Lawn & Landscape

SERVING THE \$40 BILLION PROFESSIONAL LANDSCAPE CONTRACTING MARKET

NOVEMBER 1995

3.00

Inside:

Mowing Dream Machines

Women in Industry

Wages & Salaries

New Product Showcase

Tax Planning Ideas

Committed to the Industry's Growth

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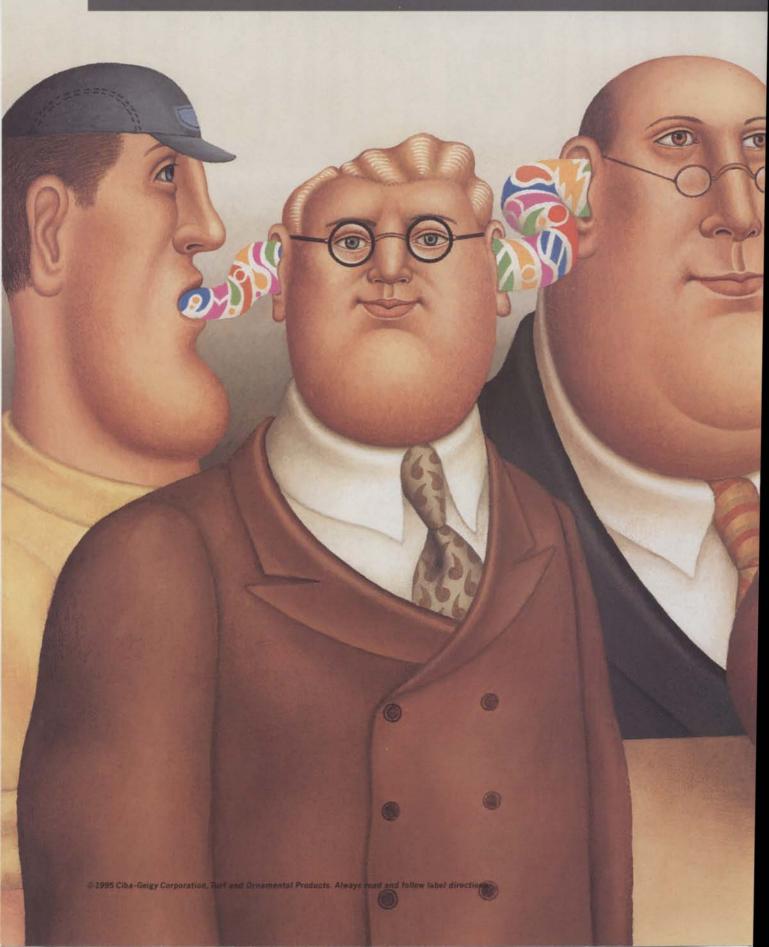
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Cover Photo



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New Product Showcase

Lawn & Landscape is proud to present new product and equipment innovations for 1000.

Cindy Code Publisher



ver the last decade, we've defined the professional lawn and landscape contracting industry. This dynamic market segment, served monthly by Lawn & Landscape magazine, continues to be the fastest growing of all horticultural markets.

Reflective of this industry expansion, the professional contractor market now consists of about 70,000 business locations collectively producing \$41 billion in service revenues.

As this industry has grown, so has Lawn & Landscape. With our November issue, we're proud to present our new name and logo, a complete magazine redesign and expanded market reach. Lawn & Landscape now offers 30 percent more circulation, reaching 65,000 landscape professionals.

Our growth reflects the continuing evolution of the marketplace from specialized companies to full-service firms offering services ranging from lawn care to mowing/maintenance services to design/build and irrigation installation.

As you page through the first issue of our redesign, you'll find a new look, added substance and our renewed goal to bring you the most in-depth coverage of your marketplace.

The new Lawn & Landscape is bolder, more colorful and a more reader-friendly publication offering a distinct blend of editorial and graphics to enhance your understanding and appreciation of the extremely visible landscape market.

Lawn & Landscape is a pioneer in developing services which build a closer bond with our readers. Our preferred reader program, our sweepstakes and our database and research development efforts are all designed to help us learn more about your businesses and to provide editorial targeted to your concerns and interests.

This month you'll also see the newest member of our family, T&O Service Tech magazine, a training and educational tool for the front-line service personnel who are responsible for the proper use of products and equipment. T&O Service Tech will be published every other month in 1996 and is available to all service technicians employed by professional landscape firms.

We're listening and we hope you will continue to share your business views and successes with us. Our magazine enhancements and new introductions are a direct reflection of changes taking place both in the industry at large and within your firms.

After you've had a chance to review the new editorial and graphics package, drop us a line at 4012 Bridge Ave., Cleveland, OH 44113, or fax your questions or comments to 216/ ш 961-0364. — Cindy Code

Lawn&Landsca

FDITORIAL

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MARKETTRENDS

ALL SYSTEMS ARE GO ...

THE OUTDOOR POWER Equipment Institute, Alexandria, Va., revised its earlier economic forecast for sales of outdoor power equipment. The new figures point to significant shipment increases of front engine lawn tractors, riding garden tractors and walk-behind tillers. However, OPEI forecasts decreases in shipments for walk-behind power mowers (-3.3 percent) and rear engine riding mowers (-6.0 percent). The group also predicted modest increases in 1996 shipments for all categories except rear engine riders.

Specifically, the forecast predicts the following1995 and 1996 (in parentheses) shipment increases: front engine lawn tractors, +13.9 percent (5.7 percent); riding garden tractors,+15.6 percent (4.7 percent); and tillers, +12.5 percent (3.2 percent).



OHIO GROUP BATTLES RENEGADE CITY

THE CITY OF Fairview Park, a suburb of Cleveland, is the target of lawn care industry groups in Ohio over their citing of Barefoot Grass Lawn Service for failing to comply with a city notification ordinance.

The company, with the assistance of the Ohio Pro-



Ohio companies are banding together to challenge a city's preemptive rule.

fessional Applicators for Responsible Regulation and funding from the Ohio Lawn Care Association and members of both organizations, filed a countersuit against the city for enforcing a law that is more strict than that of the state. This preemption is not allowed by Ohio

> law, dating back to the state's first comprehensive pesticide laws passed in the mid-1970s.

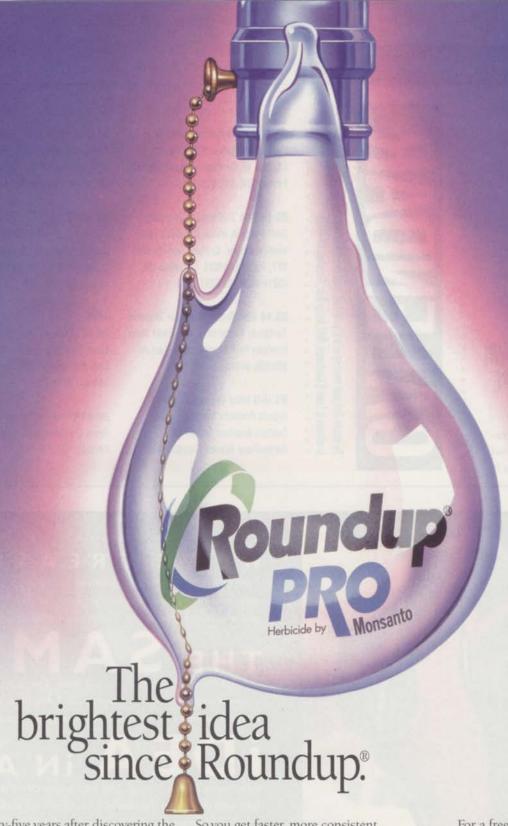
The ordinance, passed by Fairview Park city council in 1992, had never been enforced until June 27 of this year, when a citizen filed a complaint against Barefoot Grass for failing to comply with the city notification law. When the city attempted to en-

(continued on page 10)

ecent statistics indicate that Americans are living longer — which means you may need to support your household for 20 or more years after retirement. How much money will be needed to maintain your present lifestyle after you are no longer working? Financial planners agree that between

Financial planners agree that between 70 percent and 80 percent of your current gross annual income will be required. What can you do to meet this ambitious goal? Here is one strategy:

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MARKETTRENDS

(continued from page 8)

force the ordinance, the industry saw it as the perfect opportunity to take a stand, according to Bill Clutter, past president of OLCA and a board member of OPARR.

Attorneys for Barefoot Grass moved for dismissal of the citation, but at press time no ruling had been made on the motion.

TRUGREEN/CHEMLAWN ADDS INTERIORSCAPE FIRM TO GROUP

Something Different Interior Plantscaping, a 20-year

(continued on page 10)

To ensure that your meeting date is published, send an amouncement at least 10 to 12 weeks

NOV. 27-28 North Central Turfgrass Exposition, Pheasant Run Resort, St. Charles, III. Contact: Illinois Turfgrass Foundation, 312/201-0101.

OEC. 5-8 Ohio Turfgrass Foundation Conference & Show, Columbus Convention Center. Contact: Julie Weller, OTF, P.O. Box 14824, Columbus, OH 43214-0824; 614/261-6750.

DEG. 8-8 42nd Rocky Mountain Regional Turfgrass Conference and Trade Show, Currigan Hall, Denver, Colo. Contact: 303/688-3440.

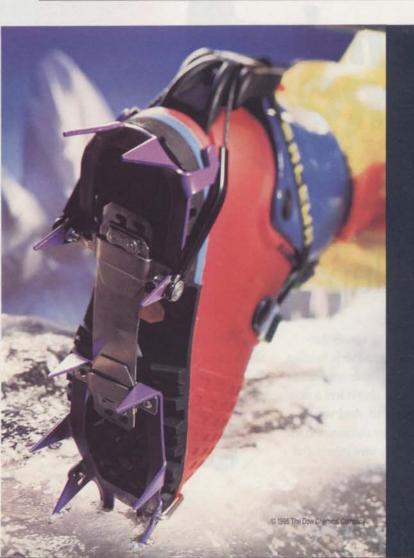
OFEC. 11-12 Using Compost and Other Organic Products, Houston, Texas. Contact: American Society for Horticultural Science, 703/836-4606. OEC. 11-13 Design Short Course V for Residential Properties: Planting Design, Richfield, Ohio. Contact: Ohio Landscapers Association, 800/335-6521.

OEG. 12-14 Georgia Turfgrass Association Conference and Show, Georgia International Convention Center, Atlanta. Contact: Douglas Moody, 770/975-4123.

1996

JAN. 2-5 Advanced Turfgrass IPM Short Course, University of Maryland, College Park, Md. Contact: 301/405-3913.

JAN. 3-5 Ontario Turfgrass Symposium, Regal Constellation Hotel, Toronto. Contact: 519/767-1114.



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USE READER SERVICE #81

JAN. 5-8 GrowerExpo '96, Hyatt Regency O'Hare, Chicago. Contact: 800/456-5380.

JAN. 8-12 Turfgrass Short Course, Cornell University, Ithaca, N.Y. Contact: 607/255-1792

JAN. 8-12 Advanced Landscape IPM Short Course, University of Maryland, College Park, Md. Contact: 301/405-3913.

JAN. 9-11 Eastern Pennsylvania Conference & Trade Show, King of Prussia. Contact: Michael Smith, 610/828-0253.

JAN. 9-11 Wisconsin Turfgrass and Greenscape Expo '96, Holiday Inn West, Madison. Contact: 608/845-6536.

JAM. 10-12 34th Annual North Carolina Turfgrass Conference and Show, Charlotte, Contact: Marsha Richardson, 910/695-1333.

JAN. 12-14 Professional Lawn Care Association of America Management Conference, Embassy Suites Camelhead, Phoenix, Ariz. Contact: PLCAA, 800/458-3466.

JAK. 16-18 Mid-America Green Industry Convention, Kansas City, Mo. Contact: Professional Lawn Care Association of Mid-America, 816/561-5323.

JAN. 16-18 Landscape Ontario's Congress '96, Toronto Congress Centre, Toronto. Contact: Landscape Ontario, 905/875-1805.

JAN. 17 Landscape and Nursery Expo, Sacramento, Calif. Contact: 916/442-4470.

JAN. 17 Professional Landscape & Turf Conference, Westchester County Center, White Plains, N.Y. Contact: 914/636-2875.

JAN. 18-20 Mid-America Horticultural Trade Show, Navy Pier, Chicago, III. Contact: 708/526-2010.

JAN. 19-20 Landscape Maintenance Association Equipment Show Roundup, Tampa, Fla. Contact: 941/680-4008. JAN. 22-24 Central Environmental Nursery Trade Show, Columbus, Ohio. Contact: 614/899-1195.

JAN. 23-25 Virginia Turf and Landscape Conference and Trade Show, Richmond, Va. Contact: 804/340-3473.

JAN. 24-26 Midwest Turf Expo, Indianapolis. Contact: Midwest Regional Turf Foundation, 317/494-8039.

JAN. 25-26 Northern California Turf and Landscape Council Exposition, Contact: 510/490-6292.

JAN. 26-27 Alabama Nurserymen's Association Show, Mobile. Contact: 334/821-5148.

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USE READER SERVICE #48

MARKETTRENDS

old firm in Cincinnati,
Ohio, is now part of the
TruGreen/ChemLawn
group of interiorscape
companies. The company
hopes to expand and
improve its operations, and
will continue to operate
under the Something
Different name.

DOWELANCO FORMS TWO T& O SALES DISTRICTS

A restructuring at Dow-Elanco, Indianapolis, has resulted in the formation of two sales districts dedicated

(continued on page 18)

NEWS DIGEST

POOR PEAT HARVESTS SPUR NEW INVENTORY POLICIES

A fter two years of poor harvests, the Canadian Sphagnum Peat Moss Association members have agreed to create a buffer inventory in long-term storage from season to season to offset future low harvests. The inventory will represent 15 percent to 30 percent of a normal year's harvest. The association member producers represent more than 99 percent of all the peat imported into the U.S.

RIGHT TO BAD LAWN UPHELD IN TEXAS COURT

A Houston homeowner who refused to mow the St. Augustinegrass in his front yard while citing the "ecological and aesthetic advantages" of letting it grow was granted an injunction keeping the city from mowing the lawn for him. Despite neighbor complaints about the grass, which is 15



inches high is some places and well above limits set by local ordinances, the court granted the injunction until all appeals were exhausted.

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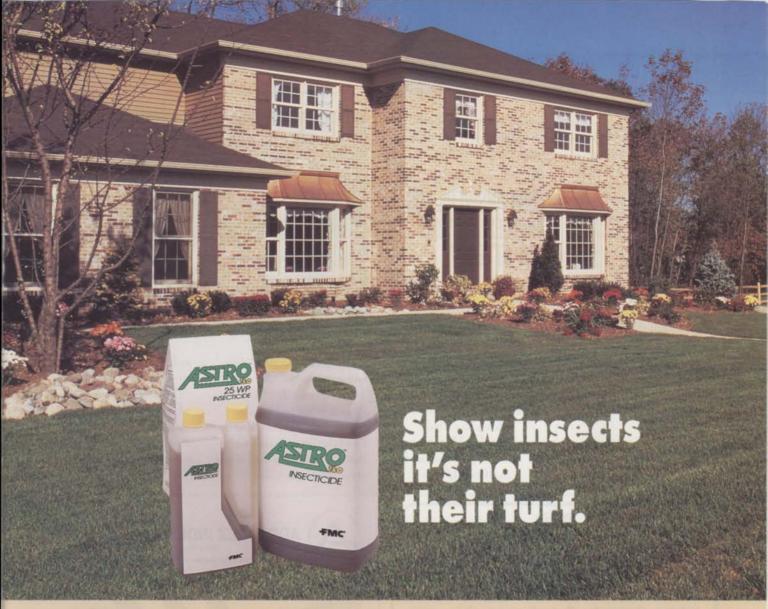
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- OTHER (Please specify) _

NUMBER OF EMPLOYEES _____

A3 LLM

(continued from page 10) solely to the turf and ornamental market. The two new districts have yet to be staffed or headquartered in any geographical area, but will enable the company to service its turf and ornamental customers, according to Gary Denhart, sales

"We're dedicating more time and resources to the T&O marketplace because it is and will continue to be an important business for us," he said. The structure will allow two dedicated sales representatives to

handle current products and others under development for the market.

ECHO ANSWERS LOS ANGELES BLOWER

RAN ATTEMPT

Echo Inc., Lake Zurich, Ill., responded quickly to the initiative of Councilman Marvin Braude to ban the use of gasoline-powered leaf blowers in the city of Los Angeles, Calif.

It is the third attempt by Braude to limit blower use.

> which he called "intolerable intrusions, polluters and inefficient." (see



A ban on leaf blowers has been proposed for the city of Los Angeles for the third time. The ban would limit noise to no more than 65 decibels at 50 feet.

Lawn & Landscape Maintenance magazine, October 1995, page 17).

In a letter to Braude. Echo representative Robin Pendergrast pointed out that the company had made great strides in noise

reduction, "not only minimizing but dramatically decreasing the amount of noise that is emitted ... ' Pendergrast also stressed that two-cycle engine emissions also had been

(continued on page 20)



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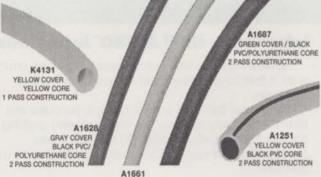
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tomorrow's trimmer.



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* At participating dealers

USE READER SERVICE #72

(continued from page 18)

reduced "dramatically."

In reference to Braude's Aug. 15 news release: "It is unfair and inappropriate to make references in this press release without providing the media, other committee and council members and interested parties with factually accurate information."

Echo offered to provide detailed information about recent achievements in leaf blower technology that specifically address the Councilman's concerns at the next meeting of the city's Environmental Quality and Waste Management Committee.

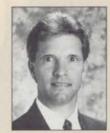
(continued on page 25)

uss Adsit joined the faculty of the Department of Landscape Architecture at Mississippi State University.

Homelite named Jerry Shadley executive vice president of sales and

marketing, responsible for

Lee Ingram



Jerry Shadley

global sales. David Walker is vice president of operations and Stephen Peace is manager of advertising and communications.

Lee Ingram was named safety and security director of Environmental Care, joining the company after 15 years with the Litton Aerospace Co. He will be responsible for ensuring compliance with health and safety regulations.

Burlingham Seed hired Don Woodhall as vice president. He has been in the seed industry in New England for 21 years.

Paul Zarlengo joined CLC Labs as director of sales, marketing and technical service support.



deck allows mowing on rough terrain and a unique trunnion on the front axle frame assures a high quality cut and smooth ride. The

drive system, giving smooth control with a wider neutral band. Controls are fully adjustable.

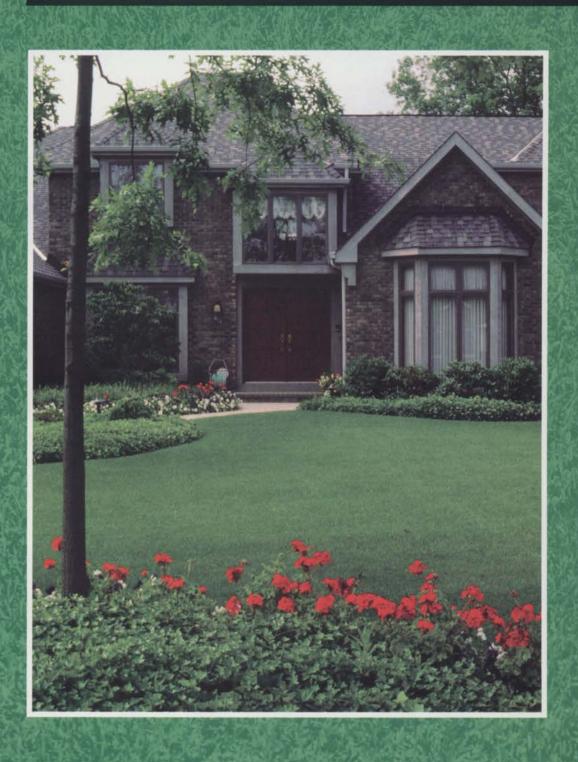
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The environmentally friendly products, packaging and formulation technology of tomorrow are available from Riverdale today.



The future of the turfgrass industry depends heavily on our actions today. The importance of clean air, clean water, and healthy turf and trees will significantly enhance the health and recreational needs of the population. Increasing environmental pressures require all of us to be better stewards of the products we use. Making the best product choices today will help insure our right to continue in this business tomorrow. We believe those choices begin with Riverdale products.

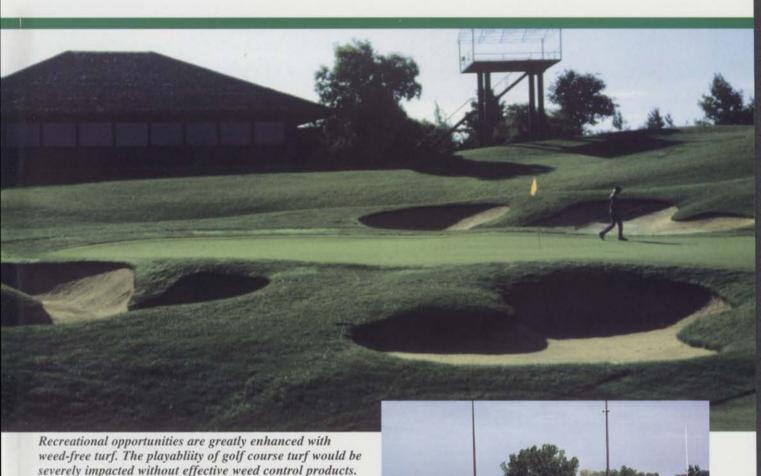


Maintaining healthy, weed-free turf is as important to the environment for cooling, filtration, and erosion control as it is to the aesthetic value of a home.

Riverdale's formulation and packaging advances allow turfgrass managers flexibility to choose the broadleaf weed control products that best fit their needs.

Options include:

- Dry, water soluble herbicides or liquids.
- 2,4-D based or 2,4-D free products.
- Esters or Amines.
- The right mix for your turf situation.



Dry, Water Soluble Herbicides

Triple rinsing and disposal problems are a thing of the past with Dissolve, Tri-Power Dry, and Triplet Water Soluble. All packaged in water soluble bags. No mixing, measuring, pouring, freezing, or exposure to concentrates.

2,4-D Based or 2,4-D Free

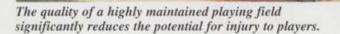
Whatever your choice, Riverdale offers a full line of three-way herbicides. Your weed control doesn't have to suffer because you choose not to use 2,4-D. Riverdale offers proven effective, broad spectrum broadleaf weed control with the herbicide combination of your choice.

Esters of Amines

Cool weather weed control is significantly enhanced by using Ester formulations. When it warms up, switch to Amine formulations. Riverdale offers you choices of chemical components in both Esters and Amines.

Various Product Mixes To Choose From

With Riverdale herbicides, you can choose the product mix you need. Riverdale's full line of broadleaf herbicides give you the flexibility to manage your own program.





Worker protection standards have left few products labeled for commercial sod producers. Riverdale offers a choice of herbicides for growing healthy, weed-free sod.

Products designed to meet your needs!

Dry, Soluble Herbicides in Water Soluble Bags

DISSOLVE® (2,4-D, Mecoprop, Dichlorprop)



- Dicamba-free
- Totally water soluble amine formulation
- No measuring, mixing, pouring or handling of concentrates
- No triple rinsing or disposal problems
- Cool and warm season turf

TRIPLET® W.S. (2,4-D, Mecoprop, Dicamba)



- Proven performance improved formulation and packaging
- Totally water soluble amine formulation
- No measuring, mixing, pouring or handling of concentrates
- No triple rinsing or disposal problems
- Cool and warm season turf

TRI-POWER®DRY (MCPA, Mecoprop, Dicamba)



- 2.4-D free
- Highly soluble acid formulation
- No measuring, mixing, pouring or handling of concentrates
- No triple rinsing or disposal problems
- Cool and warm season turf

Liquid, 2,4-D Based Herbicides

TRI-ESTER™(2,4-D, Mecoprop, Dichlorprop)



- Ester formulation
- Improved cool weather weed control
- Increased efficacy on hard-to-control species
- Dicamba-free
- Cool and warm season turf

TRIPLET (2,4-D, Mecoprop, Dicamba)



- Amine formulation
- One product for all use sites
- Flexible rate ranges
- Effective, economical broadleaf weed control
- Cool and warm season turf

TRIAMINE (2,4-D, Mecoprop, Dichlorprop)



- Amine formulation
- Dicamba-free
- Tank-mix compatible
- Effective, economical broadleaf weed control
- Cool and warm season turf

Liquid, 2,4-D Free Herbicides

TRI-ESTER" II (MCPA, Mecoprop, Dichlorprop)



- Ester formulation
- 2,4-D and Dicamba-free
- Improved cool weather weed control
- Increased efficacy on hard-to-control species
- Cool and warm season turf

TRI-POWER® (MCPA, Mecoprop, Dicamba)



- 2.4-D free
- Amine formulation
- Low use rates and flexible rate ranges
- Effective, economical broadleaf weed control
- Cool and warm season turf

TRIAMINE "II (MCPA, Mecoprop, Dichlorprop)



- 2,4-D and Dicamba-free
- Amine formulation
- Flexible rate ranges
- Effective, economical broadleaf weed control
- Cool and warm season turf

For more Information, Call

Riverdale

425 West 194th Street Glenwood, IL 60425-1584 PHONE (800) 345-3330 FAX (708) 754-0314

MARKETTRENDS

(continued from page 20)

That committee is scheduled to meet early this month. Echo said it had been "inundated" with queries by homeowners, dealers and other companies since Braude's initiative was published in the Los Angeles newspapers.

ASSOCIATION NEWS

ew president of the Professional Lawn Care Association of America is John Buechner, Lawn Doctor Inc., Marlboro, N.J. Other new officers include Terry Kurth, Lawn Care of Wisconsin, Middleton, Wis., president-elect; Larry Messina, Lawn Cure of Southern Indiana Inc., Jefferson, Ind., vice president; and Bob Ottley, One Step Tree & Lawncare, North Chili, N.Y., secretary/treasurer. Dale Amstutz, Northern Lawns Inc., Omaha, Neb., is immediate past president.

Teddi Davis, Garick Corp., Cleveland, Ohio, is the new president of the Professional Grounds Management Society. First vice president is Steve Wharton, Minot Park District, Minot, N. D.; and second vice president is Tom Riccardi, Goodyear Tire and Rubber Co., Akron, Ohio. The society's new directors include: Kevin O'Donnell, Villanova University, Philadelphia, Pa., mid-Atlantic regional director; George Meeks, ServiceMaster, Memphis, Tenn., southeast regional director; and George Gaumer, The Davey Tree Expert Co., Kent, Ohio, director at large.

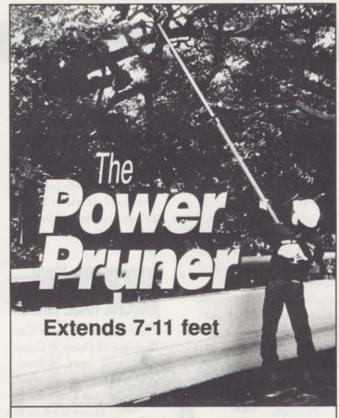
For more information, contact PGMS at 410/584-9754.

The Strategic Planning Committee of **PLCAA** analyzed future directions of the lawn service industry at the group's August board meeting. Among its projections were:

- New products will require greater knowledge and expertise to use.
- · Consolidation of lawn care companies will continue.
- · Customers will want more of a "prescription approach" for services.
- · Fewer products will be available.
- . Weeds will continue to be the number one concern of customers.

The group also set specific future goals to further the development of the industry and individual companies. The Strategic Plan calls for affecting legislation, improving the public perception of lawn care, educating the industry and the public, developing membership and taking several other leadership roles.

For more information about the committee's projections or the Strategic Plan, contact PLCAA at 800/458-3466.



- Portable-splined, aluminum shaft easily extends 7-11 feet
- Lightweight-only 16 lbs.
- Safe-eliminates climbing
- Fast-cuts through 10-inch limbs in seconds

The Power Pruner has gone beyond tree pruning. A variety of attachments and accessories makes the Power Pruner the only tree and hedge trimming tool you need.

The **new Hedger trimming attachment** allows you to shape and prune hedges and shrubs or to thin heavy

brush. The circle saw accessory is available for finer pruning. The Model D unit is for safe pruning around high-voltage sources.

The automatic oiling system is standard on all units. 2 1/2- and 5-foot extensions are available for extended reach—up to 17 feet.



HEDGER TRIMMING ATTACHMENT NOW AVAILABLE

For more information or to locate a nearby dealer, call:

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USE READER SERVICE #65

EAST MEETS WEST IN FERTILIZER PACT

Pursell Industries Inc., Sylacauga, Ala. entered into an alliance with J. R. Simplot Co., Pocatello, Idaho, to manufacture and market fertilizers for the turfgrass, nursery, consumer and agriculture markets. Pursell manufactures controlled-release fertilizers, and has supplied those products to Simplot for more than 10

Simplot, which produces phosphate fertilizer

vears.

for turfgrass and commercial nursery markets, is said to be the leading manufacturer of granular, homogeneous fertilizers in the western United States. The alliance calls for combined efforts in technology, marketing/distribution and research.

JOHN DEERE JOINS NASCAR RACE LINEUP

The Lawn & Grounds Care
Division of Deere & Company, Moline,
Ill., will sponsor a car and
driver team in the
1996 schedule for
the National Association

for Stock Car Auto Racing. Chad Little, NASCAR driver, will pilot Deere's Pontiac Grand Prix for MRM Motorsports, which is owned by football quarterback Mark Rypien and businessman Greg Pollex.

The team will participate in the Busch Grand National Series of 26 races in 14 states, which starts in February of 1996.

ARIENS INKS DEAL TO ACQUIRE STENS CORPORATION

Ariens Corp., Brillion, Wis., signed a letter of intent and was expected to acquire the assets of Stens Corp., an outdoor power equipment aftermarket parts manufacturer based in Jasper, Ind., to launch the company's expansion into the parts distribution market. The deal was expected to close approximately late October.

DIRECTIONAL BORING SYSTEM SIMULATOR IN DEVELOPMENT

The Charles Machine Works, Perry, Okla., has partnered with three universities to develop a directional boring system training simulator.

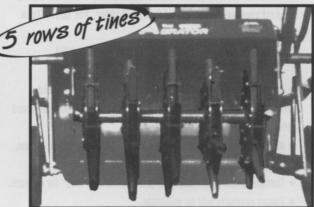
(continued on page 30)

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Now Turfco® Has Land Series AERATOR by Turfco

Introducing The PRO SERIES AERATOR by Turfco
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The Pro Series Aerator by TURFCO is the answer to your wide area and sloped area aeration needs. The Pro Series gives you 8 rows of tines with the most dense aeration pattern for an aerator of this design.

The E-Z off, drop off wheels allow you to pass through gates.

The Pro Series has also kept all the great features of The Aerator

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A. Thomas Perkins, Ph.D.

Business Manager
Professional Turf, Ornamental & Pest Control Products

Introducing new PENI And the PENDULU



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

A.Thomas Perkins, Ph.D.

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

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

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

PENDULUM also offers greater flexibility than ever before, since it is also available in 60 WDG and 3.3 EC sprayable formulations. And now, like all Pendimethalin based products, it's more affordable, thanks to special cash rebates available to you through July 31, 1996.

ULUM® Plus Fertilizer, M Plus Sweepstakes.



Broad spectrum. Season-long control. Costeffectiveness. Flexibility. And a chance to win \$10,000 in cash.

Looking for a preemergent herbicide that offers more? We don't think you'll find one.

Sweepstakes Rules: Offer available to professional product end-users only. Distributors or other individuals reselling product not eligible. No purchase necessary. Limit one entry per person. Complete the entire form. Incomplete information will nullify entry. All entries must be postmarked no later than March 10, 1996. Two winners will be selected, one each from the golf course and lawncare industries, from a random drawing to be held March 15, 1996. If prize is not claimed, additional random drawings will be conducted until all prizes are awarded. Estimated odds of winning are 10,000 to 1. The winners will be contacted by telephone and/or mail by an American Cyanamid Representative. All applicable taxes are the responsibility of the winners.





YES, I'D LIKE TO BE A \$10,000 CASH WINNER. NAME

TITLE/COMPANY_____ADDRESS

ZIP____PHONE____

Amount of preemergent herbicide purchased annually:
Preemergent + Fertilizer lb Sprayable Preemergent lb/ga
Brands of preemergent herbicides used in the past year:

☐ Please send me additional information on PENDULUM Plus Fertilizer. Which of the weeds shown does PENDULUM Plus Fertilizer NOT Control?

Mail this form to: PENDULUM PLUS Sweepstakes, C/O M&B Associates, P.O. Box 8575, Trenton, NJ 08650-9871

PTO-954

MARKETTRENDS

(continued from page 26)

Indiana University, Purdue University, Louisiana Tech and Bridgwater College in England are working with the company to develop the



Operators can simulate the use of a directional boring machine on this system.

simulator on the company's Ditch Witch Jet Trac 2510 directional boring system.

Operators will be able to select various boring situations to test their perfor-

mance in different soil types and conditions and work sites.

RICK DOESBURG SPEAKS FOR GREEN INDUSTRY

Rick Doesburg, vice president of Thornton Gardens, Maineville, Ohio, spoke up for the professional landscape contracting industry during a recent segment of the show "Homebuilding Digest," on Home & Garden Television. The national program reviews issues, experts and projects related to home building and designing.

In the interview, Doesburg discussed the importance of landscaping in increasing property values and selecting a landscape professional. His appearance was the result of efforts by the Public Relations Committee of the Associated Landscape Contractors of America to build awareness of the industry and the role of professional contractors. "This was an exciting opportunity to show ALCA as

the expert and our beliefs of the benefits of landscaping for the audience," he said.

PGMS PUBLISHES MAINTENANCE ESTIMATING GUIDE

The task of estimating landscape maintenance work may be a little easier with the use of the Professional Grounds Management Society's updated guide. "The PGMS Grounds Maintenance Estimating Guidelines" is a 36-page booklet full of estimating worksheets, examples and instructions. The update is

(continued on page 32)



GROWTH That's What PGNS Is All About.

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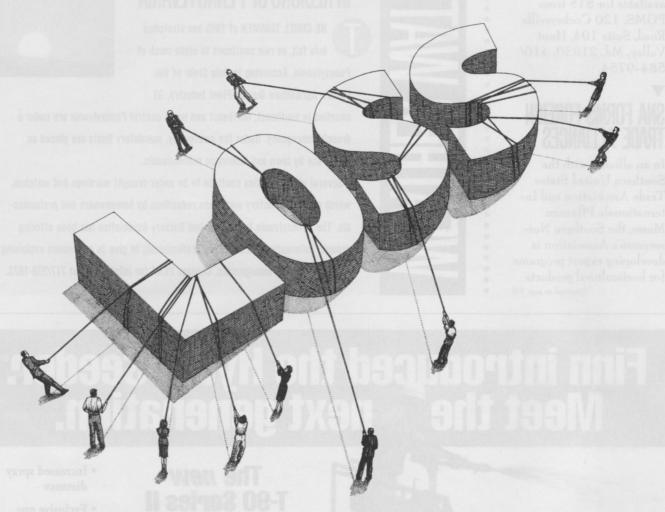
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I WANT TO GROW WITH PGMS! Please	send more information explaining how.
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Working together, ALCA and CNA help keep losses under control to keep your premium down.



The Associated Landscape Contractors of America business insurance program offers you a very important benefit: A loss control program that not only helps keep premiums down, but also is available at no extra cost. Only the close working relationship between the CNA Insurance Companies and ALCA makes this possible.

By listening to your association, we understand the risks of the landscape contracting and nurseryman businesses. As a result, the CNA Insurance Companies can offer you a loss control program that may help reduce injury and property damage and may ultimately reduce premiums. We are proud to say this program has been endorsed with the ALCA "Seal of Approval" since 1982.

To take advantage of this comprehensive insurance program designed especially for and endorsed by ALCA, call CNA at 1-800-CNA-6241.





The CNA Insurance Companies underwriting this program will vary according to the coverage. Available in the continental U.S. only. These companies include Continental Casualty Company, Transcontinental Insurance Company, Transportation Insurance Company and Valley Forge Insurance Company. CNA Plaza/Chicago, IL 60685.

MARKETTRENDS

(continued from page 30) sponsored by Ciba in conjuction with PGMS.

The updated guide is available for \$15 from PGMS, 120 Cockeysville Road, Suite 104, Hunt Valley, Md. 21030; 410/ 584-9754.

SNA FORMS FOREIGN TRADE ALLIANCES

In an alliance with the Southern United States Trade Association and Internationale Pflanzen Messe, the Southern Nurserymen's Association is developing export programs for horticultural products

(continued on page 34)

DROUGHT WOES CONTINUE IN REGIONS OF PENNSYLVANIA

HE CRUEL SUMMER of 1995 has stretched into fall, as rain continues to elude much of Pennsylvania. According to Dale Stehr of the state's Agriculture Bureau-Plant Industry, 31



counties in southeast, northeast and north central Pennsylvania are under a drought emergency. Under the emergency, mandatory limits are placed on water use by lawn and landscape professionals.

Several other counties continue to be under drought warnings and watches, which call for voluntary water use reductions by homeowners and professionals. The Pennsylvania Landscape and Nursery Association has been offering drought information packages for professionals to give to consumers explaining the warnings and emergencies. Contact PLNA for information at 717/238-1673.



Enter LLM SWEEPSTAKES '95 Today 4.	What were your 1994 expenditures by the following categories? Herbicides\$
Simply complete and mail this card (must be filled out completely to qualify):	Insecticides \$S
Name	Biologicals\$
Title	Fertilizer/herbicide\$
Company Name	Fertilizer/insecticide \$
	Please indicate the number of units operated in each category:
CityStateZip	Trimmers Blowers
Phone No.	Edgers Pruners Chain Saws Brush Cutters Hedge Trimmers
How many technicians do you employ? Full time Seasonal 6.	Please describe your mowing equipment:
2. Based on total company revenues, what	Number of walk-behind units Model Types Owned
percentage of your total business comes from:	- Wilder Types Owned
% Lawn Care	Model Sizes Owned
	Number of riding units
% Installation	Number of riding units Model Types Owned
% Pest Control	Model Sizes Owned
3. What were your 1994 revenues? \$	Woder Sizes Owned



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professional products!

how to

Enter:

Rules &

1. NO PURCHASE NECESSARY

2. The contest is open to licensed lawn and landscape contractors, their employees and suppliers. Only persons who, as of the date of the prize drawing, are 18 years of age or older, with a valid driver's license, and are legal residents of the U.S, are eligible to enter. Entry cards must be fully completed.

3. This sweepstakes is not open to employees or the families of all sponsoring firms, Lawn & Landscape Maintenance magazine or other GIE Publishing Co. publications, and affiliated companies.

4. Enter by completing and mailing the official entry form available in the monthly issues of Lawn & Landscape Maintenance magazine, or receive a valid entry form by sending a postage paid envelope to Sweepstakes '95, c/o GIE Publishing, 4012 Bridge Avenue, Cleveland, Ohio, 44113. Not responsible or liable for lost, late, stolen, mutilated, illegible, incomplete, postage due or misdirected entries. No mechanical reproductions permitted.

5. PRIZE - \$20,000 retail value of professional lawn and landscape products. The winner will be determined by a random drawing of all entries received by November 30, 1995. The winner will be announced and notified by U.S. mail and/or telephone. Prize notification returned as undeliverable as addressed will result in an alternate winner being drawn and notified until a qualified entrant is awarded the grand prize. Only one grand prize will

be awarded.

6. No cash equivalent or prize substitution offered. Prize is not transferable.

7. All federal, state and/or local taxes, if any, are the sole responsibility of the xinner. Winner will be required to sign an affidavit of eligibility and liability publicity release (allowing the sweep-stakes sponsor to use the winner's name and likeness for publicity purposes) as a condition of being awarded the prize. Failure to do so will result in an alternate winner being selected.

8. Void wherever prohibited or restricted by law.

 Odds of winning will be determined by the number of entries received. All entries become the property of Lawn & Landscape Maintenance magazine and GIE Publishing Co.

10. By participating, you agree to these rules and decisions of the judges which shall be final in all matters relating to this sweepstakes.

11. To obtain the name of the winner of this sweepstakes, send a self-addressed, stamped envelope to "LLM Product Sweepstakes," 4012 Bridge Ave., Cleveland, Ohio 44113, Atm: Franzak.

entries must be filled out completely to qualify.

Winner will be selected

December 1995.



Official B

(continued on page 32)

grown in 16 southeastern states and Puerto Rico.

The alliance, which as been under development for two years, includes a sister-show relationship with the IPM Show in Essen, Germany, which is one of the largest horticultural trade fairs in Europe.

The agreement calls for cooperative advertising support between the shows, developing a slogan or logo together and establishing exhibitor and show official exchange programs.



In an effort to help develop new markets for plant materials grown in the South, the Southern Nurserymen's Association has entered an alliance with two international trade groups for future projects and trade shows.

AAN'S LIGHTHOUSE FUND TO SUPPORT NATIONAL NETWORK

The American Association of Nurserymen has established a national Lighthouse Fund to provide more support and funding for its national initiatives. AAN believes the program will help strengthen the industry's clout when dealing with government issues.

The program is open to companies that do not currently belong to AAN, but wish to support the group's initiatives. Participating firms will receive basic information on key

issues and periodic grassroots alerts. For more information on the program, contact AAN at 202/789-2900.

EASY GARDENER, GALE GROUP LINK MARKETING EFFORTS

Landscape fabric manufacturer Easy Gardener,
Waco, Texas, assumed the
marketing and sales of the
Gale Group's Solartex
Shade Fabric. The product is
now called Easy Gardener
Shade Fabric. The move
should take advantage of
both firms' manufacturing
and marketing strengths.

More grass in one pass

Brillion's new, improved **Turfmaker Seeder** helps you grow thicker, more uniform stands and save up to 50% in seed costs. Its legendary precision seeding helps you get better seed/soil contact, increased germination, faster emergence and thicker stands all with one pass seeding.

The Turfmaker is built tough for longer, more precise operation, featuring a heavier, more positive ground-drive system. A two-piece seed shaft with center adjustment on the 10' model provides more precise seeding. Optional track remover kits, scrapers and seedbox agitator kits are available.

In addition, metal deflectors are 68% stronger and extend closer to the ground to guide seed between roller wheels for even seeding despite windy conditions.

New glass-filled nylon seed meters ensure continuous accuracy.

Turfmaker Seeders 8 models, pull and 3 pt. hitch 5'4", 8', 10' and 12' models New 12' Turfmaker

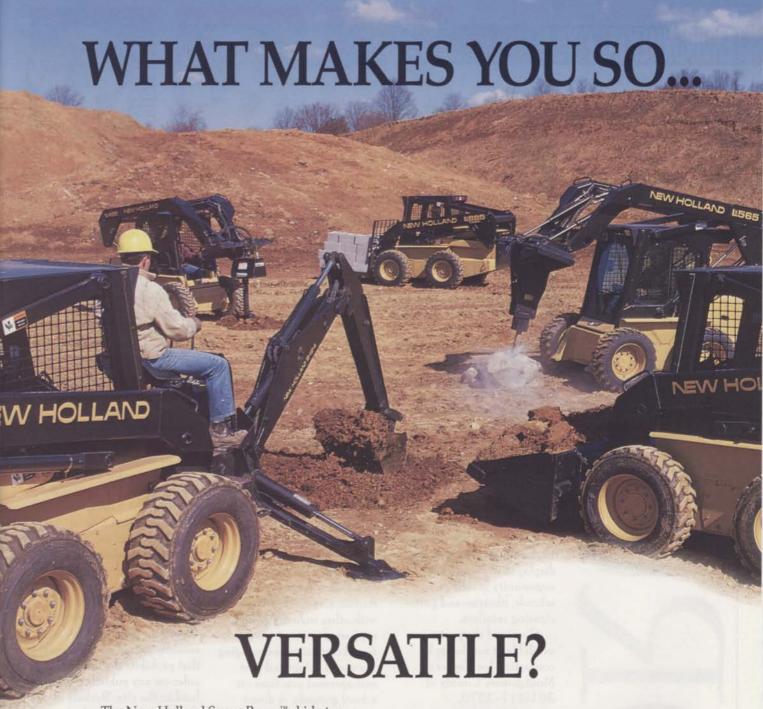
For more information on Brillion's new, improved

to Brillion Iron Works, Inc., Brillion, WI 54110.

Or call us at 414-756-2121 or fax 414-756-3409.

Turfmaker, send this ad with your name and address

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The New Holland Super Boom™ skid-steer loader is one machine that has multiple personalities. Just pick the attachment and let Super Boom do the work.

- Pick Up 'n Go™ Universal Attachment System: Super Boom hooks up easily to New Holland and competitive attachments.
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- Your New Holland Dealer: But what really makes the Super Boom versatile is your New Holland dealer. He has the attachments, parts and service support to help you squeeze the most work out of your Super Boom. Stop by today to see what makes Super Boom so versatile.

ENVIRONMENTAL FORUM







OSTER CHILD. Getting the word out on grasscycling as a lawn care practice is the latest project for Montgomery county in the state of Maryland. Officials recently released a 17-inch x 24-inch poster depicting the benefits of grasscycling. It features a color illustration of a cross-section of the lawn and soil ecosystem.

The poster is being distributed as part of a consumer education and information campaign about the benefits of grasscycling, which include a lush lawn in less time for less money. In the county, the poster is displayed in county and community buildings, schools, libraries and participating retailers.

Copies of the poster are available at no charge by contacting Joe Keyser of Montgomery County at 301/217-2270.

SPREADING THE WORD. The Associated Landscape Contractors of America recently attended World Workplace '95 in Miami, Fla., an annual conference of the International Facilities Managers Association, to demonstrate the contributions of plants to indoor air quality, as well as the working environment. Thousands of corporate decision makers

participate in the show.

ALCA joined with Plants for Clean Air and the Florida Nurserymen & Growers Association in the project, which included landscaping a 37,800-square foot area with 63 species of more than 1,880 plants. The tallest was 18 feet high.

The groups stressed that plants are a requirement, not a luxury, for living and working spaces. Beside the interest shown by many attendees, the American Institute of Architects (which sponsored the show) asked the groups to present continuing education courses in the future.

SCHOOL IPM. The Professional Lawn Care Association of America, in conjunction with other industry groups, supported a recent educational campaign encouraging the use of integrated pest management practices on school grounds. A direct mail campaign was aimed at 16,000 school superintendents across the country this past August.

"We feel this is a positive approach to address the subject that is getting more attention by the states and state legislatures," said Tom Delaney, PLCAA's director of government affairs and campaign coordinator for the organization. "The program covers the area of indoor pest control as well as

application to school grounds, sports fields and other recreation areas."

Superintendents of schools received letters from EPA, PLCAA and other sponsoring organizations, an EPA guide titled, "Pest Control in the School Environment: Adopting Integrated Pest Management," and a case study, "Integrated Pest Management in the Gwinnett County Public School System."

Other sponsoring organizations included Responsible Industry for a Sound Environment, the National Pest Control Association and the National School Board Association.

For more information, call PLCAA at 770/977-5222.

BUCKING THE STATE. The city of Cleveland Heights, Ohio, recently passed an ordinance that prohibits the use pesticides on any publicly owned land in the city. Backers of the measure cited reducing potential risks commonly associated with pesticide use as their reason for the ordinance.

It appears, however, that the ordinance is not enforceable by state law, because it includes privately owned day-care centers under its umbrella of restricted areas. This would preempt Ohio law. Industry groups plan to wait and see if the ordinance is enforced.

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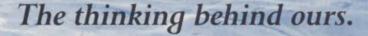
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FAX: (203) 423-2654

The thinking behind their preemergence herbicides.

1. You want cheap stuff.



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.

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Agriturf Hatfield, MA 413-247-5687

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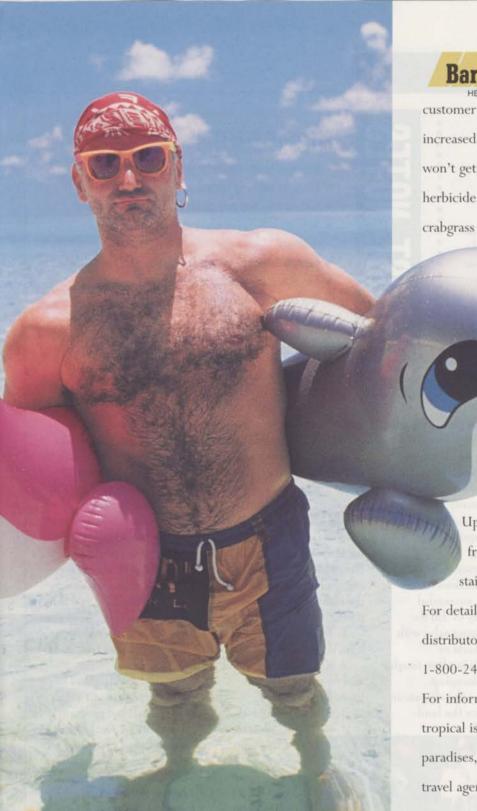
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USE READER SERVICE #12

FALL BED PREPARATION

"WHERE WILL YOU put that plant?" my wife asked. "I think I will put it next to the house in that little spot in the bed we worked up last fall," I replied. To my surprise, the shovel sank a full eight inches into the soft. loamy soil and turned over easily. Just one year ago, we had prepared the new bed by adding an inch of compost and evenly mixing it into the soil. Then it hit me. . . why don't more landscape firms offer fall bed prep to help spread out some of the spring variables that are so hard to control?

The summer heat waves have given way to fall cleanups. Pretty soon, we will again find ourselves in the rush of the spring season and wonder how we can get more done with the same amount of time and resources. Fortunately, fall bed prep can help spread out our labor, but more importantly, it can offer advantages of working with customers over the late fall or winter months.

Offering fall bed preparation and using high quality compost can extend the work season late into the year, while it also leaves one less job to be done during the spring rush.

Many landscape professionals still have plenty of work to get them into winter. Others do not. For those looking for additional sales programs

FALL SERVICE.

to impact their

bottom line.

fall bed prep can be aggres-

sively sold if

cept planting.

the landscape
contractor uses a high quality compost product in the
program. As we all know,
we can only work so many
hours in the spring and
contrary to many beliefs,
fall bed prep can include all
the normal spring steps ex-

In other more mature, seasonal businesses like landscaping, successful companies try to "fill the valley" of lagging sales with add-on products or services. This is often tough to do in landscaping, depending on the climate in your area. For the land-

BED PREP BENEFITS

- · Increases season length for production and sales
- · Increases customer contact potential
- · Spreads work load over longer periods and "fills valleys"
- Helps break up soils that are hard to work during wet weather
- . Helps to retain key employees by having more work to do
- Increases total products in menu of services
- May increase weed control of annual and perennial weed species
- Helps maintain moisture retention potential of soils in hot humid areas
- Increases drainage so wet spring soils are more workable.

scape contractor who lives in today's real world, valley filling might be commonly referred to as an employee retention program.

BEDDING ABGS. The following list shows the typical steps for normal bed preparation. Note that all but the planting can be done in the fall, if the right weather conditions permit:

 Kill existing vegetation, if it is needed.

2. Rototill the targeted area or marking it for topsoil to be placed.

3. Add some type of

amendment, including compost, sand, peat or other materials to help achieve an improved growing medium.

4. Rototill the area again to adequately mix all the soil components.

5. Plant all the required plants. If the conditions are right, it's not tool late to divert some spring work to this fall. What would it mean to your company if you could divert half of all bed preparation from next spring to this fall? How much more spring work would you be able to commit to if this were already accomplished? Could this strategy help you increase the quality of work you currently offer your customers?

FAVORABLE CONDITIONS. The main ingredient to a successful fall bed program is dry weather. Avoid working wet soil at all costs. Wet soil compacts easily and offers more challenges when spring rolls around.

Many of you are familiar with the cementitious nature of clay soils. When these soils are finely worked with a rototiller in wet conditions, a brick results. For many areas, fall may be a drier time than spring and the concept of fall bed prep may help reduce the brick syndrome.



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COMPOST MARKETING

When quality composts are used on dry clay soils, a more workable soil mixture results.

There are a number of ways to approach fall bed prep. For instance, if the ground is wet, all is not lost. Vegetation can still be killed, if needed. Topsoil

can be brought in and distributed accordingly. Compost can be applied in the required amounts, even if rototilling is not possible because of wet weather.

Through the natural breakdown process of compost, the organic chemicals released actually help break up clay soils over time, even without tilling. Hard to believe? Just try applying a 2-inch layer of compost to clay soils this fall, wait until spring and try getting a spade in the ground in treated and non-treated areas.

You will be surprised to find that even though the soil is still clay-like, it breaks up more readily and is easier to work with. This may or may not be of value, depending on the size of the job.

For areas where only compost applications can be made, consider the flat areas of the landscape first. Although compost is known for reducing erosion and does not move much on slopes, frozen ground with heavy ice and snow may influence the material to slide downhill, especially if a heavy spring rain follows a sleet or ice storm.

SENSIBLE APPLICATIONS. Almost any bed prep project lends itself to fall work instead of waiting until spring. Some of the more popular are annual and perennial prep work, tree and shrub pits and vegetable or herb garden preparation. For those gardens, be sure to have a test of the compost so that it passes your state compost quality guidelines. Since these guidelines



Because fall is usually a drier time than spring, it is a good time to apply compost and work it into the soil, avoiding the 'bricks' that form in clay-like soils while keeping it fine for spring planting.

differ in many states, you may want to contact your local solid waste office,

extension agent or department of agriculture for more complete information. Avoid using composts for herb or vegetable gardens that do not meet the minimum quality require-

For existing annual and perennial flower beds, fall bed prep may simply be a 1- to 2-inch application of compost combined with roughly working the surfaces of the beds. Many successful contractors like to "open up" the beds with a fork or spade during the fall to help the plants breathe and improve drainage. For annuals that have already been pulled out for the season, compost can be roughly worked into the soil surface and left for final grading until planting time next year. For perennials that have died back in preparation for winter, a 1- to 2-inch layer of compost acts as a protective layer of mulch.

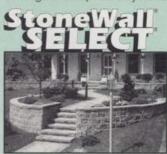
OBVIOUS BENEFITS. Fall bed prep helps increase the length of the selling and working season by as much as two full months, depending on your climate.

Fall bed prep also shifts some of the burden of juggling all the variables of spring to the fall. By offering fall bed prep, contractors can also increase the total menu of services they offer. —Rod Tuler

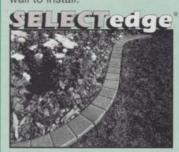
The author is a Certified Professional Agronomist and free-lance writer residing in Medina, Ohio. He is employed by BFI in Oberlin, Ohio.

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Committed to the

Industry's Growth

The most influential people in the green industry are often the busiest. Why?

Because they devote large amounts of their time and effort to helping others achieve success.

By Susan Gibson

Many contractors freely share their time, money and expertise to help others improve their businesses and help the industry become stronger and more professional. Credit: Superstock HY DO THEY GIVE so much of their time?" we asked two years ago in our review of the green industry's movers and shakers. We named several contractors and people involved in the industry to a "who's who" list of influential people.

This year, we asked a sampling of our readers to nominate those who are the most powerful in the industry. Several people interpreted the word "power" as influence, innovation, vision, achievement and staying power.

The participants named many people worth emulating. Some of the nominees are not known outside their local spheres of work, while others are highly visible across the country. Some nominees have small companies and others command multimillion-dollar enterprises. Several of them teach or do research. Most of the contractors started their businesses from scratch.

Although our nominees represent a diverse collection of people, they share some common virtues. Survey participants consistently described them as "professional," "knowledgeable" and "generous" with their time. Often, certain people are singled out for being "visionary" or for having extraordinary leadership skills. All these qualities are to be admired.

ONE SPECIAL QUALITY. A large number of nominees are active in local and national industry associations. We think that's no accident, because the responses to our survey pointed out one consistency with every nomination — the person was described as

Trendsetting Contract

Burton & Richard Sperber Valley Crest Landscape Inc. Calabasas, Calif.

Gary & Bill Thornton, Rick Doesburg Thornton Gardens Maineville, Ohio

Patrick Norton Barefoot Grass Columbus, Ohio

Tom Lied & Jud Griggs Lied's Nursery Co. Sussex, Wis.

Bruce Hunt & Dick Brickman The Brickman Group Ltd. Long Grove, III.

David Minor Minor's Landscape Services Fort Worth, Texas

Craig Ruppert Ruppert Landscape Co. Ashton, Md.

Landon Reeve Chapel Valley Landscape Woodbine, Md.

Russell Frith & John Buechner Lawn Doctor Matawan, N.J.

Bruce Wilson Environmental Care Calabasas, Calif.

Richard Cottrill & Terry Anderson Rentokil Environmental Svcs. Riverwoods, III.

Ron Kujawa Kujawa Enterprises Cudahy, Wis.

Bill Davids Clarence Davids & Co. Blue Island, III. Rich Akerman Northwest Landscape Industries Tigard, Ore.

Steven Glover & Rob Zolezzi L & L Landscape Services Santa Clara, Calif.

David Luse Arteka Natural Green Eden Prairie, Minn.

Lou Wierichs Jr. Pro-X Systems Appleton, Wis.

Arnie Sieg The Bruce Co. of Wis. Racine, Wis.

Allen Keesen & Eldon Dyk Allen Keesen Landscape Denver, Colo.

Don Karnes & Norman Goldenberg TruGreen/ChemLawn Memphis, Tenn.

Joe Williams Lawn Master, Inc. Pensacola, Fla.

Edwin McGuire The Lawn Company South Dennis, Mass.

Thomas Maxwell-Miller Ecosystems Imagery Encinitas, Calif.

Bob Andrews The Greenskeeper Carmel, Ind.

Doug Cowan The Davey Tree Expert Co. Kent, Ohio

Scott Jamieson Hendrickson, The Care of Trees Chicago, III. being "committed." Most are involved in professional organizations to further their own knowledge, make their businesses more profitable or improve the industry as a whole.

The growth they all strive for comes on three levels: personal, business and industry wide. They are committed to the green industry's success and continued professionalism, and that is why they have been nominated by their peers.

How do they show commitment? These people manage to run successful businesses or pursue successful careers, plus they devote countless hours every year traveling, meeting with others, sharing their time and experience to help someone else. That's commitment. They say "yes" when asked to help.

Our list of Trendsetting Contractors includes those people who have expanded into some of the largest lawn or landscape firms in the United States, innovated their operations or set standards of quality that are hard to copy. Many names are missing from this list because of space only.

Educators & Researchers

J.C. Raulston - North Carolina State University

Michael Dirr — University of Georgia

Jim Chatfield — Ohio Cooperative Extension Service

Jack Ingells — SUNY-Cobbleskill

Frank Milsap — Richland College

Allen Armitage — University of Georgia

Steven M. Still - The Ohio State University

W.E. Knoop — Texas A&M University

Thomas Watschke — The Pennsylvania State University

Steve Angely — University of California, San Luis Obispo

Association Executives

Debra Atkins Associated Landscape Contractors of America

Ann McClure &

Tom Delaney Professional Lawn Care Association of America

John Gillan Professional Grounds Management Society

Ben Bolusky American Association of Nurserymen

Allen James RISE

Bob Felix National Arborist Association

Others in education, association leadership, consulting and allied businesses demonstrate similar commitment by devoting time and effort to furthering the industry as a whole.

THE VOTES ARE IN. So who are the movers and shakers behind the green industry?

Our lists include some people who received many votes, and others who were mentioned only a few times. They've all gone the extra mile.

We've even included a list of up-and coming-leaders to watch in the future. Don't feel bad if your name is not on the list. It may be someday.

In The Marketplace

Teddi Davis Garick Corp.

Jan Jansen Jansen Wholesale Nursery

Bill Hendricks Klyn Nurseries Inc.

Alex Shigo & Associates

George Koziarz George Koziarz & Assoc.

Jim Perrone Perrone-Ambrose Assoc.

Frank Ross Ross, Payne & Assoc.

Phil Christian pdc consultants

Larry Keesen Keesen Water Management

Charles Vander Kooi Vander Kooi & Assoc.

Bob Zahra Florapersonnel Inc. Editors' note: We welcome your nominations for next year's list. Send them to: Who's Who, Lawn & Landscape, 4012 Bridge Ave., Cleveland, OH 44113 or fax: 210/901-0364.

The author is Editor of Lawn & Landscape magazine.

Up & Coming Leaders

Michael Byrne Byrne Brothers Landscaping Essex, Mass.

Kurt Kluznik Yardmaster Painesville, Ohio

Chris Kujawa Kujawa Enterprises Cudahy, Wis.

Eric Keesen Allen Keesen Landscape Denver, Colo.

Dick Ficco Partners Quality Lawn Service Easton, Mass.

Bruce Moore Eastern Land Management Shelton, Conn.

Michael Rorie Groundmasters Inc. Cincinnati, Ohio

Steve Hyland Hyland Brothers Lawn Care Fort Collins, Colo.

Terry Kurth Lawn Care of Wisconsin Madison, Wis.

Bruce Church D.R. Church Landscape Co. Lombard, III.

Scott Brickman
The Brickman Group Ltd.
Long Grove, III.

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USE READER SERVICE #115

Contractors Describe Their Dream Machine



Quality of cut and operator satisfaction are major features that many contractors search for in their dream machines, Credit: Ferris

Contractors' Dream Machines

LTHOUGH contractors have several features they would like to see on mowers of the future, the main features they look for in the mowers of today, ranked in importance, are:

- . Quality of cut
- · Operator satisfaction/comfort
- · Safety
- · Productivity
- · Hydrostatic drive
- · Mulching capability
- . Ease of operation and maintenance
- · Value for the job performed
- Durability
- · Availability of replacement parts
- · Maneuverability
- · Past history
- Compact enough to fit other mowers on trailer
- · Warranty
- · Speed
- · Finger-tip control
- · Power
- Lightweight

Several
contractors report
that safety,
operator comfort
and special
features that work
correctly are high
on their list for
mowing machine
improvements.

By Barbara G. Howell HE DREAM machine. The perfect mower for today's lawn maintenance contractor would be easy to operate, provide a superior cut and have reliable safety features.

Actually, the list of desirable mower features is extensive. Contractors in various parts of the country have different problems. Some mow thick, fast-growing St. Augustinegrass or bahiagrass. Some have steep slopes to cut. In several places, local noise ordinances regulate starting times and stringent yard-waste disposal requirements present a different type of challenge.

Most maintenance contractors complain about breakdowns, the mix of tight areas and broad expanses and the need to bag or mulch. They wish their current mowers would solve these problems and a multitude of others.

OPERATOR IS KING. Most often, contractors said operator satisfaction and ease of operation are the single most important factor in selecting a mower.

"What the guys like is important," mechanic Tim Mayer of Byrne Brothers, Essex, Mass., answered enthusiastically. "If that's what they like to use — if it best suits the job and the employee — give it to them. If you give them what they want, they take care of it."

The call for operator satisfaction was echoed by contractors who called for mowers with greater comfort and ease of operation.

"A perfect mower would be comfortable to use," said Michael Gaffney, technical resource specialist for the Professional Lawn Care Association of America and a former maintenance division manager for White Oak Landscaping, Kennesaw, Ga.

"Mowers have come a long way with comfortable seats and arm rests for operators. A dream machine would also have hydrostatic controls," Gaffney continued. "There

(continued on page 48)

Finding The

Manufacturers Describe eir Dream Machine

CCORDING TO equipment manufacturers, the perfect mower would have the following characteristics. ranked in order of frequency and importance.

- . Excellent cut. Blades easily sharpened, no-scalp technology.
- . Durable, Built heavy to withstand rough use.
- · Maintenance-free. No lubing or greasing required. Might not even have to check engine oil.
- . Productive. Turn the key on and go. Go and go easily.
- . Mulching ability. New designs allow more complete mulching of more types of grasses.
- . Speed. Enough speed to finish jobs without spending long hours.
- · Maneuverable. Mowers will eliminate the need for trimming with closer cuts and fewer man hours.
- · Ergonomics. Designed with operator comfort in mind. Allows day-long use without tiring.
- . Riders. Will allow greater operator efficiency.
- . Ouieter. Computer-assisted sound dampening systems will make the mower extra quiet.
- · Lightweight. Will improve performance and economy.
- . Safe. User friendly. Will minimize danger to operator and bystanders.

quipment manufacturers are working hard to develop mowers to meet contractors' needs, and to contractors a competitive edge.

HYDRAULIC FEATURES. Manufacturers agree that one trend is toward more hydraulically driven mowers. While belt drives will continue to be the primary entry-level units, "more hydrostatic drives are the wave of the future," said

Dick Tegtmeier, president and chief executive officer of Encore Mfg., Beatrice, Neb.

Jeff Mack, vice president of equipment for LESCO Inc., Rocky River, Ohio, elaborated on the reason for the trend. "The hydrostat walk-behinds' increased productivity are moving them to the front of the mowing industry."

Rick Curlett, director of marketing for Exmark Manufacturing, Beatrice, Neb., also feels that productivity and hydrostatic drives are synonymous. "More productive units will increase profitability," he noted.

Quality of cut tied with hydrostatic drive is the most important feature on the mower of the future. Manufacturers agree that if a mower doesn't do an excellent job of cutting grass, the property owner isn't going to be happy and the contractor won't be able to keep the job.

"It's a race," said Rick Cuddihe, sales manager for Ferris Industries, Vernon, N.Y. "You have to deliver a quality cut in as little time as possible."

This "need for speed" is echoed by Mark Meagher, advertising manager for Dixie Chopper, Coatesville, Ind. "While jet power may not be the future for mowing, speed and productivity certainly are."

Manufacturers also recognized durability as an important characteristic. "Our concern is for extreme ruggedness," said Don Kanter, director of sales and market-



Many manufacturers are designing durability, safety and productivity into new models, Credit: Dixon

Imagine a mower so quiet you have to check the light to see if it's operating. That may be designed into tomorrow's machines.

By C. Neal Howell



USE READER SERVICE #56

the perfect mower

(continued from page 40)

would just be less wear and tear on the operators' arms that way. A machine designed for operator comfort would also have shock absorbers and maybe cabs and air conditioning."

SAFETY CONGERNS. While air conditioned cabs seem like quite a luxury, Gaffney's concern for operator comfort stems more out of concern for safety than

luxury. He points to one of the most difficult conditions his crews had to face when they

were mowing.

"It's tough to mow when it's humid. Management has to look at the human side. When it's hot and humid, you have to let operators take more breaks to replenish their water supplies. If they don't take the breaks, they are more likely to get fatigued and then, they're more likely to have accidents."

Gaffney and several other mowing contractors expressed concern for operator safety and the need for mowers to provide that safety. Some were critical of the "operator presence controls" and other safety switches that didn't work reliably and actually encouraged operators to disable them out of frustration.

Brian Battaglia, vice president of Gazebo Landscaping, Delray Beach, Fla., agreed that safety features are important and must be usable.

"Some of the devices and switches now work like they were put on as an afterthought. Too often they don't work properly," he said. "This area needs more money and time spent on it, or maybe it needs to be done differently. We don't mind paying for it if it works. If it (the switch) doesn't work properly, it will become a safety problem. Make safety features usable."

Operator satisfaction also works with reliability, according to Mayer. "If an operator doesn't like the machine or it's not working properly, there's a lot of frustration. It's not a pretty sight. He's going to be frustrated, break the machine and call us to come and fix it."

Many contractors suggest that one way to minimize breakdowns is to use a one man/one mower assignment. In fact, Mayer said this system has made an "unbelievable" difference since it has been in use at Byrne Brothers.

He explained: "Since we've assigned machines to each operator, our shop time is down to one-fourth of what we

used to do three years ago."

Most maintenance contractors complain about breakdowns, the mix of tight areas and broad expanses and the need to bag or mulch. They wish their current mowers would solve these problems and a multitude of others.

MAINTENANCE MATTERS. Reliability and ease of maintenance for mowers is important to Mayer and others, too, who have begun on-site servicing and repairs.

All contractors agreed that regular and preventive maintenance are the keys in preventing mower breakdowns. And that maintenance should be easy to do. "If you hide a grease fitting way up under someplace, it's not going to get lubed," Battaglia commented.

Gaffney agreed that most repair problems are minor items like "flat tires and worn out bearings, usually from improp-

er greasing."

"Quality of the piece of equipment," is what's important to Battaglia. "The durability of the unit, the thickness of the metal, the type of bearings it has all count. Second is the mower's simplicity. It should be built so it's simple to use and simple to maintain. The dream machine would last forever.

"Make it stupid-proof is what we always say," Battaglia continued. "Think about where you place things for maintenance."

A user-friendly, durable machine is also a priority for Doug Hoffman, assistant to the director of operations at Quality Care in Iowa City, Iowa. "A mower should be so simple to use you can teach a college freshman to do it in a day and then send him out by himself.

"There are maintenance issues as well. The mower needs to be durable and have a good warranty. It's important that we can get the parts we need quickly. It should also be simple to repair — no hidden parts. Put the carburetor out where you can get at it," he suggested.

Contractors say availability of replacement parts is still sometimes an issue. Many keep the same manufacturer so they can keep a supply of parts in-house.

DREAM MACHINES. Hoffman's dream machine "would allow an operator to have the choice at the touch of a finger. It would shift automatically to go up a hill and then shift again to go on flat terrain. Control is one of the most important things. How well does it respond?"

Of course, the most important task of a mower is to cut grass. Quality of cut was a major issue, as was the ability of the mower to mulch since removing or blowing grass clippings takes more time.

Some contractors are suspicious of mowers which promise speed. Battaglia opined, "all of the mowers out there now go fast enough. If you go faster, the quality of cut is going to suffer."

Several contractors also mentioned the desirability of hydrostatic drive mowers. They agreed that, while the initial expense is more, the hydrostats are more productive (because belts don't slip under wet conditions), more maneuverable and break down less often. They also maintain a more constant speed, which allows for better productivity and a higher quality of cut.

Finally, contractors looked at finding the right machine for the right job. The machines, they said, should be priced for the value in relation to the job it must perform.

The author is an industry consultant with Key Solutions, a division of Iris Sales & Solutions Inc., Rocky River, Ohio.

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USE READER SERVICE #46

women in business

A woman's place
used to be at home,
but now it's anywhere
she wants to be in the
lawn and landscape
industry. Several
women contractors
explain how they've
found success in an
industry dominated
by men.

By Barbara G. Howell



Feeling at Home in the

Green Industry



The large photo is Kathryn Mathewson's "feminine" redesign of the landscape pictured above.

HAT ARE WOMEN doing now in the green industry? Whatever they do best.

In the 1960s, women in the green industry were a rarity. Many were quiet, if not silent, partners with their husbands or other family members. Their roles were often dictated by raising a family or helping a husband in business until he could afford to quit his other job and work full time.

In the 1970s and 1980s, women came into their own and began taking jobs as owners, designers, golf course superintendents or project managers. They began to take leadership roles, assuming positions of power and prominence in industry trade associations.

Now, women are a vital part of every area of the green industry. They operate the machines, hoist the fertilizer bags, design and install the landscapes and own the companies. Today, they make vital and unique contributions.

SPECIAL STRENGTHS. Instead of emulating their male counterparts, women are capitalizing on their own strengths. They are working to make the steps from design through installation and maintenance work together as a process.

They are capitalizing on their abilities to be sensitive to all life — plants, insects, birds and animals — to integrate the landscape. They are using their perceptions about consensus and relationship building and developing strong new companies which are not only winning awards, but are also gaining customers.

There are many ways to judge success in the landscape industry.

Audrie Seeley & Company is 64th out of the top 100 companies in Kansas City, Mo., with 1994 revenues of \$2.5 million dollars after only seven years in business. Owner Audrie Seeley's most visible projects include those at the Kansas City Zoo and Arrowhead Stadium.

Pam Hague, vice president of Lawn Classics, Findlay, Ohio, is state certified in three areas: ornamental, turf and institutional pest control. Eight years after forming the company with her husband, she plans to leave in 1996 to answer a new challenge: getting her commercial pilot's license. JoAnn Smallwood of Naples, Fla., has returned to the White House to receive her second National Landscape Association Design Award. She has received many other awards in the 20 years since she founded her company and began working for commu-

nity improvement in southern Florida.

Kathryn Mathewson is the first female board member of the National Landscape Association. She is author of numerous journal, newspaper and magazine articles. Because of her unique perspective on nurturing the environment while landscaping, she was chosen for a feature spot on "Good Morning America."

These women are just a small sampling of the talent and abilities found in all aspects of the lawn and landscape contracting industry. Other women are researchers or successful managers of businesses handling everything from irrigation installation to native perennial supplies.

Many of them began in businesses with their husbands who depended on them to tend the nursery or the office while they went to work. Today, some continue this way.

TRADITIONAL APPROACH. Pam Hague started in this manner. Her husband, Doug, worked so many hours for another lawn service company that, when he decided to form his own company, Pam insisted that she be a part of it.

Beginning in 1987, Pam said, "I pushed the spreader and he pulled the hose." Gradually the work become more specific. "He worked the daytime and I did the evening. I had two kids in diapers and I secluded myself in a room and did the marketing by calling people in the phone book. There were so many things to do—taxes, education, records. I did the bookkeeping and managed the office.

"But," Hague continued," I didn't want to answer the phone as the boss' wife. I wanted to know what we were applying when customers



Many women contractors, including Mathewson (above), describe their view of landscape as a 'process' that evolves over time, rather than as a one-time 'project.'

women in business

called to ask questions. So I called the Ohio Department of Agriculture and they sent me a study packet and I took the turf test. After a couple of years, I passed the landscape test. When we wanted to get another area of income and keep the employees busy, I studied the same way for my institutional pest control license."

Now, Doug Hague does the training and production and keeps the employees motivated while Pam handles customer service and managerial tasks. They work together to develop many of the application programs.

"If someone would have told me 10 years ago that I would be in turf, I would have told them they were crazy. Now that the turf business is doing well, I would like to try some things on my own. Next year I plan to leave the business to become a commercial pilot," she said.



Julia Hines at Shrub & Turf in Athens, Ga., got her start in the green industry through her husband, too. When husband Andy managed a lawn service franchise business in 1977, he hired his wife Julia as an applicator and she sprayed fertilizer and chemicals for nine months.

Then, Julia got a call from the franchise holder to be a sales representative and she did that before she and Andy started their own business in 1991. She now works in the business as the Audrie Seeley (left), like other women contractors, believes that many gender-based traits attributed to men and women complement each other in the workplace.

company's vice president and office manager.

IN THEIR OWN RIGHT. Many women took an interest in the field by themselves. In Florida, JoAnn Smallwood started as a one-woman operation more than 20 years ago. It has grown to include two companies — Smallwood Design Group and Smallwood Landscape — which employ 60 to 70 people.

Her accomplishments, including state and national award-winning designs, can be attributed to three things. "I have a natural inclination in the area. It has always been my interest," Small-



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wood said. Second, the inclination was fostered by the influence of her father, an environmental and water-law specialist, and her aunt and mother who were artists. Most important, though, she has been a success through a commitment to long hours and quality service.

That natural inclination toward landscape and hard work has also motivated the success of women such as Meryl Michael in British Columbia and Kathryn Mathewson in San Francisco.

Michael first recognized her interest during a work experience program in high school at a retail nursery. "I fell in love with it," Michael explained.

Since then she has been an estate groundskeeper, an annual flower grower, manager for a retail plant store, interiorscape installation supervisor, owner of a residential design and maintenance company and, most recently, exterior maintenance manager for Nor-Van Landscape Design in Vancouver, British Columbia. At home now, she operates a residential consulting firm.

Kathryn Mathewson's love for landscape grew out of an interest in biology, a connection obvious in her appreciation of creating a thriving ecosystem in her garden designs.

Before she started Kathryn Mathewson Associates in 1979 and Secret Gardens in 1982, she was landscape construction coordinator for the developer of Pier 39, a large retail area in San Francisco; a landscape designer for various government agencies in Singapore; and project architect for a landscape architect in New York designing malls, plazas, playgrounds and parks. She also wrote the landscape plan for an 80-acre waterfront park, was a land-use consultant for the National Park Service and designed landscapes for condominiums and HUD housing.

Mathewson said she started into business for herself because she saw a void. "There was no one doing what I felt people wanted — which was evolving, nurturing gardens."

She highlighted the unique characteristics of women that make them well



suited for an evolving green industry, telling an interviewer, "Our military society has not had room for women's strengths to blossom and has not develDebby Cole and Sara Twaddle, director of operations, staff a booth at a trade show for prospective commercial landscape clients.

oped balanced people. Our outdoor spaces are more like war zones than healthy, tranquil places." The qualities she lists as important characteristics of women are echoed by her female peers from Kansas City to Georgia.

PEOPLE SKILLS. Women in horticulture today see valuable contributions they



women in business

can make because of their special ability to integrate a number of elements into a whole. These elements may be the inclusion of companion plantings, birds or architectural elements in a landscape.

Women are said to have a strong sense of nurturing that they say serves them well in establishing gardens, as well as in forming good relationships with employees and clients.

Audrie Seeley worked for a landscape company in Overland Park, Kans., for 12 years before starting her company in Kansas City in 1988. She said that, while women have strong attributes for landscaping and business, it is very important to have a blend of employees.

Seeley took profit sharing from her previous employer when she started her own business because she saw a need for a landscaping firm dedicated to the customer relationship.

She extends that fairness in treatment to her employees, including those women who take time off to have children and care for babies while working extremely hard for her company.

GENDER TRAITS. Mathewson claims men see landscape work as a product when it is more appropriate to view a garden as a process, developing over time. She stressed the patience women have to let a garden or a situation evolve.

Michael said the attention women pay to detail like "keeping things up to snuff and keeping the edges straight" is a special aptitude for certain types of green industry work. She also noted the aptitude men seem to have for machines

Now, women are a vital part of every area of the green industry. They operate the machines. hoist the fertilizer bags. design and install the landscapes and own the companies.

and women for detail work like weeding or dead-heading.

"We do tend to categorize," Michael admitted, "but that's OK. It's often a woman's preference, but there are always other choices. Women definitely have more choices now, even more so when they're managing."

Seelev said those management qualities include being able to read people and helping to take care of their needs. "Women work better with the client and often have a better eye for design and colors. Some men don't like color and design work. Men do con-

(continued on page 120)

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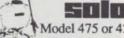


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USE READER SERVICE #118

cover feature

Florida Research **Tracks Turf DNA**

hanks to the O.J. Simpson trial, everyone is aware of DNA testing and its importance to criminal cases. Now, University of Florida researchers are putting bermudagrasses on trial, using DNA fingerprinting to distinguish genetic "off-types," as well as to help certify the authenticity of bermudagrass planting stocks.

The two-year, \$66,000 project, "Distinguishing Off-types in Tifway and Tifdwarf Bermudagrass," received funding this July from the Florida Turfgrass Research Foundation and the Florida Golf Course Superintendents Association.

Twenty-six bermudagrass genotypes will be compared using DNA fingerprinting, chromosome counts and plant morphology. University of Florida researchers from Gainesville and Ft. Lauderdale include Drs. Philip Busey, Nigel Harrison, Charles Guy and Albert Dudeck. Dr. David Huff of Pennsylvania State University is collaborating.

GENOTYPES.

Off-types of turf can cause significant aesthetic and quality problems, especially for golf courses and other types of playing fields,

according to Kevin Downing, Florida Golf Course Superintendents Association research committee chair and golf and landscape manager of Willoughby Golf Course in Stuart, Fla.

Off-types' tolerance to stress - close mowing, weather, disease, heavy traffic - can differ from cultivars like Tifway (Tifton 419) and Tifdwarf, showing chlorosis, winter discoloration, excess seedhead production, poor density and decline in contrast to surrounding grass.



Off-types of bermudagrass are visible here.

Compared to authentic varieties' predictable year-round growth, uniform color and wear tolerance, off-types are "aggressive and weedy," usually requiring expensive maintenance. Downing estimated that the cost to regrass an average 18hole course is \$100,000 to \$400,000, for the putting surfaces alone.

"If you're growing the wrong grass, there's no telling how much money you might throw at it, and still not have a golf

course on par with the one down the street," said Busey in an interview. "I think this study will help other aspects of the turf industry."

MYSTERIOUS ORIGINS. Little is known about the origin of off-types. Golf course professionals first called attention to the problem more than 20 years ago. According to Busey, off-types may originate from contaminated sprig stock, seeds of "common" bermudagrass that were brought onto courses by golfers' shoes, machinery, animals and other carriers or by spontaneous mutation.

Downing said his staff has done a "yeoman's job" maintaining the seven-year-old course at Willoughby, but patches of grass have cropped up that are "physically different" than the rest. "The problem is very noticeable," he said.

DNA fingerprinting will help document the presence and nature of off-types, and whether or not they can be prevented.

In the long run, DNA profiling may impact the lawn and landscape industries in a major way. Busey said municipalities, parks, recreation departments and other landscape users who pay top dollar for turf may find DNA fingerprinting a useful quality control measure.

Downing agreed. He said it's likely the certification process could expand to include other grasses, but "it would probably take a few years."

FINGERPRINTING AT WORK.

Faster and more accurate than other test methods, DNA profiling lets researchers quantify degrees of relationship, such as whether off-types are mutations or seedling variants.

UF researchers will use a DNA technique that produces characteristic bands for each grass, similar to the bar codes at the supermarket, for a clear comparison of genotypes.

To ensure the testing's

accuracy and consistency, researchers are vigilantly maintaining turfgrass source material and conducting blind turf tests. Morphological markers and chromosome counts — the first line of off-type detection in the field — complement expensive DNA profiling.

CERTIFICATION SUPPORT. DNA fingerprinting should help certify the authenticity of bermudagrass planting stock by reliably distinguishing the genetic off-types.

"If we can show that the DNA fingerprinting is truly repeatable, then our precise reaction conditions will be published and available for use by independent testing laboratories, sprig certification agencies and turf supply companies," said Busey. "I think the backbone of any quality assurance program is to have a trail of accountability."

Busey suggested that DNA fingerprinting first be used to certify source material, second to validate the grower's field and third, used on golf courses to determine turf content. Before grass is put on the market, turfgrass certification inspectors should use DNA testing as a quality control step.

"I think it's going to really help the industry and the credibility of growers and southern turfgrasses," said Howard Barnes, president of Quality Grassing and Services Inc., Tampa. He is a member of the Florida Turfgrass Association's Certification Committee.

Although the process will make certified grass more expensive, it should help "cut flyby-night growers out of the picture," he said.

"DNA testing will help ensure what made it to the site is what is growing," Downing said.

However, Busey warned that DNA fingerprinting should not be promoted as a "cure-all."

Earl Elsner, director of the Georgia Seed Development Commission, which manages commercial foundation seed shipment of Tifton series bermudagrass, agreed. "The long-term goal of DNA fingerprinting is to identify these off-types when phenotypic observations are not adequate."

The DNA process alone will not solve the problems facing turf professionals, said Elsner. Rather, it must be part of a rigorous program that incorporates genetic and phyto-sanitary certification methods.

Just like the trial in California, he said, DNA testing alone can't determine if the defendant's guilty, but it can narrow the possibilities. — Anne Wemhoff

The author is a free-lance writer based in Hudgins, Va.

market insights

On-Line Discussion Groups Offer Access to Landscape Data

On-line forums offer lawn and landscape professionals easy access to information and the opportunity to discuss issues with peers and customers. Drop in on the following free "subscription lists" to get the buzz, or to ask a question of your own.

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Gardens	Gardens and gardening
Hort-L	Virginia Tech Horticulture Department - monthly releases
Hortpgm	Virginia Tech horticulture programs in consumer horticulture
Turfpath	Discussion list for turfgrass pathology
Usiale-L	International Association of Landscape Ecology list

Naples, Florida Bans 'Invasive' Plant Varieties

On Aug. 2, the Naples, Fla., City Council voted to add the java plum, carrotwood and earleaf acacia to its pest plant list, despite efforts from Florida's green industry. According to Naples Natural Resource Manager Dr. Jon Staiger, developers and land owners have five years to remove the plants from infill lots (the vacant lots in subdivisions) and growers have six months to get rid of existing stock. The plants must be removed from vacant land upon development, but can remain in residential landscapes as long as the plant material does not pose a hazard to neighbors.

Ameiel Villani, general manager of Sunny Grove Landscaping Inc. and board member of the Florida Nursery Growers Association, Royal Palm Chapter, said the industry lost the issue "purely on perception, not on facts."

market insights

He said the group pushing the ban — primarily the Native Plant Society — presented no "scientific data" to prove the plants' invasiveness. "It's politically correct to push native plants," he said.

According to Villani, lay people, including



Non-native plants come under fire.

the President of the United States who recently signed a memorandum encouraging native plant use in federal landscape projects, automatically think native plants will proliferate with low maintenance and water, "but it's just not true."

Rather, he said, the use of indigenous and xeriphetic plants, alongside natives, are required to meet goals of water conservation and reduced maintenance.

Villani and other growers are concerned for the future, especially as membership in the Native Plant Society becomes "a status thing."

"The scary thing is they're going to go after other non-native ornamental plants like the Ficus benjamina, one of the biggest crops in Florida that's shipped around the world," he predicted.

Southeast Market Reports

It seems the Southeast just can't shake off the effects of the hottest, driest summer in recent history:

Washington, D.C. — Outside Washington, D.C., Bern Bonifant, vice president of Natural Lawns in Merrifield, joked, "We had a wonderful summer, where people baked around the pools and so did the lawns!" Record heat and drought were "brutal on plants and landscapes," he reported.

Borers and grubs caused significant damage on weakened plant material. Bonifant said rising seed prices are a major concern, as demand for reseeding heat and droughtdamaged lawns increases along the East Coast. The Fairfax County, Va., firm is focused on reducing plant stress by applying high-iron, high-sulfur fertilizers.

Lexington, Ky. — Stephen Hillenmeyer, president of Hillenmeyer Nurseries, said fall looks like it's going to be a good season, as long as "the weather doesn't mess us up."

Hillenmeyer said he's concerned about long-term damage to plant material from the summer drought, which the public doesn't realize is still a problem, despite recent rains. He's seen local 50-foot trees die from the drought of 1988.

5) Why are you optimistic/pessimistic?

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	1		

Optimistic

regional outlook fax survey

Lawn & Landscape is interested in learning more about market conditions in the Southeast, so we've incorporated a Fax Survey into this issue of Regional Outlook. If you would like to assist us in learning more about your market — as well as find out how others are doing in your market area — please fill out the following questionnaire and fax (216/961-0364) or mail a copy to LL magazine at 4012 Bridge Ave., Cleveland, OH 44113. We'll report the results of the survey in future editions of Re-
gional Outlook. Thank you for your assistance.

2) If you	ur busine	ess is "up'	or "down		please list the
percenta	age of ch	nange:	+		_
				our readers.	t observations

Pessimistic

6)	Please	rate	your	compar	ny's	business	performa	ance	for
100				100	7.0		compared		
(ct	neck onl	v one	in ea	ach cate	gory):			

Service	Above Average	Below Average	Average	Not Involved In This Market
Mowing Aeration Tree Care Landscape	=	=	=	
Design Lawn				
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Money Talks?



To keep wages and salaries from breaking the bank, contractors are trying some creative compensation

plans.

uccessful contractors have recognized over time that retaining a quality work force is a key to keeping a business thriving. The road to this destination, however, has not been so clear.

There may be plenty of variance from market to market, and company to company, but contractors are fairly consistent in their concerns about wage and salary levels in relation to job pricing.

With only so much cash, contractors have been experimenting with ways to keep employees from defecting without breaking the bank.

STATUS REPORT. A growing economy over the last couple of years has created new business in many areas, but has also lowered unemployment to the straining point for many contractors. Tom Tolkacz, president of Swingle Tree Co., Denver, Colo., is one who feels this is definitely true in the West.

"In the Denver area, and really in most of the western states, the economy has been on the rise for the last two to three years with no signs of slowing," said Tolkacz. "That adds to the pressure to attract good people, and base hourly and salary rates have been going up."

Dale Elkins, vice president of the Florida division of ISS Landscape Management Services, Orlando, Fla., said the 1990s have been a period of significantly higher salaries and somewhat higher hourly wages in his area.

"It seemed like we hit 1990 and suddenly, we and other large companies were out at the universities competing to recruit the top students," Elkins explained. "The students started holding out for more money, and that was never the case before the 1990s."

The lack of available employees is the other big concern in areas where landscaping is booming. This means that the construction industry, as well as other companies moving into those areas, further strain the worker pool.

"Younger folks are not attracted to the industry — our workers are older now, in the 20- to 30-year old range," said Tolkacz. "They tend to have more responsibility with children, a mortgage and the other costs of living. They also want more quality time off the job — I'm not sure the industry had to face this five or 10 years ago."

NEW PHILOSOPHIES. Michael Byrne, owner of Byrne Brothers Landscaping, Essex, Mass., has had a policy of no seasonal hiring for the last three years, and he said it's been a big success.

"I don't subscribe to the theory that more people get more work done," he said. "My philosophy is, if you pay fewer people more money, you won't have to hire additional labor."

Of course, Byrne's employees are expected to organize and plan their work so that it can be performed by the available workers without additional hiring.

The greater level of personal responsibility has other positive repercussions as well. Byrne said the company's employee attrition rate has been nearly nonexistent, and hiring new employees is done through word of mouth, rather than advertising.

Employees rely on each other so much for their own success, Byrne said,

Wage/Salary

referrals are almost always top-notch people.

Byrne believes this philosophy could work for many contractors.

"As an industry, we kill ourselves staffing up every spring," he said. "We prefer to invest in better equipment for our employees."

FULL EXPOSURE. David Luse, president of Arteka Corp., Eden Prairie, Minn., relies on open book management to give employees a sense of empowerment and belonging to the organization. For the past year, nearly half of Arteka's 125 employees have gotten full access to the company's books.

Understanding the numbers has given employees the opportunity to find ways to cut costs and increase profits. At the end of the year, 1/3 of the profits after the earning goal is reached are put aside for the employees. A year into the program, employees have sliced \$200,000 off the bottom line.

When hired, employees are told whatthey can expect to earn at the low, middle and high end of their job. "That way," said Luse, "they know what is achievable at a certain job description."

Training is also a big part of the equation. Two years ago, the company hired a human resources person on board to coordinate training and safety. It's a good benefit for hiring.

Fax Survey: The Status of Labor in the Green Industry

With labor shortages in many areas of the country and the retention of employees foremost in the minds of many contractors, the editors of *Lawn & Landscape* magazine would like to know more about your company's situation as it relates to labor.

We hope you will take a few minutes to fill out this brief, completely anonymous survey. We will use the results in upcoming, in-depth articles about the industry. Thank you for your help!

Which ONE of the following best describes your company?	What benefits are provided for hourly
Landscape Contractor (maintenance & installation)	employees (check all that apply):
Lawn Maintenance Contractor	Profit Sharing
In-House Maintenance Contractor	401(k)
Chemical Lawn Care Company	Paid Holidays — How many?
(excluding mowing maintenance service)	Paid Vacation Days — How Many?
Ornamental Shrub & Tree Service	Paid Personal Days — How Many?
Landscape Architect	Paid Health Insurance
Irrigation Contractor	Shared Health Insurance
Other Contract Services (specify):	Paid Dental Insurance
cities contract contract (openity).	Shared Dental Insurance
What is your position?	Paid Disability Insurance
New laws have you been with your present company?	Shared Disability Insurance
3 How long have you been with your present company?	Paid Life Insurance
How long have you been in the industry?	
5 In what state are you located?	Other (describe)
a realise you — valuated all — getting do not a	What benefits are provided for salaried
how many salaried and hourly employees are at your	employees (check all that apply):
company?	Profit Sharing
HourlySalaried	401(k)
Of the total number of employees at your firm, how many	Paid Holidays — How many?
are seasonal, and how many are full time?	Paid Vacation Days — How Many?
Seasonal Full Time	Paid Personal Days — How Many?
	Paid Health Insurance
3 Please indicate the average wages you are currently	Shared Health Insurance
paying in the following employee categories. Wages	
should be in dollars per hour; salaries, if applicable,	Paid Dental Insurance
should be in dollars per year. Please specify.	Shared Dental Insurance
	Paid Disability Insurance
Entry Level Laborer \$	Shared Disability Insurance
Field Laborer \$	Paid Life Insurance
Equipment Operator \$	Other (describe)
Lawn Service Technician \$	
Foreman \$	Please indicate your 1995 anticipated
Supervisor \$	sales in the following ranges:
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What is your level of education?	\$50,001 - \$100,000
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High School Graduate	\$250,001-\$500,000
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Basics of Micronutrients: Part 3

Just a Dab Will Do

Boron, molybdenum and copper are necessary for plants in tiny amounts. They may be just what the doctor ordered.

By. C. Neal Howell

O THE TERMS B, Cu, Mo sound like code words? Try to remember that chemistry lab so long ago and you'll know that they stand for Boron (B), copper (Cu) and molybdenum (Mo) — the last of the essential nutrients for turf and ornamentals.

Should you be adding boron, copper or molybdenum to your current fertilizer program? Knowing that of all of the essential nutrients, these three have the lowest use rates probably gives you pause. You should pause.

You should not be routinely adding these three nutrients. It's in cases like this that experience teaches a little bit does a lot of good; a lot can hurt you. You shouldn't ignore these three elements, either, because they are links in a nutrient chain. A chain doesn't work well if one link is missing or weak. You simply can't grow healthy, green turf and ornamentals without them.

SMALL REQUIREMENTS. Most plants have very small requirements for boron, copper and molybdenum and most soils probably contain enough of each to supply normal growth patterns.

There are some areas where soils do not supply enough of these elements or where conditions inhibit nutrient uptake, however. There are times when plants may be stressed to the point they are unable to pick up adequate supplies of the nutrients and growth may be affected.

While quite a bit of research has been done on the B, Cu, Mo needs of agricul-

> tural crops, not much work has been done on turf and ornamentals simply because it is very difficult to artificially induce deficiencies under normal soil and growth conditions.

> THE GREAT PRETENDER. Boron has been described as "the great pretender" since it can mask its deficiency by

(continued on page 02)

The effects of zinc toxicity are obvious in this laboratory experiment showing a control plant and one with too much zinc.

MICRONUTRIENT TOXICITY LEVELS

Nutrient

Boron

Copper

Iron

Manganese

Symptoms 1st Appear at Tissue Levels of:
519 ppm

656 ppm 2,557 ppm

1,280 ppm



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micronutrients

(continued from page 00)

causing the plant to exhibit symptoms of several other nutrient deficiencies. Boron deficiencies have been diagnosed in one or more crops in 43 states and its deficiency is probably the most widespread of all the micronutrients.

Boron is essential for development and growth of plant cells in the meristem or new tissue growth areas. As a result, visual deficiencies are usually identified by stoppage of growth of the terminal bud followed quickly by the death of young leaves.

Micronutrients:

Too Much of a Good Thing?

o date, there has been limited research on how micronutrient toxicity can affect turf-grasses and what exactly you can expect from too much of a good thing. Recent research on micronutrient toxicities on Kentucky bluegrass give us a chance to look at these issues and hopefully learn from them.

Dr. Chiwon Lee of North Dakota State presented the results of his research on micronutrient toxicities in Kentucky bluegrass this year. This research suggests that micronutrient toxicities on turfgrass are rare and, oftentimes, difficult to induce.

BORON TOXICITY. While small amounts of boron are needed for optimum growth, some wells and streams used to irrigate turf and ornamentals can contain amounts of boron far in excess of plant needs. Under these conditions, boron can reach levels toxic to some plants.

As a rule, plants grown on soils containing high levels of lime will tolerate higher boron levels than those grown on acidic soils. Kentucky bluegrass is rated as moderately tolerant and is capable of growing in conditions with soil levels of up to 4 ppm boron without yield or vegetative growth being reduced.

Boron toxicity on Kentucky bluegrass is characterized by severe chlorosis and leaf bleaching when the tissue levels exceeded 519 ppm. The degree of tissue whitening becomes greater as the boron levels in the plant increases. At the highest boron levels, leaf chlorophyll is greatly reduced, as is plant size and vigor.

TOXIC COPPER. Copper toxicity has been found in areas specializing in copper mining or where copper fungicides have been used extensively. Copper can be highly toxic under some conditions and care should be used for applications of products containing high levels of copper.

Copper toxicities on Kentucky bluegrass develop at about 656 ppm in plant tissues. Symptoms of copper toxicity include reduced and discolored root growth, poor shoot development and leaf chlorosis and the development of creamy white colored lesions which develop in the center of the leaf blade.

Toxicities are, fortunately, rare and are usually limited to areas rich in naturally occurring copper or in areas treated with fertilizers containing high levels of copper such as sewage sludges, pig and poultry manures, municipal composts and products containing mine wastes.

TOXIC IRON LEYELS. While iron is generally a very forgiving element, high application levels can give dramatic visual differences. As the level of

Several visual symptoms can indicate a deficiency of boron:

1. Death of terminal buds which causes lateral shoots to develop, resulting in a "witches-broom" appearance.

Chlorotic, thickened, curled and wilted leaves.

iron in an application increases, so does the darkness of the color. At the highest rates, turf can turn green-black. Tissue levels of 2,557 ppm iron in Kentucky bluegrass caused this greenish-black discoloration.

In all cases in 25 years of personal my experience, this discoloration was transitory and lasted no more than two mowings. After the black was mowed off, the turf remained a dramatic dark green for an extended time.

NO TOXICITIES. No manganese toxicities have been reported on either field-grown or laboratory-grown turfgrasses.

While molybdenum toxicity has been diagnosed in animals in the field, it has not been identified in plants outside of the laboratory.

At tissue levels of 1,280 ppm of molybdenum in Kentucky bluegrass, leaf browning and necrosis occurred. These symptoms were usually identified by a chlorosis to bronze-brown discoloration of the plant. The discoloration developed from the plant sheath to the upper blades and preceded extensive plant dieback,

Usual zinc toxicity symptoms include chlorosis and reddening of the leaf blades. As the zinc levels increase, the leaves of the plant begin to exhibit purplish-red discoloration and reduced foliage production.

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3. Improper pollination, flowering and fruit or seed set.

Deficiency symptoms in turf are vague and plant quality is reduced before plant growth. Since boron is not translocated within the plant, deficiencies are first observed in the youngest plant tissues - not unlike an iron deficiency. Usually, stress from lack of boron will be evident when the plant is growing rapidly, flowering or suffering from drought stress.

Always use soil and tissue tests before applying boron to turfgrass.

BORON BLOCKERS. Conditions which adversely affect boron uptake include:

1. Soils with a high pH (soil pH of 6.0 and above can affect uptake).

2. High levels of nitrogen and potassium, which seem to interact with boron to inhibit its use.



3. Excess irrigation or heavy rain. Boron can be leached readily from soils much like nitrogen loss from leaching.

4. Drought. Lack of moisture can cause roots to avoid the surface laver of soils where boron tends to accumulate (especially in organic matter) and plants may suffer from a boron deficiency.

5. Sandy soils - especially with a

Molybdenum toxicity like that shown in this experiment may result in leaf browning, necrosis and other symptoms.

pH of 7.5 or higher.

A soil level of 0.25 to 1.5 parts per million (ppm) is considered adequate for turf in most cases. Exercise care in selecting a lab since rec-

ommendations for agricultural crops differ greatly from those of turfgrasses.

ENZYME ACTIVATOR. Copper was first recognized as essential for growth of higher plants in 1931. It is required in small doses, next to the smallest amounts of any micronutrient. Copper deficiencies are

(continued on page 73)





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Give Your Business A Boost

Early preemergence applications give your employees more time to sell and service accounts.



TIMING your preemergence herbicide applications can be a real problem. The herbicide has to be down before crabgrass seeds germinate, but not too early to risk compromising residual which can result in late-season breakthrough. Throw in unpredictable weather and a heavy spring workload, and the preemergence application window becomes tight.

For lawn and landscape contractors, Paul Baker and Bob Williamson, the preemergence application window is anytime from late fall to early spring — as long as the customer is under contract for the coming year and the weather is cooperative. The key, they say, is using a preemergence herbicide — Barricade — that offers the widest application window available.

Handle More Spring Work.

The primary advantage of a late fall or early spring application is that it frees staff time for other work during the hectic spring season.

Baker, the pest control foreman at Landscape Resources in the Dallas/Fort Worth metroplex, finds that he and his crews save time and the possibility of mistakes with a fall application in October. "I like to get it finished in the fall before we overseed. That saves us the headaches of windblown seed coming up in our properties."

For 12 years, Landscape Resources has been landscaping and maintaining nearly five million square feet in the Las Colinas area in Irving.

"In winter, when a lot of the turf is apt to go dormant, clients don't want to see any splotches of green weeds," says Baker. "We found out that we have a lot easier time if we get the Barricade down in early fall before we start overseeding our properties, and before our competitors start overseeding theirs."



Outside Philadelphia, Bob Williamson, division manager of Moyer Lawn Care, applies Barricade in the early spring to save his applicators from split applications. Williamson wants to get Barricade down early on the company's residential accounts foremost for crabgrass control - giving Moyer technicians the ability to handle more accounts later in the spring.

Making use of an otherwise slow time, and decreasing the amount of labor needed for treatments, is complemented by Barricade herbicide's application rates which can be four times lower than competing preemergence herbicides.

"We are dealing with a lot less product because we can vary the rates to accomplish the amount of control needed," Williamson says. Using Barricade label options, Moyer Lawn Care relies on flexible rates for a variety of commercial and residential accounts.

Stays Where It's Needed.

Controlling crabgrass, in addition to 29 other problem grasses and broadleaf weeds, Barricade can offer the longest residual of any preemergence herbicide because of its extremely low solubility. In fact, Barricade herbicide is 17 times less soluble than pendimethalin. The result is that Barricade stays in the soil seed germination zone - a critical requirement in Texas for fall rains, Baker says.

"We have three preemergence concerns: staining, control and water solubility or mobility in the soil," says Baker. "After a heavy rain, other preemergence herbicides traveled into other areas and caused problems, especially in germinating grass seed.

"We first tested Barricade in fall 1993. However, this spring we went strictly with Barricade. This fall will also be strictly Barricade on our accounts."

Flexible Rates, Constant Con-

trol. Thanks to Barricade herbicide's application flexibility and control, Landscape Resources has been turning some heads in the Las Colinas area.

"On the properties where we've had Barricade three seasons in a row, we've had a lot less trouble with grassy weeds. Even some of our clients say they see less, like we are catching up to the problem," says Baker. "To them it looks like we are out there everyday. What they don't know is we put Barricade down in October."

In early spring, Moyer Lawn Care varies their rates of application, following label options, to meet their changing needs.

"We change the rates as the season progresses - it's all incumbent on the weather. But, when you are putting Barricade down April 15 in Philadelphia, you don't need to be at the full rate anymore because you don't need that long of a residual," says Williamson. "So we vary the rates according to our timing needs, and it remains a cost and labor saving product in comparison with other preemergence herbicides."

Benefits Increase **Business** Growth. From late fall to early spring, Landscape Resources and Moyer Lawn Care have the option to get ahead on next year's workload. Both say they also are getting a jump on their competition and helping diversify their programs and build

profit potential. The length of control has saved Paul Baker labor and service time.

"We don't have to put down a postemergent as often as we did before using Barricade," Baker says. "I know it has saved us quite a bit of time, and we get the control that saves us labor down the road."

Baker says customer expectations are a critical part in evaluating a service proposal, especially in a high profile account. The same holds true for Moyer Lawn Care, where the longer period of control helps satisfy customers' demands for positive results.

"Our customers want control, that's all they are concerned with," says Williamson. "We are giving them the efficacy they demand when they walk outside and evaluate their lawns in July. Those kinds of positive results are what brings more customers to our company. Lawn and landscape maintenance primarily is an impulse decision based on what kind of service you have provided to someone else in the neighborhood."

Better service, an open application window and happy customters is the goal of any lawn and landscape professional. Barricade offers lawn and



Barricade Provides Cost-Effective Control

"HOW do I justify the price of Barricade?" asks Butch Boss, president of A1 Industrial Lawn Care, "Because I tried it."

Based in Dallas, Boss isn't shy to talk about why he includes a premium-priced product like Barricade in his preemergence herbicide treatments.

"I only have to put Barricade down once or twice a year. With my previous preemergence herbicide, I was out there up to four times a year," Boss says. "I'm saving labor - which is more expensive than the material." Breaking out the costeffectiveness from the product cost is not easy, Boss says.

"Most people don't look at the results, they look at what the herbicide costs up front. You have to look at the cost of how many times you are going to have to put it down, your labor, equipment and, of course, the end result," Boss says.

Barricade preemergence herbicide offers season-long control of crabgrass, goosegrass and poa annua (annual bluegrass), plus

27 other grassy and broadleaf weeds. In addition, Barricade can be used at rates up to four times less than other preemergence herbicides.

Using less product also means a lighter environmental load. This is a benefit that David Robson, an extension horticulture educator for the University of Illinois, calls part of the economics of Barricade.

> "I'm a firm believer that price is not as important when you are using less quantity and getting longer re

sidual while applying any environmentally sound compound. Aren't those benefits worth some extra cost?" asks Robson.

Robson, a homeowner himself, says that as a customer, Barricade brings added value.

"I think people feel better knowing they don't have the hassle of trying to keep pets and kids off the lawn as much. It's a cliché, but you sleep better knowing that you only have to think about weed control once or maybe twice a year," says Robson.

With Barricade, lawn and landscape contractors and their customers don't have to worry about staining either. Because of Barricade's non-staining formulation, using as directed by the label means no worry about stained uniforms, equipment, vehicles, driveways, fences or shoes.

"I expect contractors to apply a herbicide that will work efficiently, economically and safely," says Robson. "As a

> homeowner, I wouldn't want to worry about anything."

These expectations make Barricade highly cost-effective. Which explains why Butch Boss continues to rely on Barricade for his preemergence control.

"We will be applying Barricade for our preemergence work. We're going to look into using Barricade in an onfertilizer formulation, but either way, Barricade will be going down, because I know what my true cost is."

"Most people don't look at the results, they look at what the herbicide costs up front."



S SANDOZ

University Research l Preemergence Applic

RECENT research at Kansas State University and Michigan State University tested the efficacy of several preemergence herbicides when applied in the fall. The research supports the "non-traditional" fall application option for at least one of the products, Barricade herbicide. When applied in late fall, Barricade was still providing excellent control in the summer of the following year.

KSU — Barricade fall vs. spring applications.

Applied in test plots in both late September and late October, Barricade herbicide showed no significant difference in comparative efficacy with spring herbicide applications.

Overall, the fall vs. spring applications show that Barricade provides a consistently high level of control.

These results are supported by Michigan State University research conducted in 1995 — a year where environmental conditions were ideal for crabgrass growth.

MSU — Barricade late fall application.

Applied in early November 1994, Barricade continued to provide consistent control of crabgrass through August 1995.

Conclusions and business considerations.

Fall applications with a preemergence herbicide can offer significant advantages to lawn and landscape contractors. From an application window perspective, fall applications provide a much larger application window and reduce concerns over favorable weather conditions in the spring. From a business perspective, fall applica-

FALL APPLICATION – BARRICADE

TREATMENT	RATE (LBS./A)	DATE OF APPLICATION	% CRABGRASS JULY 15	AUGUST 15
Barricade	1.00	September 28	0.0	0.3
Barricade	1.15	September 28	0.0	0.0
Barricade	1.00	October 25	0.0	0.0
Barricade	1.15	October 25	0.0	0.0

SPRING APPLICATION – BARRICADE

TREATMENT	RATE (LBS. AI/A)	DATE OF APPLICATION	% CRABGRASS JULY 15	AUGUST 15
Barricade	1.00	March 1	0.0	0.0
Barricade	1.00	April 1	0.0	0.0



Proves Fall ation Efficacy

tions give you a big jump on next spring's workload. Applicator workloads are usually lighter in the fall. So time saved with fall applications for your repeat customers can be used the following spring to sell new customers or perform other work.

In the research, Barricade provided longer lasting control of crabgrass. Barricade herbicide's performance in the KSU study also supports its flexible application timing — whether late fall or very early spring when the ground is not frozen.

Joe Yoder, technical services manager for Sandoz Agro, Inc., the manufacturer of Barricade, says the KSU

LATE FALL APPLICATION – BARRICADE

TREATMENT DATE

Barricade

RATE (LBS./A) 1.00 DATE OF APPLICATION

November 2

% CRABGRASS

2.0

5.0

and MSU studies support other research from the East and Southeast showing that the extended residual of Barricade makes it the only herbicide capable of fall applications for spring and summer crabgrass control. The results show that Barricade offers lawn and landscape contractors the option of fall-only, fall and spring or spring-only preemergence applications that provides season-long control of crabgrass and 28 other weeds.



Using Products With Confidence Powers Memphis Firm

RUNNING a family-run lawn and landscape business means getting employees behind the company's philosophy.

Founded in 1972, Southern Spray Co. in Memphis, follows a "do it thorough, do it right" philosophy. Kermit Throckmorton, son of the founder and the residential and commercial lawn care manager, attributes part of the company's success to employees who feel confident using their products.

Throckmorton says this affects results and improves overall performance. To help give employees the best tools possible, Southern Spray Co., switched this spring to Barricade preemergence herbicide.

Barricade herbicide's active ingredient, prodiamine, controls crabgrass, goosegrass, poa annua (annual bluegrass) and 27 other grassy and broadleaf weeds in either single or split applications. Throckmorton was pleased with the level of control he got in his first season with Barricade.

"We got better control of crabgrass," Throckmorton says. "And the technicians really like the fact that Barricade comes in water dispersible bags. For us it gives two additional benefits: First, the dispersible granule bags are good for storage. Second, the bags help you mix what you need to avoid wasting a lot of

chemical product."

Barricade's application flexibility allows it to be used in a variety of application areas. For example, 60 days after overseeding, Barricade can be applied to turf, without damaging new growth. It also can safely be sprayed in hard to reach areas near perennials, wildflowers and over 100 varieties of landscape ornamental plants and shrubs. Applications in other sensitive areas also are easier thanks to Barricade herbicide's non-staining feature.

"My technicians have been spraying pendimethalin for three or four years, which stained clothes, trucks, fences and walkways," says Throckmorton. "After we switched to Barricade, they were feeling better and looking more professional. It was amazing because morale this year was a lot better than last year," Throckmorton says. "I think it reinforces the fact that the employees know what they are doing and are getting good results."

It's this attitude that keeps Throckmorton in the running with national lawn care chains. "The chains try to grow and grow—get bigger and produce as many dollars as possible.

"What's important to me is if my employees spend extra time on each yard to do the job right, the first time."

Southern Spray Co.'s 20 full-time employ-

Barricade: Not Just For Turf

COMPETITION in the 1990s means that lawn care companies must find ways to meet growing customer needs. One service extension to consider is handling weed control in and around ornamental beds. Barricade preemergence herbicide is labeled for control of crabgrass and 29 other grass and broadleaf weeds and can be used with confidence in and around over 100 landscape ornamentals, including varieties of perennials and established wildflowers. Barricade herbicide's formulation eliminates concern about staining along sidewalks, buildings, fences and siding. Best of all, a single application of Barricade can provide season long control.

A convenient one-pound container makes it simple to measure and mix the right amount of Barricade for backpack applications.

Barricade will not harm most ornamental trees, shrubs and flowers. Some of the species that Barricade may be applied to without injury include:

Japanese Maple
Norway Maple
Holly
African Lily
Barberry
Japanese Boxwood
Scotch Heather
Wild Lilac
Flowering Dogwood

ees play an important role in the company's success. Throckmorton thinks that with strong products backing them, it makes their jobs easier, and provides a better opportunity for employees to contribute to the company's success.

"If you offer your employees products that make them comfortable and more efficient, there is going to be an improvement in morale. Keep your employees happy, pay them right and go the extra mile to take care of them," says Throckmorton. "For us, Barricade is part of that. It helps our employees do a better job and get results."

Taking the Blemish Off Service Records

SOME of Larry Shield's lawn and landscape customers used to see yellow after a preemergence treatment — on their shoes, clothes and floors.

"One spring we replaced five, white linoleum floors because of stains. All of these customers had dogs and the dogs would come in from outside and lay down. It didn't matter whether the floor was 600 square feet or 2,000 square feet, if it had a two-foot square yellow stain, we had to replace the entire floor," says Shields, president of Beautylawn, in Memphis.

Following treatments with pendimethalin, the stains also left a permanent mark on Beautylawn's service record. "We ended up losing all five of those customers, even after we replaced their floors. I guess they thought we might use pendimethalin again," says Shields.

formulation, Shields says, Barricade also performs more effectively. With more than 3,500 residential accounts, he feels it's important to provide both excellent weed control and customer satisfaction.

Shields says his program involves six rounds per year, with one spring application of Barricade. The company uses it in water soluble bags and appreciates the convenience and lower use rates.

"By and large customers just want you to do the job well. They don't care about the technical part of it, they just don't want the treatment to inconvenience them in any way," says Shields. "Barricade gives us the performance and security we need."

Part of the security of Barricade's nonstaining formulation is that it can be sprayed near highly visible outdoor areas, such as driveways and fences, without the risk of staining.

Butch Boss, president of A1 Industrial Lawn Care in Dallas, remembers one application that nearly cost him an important customer.

"We were spraying pendimethalin outside the main entrance of a major corporate headquarters — a brand new facility — and I had a hose break," says Boss. "Luckily, I was able to stop the leak before anything serious happened."

Risks like these endanger a company's service record. Barricade herbicide's nonstaining formulation also offers an advantage that operators like Boss appreciate.

"After switching, we compared the length of control Barricade provides to pendimethalin and, frankly, there was no



Environmentally Friendly Features Build Selling Power

ANSWERING questions about the environmental impact of providing lawn and landscape services is becoming almost a daily part of lawn maintenance work.

"When I am selling to new customers, more than half ask questions about the knowledgeable staff that is well-versed with Barricade herbicide's environmental benefits. Key points include:

 Barricade can be used at rates much lower than other preemergence herbicides
 — which means you are putting down less



products we are using," says Bob Williamson, division manager of Moyer Lawn Care, outside Philadelphia.

"What we are dealing with is an environmental and emotional issue. People want to be assured that we are using a product that won't harm them or their children. We can achieve that by educating them."

Emphasizing environmentally friendly business practices begins at the selling point. It's here that a contractor can ease a customer's mind. By discussing product features such as rates and environmental impact, you can help build a customer's confidence as well. Lawn and landscape companies that use Barricade preemergence herbicide find its features make this an easier task.

Start by making sure you have a

product, up to four times less.

- Barricade herbicide's active ingredient has an extremely low water solubility. This keeps the product where it is needed, for a longer period of time, and it won't leach out or down.
- Customers are getting season-long control in one or two applications instead of the usual three or four — without using more product.
- Because of the small amount of preemergence herbicide you are applying, your employees are getting a minimal amount of exposure — showing customers you consider both the environmental and human aspects of your service.

Selling your service begins with educating your customer. In turn, you are putting them at ease — and building references for new business.

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micronutrients

(continued from page 04)

probably less common than those of other micronutrients. Six to 20 ppm in plant tissue is usually adequate for most plants.

Copper functions as an enzyme activator and works to aid plant respiration and photosynthesis. It cannot be translocated, so a continuous supply of copper is necessary to prevent new growth from being affected.

Copper deficiency has been diagnosed in 14 states; the majority of the affected areas have sandy, peat or muck soils. The sandy soils of the Atlantic coastal plains, for example, are often deficient in copper. Peat and muck soils in Florida, New York, Indiana, Ohio, Michigan, Minnesota and Washington also have demonstrated copper deficiencies.

CHECK THE SYMPTOMS. Obvious deficiency symptoms of copper include:

1. Dieback of terminal shoots in trees.

- 2. Stunted growth.
- Wilting and death of leaf tips.
 - 4. Poor pigment.

Certain conditions adversely affect copper uptake by plants. For instance, light sandy soils often produce plants with copper deficiencies. High pH soils can also dramatically reduce the

availability of copper. Any soil with a pH of 7.0 or higher may produce plants that exhibit copper deficiency. Copper is most readily available in soils with a pH of 6.0 or below.

Copper uptake also can be hampered by applying high rates of phosphorus, zinc or nitrogen. In addition, peat, muck

There are times when plants may be stressed to the point they are unable to pick up adequate supplies of the nutrients and growth may

be affected.

.

and other organic soils can effectively tie up copper.

DIAGNOSING THE PROBLEM. While copper deficiency can be a problem, it is usually localized and most times affects tree crops and plants growing on sandy or organic soils. Soil and tissue tests still remain the best method for identifying copper deficiency. In many cases, fungicides containing copper have

corrected or prevented copper deficiencies. Many of these same fungicides are no longer available and copper supplements may have to be considered.

NITRATE REDUCER. Molybdenum is the element required in the smallest amounts

(continued on page 70)





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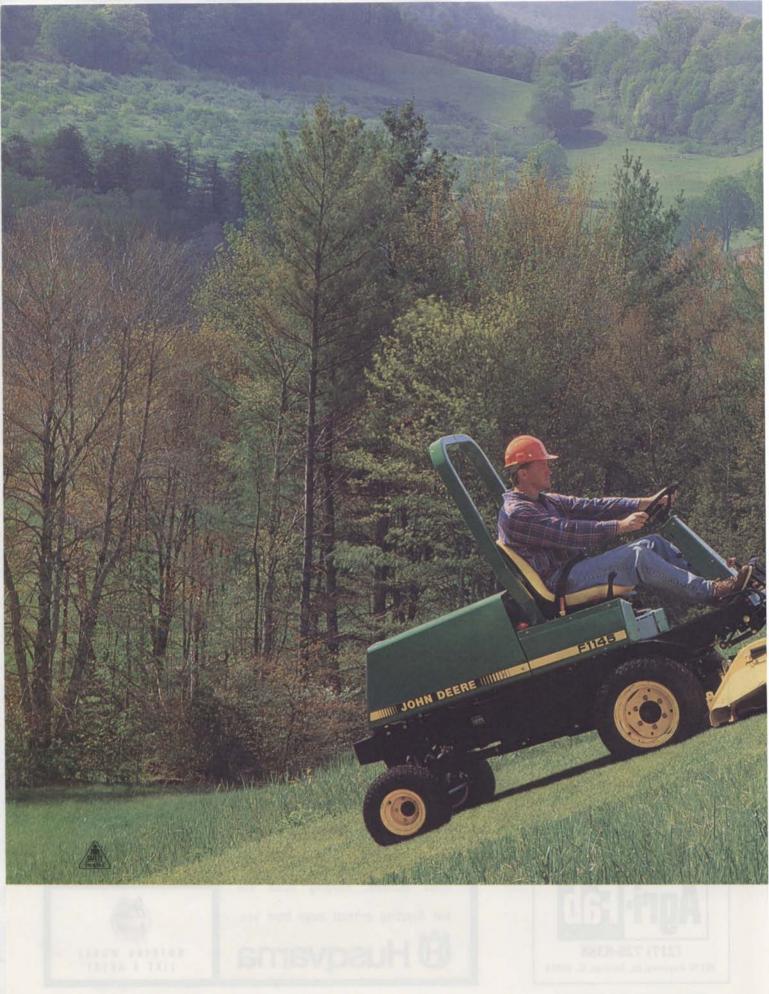
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multi-purpose dump bodies for hauling Dump "E" converts standard pickups into end-user specifications; and the "slide-in or dump body-mounted and customized to AM-30 "tow-behind" units, which are ideal to sionals and municipalities, the line includes other debris. Designed for landscape profesequipment for the removal of yard waste and construction and landscaping material high volume leaf pick-up; the FRP is flatbed AG-18, which comes equipped with a fullythe self-contained, pickup- or trailer-mounted Take a look at the All-Pro lineup today tydraulic dump system; the AM-23 and

micronutrients

(continued from page 73)

by plants. It is also present in extremely small amounts in soils. Most soils will contain only about 2 ppm total and, generally, only a fraction of this amount is available for plant use.

Molybdenum is essential for the reduction of nitrates by turf and ornamentals. Plants cannot change nitrate nitrogen into amino acids without an adequate supply of it.

Molybdenum also performs some other apparently mysterious functions. These functions are mysterious because, in many cases, applications of molybdenum have spurred growth and, while those increases have been attributed to molybdenum, no one can say what caused the growth.

Visual symptoms of molybdenum deficiency in turferass have not been documented on turfgrass.

The symptoms of molybdenum deficiency in plants have been known to include:

- 1. Stunted plants similar to those with a lack of nitrogen
- 2. Obvious rolling or cupping of leaves with a marginal scorehing.

INHIBITING UPTAKE. Conditions which inhibit molybdenum uptake are low pH soils and sandy soils. Unlike most other micronutrients, molybdenum is less available as the pH drops below 6.0 or 6.5, where available molybdenum declines rapidly.

As it drops even lower, iron and aluminum become more available and tend to form compounds which are very insoluble, literally tying up the molybdenum. Under alkaline conditions, iron and aluminum molybdates are rarely formed. This accounts for the greater availability of molybdenum in alkaline soil conditions.

TRICKY DIAGNOSIS. Soil tests may not reflect a true picture of molybdenum levels since requirement levels are so low. Tissue tests are the best method to use.

If you are having a problem maintaining quality turf and ornamentals and have exhausted all other possible remedies, try correcting for a molybdenum deficiency.

An application of lime to acid soils can free up existing molybdenum, unless you're working with a sandy soil. Then, a molybdenum product will be required to correct the deficiency. Molybdenum should not be routinely applied with every fertilizer application, but used under certain conditions. Foundation plantings, new lawn establishment, initial fertilization of annual plants and installation of sod are all times when it may help growth.

Astute managers have discovered that supplying micronutrients along with the traditional N-P-K produces the dark green foliage and turf so prized by home and business owners.

The author is an industry consultant with Key Solutions, a division of Iris Sales & Solutions Inc., Rocky River, Ohio.

Sloppy Design Can Cost You a Bundle

Serious
irrigation design
errors are costing
property owners
plenty of money
in wasted water.
They can also
hurt the
contractor
in court.

By Larry Keesen AKING SHORTcuts in irrigation design and installation may save you money now, but result in legal fees and costly settlements in the future. Property owners are sometimes left with no recourse but to sue developers, designers, contractors and even manufacturers for inefficient and poorly designed irrigation systems.

Many irrigation designers stretch head spacing, ignore good hydraulic design, neglect water pressure controls and specify residential equipment in commercial applications to name a few glaring problems. This is often done in the interest of cutting costs and increasing profit.

In light of sloppy design, property owners are becoming more concerned about the cost of maintaining the landscape. Water costs are increasing as are the penalties enforced to prevent waste. One large housing development in California paid out more than \$300,000 in penalties for excess water use in 1993.

THE CONSEQUENCES. The Crossings homeowners' association in Denver (140 condominium units), and the steps taken to resolve design flaws is an expensive example of what can happen following a poor irrigation design.

In 1991, an evaluation of The Cros-

sing's irrigation system was initiated to determine if the turf was being over watered, and whether the design was the cause of drainage problems and structural damage.

An investigation revealed numerous problems with the design and original installation of the irrigation system. The system did not provide uniform coverage, resulting in over watering or "flood" irrigation in some areas.

Our findings indicated that the head spacing was stretched in many cases. Most of the pop-up spray heads were spaced at 18 feet to 23 feet (65 percent to 80 percent spacing) instead of the manufacturers' recommended 15 feet. Rotor heads were spaced at 44 feet to 48 feet in lieu of the recommended spacing of 38 feet. There was a great deal of over spray onto the buildings, asphalt, roads and tennis courts.

Many of the pop-up spray head zones had high operating water pressures rang-



A check with the landscape plans while designing the system would have indicated that rotor heads were the wrong choice for this area.

ing from 40 psi to 50 psi instead of the required 30 psi. Some of the heads were operating at pressures below 30 psi in the 15 psi to 20 psi range. These high and low pressures resulted in a reduced radius of coverage from 15 feet at 30 psi down to an 11-foot radius at 15 psi.

The impact rotor head pressure ranged from 20 psi to 60 psi resulting in both high and low pressures. These defects caused a distortion of the spray pattern, reduced radius coverage, poor stream breakup and variable rotation speeds, all of which resulted in poor uniformity of coverage and wasted water.

The irrigation system was supplied by three 3/4-inch water taps, with 40 feet of 3/4-inch "K" copper service pipe and 3/4-inch water meters. The system runtime was calculated based on 1 1/2 inches of water applied per week during July. The system runtime measures out A rotor and pop-up spray head on the same zone is a mistake. The spray head applies three to four times as much water as the rotor head, resulting in poor uniformity, overwatering and waste.

at 23.33 hours per day. Consequently, The Crossings received enormous water bills that reflect daytime watering, and residents were deprived of the use of turf areas for summertime activities.

These and other design errors resulted in the following water use rates (see chart on page 79). Turf water requirements for this area do not exceed 30 inches per square foot, or 4,160,000 gallons on an annual basis.

Proper and efficient irrigation design for this site reduces irrigation water consumption by as much as 42 percent, or 2,958,000 gallons (three-year average). This results in a water cost savings of \$3,875 per year.



Because of the deficiencies in irrigation design and installation, the homeowners' association at The Crossings successfully sued the developer for damages and received a large settlement.

In addition to a variety of landscape problems caused by poor design, per-

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sonal injury can also occur from heads and valve boxes installed too low in turf and athletic fields. We have seen several cases where people have stepped into vaults and valve boxes, and sustained serious injury because of unsafe lids.

PRESSURE CONTROL. Many designers do not understand the importance of pressure control. High pressure causes pop-up spray heads to mist and shriek from the high velocity of flow, and leak around the heads and wiper seals. We have seen rotor heads operating like "machine guns" and spinning tops, creating a bank of mist that drifts away from the area for which it was intended.

Low operating pressure causes the water to explode into larger droplets producing soil compaction and reducing the effective radius of coverage. High pressure causes the water to explode out of the nozzle into a higher number of tiny droplets that range in size from 1.0 mm (moderate rain) to 0.10 mm (mist).

A 1.00 mm drop falling from 10 feet in a 3 mph wind will drift 5 feet, while a 0.10 mm drop will drift 50 feet. This reduces the effective radius of coverage and causes the water to appear as a drifting mist. This mist will evaporate

much faster than larger droplets, and will easily drift away from the irrigated area. Imagine the water wasted by drift in a 5- or 10-mile per hour wind.

The ideal operating pressure (and therefore adequate droplet size to meet the needs of plant materials) for small pop-up spray heads is 25 to 30 psi. We recommend a pressure of 30 to 50 psi for

most rotor head appli-

TOTAL ANNUAL IRRIGATION USAGE

	Gallons of water	Inches of water
1988	6,278,000	45.27
1989	6,554,000	47.26
1990	8,522,000	61.46

PRESSURE REMEDIES. Wa-

ter pressure can be easily regulated. To correct high pressure, use pressure reducing valves and pressure loss in the pipe to provide optimum pressure at each head. Use pop-up spray heads with a pressure re-



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ducing device (set for 30 PSI) installed as an integral part.

Pressure reducing valves can be installed at the electric control valve to control pressure for the rotor head zones. Plastic preset PRVs can be installed under each rotor head. When the static pressure in residential and commercial systems is

more than 75 psi, install an adjustable PRV at the point of connection to protect the system from unnecessary surges.

High water pressure can also cause surges in lateral lines, especially if the lateral is drained or partially drained after every cycle. This results in damage to the equipment, water leaks and a re-

Many irrigation designers
stretch head spacing, ignore good
hydraulic design, neglect water
pressure controls and specify
residential equipment in
commercial applications to name
a few glaring problems.

.

duced system life span. Install heads with check valves to prevent low head drainage and to save valuable water.

Low water pressure can be avoided by carefully calculating hydraulics for every design. If possible, allow for a 10 to 15 psi supply pressure drop.

Irrigation system uniformity is the bottom line. Several town house associations in the Denver area received large cash settlements from designers and contractors for the improper design and installation of their irrigation systems. The contractors at fault all did the same thing — they stretched the head

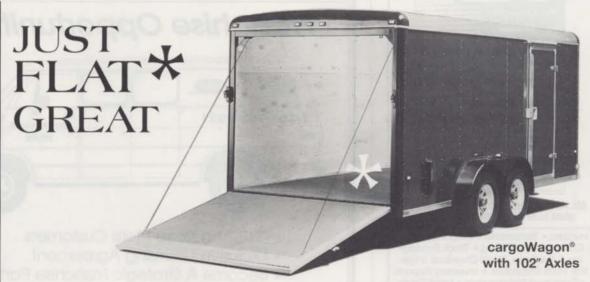
spacing to 70 percent and 80 percent of the diameter of coverage when most manufacturers recommend spacing at 50 percent of the diameter.

The result is unacceptable uniformity causing damaged turf and asphalt from the over watering required to prevent the turf from wilting and dying. Proper spacing for any head should be no greater than the manufacturers' recommendations, plus necessary adjustments for wind conditions. Uniformity is important in turfgrass, where every square inch has roots and a shallow root zone where 75 percent of the roots are found in the top 1 to 2 inches of soil.

The essential components of a quality irrigation system include equipment that is high in quality and performance, low in maintenance, long lasting and water conserving. Selecting the right

(continued on page 82)

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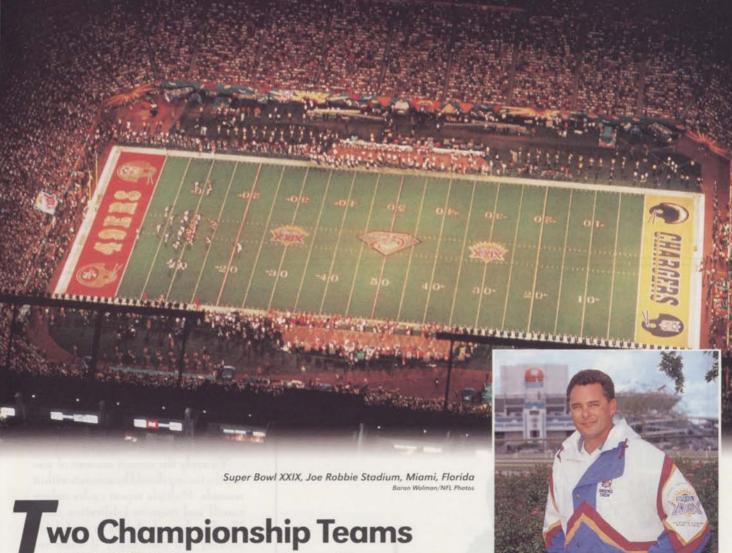
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I-20 Rotor



I-25 Rotor



I-40 Rotor



HBV Valve



The Irrigation Innovators

(continued from page 80)

equipment for an irrigation project is vital to its long-term success. Many contractors and designers select equipment based on price or friendship instead of considering its quality or performance.

For example, head selection for turf areas should require a minimum pop-up height of 4 inches. If the mowing height is more than 3 inches, use a 6- or 12-inch pop-up height. Use slotted brass nozzles for small spray heads. Plastic nozzles usually apply little water within 12 inches to 18 inches of the head. Brass nozzles have a slot cut into the nozzle below the main outlet that pro-

vides water for the area immediately around the head.

Smaller, plastic impact rotor heads expose the system to more damage, while the use of stronger materials or smaller diameter heads minimizes damage from equipment, vandalism and injuries.

Swing joints are necessary to protect sprinkler heads from damage. Flexible, kink resistant tubing or premanufactured PVC swing joints are best.

CONTROLLERS AND VALVES. The most important selection criteria for an automatic controller is ease of operation and simplicity. If you need an instruction booklet in order to operate it, look for another controller. Other important features are accurate timing, multiple repeat cycles, flexible day scheduling, sensor input and water budgeting.

To apply the correct amount of water, the timing should be accurate within seconds. Multiple repeat cycles reduce runoff and improve infiltration rates. Flexible day scheduling is useful for mowing and particularly if water restrictions are mandated. Insist on a memory retention in the computer chip instead of replacing a rechargeable backup battery every year.

Look for valves that have an internal manual bleed so the valve box won't fill with water. The small ports in the valve should be clog-resistant and/or selfcleaning. An encapsulated solenoid with a captured plunger helps the life span and reduces maintenance headaches.

Select valve boxes that withstand compaction and weight against the side and top of the valve box.

Every designer should review the installation process, answer questions and evaluate the final installation to make sure the system was installed correctly and operates properly.

The author is vice president of Keesen Water Management, Denver, Colo. This article is condensed from The Complete Irrigation Workbook: Design, Installation, Maintenance and Water Management. To order, see page 125.

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How To Handle Year-End Closing

Several year-end decisions can save you a lot of money, depending on your situation. Ask a professional money manager to help you find the right strategy.

By Dick Lehnert

on't put off until tomorrow what you can do today, the adage says. Probably good advice for most days, but not for the last day of the old tax year and the first day of the new. When it comes to federal income tax liability, sometimes you should and sometimes you shouldn't put things off. You can alter your federal tax bill by choosing to shift income or expenses from one year to another by acting on or before January 1.

Mike Kelsey, a Michigan State University agricultural economist and tax specialist who runs year-end tax schools for nurserymen, landscape contractors and others in the green industry, explained that a basic management guideline is to "avoid wide fluctuations in income. That results in the lowest income tax over time."

But in many lawn and landscape enterprises, income can vary year to year, so you need to look for income eveners.

POLITICAL CHANGES. Remember that the tax code itself is not even. It changes from year to year, sometimes predictably, as in phase-in periods where deductions are gained or lost or when rate structures are altered. These changes often come during or after election years (which is just about all the time).

On the political scene, the Republicans' Contract with America will probably result in tax law changes later this year, but since it is so late in the year, it is doubtful they will be retroactive to include 1995.

But the pressure is on to lower taxes for future years, and that suggests the savvy tax manager should move income into the future, if

> possible. Kelsey believes some capital gains reduction will come, probably for 1996.

Back before 1986, capital gains income was taxed at half the rate of ordinary income. The current rate is capped at 28 percent.

"It is doubtful we will see capital gains taxes as low as half of that 28 percent," Kelsey explained, "but a new cap at 20 or 22 percent seems likely. Republicans are very strongly in favor of reducing the capital gains rate."

What that means is that capital gains income should be postponed if possible. If you're planning to

Don't wait until spring to make important financial decisions. Some money-saving strategies should be set before January.



BUSINESS MANAGEMENT: PART 11

sell your business, or business assets, that income will likely be taxed at a lower level in 1996 than if the sales are made in 1995.

INCOME EVENERS. Depending upon your tax situation, you may want to reduce or increase net income for 1995. Following are some of the best income eveners, according to Kelsey:

1. Buy or delay purchases of supplies. If you're in a lawn service business, for example, you can buy the supplies you will use in 1996 this year. (That assumes you use cash accounting for your business. With accrual accounting, you can't ignore your inventories when filing your tax.)

For cash accounting users, you can buy such things as fertilizer, seed, fuel, chemicals and small tools in 1995 that you will use next year, then write them off as costs against 1995 income. There is a limit to this option, but a fairly high one.

These expenses can't exceed 50 percent of the expenses that will be claimed for the year for which economic performance occurs, and cannot "materially distort" income.

You also cannot bring into inventory, and deduct as an expense, those things you will sell the next year. Products that are "consumed" in the course of business—fuel and fertilizer, for example—are deductible. Products that are bought and resold—nursery stock, for example—are not deductible in 1995 if they will be resold in 1996.

Buy or delay capital expenditures. Capital items are those with useful lives longer than a year. Office equipment, computers, mowers and other types of equipment are the kinds of items that would normally go onto a depreciation schedule — except for direct expensing.

Generally, buying capital goods is not a good way to reduce current-year income. Capital goods go onto a multi-year depreciation schedule where costs are deducted annually for from three to 31 1/2 years, with a very small writeoff in the first year.

With an IRA, contributions need not be a specific amount or done annually. Anyone can have one, as an employee or self-employed, in addition to one's other retirement savings programs.

However, in any one year, a business can directly expense up to \$17,500 of capital purchases. If you want to reduce taxable income for this year, you might want to time the purchase of new mowers or computers to take place before the end of the year. You can not use this to reduce taxable income below zero.

This is one category in which Congress may make some changes. One tax expert predicts Congress will

raise it to as much as \$25,000. That would suggest a strategy of using the full \$17,500 for this year, but waiting until 1996 for additional capital purchases.

3. Pay or delay paying some annual bills — real estate taxes, for example. But remember that you cannot prepay insurance premiums or interest.

4. Some expenses are deductible as current year expenses, even though they are not annual expenses. Thus, you can time such things as machine repairs or the painting of buildings. If you want such deductions against 1995 income, have the work done and paid for before the end of this year.

5. Timing of receivables is another way to bring income into this year or move it to next year. You must be "reasonable" in using this strategy.

If you're in the lawn service or landscape business and you also plow snow during the winter, you can probably arrange your

THE TRUTH ABOUT TAX BRACKETS

Tax brackets are not as significant a factor in tax planning as they once were because the graduated income tax is less graduated than it once was. And, if the flat-taxers can get their way in Congress, income taxes will be even less graduated in the future.

But for year-end considerations and tax planning purposes in general, consider that exemptions from income tax have in recent years been rising each year and the break points between the brackets are going higher each year.

Deferring income may reduce tax liability by moving income out of a higher income tax bracket this year and putting it in a lower tax bracket next year.

But always remember this: Earning an additional dollar has no impact on the tax rate of previous dollars. If you are so fortunate as to have income in the highest tax bracket (39.6 percent), you pay that only on dollars over \$256,500. Being in a higher tax bracket is never a penalty.

The tax table of brackets for 1995 income are as follows:

TAXABLE INCOME

 TOU IN HE HAVE THE					
If your income is:	You pay + p	percen	t on excess	of the amount over	
\$0- \$39,000	\$0.00	15	percent	\$0	
\$39,000 - \$94,250	\$5,850.00	28	percent	\$39,000	
\$94,250-\$143,600	\$21,320.00	31	percent	\$94,250	
\$ 143,600 - \$256,500	\$36,618.50	36	percent	\$143,600	
\$ 256,500-	\$77,262.50	39.6	percent	\$256,500	

Your tax and yearend strategies should enable you to meet your business and personal goals. Credit: Clean Cut.

billing on the snow plowing so you get paid before or after Jan. 1, at your choosing. But if you try to bill the 1996 lawn services in 1995, IRS would not likely approve of it.

SALARYOPTIONS. One obvious way to reduce income in a current year is to pay it out in compensation.

Many times in small businesses, spouses

and children work. If your child is under the age of 19 or regularly enrolled in school, he or she can earn any amount and the parent can still claim an exemption for them if the parents pay more than half of the child's support.

This is a great way to support children in college or vocational school. They work for you during the summer — making up to \$3,900 this year without having to pay taxes on it — while you get to claim them as exemptions, worth \$2,500 each this year.

You cannot give away the money willy-nilly to children and deduct it as wages. You have to plan ahead so they do, in fact, work for you.

Don't overlook valued employees. In the green industry, so many jobs are seasonal that it's hard to keep employees. You can use year-end bonuses to show your appreciation and set the stage for a good working relationship next year — and you can deduct those costs as part of compensation.

RETIREMENT PLANS. There is, of course, nothing wrong with having to pay income tax. What better measure of the success of your business is there than having made so much money that you have to pay some in the highest tax bracket?

Rather than spend the money on equipment you don't need in some misguided effort to beat Uncle Sam, how about saving some of it? There's nothing wrong with having savings in the bank or invested outside of the mainstream of your business.

One place you can stash income and defer taxes on it is a retirement plan, for you and/or your employees. There are basically four kinds of retirement accounts: IRAs, SEPs, Keoghs and 401Ks.

The IRA — Individual Retirement Account — is



the most easy and flexible to use. You can make a last-minute decision — right up to tax filing date — of whether to contribute and how much (up to \$2,000 for an individual or \$2,250 for a spousal IRA).

With an IRA, contributions need not be a specific amount or done annually. Anyone can have one, as an employee or self-employed, in addition to one's other retirement savings programs.

Taxes on the IRA investment are postponed until distribution. The idea is to shift your income into your retirement years, when that income probably will be lower and therefore will be taxed at a lesser rate, if it is taxed at all.

The downside of the IRA is that distribution cannot begin before age 59 1/2 without a stiff penalty. Should an emergency require early payment, not only is the income tax due, but a 10 percent penalty on principal is imposed by the IRS.

IRAs do not allow enough annual investment to be considered a total retirement plan. Their great advantages are their simplicity and the fact that they can be used as part of a personalized year-end tax planning strategy.

The other three retirement plan options are more complicated. Having a good year in business may lead you to decide to set up a retirement program, but the other forms of retirement plan usually are not used as year-end planning tools. For one thing, an employer must already have the policies in place, and must include all qualified employees.

However, a SEP may be a useful year-end device. SEP is the acronym for Simplifed Employee Pension plan. A SEP is a program under which the employer makes contributions to the IRAs of employees.

A key feature of a SEP is that the employee is

BUSINESS MANAGEMENT: PART 11

immediately "vested," meaning the funds belong to the employee and will not revert to the company or to the general fund if the worker leaves the place of employment for any reason.

SEP plans allow up to 15 percent of compensation, not to exceed \$30,000, to be invested each year, right up to tax filing deadline.

YOU NEED HELP. Taxes are complicated, and you may need help doing yours. A CPA or a tax lawyer should be able to help you, but keep in mind that a person familiar with the business cycles of lawn and landscape contracting companies will be the most helpful.

It also pays to keep yourself informed. Each year, the IRS provides an update to

the United States Master Tax Guide. It runs about 700 pages, and should be part of everyone's library.

Your tax and year-end planning strategies should also enable you to meet your business and personal goals. After all, those are the driving reasons that you are in business. Hopefully, your tax burden will not be so heavy that it limits your ability to grow your business, and therefore, your personal wealth. As one tax consultant put it, "You came into this world broke and you'll leave it broke. Might as well have some fun with the money while you're here."

The author is a free-lance writer residing in Lansing, Mich.

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DON'T RUIN YOUR BUSINESS **MERELY TO ESCAPE TAXES**

Effective tax management boils down to a few simple things. One tax consultant offered this common sense advice:

- · Don't hide income. You can go to prison for that.
- · Do be aggressive in listing expenses as deductions. If the IRS decides to disallow what you claim, you'll have to pay the tax, but usually without interest or penalty. It's easier to ask forgiveness than ask for permission.
- · Do remember that the law says you must pay income taxes. The 17th Amendment to the Constitution establishes that. But the terms - how much you pay and what are legitimate deductions - that's all tax code. According to Steven Forbes, who is running for President, the tax code has 7 million words, 10 times as many as the Bible, and all of them subject to interpretation.
- · Don't ruin the value of your business to avoid taxes. A healthy business is profitable and paying income taxes is a measure of that. If you're working to write off income or defer taxes, make sure your records reflect that.

New Product Showcase

MOWERS

Exmark introduces the all new Lazer Z™ midmount rider with an operator comfort control package. Its hydraulically dampened steering is said to provide exceptional control with zero-turn precision. The low center of gravity,



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and high-speed cutting capability— up to 8.5 mph forward and 4 mph reverse. Other features include a full-floating deck and a deck-forward design that enables the operator to easily see all deck edges for complete trimming control. Circle 130 on reader service card

- dustries are designed to make landscape maintenance more efficient and profitable. Featured products include a hydraulic range wing, Model 6400 hillsider mower, two Quadcycler mowing decks and three Hustler Out-Front mowers in the 3000 series of zero turning radius machines. Circle 131 on reader service card
- Zipper's new 14-hp mower combines with a 44-inch high volume, high velocity mower deck to provide a smaller product for the commercial contractor. It features a Briggs & Stratton V-twin Vanguard engine, direct-drive hydrostatic system and a full-floating front deck that flips up to vertical position for main-

tenance. Zipper estimates that it can achieve 3.4 acres per hour in performance. Hydrostatic system requires less horsepower for



the drive and allows a greater percent to be directed to the mower deck.

Circle 132 on reader service card

Easy deck cleaning and underside maintenance are two key features of a new tilt-up deck option from Walker Mfg. The hinged deck carrier frame has a large, retractable handle on the front of the deck, roller wheels on the back for easy tilt-up, and automatic blade locking



in tilt-up position for safety. One person can tilt it up and lower into the normal operating position in less than 15 seconds. Retrofit kit

gives earlier 42- or 48-inch decks the option. Circle 133 on reader service card.

The Kees Hydro walk-behind, zero-turn radius mowers have a tracking adjustment system for straight tracking on slopes. This adjustment requires no tools and is easily aligned to

eliminate any operator drift. The cutting height can be controlled with a simple springassisted lever.

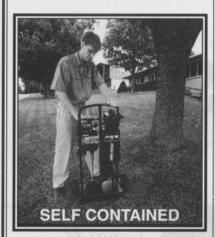
Circle 134onreader service card



Lawn & Landscape is proud to present the new product and equipment innovations for 1996.

PUT FERTILIZER WHERE IT'S SUPPOSED TO BE IN THE TREE'S

"FEEDER ROOT ZONE"



THIS SYSTEM IS IDEAL FOR THE TREE CARE PROFESSIONAL.

THE WEBSTER ROOT ZONE FEEDER makes tree and shrub fertilization fast and economical.

Drills and fills in one operation drilling a 1-1/2" diameter hole up to 14" deep, the unit depenses 4 ounces of granular fertilizer, reaching over 90% of the tree's feeder root system.

Lightweight and portable, the Webster drills and fills up to 6 holes per minute, putting the proper nutrients right where the tree needs them, in the feeder root zone.

This unit can also depense drainage materials such as pea rock to improve aeration and reduces compaction in heavy clay soils.

GIE Show Booth #2115

WEBSTER (



USE READER SERVICE #123

new product showcase

Grazer's zero-turn-radius mower features high ground speed and wide deck width for efficiency. Forward deck position allows cutting under shrubs and fences, and dual steering levers minimize fatigue and eases operation.

Circle 135 on reader service card

PESTICIDES/FERTILIZERS/ SPECIALTY CHEMICALS/BIOLOGICALS

Ciba presents a wettable powder formulation turf growth regulator called Primo® WSB, which is available in new

water soluble bags. This formulation is registered for both residential and commercial lawns and has a closed system to reduce the potential for



user and environmental exposure during mixing, as the entire bag and its odorless contents disperse completely in water. Primo WSB can be used on all warm- and cool-season turfgrasses.

Circle 136 on reader service card

Monsanto introduces an improved formulation of Roundup herbicide, called Roundup Pro, for the turf and ornamental professional. The new formulation is said to provide better rainfastness and quicker burndown, as well as increased worker safety and cost



effectiveness. It can be used without an extra surfactant. Tests show Roundup Pro to provides rain-fastness within one to two hours for use

against all labeled weed species. Circle 137 on reader service card

DowElanco's new Rubigan 50WSP package comes in premeasured, water

soluble polyvinyl alcohol packages designed for easy use in power spray equipment. The fungicide is systemic in nature and is labeled for use in commercial and residential turf, parks and athletic fields. Rubigan is said to be effective against a variety of turf diseases, including dollar spot, rhizoctonia blight, necrotic ring spot, stripe smut, snow mold and others.

Circle 138 on reader service card

Bio-Trek 22G from Wilbur-Ellis is a biological turf fungicide said to be effective on dollar spot, pythium and brown patch, while enhancing root growth and plant vigor. It is a beneficial fungus, Trichoderma Har-zianum, in granular form. It is non-toxic and non-pathogenic to vertebrates and plants and won't contaminate water.

Circle 139 on reader service card

Pendulum Plus fertilizer from American Cyanamid brings together the convenience of a premergence herbicide and a fertilizer in one product. This formulation provides control of

most annual grasses and many broadleaf weeds found living in turfgrass. It is now labeled for use on Kentucky



bluegrass, perennial ryegrass, fine fescues, tall fescue, bermudagrass, St. Augustinegrass, centipedegrass, zoysiagrass, bahiagrass and blends.

Circle 140 on reader service card

MattchTM broad spectrum Bt insecticide from Mycogen contains a precisely controlled blend of two Bacillus thuringiensis toxins selected for potency against pests. Tests have shown its effectiveness against armyworms, loopers, leafrollers, webworms and other lepidopterous pests.

Circle 141 on reader service card

(continued on page 90)

The "outfront" leader in zeroradius mowers for more than a quarter of a century.



. to Side Discharge

uik-D-Totch Voc®

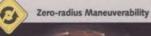
The New Combo Mulching™ Deck* lets you achieve superior results in varying conditions using the same deck.

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

to Down Discharge'

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

- 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 outfront deck reachability.
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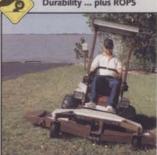
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(continued from page 88)

VelocityTM non-restricted use insecticide from Valent USA is now available for control of ants, including fire ants. It is said to provide fast, long-lasting control of ants on turf in a low-odor formulation. Velocity puts an end to ant mounds in 24 hours and gives residual control for up to four weeks, to discourage building of new colonies. Circle 142 on reader service card

Nitro-Gel from Bella is an allnatural turf fertilizer that uses an enzyme to produce nitrogen from the atmosphere. When it is applied with a plastic aerator, the product forms micro-encapsulations in the soil that are impervious to leaching. The enzymes are activated and released in the soil as the lawn is watered.

Circle 143 on reader service card

CHIPPERS/SHREDDERS/ DEBRIS MANAGEMENT

Bear Cat's Vac-N-Chip Pro has a 29-inch-wide swath with agitator bar and 27 mounted beater blades to pick up leaves and small twigs, adjustable vacuum opening and self-propelled operation with five forward speeds and one reverse. Single front wheel pivots for easy turning and maneuverability in rough terrain. It handles branches up to 3 inches in diameter with a built-in chipper unit.

Circle 144 on reader service card

The LESCOTM Tail Gate Truck Loader has a swivel discharge chute for loading and unloading. A key feature is a 10-foot long, heavy duty vacuum hose with a handle for easy reach and high volume vacuuming, which allows for

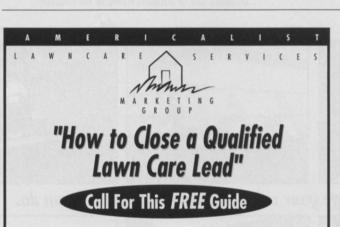
easy flow of wet leaves. The loader is powered by either an 8- or 13hp HondaTM engine. Both models easily attach to the tail gate of any truck without the need for any tools.



Circle 145 on reader service card

The Mighty Mac 260 chipper/shredder from Mac Kissic is highway-towable with flex-ride suspension, 4-inch rapidfeed chipping and a shredding chamber with 48 free-swinging hammers. It is powered by a 16-hp twin cylinder Vanguard engine and has a rotor engagement system with load-free starting. Circle 146 on reader service card

(continued on page 02)



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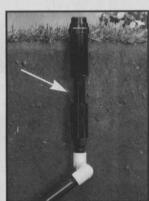


USE READER SERVICE #28

THE UP'S & DOWN'S Of Irrigation Maintenance Just Got Easier







Raised Head

Adjust Sprinkler Height Without Excavating

Olson Irrigation System's new TSR-1 provides a simple method of adjusting sprinkler heights. it is no longer necessary to dig up the entire head and swing-joint assembly to gain or lose a few inches

The Olson TSR-1 Threaded Sprinkler Riser fits between the swing elbow and the sprinkler head. When the sprinkler is rotated, the head will be elevated or lowered by up to 3 inches.

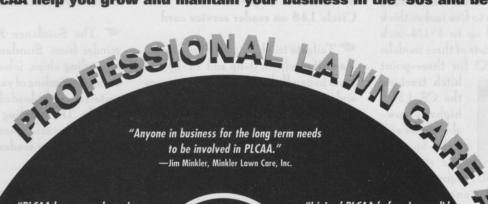


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—Les Stewart, Nutri-Lawn



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-Lou Wierichs, Jr., Pro-X Systems

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(continued from page 90)

Chipper/shredders from Bush Hog will chip light brush to five inches thick and shred material up to 1 1/4-inch thick. The line consists of three models: the CS-100P PTO for three-point



hitch tractors: the CS-130T highway towable model with a 13-hp electric start en-

gine; and the CS-180T highway towable model with an 18-hp engine.

Circle 147 on reader service card

Sterling's new TL-1000 Series commercial truckloaders come in several power ranges and are designed to withstand the abuse of daily wear in commercial applications. When used with the Sterling Shredder System TM. it

allows huge reductions in debris volume by as much as 60 percent.

Circle 148 on reader service card

Tailgate truck loaders from Giant-Vac Mfg. rely on 8-hp and 11-hp engines to handle large quantities of leaves and vard waste. Design features include 3/8-inch thick impeller blades, 9-gauge housing wearband, heavy duty construction and design for easy mounting on pickup and other service trucks.

Circle 149 on reader service card

Vermeer's Brawny TG-400 tub grinder offers maximum reach and efficiency for major land clearing projects. This improved model features the addition of a 27-foot knuckleboom leader system with a load rating of 100,000 ft.-lbs. The loader is available in two types of grapples to handle various types of organic landscape materials. Circle 150 on reader service card

The Sundance KID II compact grinder from Sundance is suited for regrinding chips, job-site cleanup and curbside grinding of vard waste. Ground material can be loaded into a transport vehicle. The grinding action is totally enclosed for safe operation.

Circle 151 on reader service card

IRRIGATION

Evolution Central and Evolution DX 2 satellite system from Rain Master Irrigation Systems is said to accelerate real-time data collection and bidirectional communication in the field. Multiple irrigation program options include system monitoring, diagnostics and alarm, water use reports and remote con-





Reidsville, GA 30453

trol capability. Each satellite processes one million bits of data per second and units operating from two points of connection require only one or two flow sensors for precise readings from every valve. Circle 152 on reader service card

The ESP-LX controller from Rain Bird provides 6-, 8-, 12- and 16-station models, and features four programs and a 365-day calendar with true odd/ even day watering schedules. The controller can detect a station failure, automatically bypass it and alert maintenance personnel. Other features include water budgeting and provisions for moisture or rain sensors.

Circle 153 on reader service card

The new Square Shooter™ sprinkler attachment from Roberts Nelson Latham works with standard impact drive sprinklers to irrigate in a square pattern with constant sprinkling speed and uniform distribution. Users can add it to new or existing impact sprinklers. They are said to reduce water consumption by as much as 33 percent, reduce erosion and reduce the number of sprinkler heads needed.

Circle 154 on reader service card

MISCELLANEOUS POWER EQUIPMENT

Ditch Witch presents the RS8/60 Jet Tac directional boring system, which is surface launched and designed to bore through most rock, coral, and other dense soils. Design features in the system include a double-drill pipe, a rock drilling bit assembly and an additional drill pipe carriage spindle.

Circle 155 on reader service card

Reinco manufactures the TM7-30 power mulcher, featuring a discharge



range of up to 60 feet and a discharge chute that rotates 360 degrees for even distribution of up to 5 tons per hour of any straw or hay. The self-contained unit is portable.

Circle 156 on reader service card

Makita introduces the 24.5-cc RBL250 blower, designed for professional landscape applications. Balanced design and angled blow pipe provide easy and efficient operation. The blower incorporates a large, low-noise muffler with a sound level of only 65.6 dBA and also features low-vibration design.

Circle 157 on reader service card

(continued on page 90)



We're not *just* economically priced, we're unsurpassed service, excellent products and exceptional value. **Mass** experience in manufacturing



your best value in mid-size mowers with these outstanding features:

HYDRO DRIVE

- Quick-Lift" operator controlled no-down-time cutting height adjustment
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- Exclusive HydroTrac™ straight tracking on-the-go adjustment

GEAR DRIVE

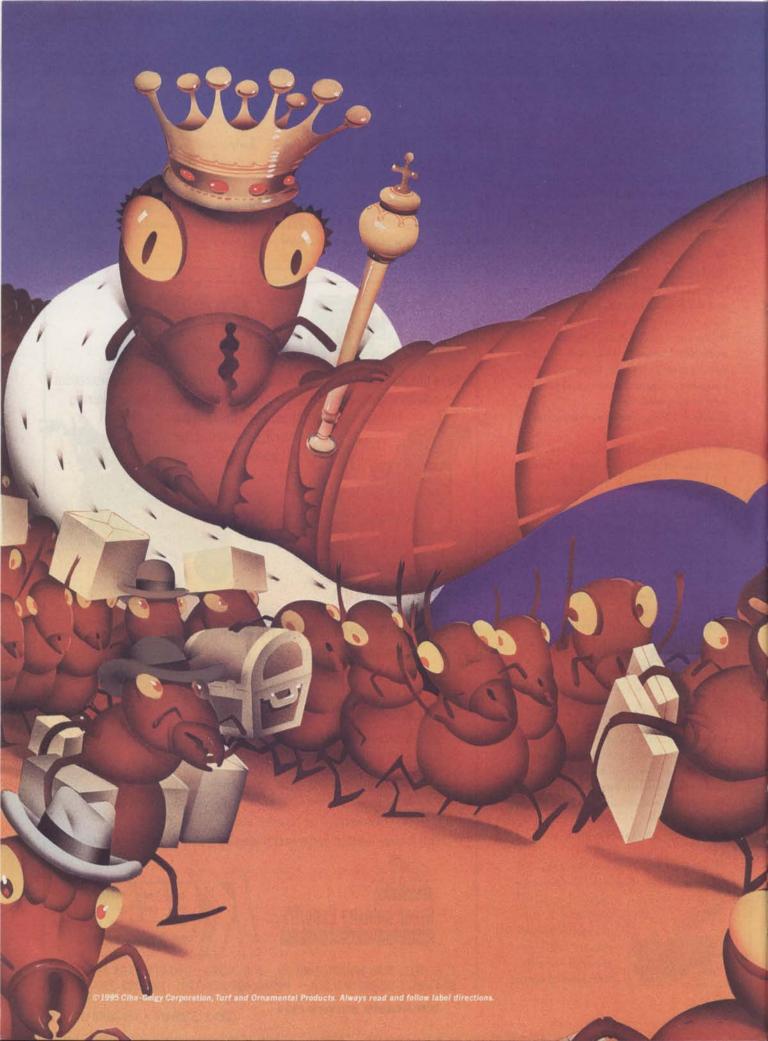
- Shift-On-The-Go 5 speed transmission with positive reverse
- Doublewide twin-cog Kevlar® traction drive belts
- Exclusive UltraTrac™ traction booster

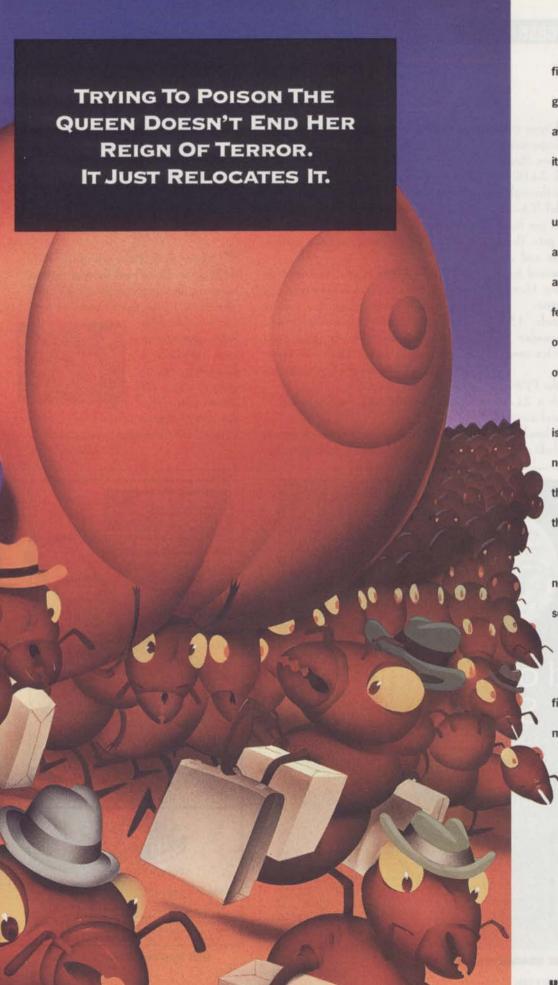
Full 2-year limited commercial warranty with 5-years on decks





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At the first sign of danger, fire ants are genetically programmed to cart their queen away to safety. Before you know it, the colony is thriving again.

That's the problem with using poisonous baits on fire ants. The poison kills worker and nurse ants before they can feed it to the queen. This sets off an alarm, signaling the rest of the colony to hit the road.

Award, on the other hand, is an insect growth regulator, not a poison. It's sure to reach the queen undetected, and once there, sterilize her.

With her ability to produce new ants eliminated, the colony soon perishes.

So this year, use Award.

And take care of your fire ants before they become moving targets.



new product showcase

(continued from page 93)

Classen offers two roll-type core aerators for professional landcape maintenance use. The smaller version, Model TA-19, has capabilities of 24,000-square-feet per hour and fits through a 30-inch gate. Larger Model TA-26 handles 34,000-square-feet per hour and fits through a 36-inch gate. Both aerators have 3/4-inch tines and are



powered by a 4-hp Honda engine.

Circle 158 on reader service card

Technic Tool presents the PP800 model Power PrunerTM, with a 21-cc engine, a fixed-length, vinyl-coated shaft and a chain saw cutting head said to offer more power than a blade saw or

pole pruner. It measures 7 feet, 10 inches in length and has a 3-foot extension to



reach limbs and branches more than 15 to 16 feet overhead.

Circle 159 on reader service card

Stihl's Picco Micro Narrow 3/8-inch extended pitch chain saw is said to provide less drag and greater cutting efficiency than its predecessors. It has a .043-inch gauge link and produces a 14 percent narrower kerf, with faster cutting and lighter weight. Concave rivet provides easy centering.

Circle 160 on reader service card

Billy Goat makes the Brush Cutter 2400 to cut through heavy vegetation. The smaller design is more maneuverable and easier to maintain. Features include a fully enclosed drive train, three forward and one reverse speeds, and a thicker, 1/4-inch blade to designed handle heavy brush and saplings in a variety of landscape settings.

Circle 161 on reader service card

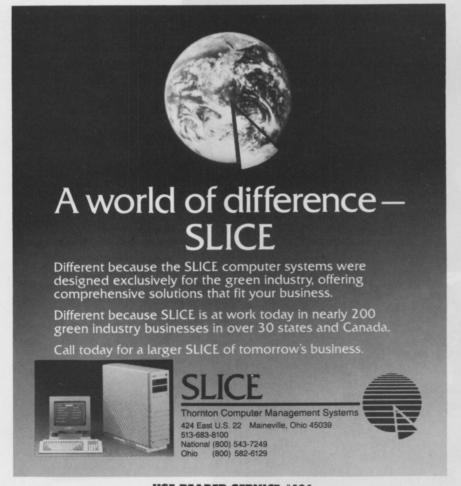
Heavy-duty chain saw Model CS-4400 from Echo handles applications requiring more power and cutting length. The 10.2-pound saw is powered by a

43.6-cc, doublering piston engine and features a heavy duty, automotive-type air filter. The chain



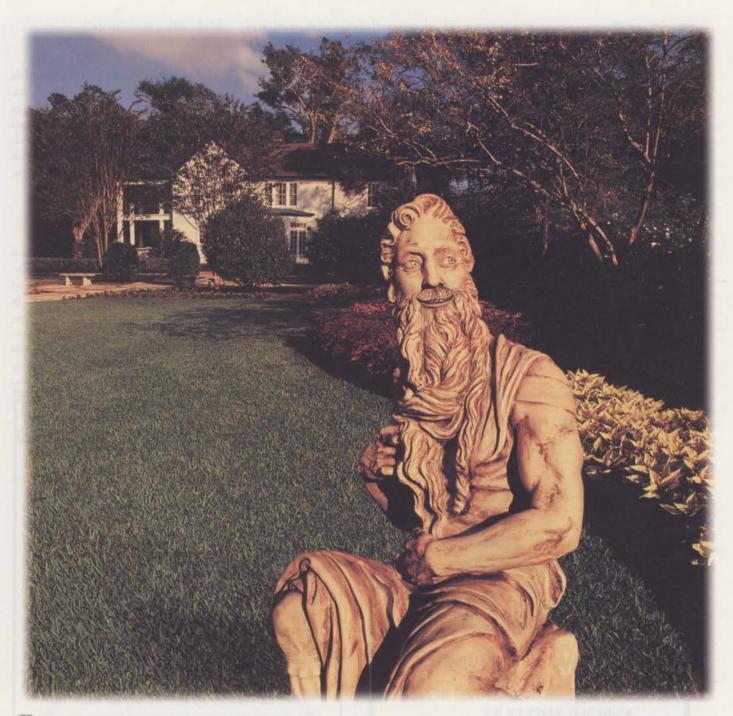
saw comes with an 18-inch bar. Circle 162 on reader service card

(continued on page 98)





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.

face of any customer.

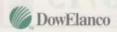
For further information on Team, or any other product in the extensive line of DowElanco products, give us a call at 1-800-352-6776. Always read

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

us a call at 1-800-352-6776. Always read and follow label directions.



(continued from page 96)

For The Edge introduces the Trench N'edge Trencher to virtually eliminate the high cost of cleaning up the trenched material from lawns and planting beds. It blows the material directly onto tarps or into an optional heavy duty wagon for



simple disposal. Trenching teeth may be set for cutting up to 5 inches wide and the depth of the

trench is easily adjusted up to 6 inches. Circle 163 on reader service card

SEED/SEEDERS

The Roll-A-Lawn turf replacement/ establishment product is a sheet of recycled paper converted into a pulp foundation and saturated with grass seeds. The sheet is rolled over a bare section of ground and staked, and grass seed take root as the pulp decomposes. It is available in sheets covering 1,000 square feet and may be dyed green.

Circle 164 on reader service card

Renegade (MB-22-92) turf type tall fescue from E. F. Burlingham & Sons is a new generation semi dwarf variety that said to be an excellent performer and have a rich dark green color. It has a shorter growth habit than other standard varieties.

Circle 165 on reader service card

Preakness Kentucky bluegrass from Lofts Seed is said to display excellent resistance to stripe smut, necrotic ring and dollar spot while also showing good resistance to summer patch, brown patch and red thread. It has a fine to medium

blade with a medium dark color. Circle 166 on reader service card

Barenbrug USA offers a new elite Kentucky bluegrass named Barcelona, which shows the ability to take heavy wear in stride and is one of the most aggressive bluegrasses ever developed. Barcelona has fine leaf texture, dark green color and a short growth pattern. Circle 167 on reader service card

SOFTWARE

iNCLUDE software corporation presents its newest version of the Remote Estimating module, which allows the user to produce quick and accurate estimates on site. Information is transferred automatically to the office network file server when the notebook com-

(continued on page 100)

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USE READER SERVICE #54

new product showcase

(continued from page 98)

puter returns from the field. Features include an automatic proposal maker, bid cloning, markups and summaries of gross profits and margins.

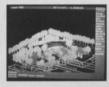
Circle 168 on reader service card

The Armor Advantage Series of software from Armor Systems generates multiple invoices for work out of branch offices and consolidates work at multiple sites into one invoice. Expenses and estimates can be calculated and later applied to invoices or work orders.

Large and small companies can use this software to handle customer accounts, appointments and payroll.

Circle 169 on reader service card

Landscape imaging and design software from Visual Impact includes photorealistic imaging software, site plan/ estimator ability and a plant encyclopedia with information on hundreds of plant materials. Imaging module provides full color projections of plants and hardscape combined. Circle 170 on reader service card



Eagle Point Software presents an upgraded version of its AutoCADTM based landscape, planning and irrigation software design program. Upgrades include landscape design, irrigation design and site

analysis modules. It runs in either AutoCAD, DOS or WindowsTM operating systems.

Circle 171 on reader service card

VEHICLES & ACCESSORIES

The ST-1 holding rack from Trimmertrap is built for Stihl BR 400 blowers. The product holds blowers with no movement, locks with a padlock and makes loading and unloading of equipment fast and easy. It installs easily to all makes of service and pickup trucks.

Circle 172 on reader service card

The Gooseneck Hitch Trailer by E-Z Dumper is built to the same sturdy specifications as the company's trailers.

It is available in sizes ranging from 7,000 to 14,000 pounds GVW. The trailers offer fast unloading and easy hitching and unhitching. The gooseneck option is said to increase carrying capacity and dis-



tribute the weight more evenly between the truck and trailer for a smooth pulling motion.

Circle 173 on reader service card

(continued on page 104)

Weed out your biggest service problem.

Paperwork. It's more than a nuisance. It devours time and keeps you from delivering the service that can distinguish you from competitors.

Now you can speed through paperwork and improve the accuracy of records, while gaining time to serve your customers better.

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The 4000 Series portable data system from Norand. On the route, this powerful but easy-to-use portable computer quickly records the services rendered at every stop. The system's portable printer can

create neat, highly legible sales invoices in seconds – a feature your customers will really appreciate.

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USE READER SERVICE #51

send data for closing out invoices directly to your central computer from their phones at home. Missed services and material tracking are reported daily.

And time-stamping helps you monitor employee productivity.

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THER \ PREEMERGENCE TURF HERBICIDES

Evaluating preemergence turf herbicides can be like comparing apples and oranges. True, all of them control weeds. (To some degree, at least.) But a closer look reveals big differences. When you consider all the products on the market, you'll find:

- A lot of them focus on low price.
- That's usually because they don't have much else to offer.

DIMENSI ON

Dimension® turf herbicide, on the other hand, gives you real value. Dimension offers premium performance, along with extra benefits that make your job easier. Here are a few reasons why Dimension stands out from the competition:

- Dimension provides unmatched crabgrass control.
- It controls crabgrass all season long—without breakthroughs.
- Dimension also handles goosegrass, oxalis and spurge.
- Fall applications help you manage unwanted Poa annua, as well as crabgrass and other weeds.
- Altogether, Dimension takes care of more than 20 tough weeds.
- Dimension works before or after crabgrass appears, extending your application window.
- It's completely non-staining—all you see is great-looking turf.
- You can stretch the long-lasting control of Dimension even further with split applications.
- Dimension works at low use rates.
- It's labeled for lawn care and golf course uses.
- Dimension offers the application flexibility of sprayable EC or granular fertilizer formulations.
- You can overseed just three months after application.
- And you can always count on exceptional turf safety.

To find out more about the benefits of Dimension, see your local Rohm and Haas distributor.



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LANDSCAPE ELEMENTS

"Handy-Stone" II lightweight con-

crete retaining wall from Handy-Stone Corp. has tapered sides that allow creative use of curves and serpentine walls and borders. It needs no mortar or concrete footings and



its rugged split-face texture adds color and character to landscapes.

Circle 174 on reader service card

Strata Panels TM from Stonwurks are thin-cut natural stone laminated to fiberglass-faced honevcomb aluminum backing and fabricated to the user's specifications. They weigh only 20 percent of dimensional stone and are said to have greater impact and flexural strength than its counterpart.

Circle 175 on reader service card.

Oly-Ola Sales Inc. presents Drain-EdgTM landscape edging material which has a built-in drainage system designed to eliminate standing water in planting beds. Black vinvledging is 4 1/2-inches high with 1/4-inch holes that allow for slow drainage out of raised beds. It can be shaped to fit landscape borders.

Circle 176 on reader service card

Series SL-07 in-ground landscape up-lighting from Architectural Landscape Lighting fits applications that require illumination from subterranean lighting instruments concealed within a planted landscape. Outer housing consists of a damage-resistant, heavy-wall

ABS transite well. The light's interior holds a cast fixture held to a decorative outer grill by stainless-steel fasteners. Circle 177 on reader service card

Model 403 fiber optic lighting illuminator from Fiberstars transmits light through fiber optic tubing via a long-life, 150-watt metal halide lamp with an integral computer-designed dichroic reflector. This forces maximum light into and through thin plastic

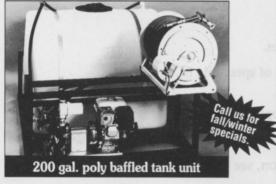
solid-core fibers for an intense source of light indoors or outdoors. Optional computerized controlsprovide



special effects such as eight color changes and other options in step lights,

(continued on page 106)





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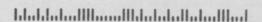
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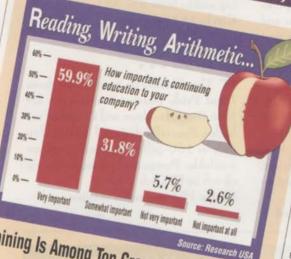
T&O Service Tech is the only magazine written for the lawn and landscape service technician. The magazine is published six times a year at an annual rate of \$10 per person for service technicians employed by companies belonging to ALCA, PLCAA, AAN or IA or \$20 per person for non-association industry firms.

1. Name (please print)						
2. State Certification Number	(if applicable)					
3. Company Name		I	ocation:	☐ Headquarter	s or	☐ Branch
Address			_			
City		_State				
Phone		_FAX				
4. What is your primary service	e specialty? (please chec	k only one):				
☐ Landscape Contractor	☐ Mowing maintenance		Om Om	amental tree & sh	rub serv	ices
(installation & maintenance)	☐ Irrigation installation		☐ Irrig	gation maintenand	ce	
☐ Chemical lawn care	Chemical lawn care Landscape Architect Other (please describe)					
5. How many years have you w	orked as a lawn and lands	cape service	technicia	in?		
6. Is your company a member	of (check all that apply):	□ ALCA	OPLO	CAA DIA	DAAN	1
7. Is your company a member	of a state association?	☐ Yes	□ No			
8. If your company is a memi	ber of one or more state :	associations	, identify	which association	ons and i	include your
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PREMIERE ISSUE 1995

For Lawn/Landscape and Nursery Service Professionals



aining Is Among Top Green Industry Issues

hat many owners and gers of fawn and landfirms are concerned the types and quality of g available in their area ir service technicians. so noted that training tinuing education is e most serious issues industry today.

The survey, sponsored by T&O Service Tech and conducted by the Chicago-based firm Research USA, polled a random sample of lawn and landscape industry owners and managers from across the country. Nearly 60 percent of the respondents said that continuing education is important (Continued on page 10)

Use 'Em Right or You'll Lose 'Em

oints in-between, ed up with leaf turning out the dimming them of this nearly of our trade. thing like this g to contrace bans or reput into place, son running

Operate power blowers at reasonable hours. the morning or too late in the evening that gets ingry. From that point on, the battle begins. communities restrict blower use.

(Continued on page 10)



Technician - Exterior program, is currently offered in California, Oregon and Washington. Illinois, New York,

Carolina, Texas, Utah, Wisconsin, British Columbia and

Associations Stress Certification Benefits

n the highly competitive green industry, being a top performer in professionalism is essential. One way to document your expertise is by gaining certification from a professional organization.

To this end, the Professional Lawn Care Association of America and the Associated Landscape Contractors of America are providing the means by which technicians may gain this certification.

PLCAA's program, offered in conjunction with the University of Georgia, is a correspondence course titled, "Principles of Turfgrass Management," This 14-section, self-directed course gives participants up to a year to complete, but many finish in half that time, according to Ann McClure,

executive director of PLCAA. The course includes a midterm and final exam, and those passing the tests receive the title of Certified Turfgrass Professional. PLCAA members receive a discount, and can call 800/458. 3466 for information. Non-members can call the University of Georgia at 800/542-8097.

ALCA's certification program for the service technician, the Certified Landscape Maryland, Virginia, Washington, D.C. North Carolina, South

Ontario are scheduled to come on line next year.

What's Insil

Maintenance



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Research & Technology Weather models that predict pest and disease pressure are around the corner.

The Appeal of a Professional 26 When you present yourself as a true professional, your work, your company and the entire industry benefit

Green Power ... Opportunities for growth in the green industry are diverse and strong in many areas of the country.

A Call For Training Training and continuing education are crucial to the image and success of the landscape industry.

Putting Your Plants to Bed ... Getting turl and ornamentals ready for the long, cold winter ahead helps ensure their health and survival.

Renovation To The Rescue When nature takes its toll on turt, many times renovation is enough to get the yard back into shape.

Valves, Controllers and Sensors..... 46

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Service Tech

annenance and

Turfseed Facts

(continued from page 104)

pool highlights and other areas. Circle 178 on reader service card

SNOW REMOVAL

The rear-mounted Pull Plow from Daniels eliminates the need for hazardous back dragging of snow and increases productivity when used with a front plow. Available in 72-, 80-, 90- and 96inch sizes, the unit features 2,000 pounds of downward pressure. Circle 179 on reader service card

Two spreaders are available from Highway Equipment. Model P features 12 1/2-inch wide conveyor in lengths from 4 to 8 feet with a 40-foot, uniform spread. The 8-foot wide Super P has a 16 1/2-foot conveyor and side extensions for better load capacity.



Circle 180 on reader service card

Winter Storm ice melter from Vigoro Consumer and Professional Products now comes in a 5-pound package. The product combines organic and inorganic compounds providing cost effective ice-melting capabilities.

Circle 181 on reader service card

Fisher snow plows feature the tripedge design where the lower edge of the blade to bends back when passing over obstacles, then springs back into place. Blades have a powder coated finish that produces a tough coating resistant to rust, cracking and corrosion.

Circle 182 on reader service card

The TGS 100 Tailgate Spreader from Grotech mounts to the gate of a pickup and allows full access to the truck's storage by removing a hinge pin. It has a 9 cubic foot, 600-pound capacity for rock salt, and adjusts to fit most truck widths. Other features include a no-rust hopper and adjustable spreading widths from 3 to 35 feet.

Circle 183 on reader service card

APPLICATION EQUIPMENT

The Chem-Pro sprayer line from Land Pride features a new series for John Deere, Jacobsen and Cushman vehicles. Specially designed 170-gallon poly or 150-gallon stainless tanks are available. Pumps are hydraulic, electric clutch or PTO-driven.

Circle 184 on reader service card

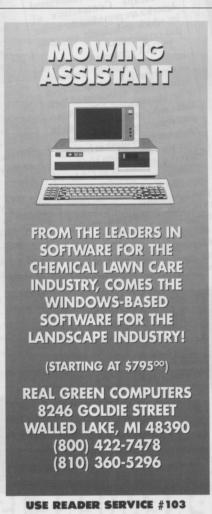
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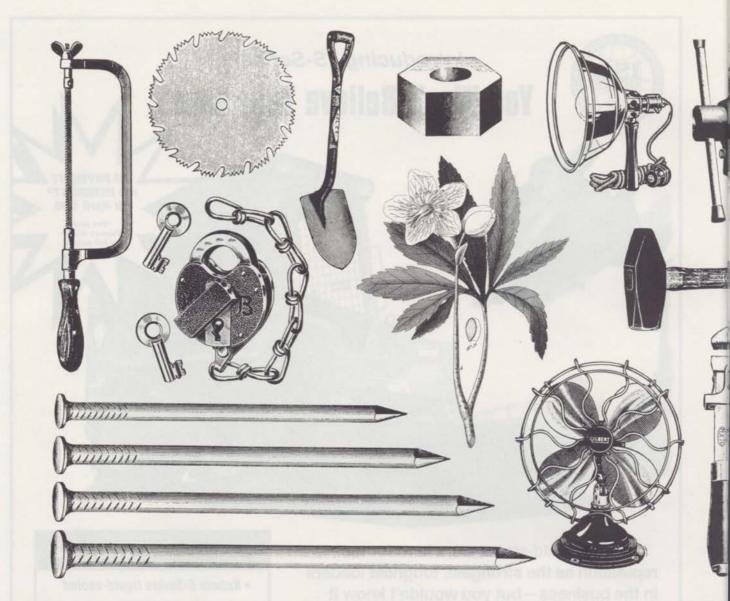
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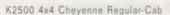


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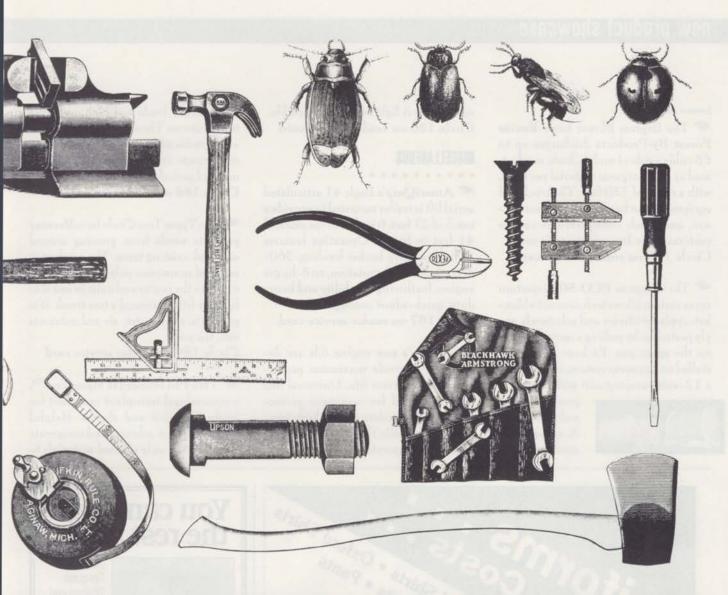




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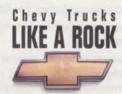




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parts, service and trained staff that can offer you a full maintenance program.

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(continued from page 106)

The Express Blower from Rexius Forest By-Products discharges up to 55 cubic yards of mulch, bark, sawdust, seed or other organic material per hour. with a range of 350 feet. The truck and equipment can be operated by one person, and truck configurations can be customized to fit a contractor's needs. Circle 185 on reader service card

The Gregson ECO-500 injection spray system allows technicians to blanket-apply fertilizers and selectively apply pesticides by pulling a second trigger on the spray gun. Package can be installed on any spray system, and features a 12-volt pumping unit with a built-in



pressure gauge and flow meter. A special coaxial hose design makes it lightweight and flexible. Circle 186 on reader service card

MISCELL ANFOLIS

AmeriQuip's Eagle 41 articulated aerial lift is trailer mounted to provide a reach of 21 feet, 6 inches to the side and 41 feet in height. Operating features include positive bucket leveling, 360degree continuous rotation, an 8-hp gas engine, feathering capability and heavy duty, quick-adjust outriggers.

Circle 187 on reader service card

Kohler's new engine oils are designed to provide maximum performance and service life. Universal oils are formulated for maximum protection against oxidation and high temperature deposits that can occur when engines are operated for long periods

under heavy loads and high operating temperatures. The additives in these oils also provide additional protection when oil change intervals exceed recommended periods.

Circle 188 on reader service card

The Typar Tree Circle from Reemay prevents weeds from growing around new and existing trees. The product is made of nonwoven polypropylene with a hole in the center and a slit in one side for easy fitting around a tree trunk. It is porous to allow water, air and nutrients into the soil.

Circle 189 on reader service card

Tree Pro introduces MycorTree TM, a mycorrhizal transplant inoculant for landscape trees and shrubs. Helpful strains of fungi colonize and invigorate the roots of newly planted materials to



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improve growth rates in a wide variety of landscape conditions. MycorTree can be mixed with a superabsorbent gel. Circle 190 on reader service card

The Elvex SuperSonic ear muffs achieve a noise reduction rating of 29 dBA, and provide excellent full spectrum attenuation. The 8-ounce earmuffs have wide ear cushions, low headband

force and oversized domes with appropriate acoustic properties.

Circle 191 on reader service card



Moldex-Metric presents two new foam ear plugs, Softies TM and SparkPlugsTM, with a NRR 31 rating. The plugs have extra soft, extra light foam. Their tapered shape makes insertion easy and their fit snug.

Circle 192 on reader service card

Sharp-N-Lube® presents a mower maintenance franchise that provides blade sharpening, air filter service, oil changes, blade balancing, spark plug checks, cleaning and other functions for lawn service customers. Franchised contractors take the portable service shop on wheels to provide convenient and profitable extra services to customers. Shop includes enclosed trailer, tools, storage areas and electric lift hoist. Circle 193 on reader service card

AquaScape, a Toro Partner, combines Toro surface aspirating aerators with diffused air systems to rejuvenate troubled ponds. It improves waters with odor and algae problems by aerating and

mixing water to decompose algae and organic matter and provide oxygen. Circle 194 on reader service card

Gumout Small Engine Off Season

Gas Treatment from Pennzoil is a fuel additive said to promote easy starting for 2- or 4-cycle engines after summer or winter storage. It also prevents rust and corrosion from forming in the fuel system and



eliminates the need to drain old fuel. Circle 195 on reader service card

Editor's note: If your new product does not appear here, please send an announcement to Lawn & Landscape, 4012 Bridge Ave., Cleveland, Ohio 44113.



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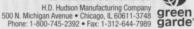
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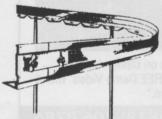
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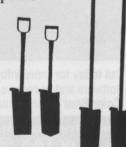
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IA'S STRATEGIC PLAN UNVEILED AT EXPO

A 26-member task force has completed a comprehensive evaluation of the Irrigation Association. The result is the 1995 Strategic Plan, which was scheduled for adoption this month at the International Irrigation Exposition in Phoenix, Ariz. It is the most thorough



reevaluation of the organization since its founding in 1949. The task force studied

every committee, staff position and member service to set goals for the next decade. David Levine, a strategic planning consultant and facilitator, assisted the task force.

More than 2,000 people were polled for their opinions of the association and the needs of the industry. Based on the input from the survey, three primary thrusts were selected for the IA. They include education and certification, legislative and regulatory affairs and communications.

New recommendations include: a single committee for each thrust, expansion of the certification program to include more states partici-

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January 13	The Ohio State University, Columbus, Ohio

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For information about the certification program, contact Daria Jakubowski, IA certification/education manager, at 703/573-3551.

pating, the availability of more educational programs and increased use of the

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DESIGN NOTEBOOK

DESIGN CHALLENGES: This

Greek Revival house built circa 1894 in the historic Sheffield neighborhood of Chicago needed extensive renovating of the structure and property. The project involved both the front and back yards, garage exterior, deck and rear exterior of the house.

The small city lot, which measured only 25 x 150 feet total, included a house and garage that took up approximately 45 percent of the property. This left only about 2,070 square feet for gardens.

The current owner converted the Greek Revival structure from a two-apartment building back into a single family home. One of our challenges was to design and install a vintage looking landscape that would blend with the old style of the home.

ESIGN NOTES

PROJECT: Landscape company:

DESIGNER: SIZE OF PROPERTY:

MAN-HOURS TO CONSTRUCT: PLANTS INSTALLED: Chicago Residence

Moore Landscapes, Glenview, III.

Victor Moore, president

Victor Moore

25 x 150 feet (gardens measured

2,070 square feet)

Approximately 400

1,441 (front and rear gardens)

DESIGN SOLUTION:

The first step
was to add an 8-inch
Littleleaf linden and formal
parterre of boxwood, lamium
and annuals, which we surrounded by a hedge of Hicks
yews in the front yard. The
plants used were: one 8-inch
Littleleaf linden, 60 12inch Wintergreen' boxwood,

31 3-foot Hicks yew and 425 (quart) Lamium 'White Nancy.'

The addition of the linden helped shade the brick structure and added scale from the sidewalk. The plan called for a symmetric design that complimented

> the home's architecture and fit into the typically small Chicago lot.

Another challenge was to screen the backyard from the neighbors and to create an outdoor room. We accomplished this by planting an allee of six littleleaf lindens on each side of a rectangular plot of turf, surrounded by bluestone pavers. The intent was to keep the lindens pleach-

The contractor built a deck with a pergola across the back of this Greek Revival house, which is located on a tiny Chicago property. The owners can enter the deck from two sets of French doors leading from the house.

ed into two hedges, similar to those seen throughout Europe.

The allee of linden set off the rear of the house and also complimented the use of two sets of French doors leading from the house's great room and kitchen

The back garden planting included six 14-foot 'Emerald' arborvitae, six 4-inch 'Greenspire' linden, 70 12-inch 'Wintergreen" boxwood, four 3-foot Capitata yew, 800 quart 'Sterling Silver' Vinca minor and 38 2 x 2-foot bluestone pavers. Some 'Bowles' Vinca minor were mixed in with the 'Sterling Silver.'

The construction contractor designed and installed a deck as wide as the house and a pergola, which has grape vines and Virginia creeper growing on it. Potted gardenia are brought indoors for the winter, while blue palm spikes (in pots from Morocco) are treated as annuals.

The bluestone path in the backyard created a border around the 'carpet' of grass, making it a usable outdoor entertaining area. The stairs of the deck also double as a

(continued on page 118)



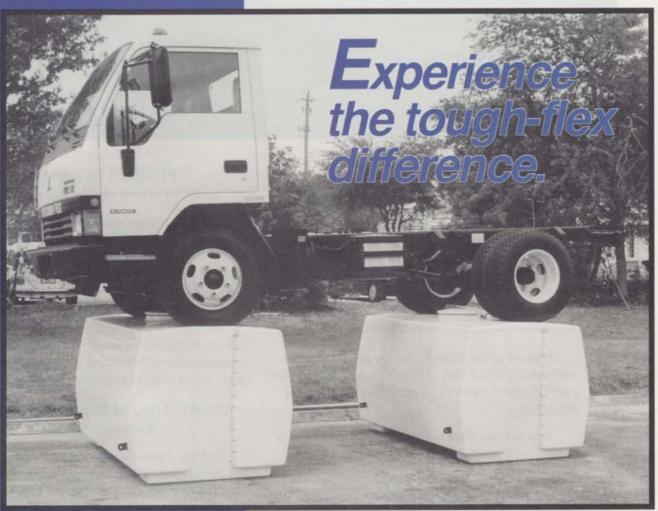
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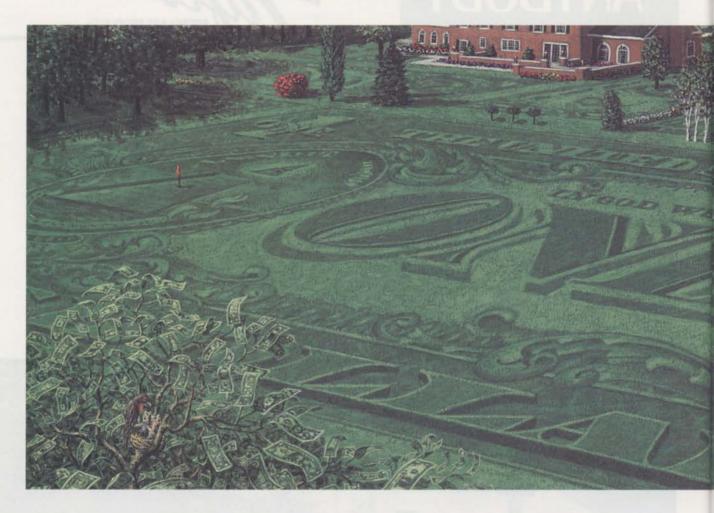
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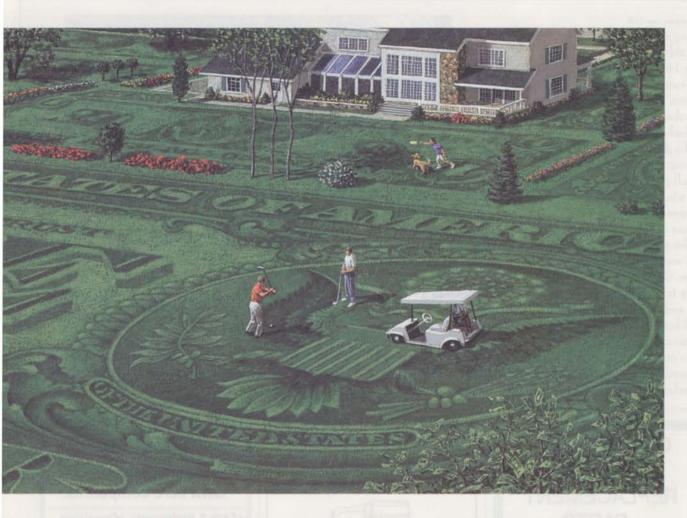
PENDULUM provides proven turfgrass tolerance and excellent preemergent control of crabgrass, goosegrass and other troublesome weeds. And with its superior season-long performance, your customers will notice when PENDULUM swings into action.

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DESIGN NOTEBOOK

seating area for guests. On each side of the deck are three 14-foot arborvitae for year-round privacy. 'Sweet autumn' clematis climb up the columns of the deck.

The garage was rebuilt and customized to look like a small guest house complete with windows, blinds, columns and turn-of-thecentury cast-iron urns.

The garden is designed to need very little maintenance. Other than the twice yearly trimming of the lindens and serpentine boxwood hedges, the gardens function as low-maintenance outdoor rooms used frequently for entertaining and relaxing. The landscape
provides a
formal accent
to the house's
architecture, as
well as a lowmaintenance
area with a
variety of
interesting
plants.



This design won a Gold Excellence in Landscape award from the Illinois Landscape Contractors Association, which sponsors awards to honor exceptional maintenance and innovative designs promoting environmental awareness and improvement. A panel of practicing landscape professionals judge the entries on quality of materials and workmanship, execution, function and aesthetic aspects. — Victor Moore.

The author is president of Moore Landscapes, located in Glenview, Ill.







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Our patented new handle design has astonishing strength. The thick-walled aluminum tubing is oval — inherently stronger than round or rectangular stock. That strength is then compounded by an internal wedge of

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The hand grips are designed for comfort and durability. They're thick, to minimize hand fatique. They're molded of, tough polyethylene and the bottom is extra thick for longer wear when used to drag brush along the ground and into a pile.

Our new aluminum handled loppers come in three models. A 21-inch version with a 1½-inch cutting capacity

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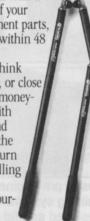
Like all our professional tools, these loppers come with a lifetime warranty. If they break, we'll fix or replace them.

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WHEN Kevin and Kellie Spaans opened Spaans' Lawn Service four years ago, they maintained 34 properties in their hometown of Salem, S.D. But with only so many hours in a day, it seemed unrealistic to think they could expand the business without a substantial investment in equipment.

Yet today, having embraced zero-radius front mower technology, they have not only increased their customer base to 170 clients, but still handle the mowing chores themselves. "I think zeroradius maneuverability has been
the key to our
expansion. I've
saved a lot of
time with our two
machines," Kevin
Spaans said.
"Without the
maneuverability
of this mower,
we'd be spending
about 20 hours
more each week

doing the same amount of work we do now. It's made our jobs a whole lot easier, without a doubt."

The husband and wife partnership in the business includes mowing responsibilities, he said. "Because of



Power raking is one of the primary services offered by Spaans' Lawn Service. A vacuum grass catcher system allows the owners to service many customers in just a few weeks during the fall.

my full-time job, Kellie has learned how to operate our two Grasshoppers — a 21hp diesel and an 18-hp diesel — which has allowed us more flexibility to expand our business."

"At first, I was somewhat

intimidated by the machines, but after practicing a little, I realized these mowers are very simple," Kellie Spaans said. "They make it almost fun to mow."

One of the primary services offered by Spaans'

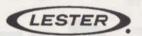
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Lawn Service each spring is "power raking," which removes leaves, grass clippings, pine needles and other remains from the grassbed. After a long winter of accumulation, it can be a challenge, but Spaans said the versatility of the mowers has made the job fast and profitable for him.

"I've got a 12-cubic-foot catcher with my Ouik-D-Tatch Vac® grasscatching system, and together they've been ideal for this kind of application," he said. "You can pick up anything with it - that's how high-tech the vacuum system is. When I go in and power rake, it really shows off my capabilities. I've gotten a lot of

new customers that way."

Last spring, the Spaans power raked nearly 140 lawns in nine days, a feat that won his company a bit of attention. "It's the machines that are doing it, of course, but it sure draws new customers."

During the spring, the company power rakes and mows primarily to residential customers. In the summer, however, it also serves commercial customers as well.

"I handle about 10 acres every four or five days on the larger accounts, while the

smaller ones run about an acre or two apiece," Spaans said. "It keeps us pretty busy, but the machines' maneuverability helps us stay on schedule."

Maneuverability and the

.

1 think zero-radius maneuverability has been key to our expansion. I've saved a lot of time with our two zero-radius machines' — Kevin Spaans

> visibility afforded by the outfront deck have been important assets to the company. "This style of machine lets you see what

you're doing out front, and you don't waste a lot of time shifting gears or turning."

On all of his properties, Spaans uses a 52-inch cutting deck for maximum maneuverability because the residential properties require some pretty tight maneuvering. He said, "the 52-inch deck is perfect."

Another advantage is the Kubota diesel engine. "The diesel is quite a piece of work," he said. "I'm really impressed with it. Long hours of running in high temperatures are not a problem for it, because it's water-cooled. And it can go four to five hours without refueling, so you don't have to haul fuel with you."

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USE READER SERVICE #121

(continued from page 47)

ing at F.D. Kees Mfg., Beatrice, Neb. George Schaefer, Kees' executive vice president for operations, added that "minimizing down time equals increased productivity."

TIME IS MONEY. Ease of maintenance is

another priority, manufacturers agreed.

"Maintenance is something to be keyed in on," said John Chick, sales manager for Snapper Power Equipment, McDonough, Ga. "The trend is toward lighter, simpler mowers that can be repaired in the field."

Tom Prall, manager of product de-

velopment for John Deere Co., Raleigh, N.C., noted, "The mowing contractor needs a machine that spends as much time as possible mowing and a minimum time being serviced."

Increasing productivity is also a major concern of the equipment manufacturers. Most felt that the combination of speed and maneuverability were essential for mowers of the future.

"More lawns in a day is the name of the game," explained Steve Dixon, marketing manager for Dixon Industries, Coffeyville, Kan. "Most contractors would like a riding mower that is so maneuverable that it could eliminate the use of a trim mower." He added that while maneuverability is a key issue, his firm is working on other ways to increase productivity.

"Productivity while mulching is the goal of Toro's new class of mower," said Rick Rodier, marketing manager for contractor equipment and services, The Toro Co., Minneapolis, Minn.

THE MULCHING OPTION. Mulching is here to stay, many manufacturers said. While some expressed reservations about whether the perfect mulching mower has yet been invented, all agreed that the mower of the future must have mulching capability. They said improvements in the mulching feature would include mulching at a higher rate of speed and mulching under wet grass conditions.

What other features do the manufacturers see on machines of the future?

Speed was considered as important as maneuverability. Ergonomics could add ease of mowing along with productivity. Quietness and more riding capability are also on the horizon. Weight of the mowers was occasionally mentioned as an issue. Safety features were mentioned in regard to liability concerns.

Price, you ask? Where was the price? Not a single manufacturer mentioned it as a prime consideration.

The author is an industry consultant with Key Solutions, a division of Iris Sales & Solutions Inc., Rocky River, Ohio.



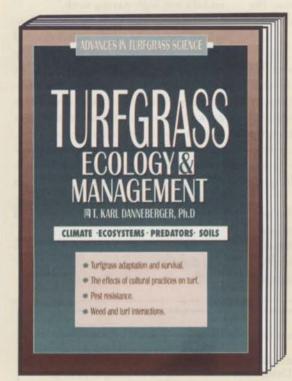




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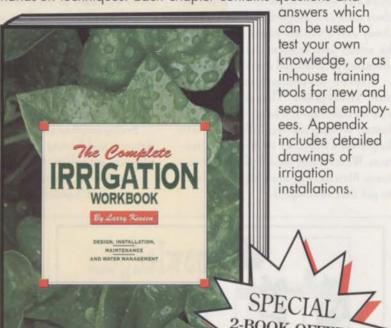
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struction well. They like to do big work. Women just do a better job with perennials and mums, with attention to detail and spacing."

This attention to detail is also noted by Julia Hines, who said when her company worked at Oral Roberts University, the women on the crew did neater work and seemed to get more done than their male counterparts. Julia's husband Andy said there are many reasons why he would hire women, including their attention to detail and customer service.

"I love to see women in customer service," Hines noted. "They give good service on the route and handle complaints better. Women are usually better able to help steer a customer in the right direction. Women also usually do better in a team. Men have to work together longer to get that same spirit.

"It's better than it used to be and I don't see any discrimination from hiring them, but it's hard to get women to apply," Andy Hines said. With the reports of a shrinking labor force, the opportunities for women should continue to increase.

FUTURE ROLES. Women have advice for those who want to work in the industry.

Debby Cole, president of Greater Texas Landscaping in Austin, suggested that women capitalize on their strengths—commitment, organization, persistence and detail orientation—to improve the quality of work and the quality of life for their employees.

Seeley emphasized the need for persistence and having quality employees who you are willing to help nurture.

Smallwood noted that horticulture management "has to be something you're

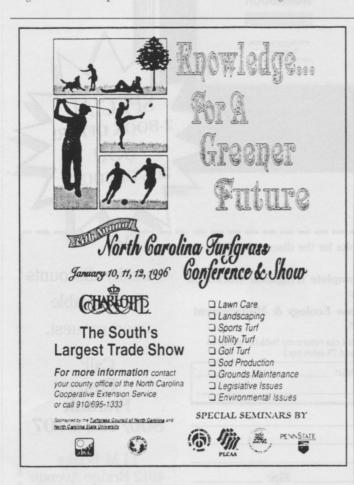
emotionally impelled to do."

That need for a genuine love of horticulture is also emphasized by Michael. "It's not glamorous. It's physical work and it's not high-paying work."

Education and training are also essential for dealing with customers and men in the industry, said Michael. She suggested a woman have an idea of what she wants to get into and get some practical experience. That experience helps grow a business and helps combat negative comments from dubious male peers.

Michael also advised women to cultivate good communication and people skills and have confidence. "There are no limitations if you have confidence in yourself," she noted.

The author is an industry consultant with Key Solutions, a division of Iris Sales & Solutions Inc., Rocky River, Ohio.



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Landscape Architect: Entry Level + with professional degree. The candidate must possess a desire to work and develop professionally in a residential/commercial design environment. Candidate must possess excellent graphic and communication skills. Working Autocadd/Landcadd knowledge is a plus.

Please fax your resume to: Lifescapes, Inc., 770/345-6399, or mail to: Lifescapes, Inc., 6202 Hickory Flat Hwy., Canton, GA 30115. Please specify which position you best qualify. We offer competitive salary with a bonus program along with profit sharing, 401K, medical and dental. EOE

RESIDENTIAL OPERATIONS MANAGER

Leading St. Louis area lawn and landscape maintenance company is in need of operations manager for multibranch residential department. Responsible for lawn and tree care programs, irrigation installation and service repair, turf renovation and establishment. Candidate must possess proven organizational and leadership skills, the ability to work in a fast-paced growth environment. Knowledge of TQM principles and a strong understanding and commitment to customer satisfaction. EOE. Drug free workplace. Send resumes to: Operations Manager, P.O. Box 8068, Belleville, IL 62222.

LAWN CARE MANAGER/AGRONOMIST

OPPORTUNITY IS KNOCKING — Seeking an ambitious, detail-oriented candidate with strong interpersonal skills and sales experience to head up our Lawn Care division and become part of a progressive and dynamic team. We offer an outstanding compensation package plus a wide range of benefits. Qualified candidates should send or fax their resume with salary expectations to SavATree, 360 Adams St., Bedford Hills, NY 10507 or fax 914/666-5843. EOE

LAWN CARE TECHNICIANS

Davey Tree's Minneapolis, Minnesota residential operation is looking for experienced, honest and self-motivated people looking to advance their career with America's oldest and largest employee-owned, green industry company. Qualified applicants should have experience in turf care management, have a valid driver's license, enjoy outside work and possess good communication skills. Davey offers competitive wages and benefits plus opportunities for career growth, training and development. Resume with salary requirements should be sent to The Davey Tree Expert Company, 2500 Fembrook Lane N., Plymouth, MN 55447-4733.

INVESTOR/WORKING PARTNER

Full service grounds maintenance company in northwest Ohio seeks individual to invest as a working partner to handle the operations portion of the business. Percentage of partnership dependent on financial resources and individual qualities. Business is in its 9th year with nearly a quarter of a million dollars in sales in 1994. Owner will consider purchase offers from serious bidders. Reply to: LLM, Box 378, 4012 Bridge Ave., Cleveland, OH 44113.

LANDSCAPE POSITIONS

Looking for the right opportunity? Join a winning team in Cleveland and Columbus, Ohio. If your expertise is Landscape Architecture, Design or Maintenance Sales, Estimating or Supervision, send us your resume or call 216/357-8400. Yardmaster Landscape Architects and Contractors, 1447 N. Ridge Road, Painesville, OH 44077.

LANDSCAPE/MAINTENANCE MANAGER

Seek individual with strong technical knowledge of landscape/maintenance. Must have QAL License, customer relations, employee management skills, OH degree preferred. Send resume with salary history to P.O. Box 484, Gardena, CA 90248.

IT PAYS TO ADVERTISE IN LAVVIN & LANDSCAPE CLASSIFIEDS.

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10 INEXPENSIVE WAYS TO

the bank to reward em-

according to Sam Deep

You don't have to break

plovees for work well done.

and Lyle Sussman, authors

of Smart Moves for People

in Charge (Addison-Wesley

Their methods include

1. A handwritten note

telling an employee thanks

complimentary letter from a satisfied customer.

3. Springing for break-

4. Asking about the

employee's family.

company perk among deserving employees.

from suppliers. 8. Holding a party

work season.

health and well being of an

5. Taking a member of the support staff along on a

6. Periodically rotating a

7. Offering discounted merchandise or services

following the successful

advice for a problem.

employee publicly.

10. Recognizing an

completion of a project or

9. Asking an employee's

Publishing Co., 1995).

the following.

fast or lunch.

sales call.

for a job well done.

2. Showing off a

REWARD EMPLOYEES

BEFORE IT STARTS

Employee theft of tools, supplies and materials can add to your costs surprisingly quickly. How can you avoid an embarrassing, and it happens?

suggest the following precautionary steps:

- Hire carefully. Have a thorough screening system in place to weed out possible thieves.
- Manage your materials. Spread out material handling between different people or departments. Make sure to control your inventory frequently.
- Educate your employees. Tell them how much theft can cost your company's profits. Explain all policies carefully.
- · Help employees. Some people steal because of personal or financial problems. Be available to assist employees with

STOP EMPLOYEE THEFT

possibly costly scene, before

Experts in Inc. magazine

- special, temporary needs.

Manage Your Insurance Costs

Not everyone enjoys reviewing their business insurance policies, but a little extra time spent on insurance can reap huge benefits, according to Rick Bersnak at M.F.P. Insurance Agency Inc.

For instance, if your lawn or landscape contracting business has stayed relatively even for the past few years, your insurance costs probably should not have jumped up appreciatively. Bersnak explained that your insurance costs should not rise without reason from year to year if your direct payroll has been flat or the number of vehicles in your fleet is the same.

According to PLCAA's ProSource, your insurance costs should grow as your business grows and as you acquire more equipment. Bersnak warned not to assume that new equipment is covered automatically. He suggested the following ways to track insurance changes:

- Keep an updated equipment list. Determine if you want to keep insurance on older equipment. Contact your agent when you purchase new equipment.
- Get copies of your loss history each year. It should list premiums you've paid and losses your insurer paid on your behalf. This is your "loss ratio." A low loss ratio should keep your rates low.
- · Check for experience discounts. If you have more than five vehicles or been in business more than three years, your business may be eligible for an "experience" credit if you've had no losses.
- Learn what is covered and what is not. Ask your agent to learn about your business. As you work together, you may discover other ways to save more business insurance costs in the process.

REFERENCES THAT TEACH SERVICE

If you turn the tables on prospective employees and let them check your references, they may learn a lot about your concept of service. According to an article in Inc. magazine, one service provider already uses this method on his prospects.

Job applicants are told to call a list of references to find out what kind of company they'll be involved with and are encouraged to ask a variety of questions. The telephone interviews are designed to give job applicants an

understanding of who the customers are and why they like that company.

The employer gets additional insight into the prospective employee when he calls back the references to find out their impression of the person and also what kind of questions that person asked.

Of course, this system requires the time and cooperation of your customers, but also gives an instant gauge of customer rapport before the person is actually hired.

HEAVY ON PERFORMANCE. LIGHT ON THE WALLET.

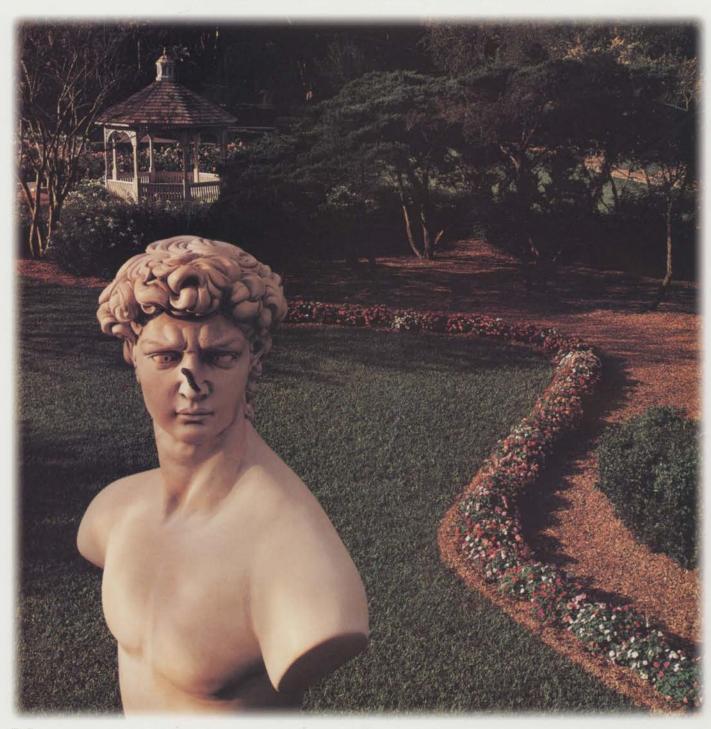
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Whether you're in the market for hydrostatic or gear drive, Gravely has mowers to handle the tightest budgets. Built for speed and reliability, the Pro 150 and the Pro 250 will help you trim costs and clear a path to greater profit.

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DURSBAN ELIMINATES 140 INSECT PESTS BECAUSE ALL IT TAKES IS ONE TO BUG A CUSTOMER.



Most customers tend to overreact. Discover one lawn pest and they think they're infested. Never mind that most customers can't tell the difference between a sod webworm and a night crawler.

Keeping customers' lawns insect pest free is what Dursban* insecticide is all about. Not only is it a dependable and economical broad spectrum insecticide; but it has also been formulated to provide you an effective residual on most turfgrasses and ornamentals.

One thing for sure, use Dursban and customers won't be bugging you with their insect pest problems.

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