

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 Look closely at this course. No dollar spot in sight. Not even resistant dollar spot, thanks to Rubigan.

Rubigan controls dollar spot on your tees, greens and fairways for only about 10 cents per 1,000 square feet per day. That's all. And you get a full 28 days control with just one 0.4 oz. application per 1,000 square feet.

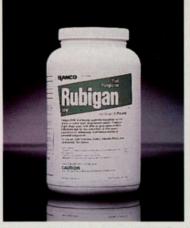
Now look closer. Notice there's also no fusarium blight, necrotic ring spot, summer patch or take-all patch. And no large brown patch, either, with a Daconil 2787[®] tank mix.

Only Rubigan is labeled to prevent

and treat all these harmful diseases. No wonder Rubigan is the superintendents' choice for dependable dollar spot control in all types of weather.

This year, make your course look this spotless. Make it dollar spotless with Rubigan. See your Elanco distributor. Or call toll-free: **1-800-352-6776.**

Elanco Products Company A Division of Eli Lilly and Company Lilly Corporate Center Dept. E-455, Indianapolis, IN 46285, U.S.A. Rubigan[®]—(tenarimol, Elanco) Daconil 2787[®]—(chlorothalonil, SDS Biotech)



Circle No. 113 on Reader Inquiry Card

Dollar spotless.

Dollar for dollar, nothing controls dollar spot better than Rubigan.





A quality cut isn't the only thing it's designed to leave behind

Make no mistake.

The John Deere 756 and 856 are turf mowers first. Good ones. But what makes these two mowers even more attractive is their ability to do more than cut grass.

With the rear cutting unit removed (a job that takes less than 5 minutes), the 756 and 856 can do extra duty carrying rear-mounted implements.

Both feature Category 1 3-point hitch capability and drawbar. So, when needed, you can quickly put attachments like aerators or spreaders to work.

For mowing, the 756 and 856 both feature three 30-inch cutting units. All are hydraulically driven to deliver better quality cuts in long grass, wet conditions, or over contoured terrain. Places where ground-driven reels fall short.

Individual control of left, right, and rear cutting units also makes them perfect for areas where mowing around obstacles is a must.

Talk to your John Deere distributor today for more information on these multifunctional mowers. Or, write John Deere, Dept. 956, Moline, IL 61265 for a free brochure on all of John Deere's Golf and Turf Equipment.



The 756 and 856 both feature a Category 1 3-point hitch capability to carry attachments like the John Deere 206 Spreader or 260S Shatter Aerator.

Standard drawbar on 756 and 856 allows you to pull implements like the John Deere 140S Shatter Aerator.





Circle No. 108 on Reader Inquiry Card

Nothing Runs Like a Deere

MAY 1988, VOLUME 27, NUMBER 5



25



Formerly WEEDS TREES & TURF

25 COVER STORY: COOL-SEASON INSECT CONTROL GUIDE

Here's what's new in cool-season insect control: Triumph has finally received a label; diazinon can no longer be used on golf courses; and nematodes may control insects biologically.

NOT SO FAST 34

Opinions on green speeds vary as much as the management practices themselves. In the following, a few superintendents reflect on the trials and tribulations of managing greens in the face of pressure from players.

40 A GUIDE TO LAWNGRASSES

Confused about which new turf varieties will work best for home lawns? The executive director of The Better Lawn and Turf Institute tells what to look for in choosing good grass.

48 **DISEASE GUIDE FOR COOL-SEASON TURF**

No fungicide offers a complete spectrum of turf disease control. But, for most diseases, a range of reliable products is available and (in spite of enormous development costs), the introduction of new materials continues.

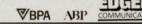
VALUING YOUR COMPANY 56

If you are thinking about selling your landscape or lawn care company, how do you determine how much to ask? Or to expect from the potential buyer? These formulas should help you get in the ballpark, anyway.

		and the second se
DEPARTMENTS 64	RESEARCH UPDATE	NS SAN
6 NEWS/TRENDS 68	JOBTALK	PA-STA
8 GREEN INDUSTRY NEWS 70	PROBLEM MANAGEMENT	Sec.
18 SHORT CUTS 72	PRODUCTS	and the second
21 ATHLETIC TURF 82	CLASSIFIED	
60 ON DESIGN 91	AD INDEX	
62 INSURANCE INSIGHTS 92	OUTLOOK	
		COMPANY OF THE OWNER OF THE OWNER OF

ON THE COVER Japanese beetle larvae feeding at the soil-thatch level and sod webworms on thatch, by Dr. Harry Niemczyk

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, 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: \$35 per year in Canada. All other countries: \$70 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. Second class postage paid at Duluth, Minnesota 55806 and additional malling 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 55806. 11411







Blasts sod webworms, mole crickets, and fire ants.

Continues to work systemically by remote control.

Sprayable by vehicle or on foot.

Gives effective, broad-spectrum control of armyworms, leafhoppers and greenbugs.

> 'Refer to state regulations. Avoid accidents. For safety, read the entire label including precautions. Use all chemicals only as directed. Copyright © 1988 Chevron Chemical Company. All rights reserved.



Low toxicity to wildlife.

Convenientto-use soluble powder. Compatible with most insecticides and fungicides gentle on turf.

Once spray dries you can re-enter treated area immediately ideal around golf courses and parks.

* * * *

Gentle to streams and ponds fed by runoff.

Circle No. 104 on Reader Inquiry Card

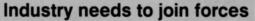
Company

UKIHU Chevron Chemical ORTHENE

TURF, TREE & ORNAMENTAL SPRAY

NEWS/TRENDS

by the Editorial Staff



■ Words from Larry Scovotto, executive vice president of the American Association of Nurserymen:

"A great deal of work needs to be accomplished on behalf of the landscape industry. The residential landscaper, the landscape contractor and the interior landscaper need to join forces in a unified business and marketing effort to make the commercial sector and the general consumer more aware of the value and necessity of landscaping.

"On the national level, there is a big job to be done in residential, commercial and governmental business promotion on behalf of landscaping. People at all levels need to be educated to perceive both the need and value of landscaping. The expectation of landscaping throughout our daily lives must become a part of a new national culture."

Governmental sales growing?

■ Sales of turf supplies to landscape managers in the government sector will be a growing area in the next few years, according to James I. FitzGibbon of Lesco Inc.

"Government, school and institutional sales has the potential to be a big revenue-producer for us in the near future," he told company employees and suppliers recently.

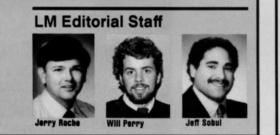
FitzGibbon made the comments at the company's annual sales meeting in Sebring, Fla. which featured two days of trade show exhibits. Seminars were conducted by Ciba-Geigy, American Cyanamid, Elanco, Hoechst-Roussel and Mobay.

Construction up, down

■ A construction boom is seen on college campuses in the next five years, but the overall construction outlook for 1988 doesn't appear as rosy.

According to The Chronicle of Higher Education, "a survey of college planners found that about 60 percent saw the need for new or modernized facilities on their campuses as 'extremely urgent' or 'very urgent.'" Why? Because the facilities built during the first post-war baby boom in the 1960s are reaching the end of their 25-year life expectancy.

However, the overall 1988 construction picture is not good, according to George Christie, vice-president and chief economist for McGraw-Hill Information Systems. "Lower interest rates, more than anything else, will make the difference between a shallow and a steep decline of construction activity" this year. Projection is that the total 1988 construction contract value will drop three percent lower than last year's \$248.4 billion.



EDITORIAL STAFF

LM

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

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; Joe Bilderbach, Vice President; James Gherna, Vice President; George Gienn, Vice President; Harry Ramaley, Vice President.

WE BUILT OUR MOWER ON THE THEORY THAT THE EARTH IS ROUND.

One great discovery deserves another. We call ours the Kubota F2000 front mower.

With a flip of a lever you're in 4-wheel drive, making fast work of those nooks, crannies, curbs and curves you can't landscape into submission.

Add front wheel differential lock, a 20horsepower diesel engine, and travel speeds up to 9.5 mph, and it flies in the face of rain, snow and mud. With Kubota-like ease.

It has a hydrostatic transmission to spare © 1988 Kubota Tractor Corporation you the trouble of clutching. Rear-wheel power steering and independent front brakes for precision maneuverability. And your choice of 60" or 72" mowers, a sweeper or snowblower. All lifted hydraulically.

Next time your turf throws you a curve, let our F2000 straighten it out.

Send for our free Grounds Maintenance Equipment Guide, by writing to Kubota Tractor Corp., P. O. Box 7020-A, Compton, California 90224-7020.



GREEN INDUSTRY NEWS

Keeping your course secure

in manual interior

Vandals used to be a problem at Chicasaw Country Club in the Memphis, Tenn., area. No longer.

Jim Harris, Chicasaw superintendent, has some tips on how to keep

undesirables off golf courses, especially in urban areas. They focus on "preventing rather than apprehending and prosecuting."

• If an incident takes place and the culprit is not apprehended, keep it out of the media. This takes away his satisfaction.

• Have members

LANDSCAPING

keep valuables at home or in the locker. A number of players on his course had been robbed during rounds.

• Hire highly visible, uniformed security guards.

• Cover drain ducts with grates to keep people from crawling in through them and enclose the course in fencing with barbed wire on top if possible.

Make sure everyone on the

course can be identified: members, maintenance crew and caddies. Uniforms for maintenance crews are a good idea, Harris says. Question any unaccounted for people on the course.

• Control all course entrances and hire 24-hour security for the front gate, closing almost all the gates.

There are, of course, some problems in taking these measures.

"Locked gates meant vendors had to go to the front office and then be let in," Harris says. Also, the pro shop couldn't sell

orange shirts because this was the color given to the maintenance crew.

COMING IN JUNE

Aquatic weed control

Warm-season disease guide

Aerification/dethatching



Dr. Robert Shearman

RESEARCH

Potassium prominence growing in turf care

As more research is conducted, results are showing more benefits of potassium use.

Within the turfgrass plant, potassium helps with sugar transporting, starch formation and enzyme activity. It also influences the opening and closing of stomata.

Studies conducted at the University of Nebraska on Fylking Kentucky bluegrass show that potassium increased root density and depth. "With increased potassium, wilting tendency is lower because of the decreased water use rate and deeper rooting," explains Robert Shearman, continued on page 18

'Million Dollar List' led by Environmental

Sixty-seven companies made Lawn Care Industry's second annual Million Dollar Mowers List, representing more than \$170 million in mowing/management revenue in 1987.

Mowing/management revenue is that which is billed for mowing, trimming and clean-up services. Billings specifically for chemical applications, landscape installation, design and tree/ shrub care are not included.

Fourteen companies joined the list this year. Two companies dropped off. Environmental Care (Calabassas, Calif.), The Brickman Group (Long Grove, Ill.) and Lancaster Landscapes (Arlington, Va.) held their respective first, second and third place rankings



from last year. The rest of the top 10: 4. Northwest Landscape Industries (Tigard, Ore.), 5. Oyler Brothers (Orlando, Fla.), 6. (tie) Maintain (Dallas, Texas) and Cagwin & Dorward (Novato, Calif.) 8. Las Colinas Landscape Services (Dallas, Texas), 9. AAA Lawn Industries (Tucker, Ga.), 10. (tie) Shearon Environmental Design (Plymouth Meeting, Pa.), Pampered Lawns (Houston, Texas).

The companies averaged approximately 20 percent growth over 1986.

Company representatives attribute the growth to a continually wider demand for their services.

"I think developers are more aware of the need for curb appeal, selling their project as the people are walking in the door," says Scot Davis of Davis Landscape Contractors.

"Maintenance is a market that's really growing," adds Wayne Richards of Cagwin & Dorward.

-Elliot Maras

Circle the Reader Service numbers of those items of interest to you.

Fo	or fast	lest r	espo	nse, u	use th	ne pe	el-off	label	fron	n the	front	cove	r.				MANAGEMENT MAY 1988 This card void after July 15, 1988
NA	ME.								in St						124		MY PRIMARY BUSINESS AT THIS LOCATION IS: (PLEASE CHECK ONE ONLY IN EITHER
TIT	LE.															833	A, B OR C)
1000	199			PL/	00	E (n)	11=1	21	AE	E	LIS	- (-))	-			A. LANDSCAPING/GROUND CARE AT ONE OF THE FOLLOWING TYPES OF FACILITIES:
FIF	AW -			-			and the second	10000	1.000	-	2 101	10000			-	-	0005 Golf courses
AD	DRE	SS_		BI	116	PH	ON	12	NU	N/E	(귀)	#1 1	의트	0 <u>}'</u> {'	12/2		0010 Sport complexes
	TY_																0015 Parks 0020 Rights-of-way maintenance for highways, railroads & utilities
		133	1.72	22/2	- Carl	1000	5.4	and a	n 11.		12.34	1995	377	323	1		0020 Rights-of-way maintenance for highways, railroads & utilities 0025 Schools, colleges & universities 0030 Industrial & office parks/plants
ST	ATE				-	-		-		_ ZI	IP_		-			-	0045 Condominiums/apartments/housing developments/ hotels/resorts
TE	LEP	HON	EI		1												0050 Cerneteries/memorial gardens 0060 CMilitary installations & prisons
			- •		-	1.000		1000	and.		1000	1000			-1.5		0060 CMilitary installations & prisons 0065 CAirports
1																	0070 Multiple government/municipal facilities
101	115	129	143	157	171	185	199	213	227	241	255	269	283	297	311	325	Lotiter type of racinity (prease specify)
1001000	1.00	Sector Sector		158	1000	0000000	1.1.1.1.1.1.1	100.002	1.1.1.1.1	1070000		200000	1000	22222	10000	1000005	B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS
10010200		20203	1.22	159	1.1.1.2	100200		103030	1000	1000	122.0		1222	122.000	0.000	2022020	0105 CLandscape contractors (installation & maintenance)
1000000		1000000		160		1005555	1000	10000000		100 Cold	1000	101000000		110000000	314	100000	0110 Lawn care service companies 0125 Landscape architects
100.000		133		161 162		10000	1000	1000		1000	1000	1000	287	1.55.00		329	0135 Extension agents/consultants for horticulture
10000		135		1000		1000		1000		1000		1000		1000	317	10000	(please specify)
		1000		164		10.000		1000				1.00		1000		1.000	C. SUPPLIERS:
109	123	137	151	165	179	193	207	221	235	249	263	277	291	305	319	333	0205 Sod growers Other supplier (please specify)
110	124	138	152	166	180	194	208	222	236	250	264	278	292	306	320	334	Approximately how many acres of vegetation do you
111	125	139	153	167	181	195	209	223	237	251	265	279	293	307	321	335	maintain or manage?
1000000				168		10022254	210	11555551		1000000		1000000	1000	10000		336	What is your title? (please specify)
NO GOL			1.000	169		1000000	0.000	100005	1000	100000		2000.01	1000	10000		10000	I would like to receive (continue receiving)
114	128	142	156	170	184	198	212	226	240	254	268	282	296	310	324	338	LANDSCAPE MANAGEMENT each month; YES IND

Your Signature:

Date:

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 665 DULUTH, MINNESOTA

POSTAGE WILL BE PAID BY ADDRESSEE

READER SERVICE DEPARTMENT LANDSCAPE MANAGEMENT

POST OFFICE BOX 6049 DULUTH, MINNESOTA 55806-9749

հետեհետեհետեհետես

GET MORE FACTS

NO POSTAGE NECESSARY IF MAILED IN THE

UNITED STATES