

David Kroll, CGCS, inspects one of 18 PennLinks greens at Wilmington CC, Delaware

PennLinks creeping bentgrass working wonders at Wilmington

New bentgrass variety provides a truer putting surface at Wilmington CC.

When David Kroll, CGCS, was dealt the problem of bentgrass

This Wilmington green was seeded in early '60s with poor quality seed fraudulently labeled Penncross. All the greens deteriorated to the point that they had to be entirely renovated.



deterioration on the greens of this prestigious country club, he called in the experts to help. The greens could not be salvaged, so they were treated with methyl bromide and completely re-greened.

Dr. Joe Duich, Penn State University, suggested seeding with a bentgrass coded PSU 126.

Two and a half years later, the greens look great and with PennLinks' more upright growth pattern, putt like a dream. That experimental variety is now named PENNLINKS, and is available in limited quantities.

Available in limited supply this fall in the re-usable 6 gallon "PENN PAIL."



PennLinks' Oregon certified blue tags qualify for cash awards to qualifying turf organizations for turf research. Call our toll-free number for details.

Marketed by **TEE-2-GREEN Corp.**, PO Box 250 Hubbard, OR 97032 1-**800-547-0255** TWX **510-590-0957**





"WE MAKE MONEY OTHER COMPANIES

"Ten years ago when we first started using Roundup" herbicide for renovations, some lawn care operators in the area thought we were making mistakes...misapplying the product. I mean our signs started showing up in a lot of browned-out yards. We were doing renovations without rototilling or sod removal and getting predictable results every time.

"That's the thing about Roundup, it eliminates a lot of variables and problems that you can have with rototilling or overseeding. With Roundup you get a uniform stand of quality turf. You don't inherit any weeds or old turf to cause problems.

"With Roundup we can do a 10,000 square foot lawn in about

fifteen hours—total. And that includes one spray pass with Roundup followed up by one day's work about two weeks later to aerate, thatch, slit-seed and fertilize. There's no mud and no mess. Plus, it's about half the time it would take to rototill and easily half the cost it would be to remove the sod.

"The guys who avoid renovations are thinking of all the problems of mechanical methods. That's why we only use Roundup. Incidentally, the lower cost of chemical renovation helps make it an easier sell to the homeowner, too."

> George Kanavas Kanavas Landscape Management, Inc. Elm Grove, Wisconsin



George Kanavas, pioneered with Roundup in lawn renovations over 10 years ago. Now it's the only kind of treatment he uses.



ON JOBS WON'T TOUCH!"

ROUNDUP TURNS PROBLEMS INTO PROFITS

George Kanavas' experience in renovating lawns using Roundup® herbicide is typical of operators across the country. Roundup turns renovations into profit opportunities instead of problems. It's the modern, time, labor, and cost effective way to renovate. Using Roundup avoids the problems of rototilling or overseeding. It gives the homeowner the lawn he wants. And gives you the chance for referrals, continued maintenance and additional work from a satisfied customer.

GET THIS FREE SALES KIT

Learn how Roundup can help build your business with profitable renovations. Send in the coupon or call 1-800-323-1421 and you'll receive a free Roundup herbicide
Lawn Renovation Guide plus a complete sales kit with samples of
letters, invoice stuffers, doorknob
hangers and a prospecting guide
that shows you how to build this
profitable segment of your business.
You can't lose because there's no
obligation. But there's sure a lot of
business out there you could be
getting.

Call or send in the coupon for this free sales kit. It tells you everything you need to start profiting from renovations with Roundup.

Monsanto

☐ Yes, I'd like to learn how to make money on renovations with Roundup. Send me the Lawn Renovation Guide and Sales Kit.

Name _____

Address _____

City

State _____Zip ____

Phone_

Send to: Lawn Renovation Kit Offer Monsanto Industrial and Residental

and Residental Marketing C2NC 800 N. Lindbergh Blvd., St. Louis, Missouri 63167

ALWAYS READ AND FOLLOW THE LABEL. Roundup is a registered trademark of Monsanto Company. © Monsanto Company 1988

RIP-8-201D

VERSATILE

ATILE EFFECTIVE

Circle No. 130 on Reader Inquiry Card

Formerly WEEDS TREES & TURF





24 COVER STORY: WHY FINE FESCUES?

Frequently overlooked by turfgrass managers, fine fescues are among the most adaptable and versatile of lawn grasses, as research from Rhode Island proves.

30 ENGINE IRREGULARITIES

Armed with a few simple facts, your field-level employees can often isolate minor engine problems before they grow into expensive major breakdowns.

38 SAFE TRACK RECORD

Keeping train tracks clear serves more than purely aesthetic purposes. It can save lives.

40 PUTTING POA IN ITS PLACE

Successful annual bluegrass control requires sound chemical and cultural practices, along with some understanding from the golfers.

DIVERSIFYING YOUR BUSINESS

Landscapers today find themselves in a more competitive market than ever before. As a result, 'diversification!' has become the cry of the '80s.

DEPARTMENTS

6 NEWS/TRENDS

52 PROBLEM MANAGEMENT

8 GREEN INDUSTRY NEWS 56 PRODUCTS

46 ON DESIGN

60 CLASSIFIED

48 RESEARCH UPDATE

70 AD INDEX

50 JOBTALK

72 OUTLOOK



ON THE COVER: **Dewey Fine** Fescue by Larry Kassell

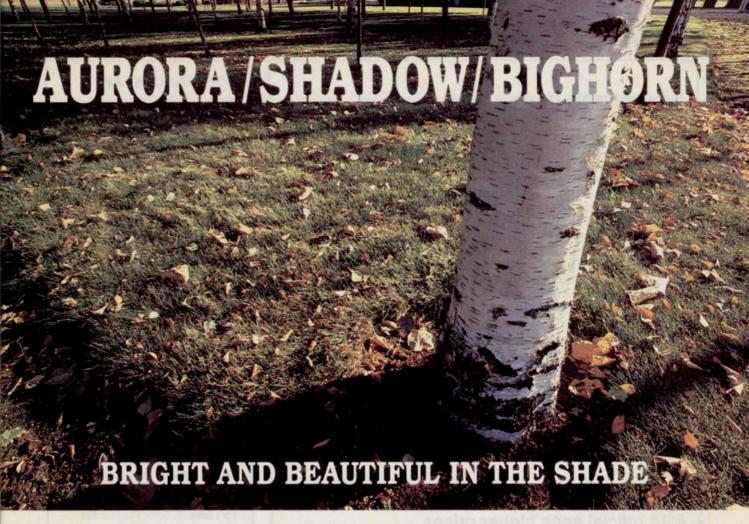
LANDSCAPE MANAGEMENT (ISSN 0894-1254) is published monthly by Edgell Communications, Inc. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130, 111 East Wacker Drive, Chicago, Illinois 60601 and 3091 Maple Drive, Atlanta, Georgia 30305. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: \$25 per year in the United States: \$50 per year in Canada. All other countries: \$100 per year. Single copies (pre-paid only): \$2.50 in the U.S.; \$4.50 in Canada; elsewhere \$8.00; add \$3.00 for shipping and handling per order. 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 © 1988 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



ABP





Aurora Hard Fescue, Shadow Chewings Fescue and Bighorn Sheep Fescue... three shade and drought tolerant fine fescues for

three shade and drought tolerant fine fescues for golf courses, parks, home lawns, roadsides and reclamation areas.

Aurora, Shadow and Bighorn have consistently topped fine fescue turf trials, and have years of 'experience' in low maintenance and high percentage shade areas.

These fescues mix well with perennial ryegrasses and Kentucky bluegrasses for use in sod production and golf courses; Aurora and Bighorn in the roughs and Shadow on the fairways.

When seeded in a monostand, our fescues will help give a course the 'Scottish links' look around tees and in roughs, and blue-grey Bighorn adds another color dimension to course design.

Low growing Aurora, Shadow and even shorter growing Bighorn require less mowing, making them ideal for roadsides and other low maintenance areas.

All-in-all, when your turf area is in the shade, where water, nutrients and maintenance are costly, it'll pay you to look into Aurora, Shadow and Bighorn . . . the good look in fine fescues.

Aurora, Shadow and Bighorn qualify for Turf-Seed's blue tag incentive program. Write us or call your seed distributor for details.



Aurora PVP 8700070 Shadow PVP 8100155 Bighorn PVP Applied for

Produced and Marketed by



P.O. Box 250, Hubbard, OR 97032 503/981-9571 TWX 510-590-0957

CALL TOLL-FREE 800-247-6910 OUTSIDE OREGON 800-247-6910

Circle No. 140 on Reader Inquiry Card

LM

Drought rears its ugly head

■ A long, dry spring resulted in some radical water restrictions in Los Angeles lately. This type of action by the L.A. City Council could be a portent for other parts of the country hit by drought.

"A new ordinance provisionally passed by the City Council will establish strict xeriscape requirements for all landscaping on commercial, industrial and multi-family housing projects in Los Angeles," notes a press release from the California Landscape & Irrigation Council. The release says that points are awarded to xeriscaping features incorporated into the landscape. Each new site plan must meet certain requirements concerning drip/trickle/micro irrigation, automatic irrigation controls, swimming pool and spa covers, non-living ground cover and recirculating water features, among others.

California Gov. George Deukmejian, who drafted a contingency plan for a drought emergency, has requested the public to water lawns only during the evening or early morning.

And California is not the only place in the country facing a probable water shortage. Landscape Management technical advisor Doug Chapman says that spring rainfall measured less than one inch at Dow Gardens in Midland, Mich.—against a normal rainfall of more than four inches.

If spring weather is any indication, it will be a long, dry summer, so landscape managers should begin making their own "contingency plans" now.

EPA official sees higher prices

■ The Environmental Protection Agency's requests for additional data on lawn care pesticides could result in fewer and higher-priced chemicals, says Cathleen McInerney, deputy chief at the Policy and Special Projects Office of the EPA.

"Producers may raise prices in order to compensate for the costs of generating additional data," she told attendees at the most recent GCSAA conference and show. "They may also simply stop making the product, or they may choose to take it off the home market and restrict it to golf courses and other non-home uses.

"Products containing active ingredients which are only registered for use on golf course would be unaffected by any new data requirements."

McInerney said that the EPA plans to issue 15 new pesticide registration standards and 10 final standards. She also predicted that this year, 13 special review decisions would be made.

Her speech also referenced biological control agents including nematodes and endophytic grasses.

LM Editorial Staff







EDITORIAL STAFF

Jerry Roche, Editor Will Perry, Managing Editor Jeff Sobul, Associate Editor Office: 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 243-8100

MARKETING STAFF

Dick Gore, Publisher Office: 455 E. Paces Ferry Rd. Suite 324 Atlanta, GA 30305 (404) 233-1817

Jon Miducki, National Sales Manager Marsha Dover, Midwest Sales Manager Gloria Cosby, Eastern Sales Manager Bob Earley, Group Vice President Office: 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 243-8100

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

Tom Greney, Senior Vice-President Office: 111 East Wacker Drive Chicago, IL 60601 (312) 938-2344

SUPPORT STAFF

Carol Peterson, Production Mgr.
Marilyn MacDonald, Prod. Supervisor
Deb Georges, Graphic Design
Becky Gothner, Circulation Super.
Bonnie DeFoe, Directory Coordinator
Gail Kessler, Reader Service Manager
Office: 120 West Second St.
Duluth, MN 55802
(218) 723-9200

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

COMMUNICATIONS

Robert L. Edgell, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Arland Hirman, Vice President/Treasurer; Thomas Greney, Senior Vice President; Ezra Pincus, Senior Vice President; James Gherna, Vice President; James Gherna, Vice President; Vice President; Vice President; Harry Ramaley, Vice President.

BEHIND EVERY GREAT PERFORMER IS A GREAT COACH



That's why so many winning equipment manufacturers sign Onan to their team. For almost half a century, Onan engines have been the first round choice of leading manufacturers.

Onan engines perform. Hundreds of thousands proving themselves every day. Performing under adverse conditions. Performing with power. Performing for years of trouble-free operation.

Onan builds winners by building winning relationships with equipment manufacturers.

Partnerships based on common goals and dedication to customer service.

Great performance, great teamwork. An unbeatable combination.

Built in the U.S.A

Onan Corporation Engine Division 1406 73rd Ave. N.E. Minneapolis, MN 55432

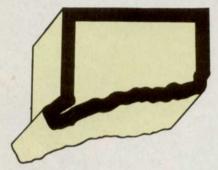
Circle No. 271 on Reader Inquiry Card

GREEN INDUSTRY NEWS

LEGISLATION

Sign-posting, licensing laws in the books

Recent legislation in three states will have an effect on how pesticides are applied. The states—Connecticut, Maryland and Kansas—have restricted pesticide application in different ways. Here is a brief rundown on new laws facing pesticide applicators in those states:



Connecticut

Anyone who sprays pesticides for non-agricultural purposes—including homeowners—will have to post warning signs. The law, passed by the state legislature in May, is expected to take effect in 1990.

The law is probably the first in the country to be jointly supported by industry and environmental groups. "The parties have agreed on everything involving the posting," says Don Kiley, executive director of the Professional Pesticide Users of Connecticut.

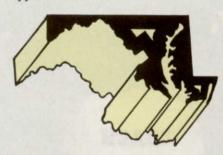
Specific regulations are to be completed by the Department of Environmental Protection by Oct. 1, 1989.

Kiley says industry and environ-

mentalists have agreed that 4x5-inch signs should be posted at conspicuous points of entry, with black letters on a yellow background reading: "Pesticide Application."

The name and phone number of the company or person doing the application would be on the back of the sign, and the property owner would be responsible for removing it after 24 hours.

The two groups also agreed that a registry of individuals who wish to be notified prior to applications should be established by the state. Pesticide applicators who spray abutting properties would then be responsible for notifying these individuals one day in advance. Applicators would be excused in the event of an emergency application.



Maryland

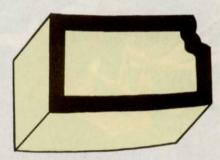
Mandatory sign posting, approved by the state legislature last year, will begin some time in July or August. The specific requirements were being finalized at the time this magazine went to press.

The requirements as they stand are

almost identical to those in Massachusetts: LCOs must post 4x5-inch yellow signs with the image of a person walking with a dog, with black letters reading: "Pesticide Application, Keep Off."

One difference is that the customer is instructed to remove the sign after 48 hours, not 72 hours as in Massachusetts, says Mary Ellen Setting, an entomologist with the Maryland Department of Agriculture. The back of the sign must have the applicator's company and phone number.

Many companies began voluntary compliance this spring, Setting says. The law covers all commercial and government lawn and ornamental applications.



Kansas

All who apply lawn care chemicals commercially for one year after Jan. 1, 1989 will have to be licensed. The legislature recently passed the requirement with the support of the Professional Lawn Care Association of Mid-America, according to Dave Murphy, association president.

Applicators will work their first year as registered technicians; they will receive verifiable training by a certified applicator. After one year, they will have to pass a test administered by the Department of Agriculture.

Kansas is one of a handful of states to require mandatory training of all lawn care applicators. The Professional Lawn Care Association of Mid-America is lobbying for a similar bill in Missouri.

Only handlers of materials in the "restricted-use" category, designated by the Environmental Protection Agency, require certification or supervision under the Federal Fungicide, Insecticide and Rodenticide Act.

Most lawn care chemicals do not fall under this category.

-Lawn Care Industry

PESTICIDES

It's official: Daconil innocent

On May 9, nearly five years after the fact, Daconil fungicide was cleared of any complications in the death of Navy Lt. George Prior.

Judge Paul S. Sheridan, Circuit Court of Arlington County, Va., dismissed the \$16 million lawsuit against Diamond Shamrock and the Army/Navy Country Club for the death. The suit was filed by Prior's widow, Liza, who claimed Prior died as a result of Daconil exposure.

"We're pleased with the judgment in this case as it relates to our product, Daconil 2787," says Ed Sabala, mana-



ger of corporate communications for Fermenta Plant Protection, which presently manufactures Daconil.

Prior, 30, died in September of 1982 of toxic epidermal necrolysis (TEN), a ra-

Daconil sis (TEN), a rapidly progressive and often fatal disease, 14 days after playing golf on the continued on page 11