David Riedman, Superintendent, Crooked Stick GC, Carmel, Indiana.

When the 1991 PGA comes to Crooked Stick, the pros will be playing on 27 acres of Penneagle/ Penncross fairways.

Superintendent David Riedman is preening this exciting Pete Dye designed course for one of the major events in golf. His job: provide them with the best playing conditions possible. The turf the pros, as well as the club members, are pleased to play: Penneagle and Penncross.

To find out how David prepares 27 acres of Penn Pals bentgrass fairways for the PGA, call or write Tee-2-Green Corp. for a copy of our new 16 page booklet "Focus on Fairways", with comments by Byron Nelson and Patty Berg. Tee-2-Green Corp. PO Box 250 Hubbard, OR 97032 1-503-981-9574 FAX 503-981-5626 1-800-547-0255

FOCUS ON TOWN

CROOKED STICK PREENS PENNEAGLE AND PENNCROSS FOR THE 1991 PGA NOVEMBER 1990, VOLUME 29, NUMBER 11

MANAGEME

LANDSCAPE MANAGER OF THE

TURF AND THE ENVIRONMENT

IRRIGATION EQUIPMENT:

AVOIDING WINTER DAMAGE

by David Ferron. Three superintendents suggest a few basic steps to prevent winter damage to irrigation

by W. Michael Sullivan, Ph.D. The failure to match material and demand results in unnecessary nitrogen loss. To prevent leaching, landscapers need to balance plant need with the type and amount of nitrogen

by Terry McIver. Training his crew members to have



24

30

34

YEAR

applied.

equipment.

contest winner.

COVER STORY: 18 SERVICE IN THE '90s

by Rudd McGary, Ph.D. Amercia wants more and better service in the 1990s. If landscapers are going to compete, they must meet the needs of tomorrow's older, more sophisticated consumer.

DEPARTMENTS

- 4 As | See It ...
- 6 Green Industry News
- 8 Letters
- **11** News Briefs
- **16** Events
- **38** Quickie-Quiz
- 40 Jobtalk
- 42 Research Update
- 46 Products
- 55 Ad Index
- 56 Problem Management

LM **Editorial Staff**





Terry Mclver - Edito

Editorial Advisory Board





Doug Chapman

J.R. Hall VPI & SU

Kent Kurtz



nio State University



A. Marty Petrovic Assoc. Professor Cornell University Ithaca, NY

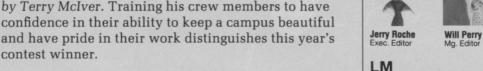
A.E. Dudeck Professor Univ. of Florida Gainesville

LANDSCAPE MANAGEMENT (ISSN 0894-1254) is published monthly by Edgell Communications, Inc. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130, Advertising Offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130, 233 North Michigan Avenue, 24th Floor, Chicago, Illinois 60601 and 3475 Lenox Road, N.E., Suite 665, Atlanta, Georgia 30326. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: \$25 per year in the United States: \$26 per year in Canada. All other countries: \$100 per year. Current issue single copies (pre-paid only): \$2.50 in the U.S.; \$5.00 in Canada; elsewhere \$10.00; add \$3.50 per order for shipping and handling (pre-paid orders only). Office of publication: Edgell Communications, Inc., 1 East First Street, Duluth, Minnesota 55802. Second class postage paid at Duluth, Minnesota 55806 and additional mailing offices. Copyright® 1990 by Edgell Communications, Inc., All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

POSTMASTER: Send address changes to LANDSCAPE MANAGEMENT, P.O. Box 6198, Duluth, Minnesota 55806.



NOVEMBER 1990/LANDSCAPE MANAGEMENT 1





Now Mow two days for the for the price of Offset cutting units. They are

bine Offset cutting units. They are the key to this new mower's success. Meet the John Deere 2243 Professional Greens Mower. The first triplex ever to

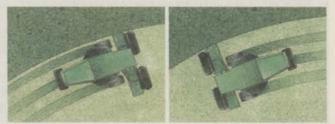
offer a head-on solution to compaction.

Until now, the built-in price you've always had to pay for triplex productivity has been increased compaction wear around the perimeter of your greens. That price just got cut in half.

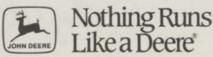
The 2243's patented offset design allows you to spread machine weight over twice as much area. Simply change the direction of your perimeter cut each day, and your tires travel over completely different ground. Your greens get a welcome rest.

ground. Your greens get a welcome rest. And that's just the start. The 2243 also features a liquid-cooled, 18-hp, gas engine; steerable cutting units; power steering; hydrostatic drive; ORFS hydraulic fittings and more.

Call 1-800-544-2122 for the location of your nearest distributor. Or write John Deere, Dept. 956, Moline, IL 61265 for free literature. Because you and your greens deserve the best—and this is as good as it gets.



Offset cutting units on the 2243 allow you to stagger your wheel tracks by simply changing your direction of cut.



Circle No. 103 on Reader Inquiry Card

AS I SEE IT

NRVMA learns how to play it safe

The National Roadside Vegetation Management Association isn't standing still when it comes to dealing with environmental and regulatory issues.

At its September annual meeting in Albuquerque, topics for discussion included:

• "Roadside Management During the Nineties;"

• "Environmental Issues that Affect Roadside Management Programs;"

• "Update on Pesticide Regulations."

Instead of taking a strictly defensive stance against herbicide and pesticide regulations, NRVMA is doing its best to tell its side of the story. It's keeping abreast of what's happening, and working for compromise with legislators.

Granted, many of the people against control products are misinformed, and in many cases operate on double standards. They cut their conscience to match the latest trendy concerns. One year it's Ice Age, the next year it's global warming. But the power of the bleeding hearts can't be denied. That's why NRVMA is taking action to inform lawmakers, citizens and the mass media about the safety of carefully researched and tested products.

Four years ago, only the Pacific Northwest had problems with environmental activists. Now it's everybody's problem.

"There's not a highway department that I know of in the U.S. that hasn't had to deal with environmental issues," says Tom Hoogheem, manager of environmental issues for Monsanto.

"It's time that we get smart," says Hoogheem. "Vegetation management in this country is under attack. We've got to get serious with the issues, we've got to know how to address the issues and we have to do it right now!"

The best example of NRVMA's concern is its applicator training program, being finalized by Dr. Harvey Holt and various associates. The program is being developed at Purdue University, but Holt is quick to mention that input for the program's content came from professionals across the country.

With the applicator training program, NRVMA hopes to eliminate what is a leading cause of activist zealotry: the mistake.

"I firmly believe, that where there has been environmental impact, 99.9 percent of it has been through misuse," suggests Hoogheem, who says applicators must "...do it right, or we'll lose the right to use the products."

The NRVMA applicator training program covers every base of applicator safety. It's a great step forward for NRVMA, and the association deserves credit for thinking ahead, and for taking appropriate action.

Dany M Jone

Terry McIver, associate editor

LM

EDITORIAL STAFF

Jerry Roche, Executive Editor Will Perry, Managing Editor Terry McIver, Associate Editor Office: 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 243-8100 FAX (216) 826-2832

MARKETING STAFF

Jon Miducki, Associate Publisher Ann Langhenry, Midwest Sales Manager Paul Garris, North Central Sales Manager Bob Earley, Group Vice President Office: 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 243-8100 FAX (216) 826-2832

Dick Gore, E. Coast Representative Office: 3475 Lenox Rd. N.E. Suite 665 Atlanta, GA 30326 (404) 233-1817 FAX (404) 261-7022

Robert Mierow, W. Coast Representative Office: 1515 NW 51st Street Seattle, WA 98107 (206) 783-0549 FAX (206) 784-5545

Tom Greney, Senior Vice-President Office: 233 North Michigan Avenue 24th Floor Chicago, IL 60601 (312) 938-2328 FAX (312) 938-4850

SUPPORT STAFF

Carol Peterson, Production Mgr. Connie Freeland, Prod. Supervisor Linnea Olson, Prod. Director Lynn Williams, Graphic Design Jackie Eisenmann, Circulation Super. Bonnie DeFoe, Directory Coordinator Gail Parenteau, Reader Service Mgr. Office: 120 West Second St. Duluth, MN 55802 (218) 723-9200 FAX (218) 723-9223

David Komitau, Graphics Coordinator Ted Matthews, Promotion Director Office: 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 243-8100

Richard Swank, Chairman; Robert L. Edgell, Vice Chairman; Richard Moelier, President; Lars Fladmark, Executive Vice President; Arland Hirman, Vice President/Treasurer; Thomas Greney, Senior Vice President; Ezra Pincus, Senior Vice President; Joe Bilderbach, Vice President; James Gherna, Vice President; George Glenn, Vice President; David T. Mayer, Vice President.

Turf-Seed products lead the

Home lawn two months after overseeding with Turf-Seed ryegrass and bluegrass products.







Quality Turf Products Green-Up Your Bottom Line

V

Lawn renovation can be a profitable addition to an LCO's services, but like other programs, satisfied customers are the key to continued success. Along with professional technicians, proper equipment and timely service, the grass seed used make the long lasting impression that creates referrals. And Turf-Seed, Inc. has the premium quality seed for *your* program ... in *your* region. Ask for these products by variety name ... because it's really *your* name that's on the line.

Northern Turf Renovation

Perennial Ryegrasses Citation II • Birdie II • Omega II • Manhattan II • CBS II Blend • 246 • 2DD • 2HH 'Charger'

Kentucky Bluegrass Midnight • Challenger • Columbia • Galaxy Blend

Southern Turf Renovation

Tall Fescues Olympic • Apache • Monarch • Silverado • Eldorado • Triathalawn Blend

Perennial Ryegrasses Citation II • Birdie II • Omega II • Manhattan II • CBS II Blend • 246 • 2DD • 2HH 'Charger'

PO Box 250, Hubbard, OR 97032 FAX 503-981-5626 TWX 510-590-0957

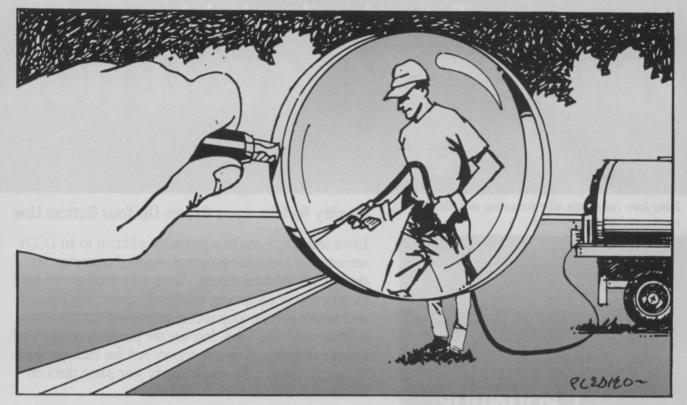


TURF-SEED, INC.

Use ROUNDUP® herbicide to kill undesired turf. ROUNDUP® is a registered trademark of Monsanto Company. Circle No. 130 on Reader Inquiry Card



GREEN INDUSTRY NEWS



LAWN CARE

Lawn care ad claims are ripped by angry lowans

IOWA CITY, Iowa — Advertising for lawn care services is again under scrutiny, this time from an anti-pesticide group here.

Environmental Advocates, Inc. recently filed a complaint against three lawn care companies for publishing what it believes are misleading statements.

The companies are All-American Turf Beauty, ChemLawn Services Corp., and Spring Green Lawn Care.

According to Daryle Johnson of All-American, in one of the complaints, his company was singled out

for claiming that, "For your convenience, All-American Turf Beauty will post a small sign on your lawn to indicate when a pesticide application has been made."

Johnson says the company was also criticized because its literature says that products, "once properly diluted and applied according to label directions, pose no unreasonable health or safety risk to people, pets or the environment."

Ron Vogel, a member of the anti-pesticide contingent, told LANDSCAPE MANAGEMENT he believes the attorney general would decide in the group's favor.

But Steve Moline of the Iowa attorney general's office says the issue is not about chemical safety.

"We're going to focus on the information given to the consumers of that product," says Moline, "and whether or not it's accurate or misleading. As to whether the chemical should or shouldn't be used, that's not part of our determination."

Environmental Advocates believes a recent settlement in New York state over lawn service advertising gives it a leg up in the matter. In the New York suit, ChemLawn agreed not to imply that the pesticides it uses are "safe" or "nontoxic," even though it had never made such statements prior to the suit.

When asked about what he had in mind to replace chemical maintenance, Vogel said, "We have to remember that these (control products) have only been in existence for 30 to 40 years, and certainly humans existed perfectly all right without them before. It's not like it's a necessity."

—Terry McIver□

RESEARCH

Bermuda is well-adapted to California

RIVERSIDE, Calif. — Hybrid bermudagrass is well-adapted to much of the state of California, according to research findings from the University of California cooperative extension.

A three-year study by Dr. Victor Gibeault revealed that bermuda has the necessary deep root systems, low water use rates, good foot traffic tolerance during warm months and low pest susceptibility.

In another study, this by Dr. Stephen T. Cockerham, the quality of common bermudagrass overseeded with different cool-season grasses was found to vary significantly, depending on subsequent foot traffic.

Gibeault says his study was done "to compare the winter color of different lines and to identify the environmental factors most responsible for their dor-



mancy."

One reported drawback is that not all the hybrids showed good winter color, and winter dormancy re-

mains a problem. Gibeault reports that the least dormancy among commercially available grasses was found in Santa Ana, Tifway II and Tifway.

"In contrast," adds Gibeault, "Tifgreen and Tifgreen II were dormant for a long time."

Little differences in dor-



Cockerham

mancy were noted among the common bermudagrasses Sahara and Arizona common. "They showed more dormancy than the good performing hybrids, but less than Tifgreen or Guymon," says Gibeault.

Soil temperature was most closely associated with dormancy. "Once soil temperatures dropped below 50°F for one to two weeks," says Gibeault, "all bermudagrasses lost all of their color."

In the Cockerham study, turf plots were overseeded with six cool-season grasses. Control plots were left free of simulated sports-cleat traffic. The others were subjected to simulated traffic equivalent to two-thirds of a football game, for one day a week beginning in February, 1987. The highest quality overseeded bermudagrass turf without traffic was produced by the two perennial ryegrasses followed closely by three fescues. Roughstalk bluegrass and annual rvegrass were acceptable. but their quality was significantly lower in the traffic plots. Annual ryegrass and two fine fescues performed slightly better.

Two perennial ryegrass overseedings performed "remarkably well" under traffic through a wide range of temperatures. □

Consumers reveal desire for strict pesticide regs, says Waste Management

OAK BROOK, Ill. — Consumers would sharply increase the level that professional pest control companies are state and federally regulated, according to a new national survey of Americans.

Only 29 percent of U.S. households feel that current state and federal regulations concerning professional pest control companies are adequate. Almost 55 percent feel that such regulations need either "substantial" or "some" improvement. This concern is balanced by strong feelings regarding the important benefits of professional pest control services in public places.

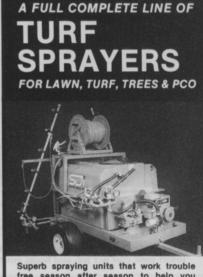
The survey, was commissioned by WMI Urban Services, Inc., a subsidiary of Waste Management, Inc.. Among its other key findings were:

• More than 86 percent of respondents felt that implementation of more rigid testing and licensing procedures for pest control technicians was either "extremely" or "very" important. • More than 78 percent of

• More than 78 percent of those surveyed indicated that chemicals and other materials used by professional pest control technicians should be restricted to their use and should not be available to the public through retail stores.

• Almost nine out of ten respondents (88 percent) feel that it is "very important" that public places use professional pest control services to protect the health of all who visit those places.

"This research indicates that the general public strongly supports increased state and federal regulation of the professional pest control industry," said Dave Quarterson, WMI Urban Services vice president. \Box



Superb spraying units that work trouble free season after season to help you achieve better control in spraying.

OUTSTANDING FEATURES:

- * LEAK-PROOF LID
- * REGULATOR RELIEF VALVE
- * FIBERGLASS TANK (many sizes)
- * MECHANICAL AGITATOR
- * DRIP-FREE SPRAY BOOM
- * E-Z REACH GATE VALVE
- * SPRAY PUMP (many sizes)
- FOR FREE CATALOG SEND TO: •

SPRAYING DEVICES INC.

P.O. Box 3107, Visalia, CA 93278 RAVING DEVICES INC. (209) 651-1306 FAX (209) 651-5024

Circle No. 124 on Reader Inquiry Card

LETTERS

Three cheers...

To the editor:

Three cheers for Landscape Management!

I read your editorial in the August issue. If we can extract 10 percent of the quality companies in the landscape contracting field (if they will give us a try), I know through the quality programs that our association has, we well retain 50 percent of them on a second-year basis.

The Associated Landscape Contractors of America (ALCA) is one of the best-kept secrets in the green industry. There is a lot more than meets the eye.

Thank you for your recent comment. We really appreciate it.

Robert M. Maronde Jr. ALCA president Falls Church, Va.

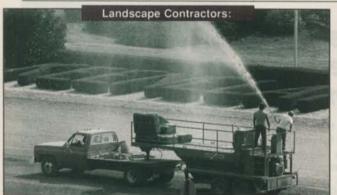
...And a boo

To the editor:

As a professional in the landscape management field, I highly regard your publication. I have never been offended by any of your ads before, as many can easily be geared toward the male readers.

I was, however, taken aback by the advertisement on page 49 of your August issue. I am sure I speak for many of my female colleagues when I say, "Wake up, the times have changed!"

Professional publications are no place for sexist ads, especially in a field where women represent a growing force. Granted, the advertiser is to blame for implementing antiquated advertising schemes, but it seems your editing department would do a better job



Bowie Hydro-Mulcher® delivers the heaviest slurries of seed, fertilizer and mulch without plugging

Strike Pay Dirt. Bowie Makes It Easy.

Bowie Hydro-Mulchers[®] cover more, faster, in fewer trips. They lower your cost per job and boost your productivity.

Productivity is the key to profits. You and your men need tough, hardworking equipment if you are going to accomplish more on any given day.

Start hitting real paydirt. Choose a Bowie Hydro-Mulcher in 500, 800, or 1100 gallon capacity with the features you want most:

 Lasts longer-rugged construction, 3/16" steel tank plate.

P.O. Box 931 Bowie, TX 76230 Loads faster-Handles mulch by the bale; best agitation system.
Produces more, daily -

Delivers heaviest slurries and discharges them further. • Brings highest resale values-

Bowie leads all competitors. Backed by industry's most experienced dealer network, Bowie offers sales, service & options like no one else.

For the Bowie dealer nearest you, call toll free: 1-800-433-0934

"Nobody does it better. Nobody's even close." of selecting what goes into your magazine.

K. Squares Golf course horticulturist Richmond, Va.

Late-season N

To the editor:

I read with interest the August article about lateseason fertilization. Its importance has not been emphasized enough as a way to promote shoot, rhizome and stolon growth on coolseason grasses.

The article discussed several nitrogen sources for late-season applications, including quick-release inorganics, slow-release synthetic organics and natural organics such as Ringer's high-protein meal-based fertilizers. The article stated that using a product such as Ringer's which relies on microbial activity for N release would be the equivalent of a dormant fertilization.

Research conducted by Dr. Tony Koski at Ohio State and Colorado indicates that using Ringer in a late-season fertilization program enhances turf color and quality later into the season than other N carriers tested. The turf greened up faster in the spring as well.

It appears from Dr. Koski's work that Ringer's natural organic product is an effective late-season fertilizer despite dependence on microbial activity.

I look forward to reading more about natural organic management of turf and ornamentals.

> P.J. McGinnity, Ph.D. Ringer Corp.

Minneapolis, Minn. (Dr. Koski likes Ringer's fertilizer. "It yields a nice even nitrogen release curve, good color response and residual activity," he says. "At Ohio State, it worked much better than we anticipated as a late—season fertilizer" with tendencies toward enhanced water infiltration rates and higher soil carbohydrate levels.—ED.)

LAWN CARE

PLCAA urges small LCOs to join up

MARIETTA, Ga. — The Professional Lawn Care Association of America (PLCAA) says it remains firmly committed to all segments of the lawn care industry, and hopes to see smaller companies in attendance at its annual meeting in Nashville this month.

"PLCAA has an enthusiastic and professional staff who are being creative and who are looking for new ways to help this industry meet the challenges ahead," says Bob Andrews, a PLCAA board member, and president of The Greenskeepers of Carmel, Ind.

The theme for the Nashville meeting, "One Day's Drive," is meant to encourage smaller lawn care companies to take the time to make it to the show. *continued on page 11*



PEOPLE

Landscape Mgt. adds to staff

CLEVELAND — Paul N. Garris has been added to the marketing staff of LANDSCAPE MANAGEMENT magazine, according to associate publisher Jon Miducki.

Garris will serve as North Central States sales manager with responsibilities from Ohio to the upper Great Lakes region. He brings seven years of newspaper advertising experience with him.

Look for LM's entire marketing staff at the Green Industry Expo's Early Bird Reception, which the magazine is co-sponsoring Nov. 12 in Nashville, Tenn. □

The Hydro-Mulcher® is a registered trade-mark of Bowie Industries, Inc. Circle No. 102 on Reader Inquiry Card

INDUSTRIES, INC.