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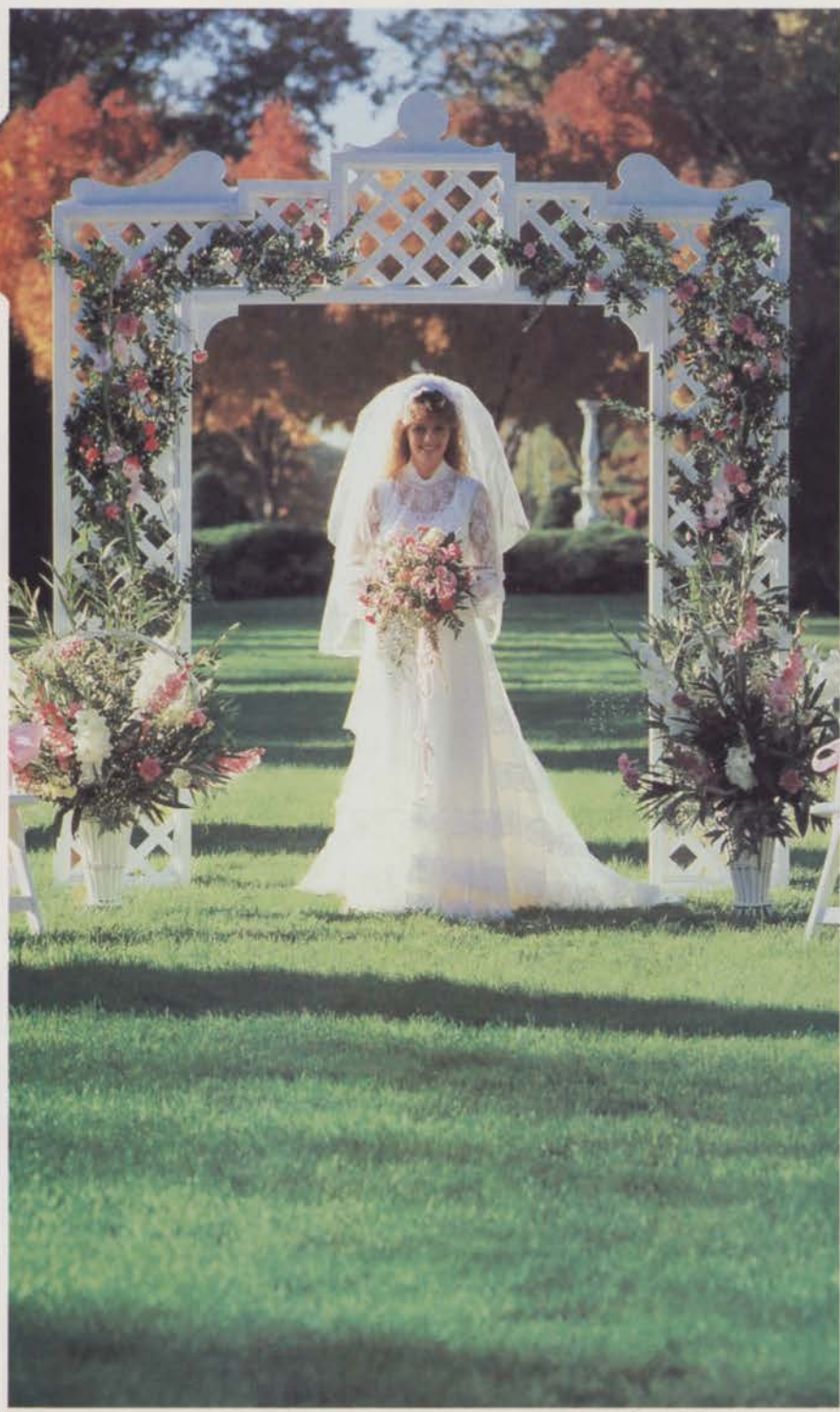
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RENOVATING HOME LAWNS

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A thing of beauty is a joy forever. Unless there are mole crickets in there.



Mole crickets. They're spoilers. Give them an inch and they'll take a lawn.

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ALA

MARCH 1986
VOLUME 7 NUMBER 3

BPA MEMBERSHIP APPLIED FOR 10/85.

TABLE OF CONTENTS

Add-On Services

Lawn care businessmen are offering their customers everything from snow plowing to aerating. Shouldn't you?52

Ornamental Pests

Ornamental care is a popular add-on service, but it entails learning a whole new set of pest control rules.58

Mall Show Marketing

Mall shows provide a prime marketing vehicle for lawn care professionals, unfortunately, not many businessmen are taking advantage of malls.....60

The Question of Insurance

Insurance companies have dropped pollution coverage clauses from their policies for lawn care applicators. What can we do?.....64

Landscaping Texas Style

Charles Racusin offers a special flair to his landscape design clients, and manages to win lots of awards along the way.....70

Renovating Home Lawns

Home lawn renovation has always been looked upon as being too labor-intensive to be a practical add-on service for lawn care operators, but times have changed.....76

IPM For Lawn Care

Integrated pest management is a concept accepted by progressive structural pest control operators. Maybe it is time lawn care operators take a look at IPM.....34

Clobbering Crabgrass

Crabgrass may be the most difficult-to-control weed lawn care professionals have to contend with.....42

Bluegrass Billbug

The bluegrass billbug is not quite as difficult to control as crabgrass, but a little refresher course couldn't hurt.....45



COVER

How many hats do you wear? If you are like the lawn care professionals we spoke with, you probably offer your customers several add-on services. (Cover photo by Barney Taxel)

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DEPARTMENTS

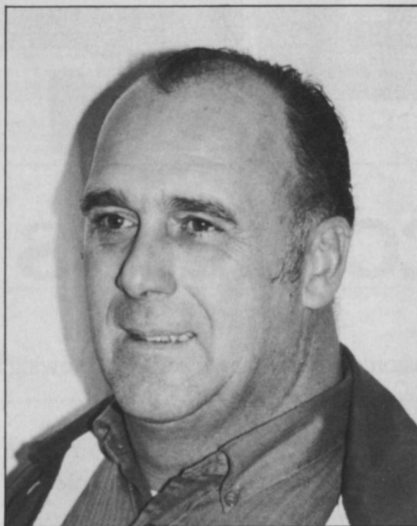
Advertiser's Index.....	90	People.....	32
Calendar.....	4	PLCAA Update.....	31
Classifieds.....	90	Products.....	84
Inside Story.....	10	Views Across The Industry.....	4
News in Brief.....	12		

VIEWS ACROSS THE LAWN CARE INDUSTRY

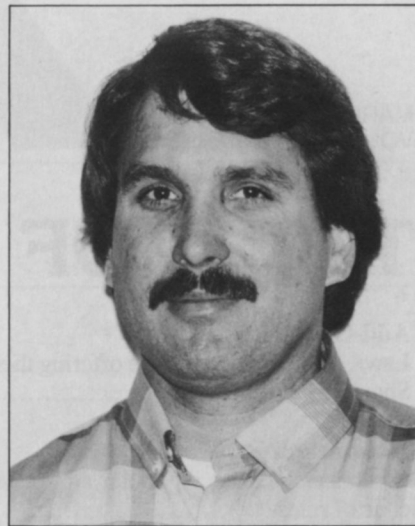
DO YOU OFFER YOUR CUSTOMERS ADD-ON SERVICES?



"We offer core aeration, mole control using phostoxin, and drill seeding, and have had a good response for all three. We tried the waters with phostoxin this year and met with very good results. That will be an area in the future that will offer good peripheral service." - **Frank Reynolds, Reynolds Lawn Care, North Haven, Connecticut.**



"Aerating is the only auxilliary service that I do. I'm really just starting with it now. I haven't done aerating in the past, but I think it's becoming a real need now. In the past, I offered snow removal, but I got out of that. It got too costly to operate the trucks." - **Glen Howling, Evergreen Lawn Spray, Kitchener, Ontario.**



"Now we're offering fungicide applications as an extra service and we intend to offer core aeration and slit-seeding in the near future. With the clay soil and extreme temperatures we have in southern California, I think that will really improve our customers' lawns." - **Larry Bourbonnais, Spray Green, Riverside, California.**

CALENDAR

Mar. 24-25

Eight Annual Athletic Turf Management Seminar, Providence, Rhode Island. Contact: Athletic Turf, P.O. Box 1936, Appleton, Wisconsin 54913; 414/733-2301.

Mar. 27-28

Ninth Annual Athletic Turf Management Seminar, Roanoke, Virginia. Contact: Athletic Turf, P.O. Box 1936, Appleton, Wisconsin 54913; 414/733-2301.

Apr. 5-6

California Landscape Contractors' Association, Inc. Certification Test, Orange Coast College, Costa Mesa, California. Contact: Micheyl Hannon, CLCA, 2226 K Street, Sacramento, California 95816; 916/448-CLCA.

Apr. 7-8

40th Annual Southeastern Turfgrass Conference, Rural Development Center, Tifton, Georgia. Contact: Dr. Glenn W. Burton, Research Geneticist, Coastal Plain Experiment Station, P.O. Box 748, Tifton, Georgia 31793; 912/386-3353.

Apr. 23

CLCA Business Seminars, Long Beach Con-

vention Center, Long Beach, California. Contact: Micheyl Hannon, CLCA, 2226 K Street, Sacramento, California 95816; 916/448-CLCA.

Apr. 23-25

CLCA Landscape Industry Show, Long Beach Convention Center, Long Beach, California. Contact: Micheyl Hannon, CLCA, 2226 K Street, Sacramento, California 95816; 916/448-CLCA.

Apr. 25-26

Seventh Annual Texas Wildflower Day, Texas Woman's University, Denton, Texas. Contact: Texas Woman's University, P.O. Box 22675, Denton, Texas 76204; 817/566-2250.

May 1

Professional Grounds Maintenance Tour, Atlanta, Georgia. Contact: Dr. Gilbert Landry, Jr., Extension Agronomist-Turf, Extension Agronomy Department, University of Georgia, Athens, Georgia 30605; 404/542-5350.

May 21

North Carolina Turf and Landscape Field Day, NCSU Turf Field Center, Raleigh, North Carolina. Contact: J.M. DiPaola, Box 7620, North Carolina State University, Raleigh, North

Carolina 27695; 919/737-2657.

July 17-20

California Landscape Contractor's Association Family Summer Tri-Board, El Rancho Tropicana, Santa Rosa, California. Contact: Micheyl Hannon, CLCA, 2226 K Street, Sacramento, California 95816; 916/448-CLCA.

July 28-30

The Outdoor Power and Equipment Institute's Expo '86, Kentucky Fair and Exposition Center, Louisville, Kentucky. Contact: Cheryl Van Vliet, OPEI, 1901 L Street, NW, Suite 700, Washington, D.C. 20036; 202/296-3484.

July 29-31

National Fertilizer Solutions Associations — Mid-year Dealer Conference "Round-up," Hyatt Regency O'Hare, Chicago, Illinois. Contact: NFSA, 10777 Sunset Office Drive, Suite 10, St. Louis, Missouri 63127; 314/821-0340.

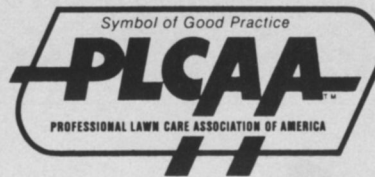
Aug. 12

Turf and Ornamentals Field Day, Georgia Station, Griffin, Georgia. Contact: Dr. Gilbert Landry, Jr., Agronomy Department, University of Georgia, Athens, Georgia 30605; 404/542-5350.

Position Announcement

DIRECTOR OF TECHNICAL SERVICES

Professional Lawn Care Association of America



Applications are now being accepted for this new position.

Primary duties and responsibilities will include:

- Development and administration of safety / agronomic educational training programs for the membership,
- Technical liaison with university, industry, regulators, and allied association personnel on issues relating to the environment, safety, and certification requirements,
- Serve as a credible spokesman for the lawn care industry on environmental / technical / regulatory issues,
- Provide technical expertise in the preparation of position statements, public comment, and testimony which promotes the professional image of the Association and industry,
- Develop a meaningful national certification program for the membership.

Applicants should possess the following qualifications:

- Master's Degree in Agronomy, or its equivalency,
- Work experience in the lawn care industry,
- Proven verbal, written, and interpersonal communication skills,
- Proven organizational, administrative, and management capabilities,
- A willingness to relocate to the Atlanta metro area.

Salary and benefits are very competitive with similar management responsibilities in the marketplace.

Individuals who are sincerely interested in the position of Director of Technical Services should send a resume to:

Search Committee, PLCAA, 1225 Johnson Ferry Rd., NE, Marietta, GA 30067

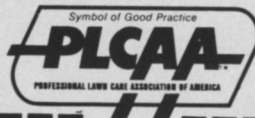
Deadline for Receipt of Applications: April 15, 1986.

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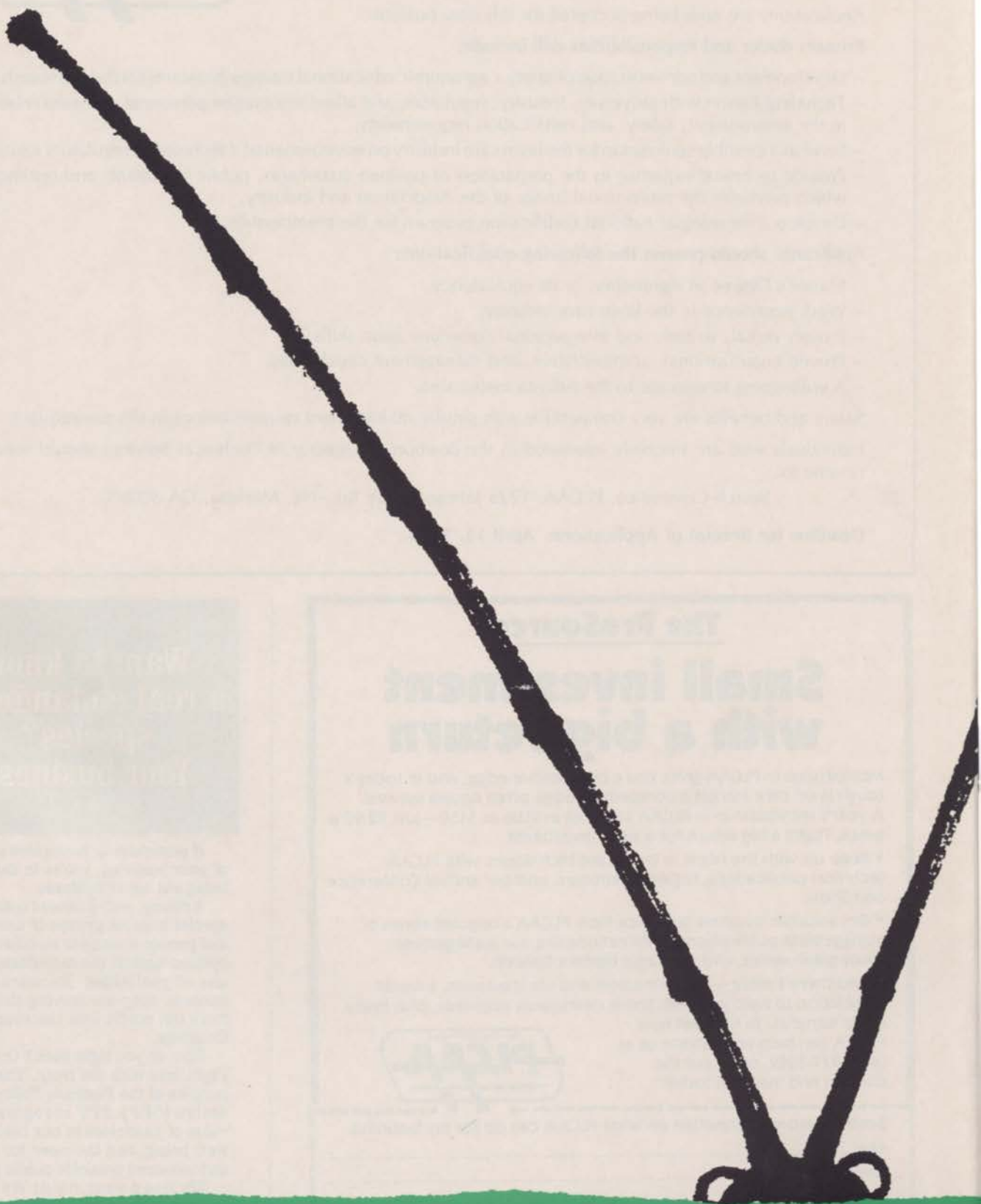
Want to know
a real endangered
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Your business.

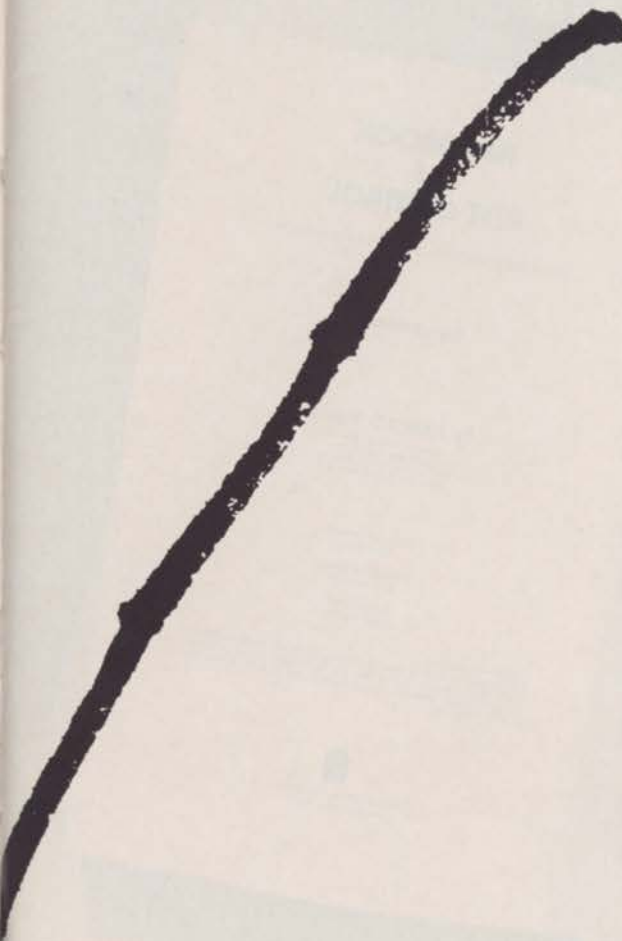
If pesticides or herbicides are part of your business, you're in danger of being put out of business.

A strong, well-financed coalition of special interest groups is using fear and pseudo-science to mobilize public opinion against the manufacture and use of pesticides. Encouraged by success, they are moving the battle from the media into the courts and Congress.

How do you fight back? Organize. Fight fear with the truth. That's the purpose of the Pesticide Policy Foundation (3PF). 3PF recognizes the value of pesticides to our health and well-being, and the need for a sane and reasoned pesticide public policy.

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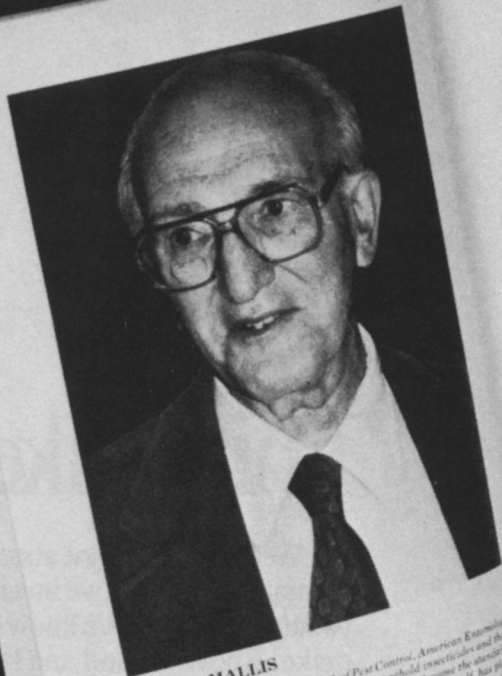
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Of PCO Professionals



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HANDBOOK of PEST CONTROL

The Behavior, Life History, and Control of Household Pests

Sixth Edition

By **ARNOLD MALLIS**

Associate Professor (Retired)
Department of Entomology
The Pennsylvania State University
University Park, Pennsylvania

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This extraordinary new training film from I.E.E. has been developed as an extension of the *Mallis Handbook* to bring the practical, professional information found in this valuable text into the training classroom.

"Cockroach Control" sets a new standard of excellence in industry training, by presenting the ultimate professional standards and technology available for achieving cockroach-free environments. It is the ultimate "how-to" training tool, developed to expand the professional techniques of service technicians. "Cockroach Control" will take your service technicians from where they are now to where you want them to be; it is ideal for training new technicians or as a professional tool to reinforce company service standards for all experienced technicians within an organization.



Training Package Includes:

- One 30-minute color/sound video-tape film developed to help you educate and train supervisors, service technicians and sales personnel.
- Five comprehensive 24-page training manuals developed to provide professionals and students with study materials designed to reinforce the film's message long after your trainees have left the training room.

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Yes,

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Rentals are provided for a 30-day period. Rental dates are guaranteed if you give us two weeks advance notice. The rental fee may be used toward your purchase if the film is bought within 90 days.

PREVIEW

Films are available for executive review only, and no training groups should attend. Previews are shipped on a first come, first served basis, and specific dates cannot be guaranteed. The preview fee may be used toward your purchase if the film is bought within 90 days.

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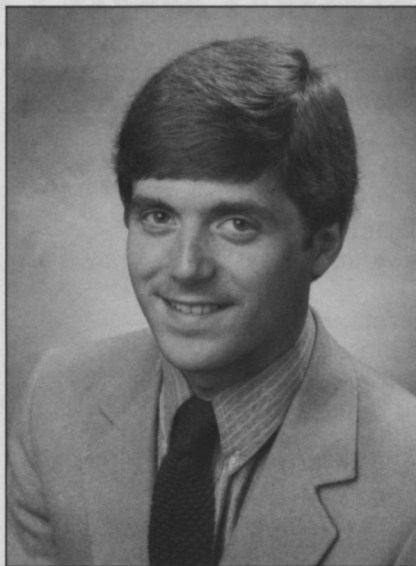
**SPECIAL LIMITED
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INSIDE STORY

This March issue is the largest issue of *American Lawn Applicator* ever published. This growth was made possible by the continuing support of our advertisers. We would like to thank them, and you, the reader, for allowing us to grow and prosper. As repayment, we will continue to deliver coverage of all the key issues facing the lawn care industry.

Speaking of key issues, Assistant Editor Vivian Rose has filed a report on the ongoing lawn care insurance crisis. Calling it a "crisis" really isn't an overstatement since insurance companies have dropped their pollution coverage as of January 1 of this year. Rose spoke with key people, both in the insurance industry and the lawn care industry, to get some answers to the kinds of insurance questions lawn care businessmen are asking.

Our cover story this month concerns add-on or auxiliary services. Most lawn care companies offer services beyond standard lawn treatment schedules and many companies are finding these ser-



vices increasingly necessary to the survival of their businesses. If you have been thinking about other services you could be offering your customers, you might want to consider some of the services

your peers told us about.

An add-on service that requires a little bit of muscle is lawn renovation. In this issue we also have an article focusing on the trials and tribulations of offering lawn renovation to homeowners. In keeping with the add-on services theme, we have an article on ornamental pests for those of you who might be considering ornamental care as a sideline.

For those of you in the landscape design/build segment of the industry, we have an interview with successful Texas landscaper Charles Racusin. We also have an article probing the merits of marketing lawn care services at local shopping mall shows.

As always, we have three technical features designed to keep you up to date on the agronomics of your business. Enjoy!

Tim Weidner

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Tuflex offers you a full line of tanks to solve your pest control problems, big or small. The experts at Tuflex carefully research and analyze your needs and assist you in designing and engineering the right tank and pump system to your specific requirements. Anything less would be a compromise solution.

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COMPARE

HOW DOES SALSCO COMPARE WITH ALA'S AERATION SURVEY RESULTS

QUALITIES A "GOOD" AERATOR SHOULD POSSESS	SALSCO 30-6 AERATOR	COMPARE SALSCO
Capable of aerating 20,000 sq. ft. per hour	25,800 sq. ft. per hour	Above Average
Should have hole pattern of 12 holes per sq. ft.	16 holes per 13½ sq. inches	Above Average
Should have hole depth of between 2½" and 3"	3" deep	Above Average
Type of tine should be Coring	Coring	Average
Should aerate 11 6,000 sq. ft. lawns per day	12 to 16 per day	Above Average
Should weigh less than 350 pounds	300 pounds	Above Average
Down time of work should not exceed 3 hrs. per 100	3 hrs. per 100	Average
Repair cost should not exceed 2-4% (of gross income derived from machine)	2-4%	Average
Should be a walk-behind type	walk-behind	Average

This survey was compiled from 500 Lawn Care Companies. It was done by ALA Magazine to find out what **you** want in an aerator, and does it exist? We say Yes...Salsco 30-6 is that machine.

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NEWS IN BRIEF

GENTLEMEN, START YOUR MOWERS!

The December, 1985 issue of *NewLook* magazine included an article on lawn mower racing. "It's purely for fun, not for commercial gain," says Jim Gavin, the man who invented the sport. "Lawn mower racers are serious about the ridiculous."

Thought up in an English pub 12 years ago, lawn mower racing is now supervised by the British Lawn Mower Racing Association (BLMRA) and involves over 100 enthusiasts throughout Great Britain. To qualify, machines must be designed and manufactured specifically to mow private lawns, though the gears may be altered to increase speed. There are three racing classes: Group 1 is for motorized hand mowers; Group 2 is for roller-driven mowers with a seat; and Group 3 is for tractor-type, wheel-driven mowers.

The article also stated that the BLMRA is looking into bringing lawn mower racing to the United States. Maybe we will see manufacturer-sponsored races cropping up all over the country. Do you think *Wide World of Sports* would cover the Lawn Mower Grand Nationals?

NEW ENGLAND GREEN ACQUIRES TURF DOCTOR

On December 24, 1985, Turf Doctor, Inc. of Framingham, Massachusetts was purchased by New England Green, Inc. of Springfield, Massachusetts for more than a quarter million dollars. Assets purchased by New England Green included Turf Doctor's customer list, some computer software, training materials, and service delivery systems, according to New England Green President Michael McKee. The purchase price ran slightly higher than earlier reports had indicated because such assets as Turf Doctor's sophisticated training materials had to be factored into the transaction, according to McKee.

The purchase was negotiated after Turf Doctor had filed bankruptcy earlier last year. Turf Doctor had averaged \$3.2 million in sales annually for the last two years, according to a memo from the law firm representing Turf Doctor.

McKee says most of Turf Doctor's former employees have come on board New England Green following the pur-



Lawn mower racing could become America's favorite backyard sport.

chase, but he is especially excited about one new employee in particular. "I am happy to report that John Kenney (former Turf Doctor president) has joined our staff," says McKee. "His responsibilities include all operational responsibilities for all markets in the eastern half of New England Green's market. In addition to operations responsibilities, he is the compliance officer for our company, as it relates to keeping us on track with third party concerns and legislative updates, such as RCRA, FIFRA, etc." McKee says he has also been successful at blending the Turf Doctor personnel, both managerial and front line level, with the "players on the New England Green team."

"We have been very successful at pursuing those people and realizing their worth. I think we have a lot to offer the Turf Doctor personnel. They are very service oriented and agronomically well-trained."

Turf Doctor's personnel was just one of the factors McKee took into consideration when evaluating the worth of the company. He also did a market research study of the customer list to demonstrate that Turf Doctor's customers were well educated and had realistic expectations for their lawn care service. The market

research also probed the average age or longevity of service with the Turf Doctor organization, how customers felt about certain systems, and most important of all, the customer satisfaction level. McKee wanted to find out how many of Turf Doctor's customers intended to stay on with his company.

"That all proved out very positive," says McKee. "It was quite obvious to me that the customers who were serviced by Turf Doctor in 1985, at least, were extremely well serviced."

Turf Doctor's customer base of over 10,000 accounts represents the company's principal asset. McKee says he has maintained close contact with Turf Doctor's customers since the date the company was purchased and has informed them that their service will continue unchanged. He has assured his new customers that many of the same technicians will be servicing their accounts.

However, New England Green will not be moving into Turf Doctor's old branch locations. "We run a little bit different operation, in that we use a little more warehouse space than Turf Doctor had historically used," says McKee. "We have chosen to open up our own new locations and hopefully grid the market

(continued on page 14)



Frank J. McDonald, Director of Marketing
Cushman Division, Outboard Marine Corporation
Lincoln, Nebraska

CUSHMAN®

“Take the new 22-horsepower Cushman Front Line test-cut and we will send you a free solid brass belt buckle that proves our point.”

Frank J. McDonald

Test-cut the improved Cushman Front Line, and you'll see why this mower is built to last.

There's no obligation, and you'll receive a free, limited edition, solid brass belt buckle.

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Engineered and built to last. That's why we stand behind the performance and durability of every Front Line mower with a 2-year warranty*.

So save some of your toughest mowing for the Front Line, then call your Cushman Front Line dealer to arrange for your test-cut. But hurry, this offer ends July 31, 1986.

For more information on the Cushman Front Line write:

CUSHMAN
3235 Cushman, P.O. Box
82409, Lincoln, NE
68501. Or, call toll-free:
1-800-228-4444.

Your free gift with a Front Line test-cut.



“OUR REPUTATION IS BUILT TO LAST”

NEWS

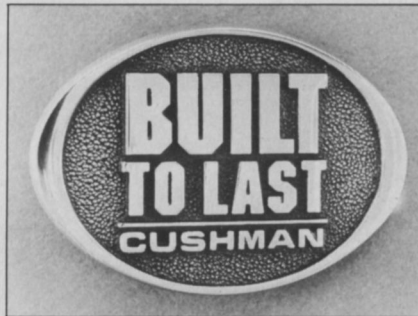
(continued from page 12)

a little differently in terms of route density and maximum radius for the branch in terms of service patterns. We have chosen to open all new locations. We have not taken over any of the Turf Doctor leases."

Only time will tell how much growth the purchase of Turf Doctor will mean for New England Green, since McKee says the conversion has not been completed yet. However, it is safe to say that a new member has just been inducted into the ranks of the lawn care giants.

CUSHMAN ANNOUNCES "TEST CUT" PROGRAM

Mowing maintenance professionals and others in the market for new outfront rotary mowers this year will have a unique opportunity to obtain a special limited edition brass belt buckle. OMC Lincoln has announced a special "test cut" program for Cushman Front Line mowers, effective now through July 31. Whether "buyers" or "tryers," every bona fide



prospective customer who takes a personal "Test Cut" with a Front Line unit will receive a special card enabling him to send in for a solid brass belt buckle. The demonstration must be verified by a qualified Cushman® dealer sales representative and so noted on the card sent in for the belt buckle.

"We have made more than 30 design and engineering changes in our Front Line units during the past two years," says Dan Hedglin, OMC Lincoln Sales Manager. "The best way for people to see all the new changes is to try out one of today's new Front Line units." For further details on the 1986 Front Line "Test Cut" program, contact local Cushman dealers, or write to Sales Department, OMC Lincoln, P.O. Box 82409, Lincoln,

Nebraska 68501; or call toll-free, 1/800/228-4444.

EXTENDING MOWER LIFESPANS

An economy model mower, such as a 3-1/2 horsepower push or self-propelled model, usually lasts 300 to 500 hours, with two valve jobs and two or more ignition tune-ups for a non-solid state ignition model, according to a report in the Minnesota Professional Lawn Care Association's newsletter *Turf Talk*. Industrial/commercial "extra tough" mowers can last 800 to 1,000 hours with normal maintenance, one or more valve jobs, carbon cleaning from the head and piston tops. This figure includes solid state ignition models.

Some engines will outlast decks, wheels, and handles. The most commonly neglected items in the use of the average mower are having regular oil and air filter changes. The next most neglected item is the regular schedule of spark plug changes and other ignition parts. In other words, regular preventative maintenance will extend the life of a costly investment

(continued on page 18)

TWO JOBS AT ONCE: The Professional Turf System can be designed to spray lawns and trees from the same unit.

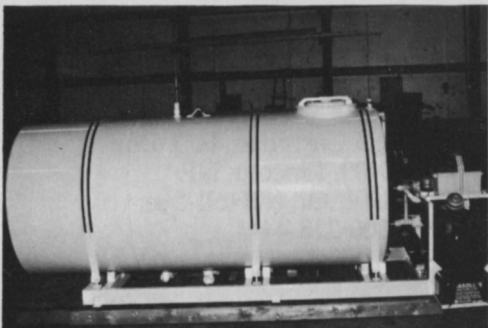
UNIQUE AGITATION SYSTEM: Allows suspension of granular material such as IBDU and wettable powders.

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8. Electric hose reel
9. Sight gauge
10. Spray gun
11. High volume agitation
12. Chemical inductor
13. Carbon Steel or Stainless Tanks



SKID MOUNT UNIT

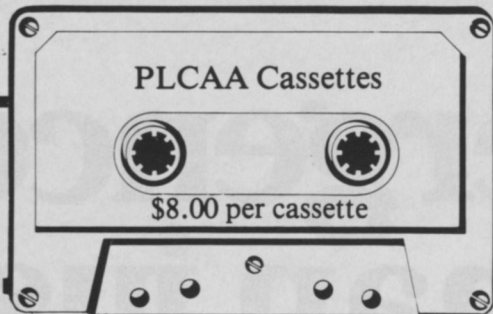
SELF-CONTAINED. SELF-POWERED.

Our skid mount unit features its own twin cylinder engine with all the features of the truck mounted units. Available in sizes from 1000 gallon down to 300 gallon. Ideal for pick-up mounting or sliding on to a flat bed.

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YOU CAN BE"
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A preemergence do more than just

Sure, you can cut costs by using the new pendimethalin products. Then again, you get what you pay for. Like uncertain performance due to limited testing. Volatility. Photodecomposition. And possible turfgrass root injury.

But with Dacthal preemergence herbicide, you don't have any of those problems. Because Dacthal has a record of proven performance that spans more than 20 years.

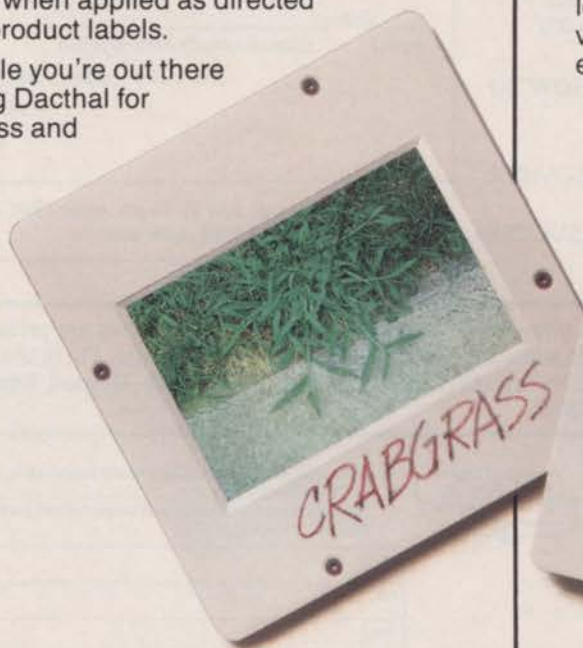
In fact, Dacthal is the only preemergence herbicide that gives you all the advantages you need...all the advantages.

Dacthal. Unsurpassed control of crabgrass, spurge and 20 other weeds.

For over two decades, Dacthal has been the standard of excellence in crabgrass control.

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And while you're out there spraying Dacthal for crabgrass and spurge,



you'll also be effectively controlling over 20 other annual grasses and broadleaf weeds.

That's nearly twice the number of weeds the new pendimethalin products currently claim on their label.

Dacthal. Virtually no volatility or photodecomposition.

Since Dacthal will not decompose when exposed to sunlight, the full amount of active ingredient gets to the soil for maximum weed prevention.



Pendimethalin is volatile and is subject to photodecomposition.

What's more, Dacthal is non-volatile so it always stays where it's sprayed. There is no lost residual activity. And no possible injury to valuable ornamentals or prized shrubs. Which explains why Dacthal can be used to control weeds on over 120 ornamental plantings.

herbicide should save you money.

Dacthal. The widest margin of turf tolerance.

Years of use by lawn care professionals as well as extensive research studies show that turf is exceptionally tolerant to Dacthal.

Here's what one such study found.

Effect of Preemergence Herbicides on Growth of A-20 Kentucky Bluegrass				
Herbicide	Rate (lbs.ai/A)	Roots (mg)	Shoots (mg)	Density (Shoots/Pot)
Dacthal® (SDS Biotech)	12	167.7	527.0	9.3
Balan® (Elanco)	2	20.8	23.5	0.8
Betasan® (Stauffer)	12	11.8	20.3	0.5
Ronstar® (Rhône-Poulenc)	2	5.3	17.5	0.3
Untreated	—	170.3	604.3	11.3

With Dacthal, there was no serious turf injury due to root inhibition. But research suggests that's not the case with other commonly used herbicides. And since the new pendimethalin products have had only limited testing, they may be risky too.

As we said in the beginning, you get what you pay for. It's that simple.

Pendimethalin products may save you money up front, but in terms of performance and reliability, they just may end up costing you your customers. And in today's market, that's too high a price to pay.

So this season, make Dacthal your preemergence herbicide. Because satisfied customers is what your business is all about.



Agricultural Chemicals Business
SDS Biotech Corporation
7528 Auburn Road, P.O. Box 348
Painesville, Ohio 44077

Always follow label directions carefully when using turf chemicals.



Dacthal® Preemergence Herbicide

NEWS

(continued from page 14)

by as much as half, therefore reducing the cost of doing business and increasing profitability.

Think about it; if an average commercial hand mower costs \$500 and can be used for 1,000 hours, the cost is 5 cents per hour. Compare that to the same mower operated 750 hours, which costs 6.6 cents per hour. That amounts to a savings of approximately 25 percent. Preventative maintenance pays!

26th VIRGINIA TURF SHOW BREAKS ATTENDANCE RECORDS

This year's Virginia Turfgrass Conference and Trade Show held in Richmond, attracted 785 participants and involved 64 exhibitors. Major speakers making presentations in the educational conference were Dr. John Street of Ohio State University, Dr. Robert Carrow of the University of Georgia, Dr. Joe DiPaola of North Carolina State University, and Dr. Lorin Krusberg of the University of Maryland.



The 1986 Virginia Turfgrass Council Officers and Board Members: (left to right) Lin W. Diacont III; Cecil Bland; Robert Henderson; Peter Connelly, President, Virginia Turfgrass Council (VTC); Walter Montross; J. Richard Fisher, Vice President, VTC; Robert P. Ruff Jr., Past President, VTC. Absent were, Gus Constantino, Gil Barber, and Robert P. Ruff Sr.

The award banquet featured entertainment by the New Virginians, a nationally recognized collegiate variety show from Virginia Tech. Dr. Thomas B. Hutcheson Jr., former head of the Agronomy

Department, was posthumously awarded the Virginia Turfgrass Council Award in recognition of his many years of service to the Virginia turfgrass industry.

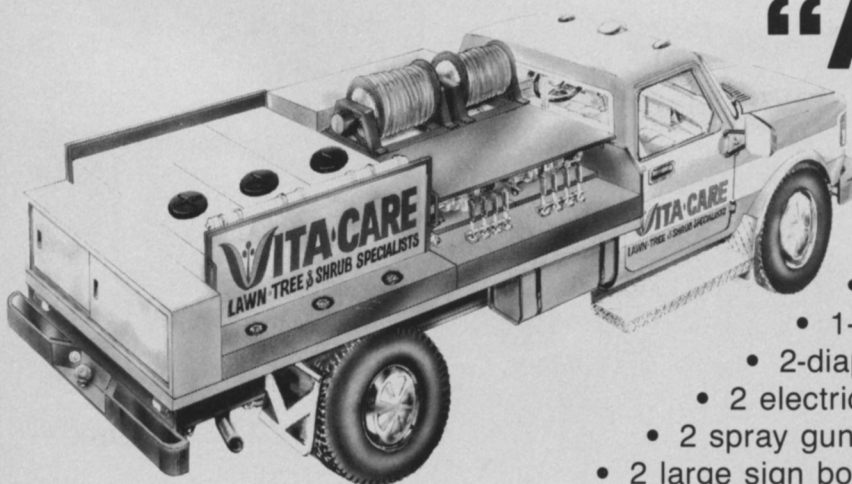
(continued on page 22)

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NEWS

(continued from page 18)

Virginia Turfgrass Council Lifetime Membership Awards were given to Dr. Roy E. Blaser and Dr. Lincoln H. Taylor of Virginia Tech.

Peter Connelly, President of Hydro-Lawn Spray Company, Roanoke, Virginia, was elected President of the Virginia Turfgrass Council. Richard J. Fisher, golf course Superintendent of Farmington Country Club was elected Vice President. Virginia's 1987 conference is scheduled to be held January 21-23, 1987, in Virginia Beach at The Pavillion Convention Center.

RHONE-POULENC OFFERS TURF DISEASE BROCHURE

Last year Rhone-Poulenc, Inc. offered lawn care professionals a Chipco® 26019 fungicide Healthy Business Package to promote disease control to lawn care customers. This year the company has printed a booklet entitled, "The Heartbreak of Lawn Disease Breakout," as an extension of the disease control promo-

tion theme.

The booklet is designed for use as a mailing piece or handout to help lawn care operators sell disease control to their customers. The booklet is offered to the industry at Rhone-Poulenc's cost of \$25 per 100 copies, according to the company. To receive an order form for the booklet, write Dan Stahl, Chipco Products Manager, Rhone-Poulenc, Inc., P.O. Box 125, Black Horse Lane, Monmouth Junction, New Jersey 08852.

IDEA BANK OFFERS PRUNING VIDEOTAPE

A new videotape on landscape pruning skills is available from The Idea Bank. The 30-minute color video, "Elements of Pruning," was recorded by Cal Poly State



University in San Luis Obispo, California. The program is designed for landscape maintenance and contracting firms as an employee training tool for in-field personnel. Special segments feature outdoor demonstrations which illustrate: selecting the right tool for the job; in-field safety tips; pruning methods for controlling plant growth; how to thin and properly train trees, shrubs, and groundcovers; and how to safely remove damaged tree limbs.

The videotape is available on VHS and may be ordered from The Idea Bank for \$78 postage paid. To order by mail, send payment to The Idea Bank, 1000 East Apache Blvd., Suite 211, Tempe, Arizona 85281. To order by credit card, call toll-free 1/800/621-1136. In Arizona, call 602/829-1233.

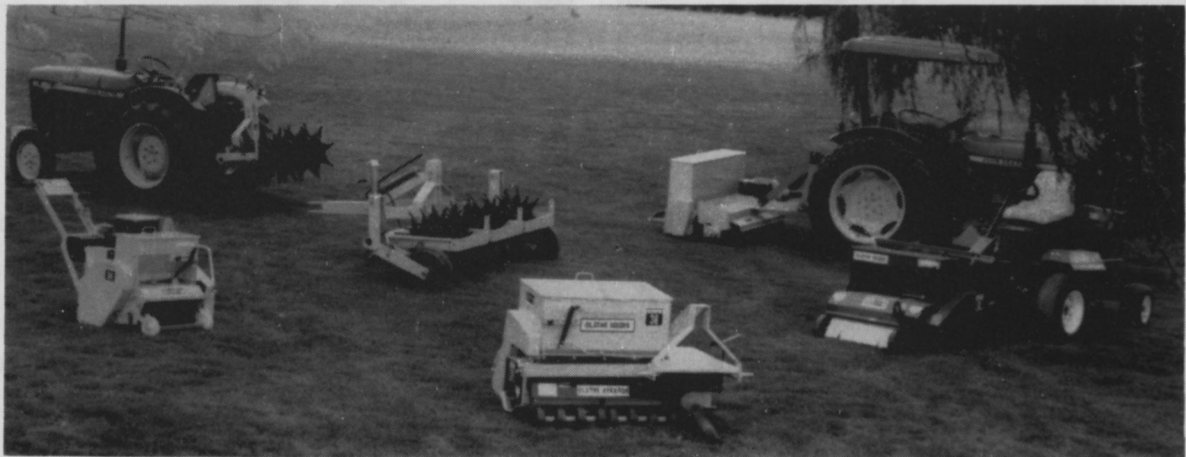
LEBANON, CIBA-GEIGY CONTRIBUTE TO TURF RESEARCH

Lebanon Chemical Corporation, in conjunction with Ciba-Geigy Corporation, recently contributed to the research efforts of two organizations involved in the study

(continued on page 26)

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A machine for all types of application from walk behind units to GIANT 6' wide tow type Aerators.

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- Push or self propelled w/ 5 HP 4 cycle I/C engine
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LAWN TRACTORS

- 11 HP engine, 12.5 or 16 HP twin cylinder engine
- 41", 48" side discharge and 33" Hi-Vac decks (optional)
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For over 30 years, all around the world, these tough and reliable products of American craftsmanship are the top choice of people in the business. It's no wonder. SNAPPER has a line of extra heavy duty machines that are



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As a service to the industry, NOR-AM has developed a Total Turf Management Program.

This program includes a turf management calendar guide, brochures on turf diseases, insect control and fertilization techniques, in addition to timely turf management reports.

To enroll in this helpful program, fill out the coupon below or contact your local NOR-AM sales representative.

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An advanced broad-spectrum carbamate insecticide that controls white grubs, chinch bugs, sod webworms, mole crickets and many other turf and ornamental pests. Turcam is odorless, works well in spray equipment, won't tie up in thatch, won't damage turf or ornamentals, and should be your product of choice when long residual control is required.

Proxol®

Economical Proxol 80SP Insecticide works fast on surface-feeding sod webworms, armyworms and cutworms, and readily penetrates thatch to control grubs. Proxol is easy to apply as a spray, has no unpleasant odor, and no long-term residual build-up in the soil.

Progress®

A selective herbicide that effectively controls annual bluegrass, crabgrass and other troublesome weed species.

Acti-dione®

Broad-spectrum family of turf fungicides that provide four-season disease control. Acti-dione has proven to be effective without creating resistance problems.

Acti-dione TGF® can be tank-mixed with Bayleton® or Daconil® to complement or improve disease control with significant cost-per-acre savings.

Banol®

Specialized fungicide that controls pythium and phytophthora in turf and ornamental plants. Preventative control with Banol stops the spread of pythium by mowers, foot traffic and surface water; it also means fewer applications, lower rates and savings in labor, fuel and equipment.

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**Total Turf Care from the
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NEWS

(continued from page 22)

of turfgrass and turf-related issues. The Golf Course Superintendents Association of New Jersey, Cook College, Rutgers University, and the O.J. Noer Research Foundation, Inc., each received a donation of \$203 toward their research efforts.

The donations were made possible through a Ciba-Geigy program which recognizes distributors such as Lebanon Chemical for sales performance on Subdue® 2E fungicide. Donations were based on a percentage of Subdue sales, with contributions made to organizations of the distributor's choice.

NEBRASKA RECEIVES OMC LINCOLN GRANT

The OMC Lincoln Division of Outboard Marine Corporation has awarded an annual grant of \$7,500 for a minimum of three years, to the University of Nebraska Foundation for turfgrass research. The annual grant will be used to support



OMC Lincoln Division Manager Herb Jespersen (second from left) presents the initial check for \$7,500 to Dr. Robert C. Shearman, Associate Professor, University of Nebraska.

graduate student studies, emphasizing the management of turfgrass and focusing specifically on improved rooting and drought tolerance of turfgrass varieties in the Great Plains.

According to Dr. Robert Shearman, Associate Professor and turfgrass specialist at the University of Nebraska-Lincoln, the grant is significant in a time

of budget constraints and limited state funding for agricultural research. "The industry support typified by this grant will enable additional graduate students to complete their course of study and pursue their career goals," says Shearman. "Undergraduate students will gain as well, by their work with the graduate

(continued on page 28)

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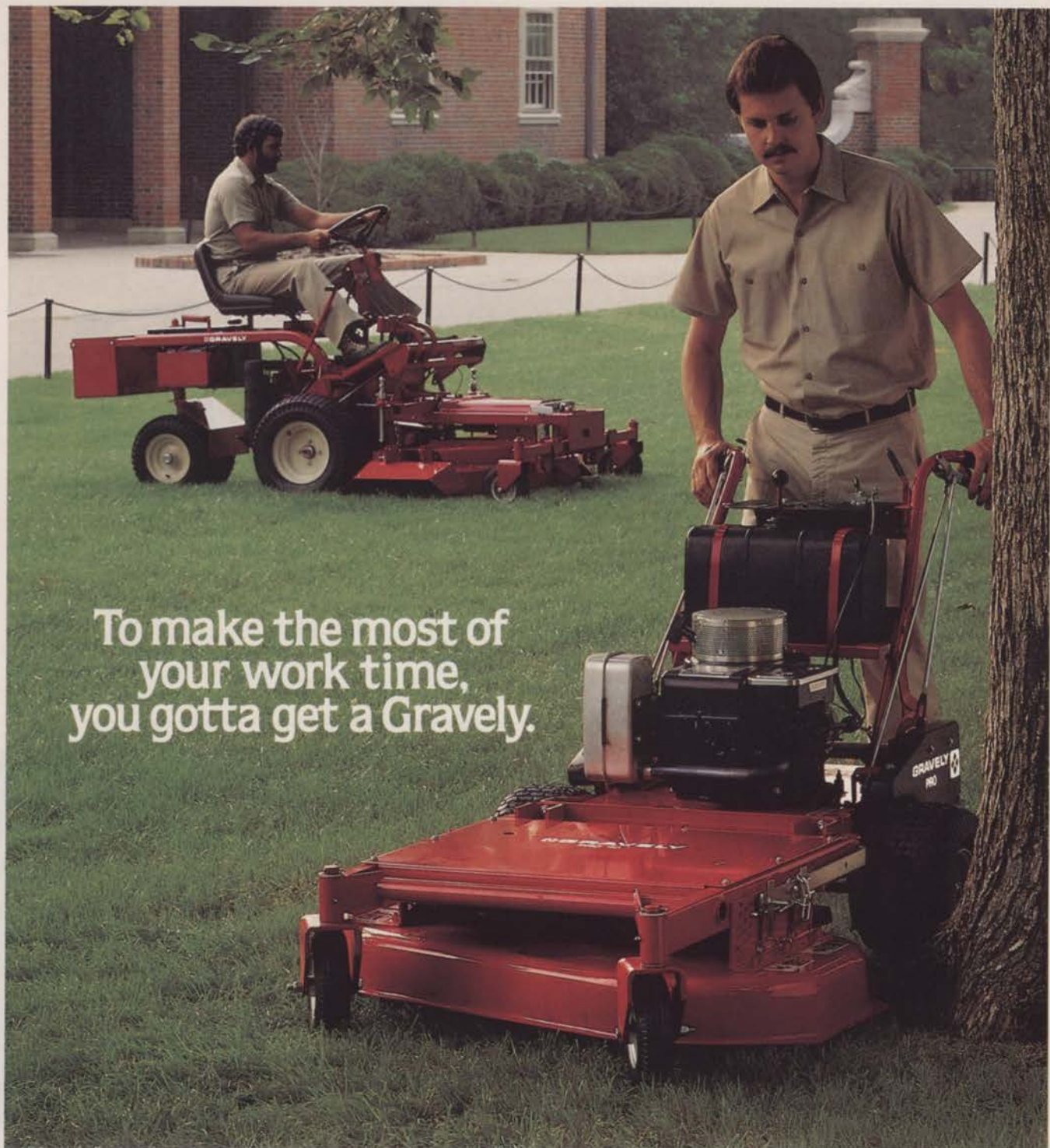
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Pro Master gives you a choice of rugged 16, 17 or 19 hp Kohler engines with 50" or 60" mowing decks. Pro offers three durable commercial engines

and a choice of 36", 40" or 50" rotary mowers so you can match your machine to your work.

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Gravely's Pro Series is backed by a two year limited warranty. Stop by your Gravely Dealer for all the details. While you're there ask for a free demonstration. Once you see the Pro Series at work, you'll know why — you gotta get a Gravely. For the name of your Gravely Dealer, look in the Yellow Pages.

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NEWS

(continued from page 26)

level students. The nice thing about this particular grant is that it fits right into an already existing research project that is seeking to find ways for lower maintenance and reduced water use on lawns."

PESTICIDE TRAINING PROGRAM AIDS COMPLIANCE REQUIREMENTS

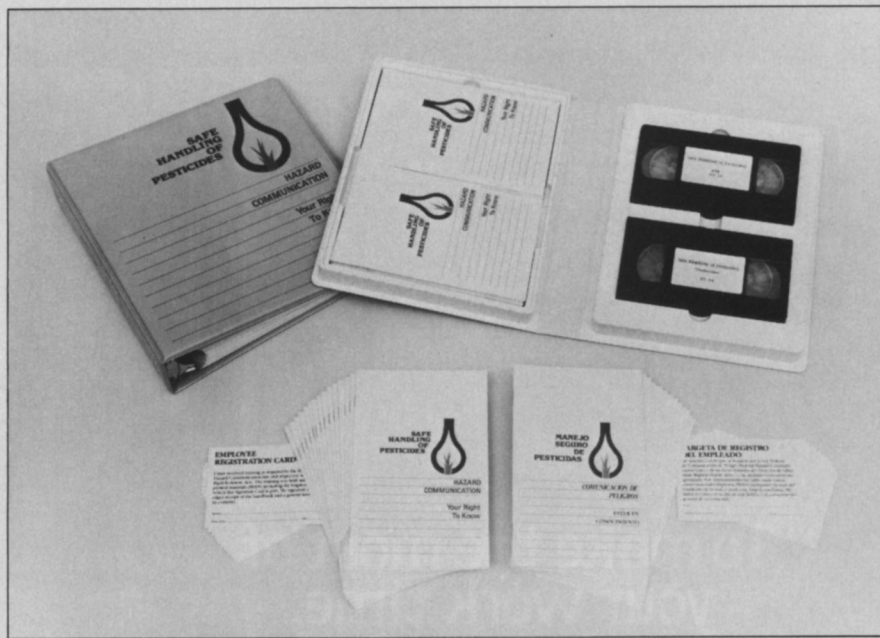
A new safety training program, designed for agribusiness and horticultural-related industries, and which assures full compliance with applicable federal or state right-to-know legislation, has been introduced by Safety and Systems Management, Inc. The program provides an increased level of hazard awareness which results in providing workers with a safe working environment. It is the only program of its type which has been reviewed and accepted by OSHA, and recommended by the American Society of Safety Engineers, according to the company.

The audio visual program is available

on VHS or Beta video cassettes and supported by employee handbooks, supervisory manuals, and all additional materials required to assure compliance. The program can be administered on a regular basis by a company's own personnel without the need for consultants who

cost up to \$1,000 for a single training session. Complete training in maintaining employee compliance records also is provided. Cost for the complete program is \$395 direct from SSMI. Special imprinting of corporate graphics also is available

(continued on page 30)




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Mag P
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Mag I
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Measuring Wheel
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NEWS

(continued from page 28)

at a slight additional cost. More information is available from: SSMI, Industrial Park Blvd., Suite 110, Minneapolis, Minnesota 55441; or by calling, 612/553-9760.

KUBOTA OFFERS LOW TRACTOR FINANCING

Kubota Credit Corporation has established a low 7.5 percent annual financing rate for qualified customers who purchase any M-Series agricultural tractors and 8.5 percent for customers purchasing G, B, and L model tractors and KH excavators. The low-rate loan will be available through June 30, 1986, with up to 60 months to repay.

The tractors available under the 7.5 percent financing rate include all M-Series tractors ranging from 42 PTO horsepower to 85 PTO horsepower. Kubota tractors available under the 8.5 percent rate include all G-Series lawn and garden tractors; B-Series compact tractors primarily built for nursery, estate care,

and landscaping; L-Series tractors used primarily for dairy farming, orchards, vineyards, and grounds maintenance; and KH-Series excavators. Another option open to customers is the waiver of the finance charge, which applies through July 5, 1986. The interest rate beyond this date will be 10.5 percent.

DENVER LEASING PURCHASES PRO-TURF EQUIPMENT COMPANY

Denver Leasing and Manufacturing has announced its expansion into the Midwest. The nationwide producer of trucks and equipment for the lawn care industry has purchased some of the assets of Professional Turf Equipment Company of Normal, Illinois. A new division, named Pro-Turf Manufacturing, USA, Inc., will be located in Normal, utilizing the tooling and personnel of the former company.

Both divisions will be involved in designing and manufacturing spray units for the lawn and tree care industries. Units vary from smaller pick-up units to one- and two-ton trucks. Spray units for conventional and mini pickups are also

available. The two divisions will offer conventional designs currently being used in the lawn care industry and new state-of-the-art equipment. Pro-Turf will continue to supply parts and accessories to the national market.

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LESCO, Inc. has issued a new, revised edition of its LESCO Weed Chart. The chart includes four-color photos, descriptions, and control recommendations for 44 grassy and broadleaf weeds commonly found in the northern and southern United States. The chart provides information about identification, growth habit, and reproductions.

The Weed Chart is designed for two formats. It may be hung on the wall as an office reference tool, or may be cut apart and included in plastic protectors in a three-ring notebook for field use. For a copy of the LESCO Weed Chart (013260), please include \$2 to cover postage and handling and mail your request to Weed Chart, LESCO, Inc., P.O. Box 16915, Rocky River, Ohio 44116.

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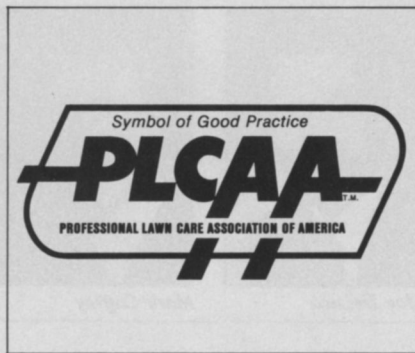
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PLCAA UPDATE

How successful were lawn care companies in their market expansions? What were their returns on net worth? In what areas were the most rapid changes occurring? The first survey of the lawn care industry conducted this past year by the Professional Lawn Care Association of America (PLCAA) and Industry Insights, Inc. yields answers to these questions, based on 1984 operations.

The report, made available to PLCAA members this month, indicates that surveyed businesses experienced stronger growth than that recorded for the overall economy, with sales volume up 20.6 percent in 1984 over 1983. Smaller operators (under \$300,000) experienced faster growth (41.2 percent) than their larger volume counterparts (15.5 percent), with western region firms showing the greatest sales growth (25.9 percent).

Although "high profit" firms showed only a 15.5 percent revenue increase over 1983, their return on net worth was 54.6 percent. Both large and small volume



firms experienced return on net worth of near 30 percent, with a similar performance reported by firms predominantly in the lawn care business and those predominantly in the landscape management business.

Personnel costs represented the largest operating expense category (37.3 percent of net sales) for firms, with the highest in the western region (42.4 percent) and the lowest in the Northeast region (34.1 percent). The average collection period

(days outstanding in receivables) was 12 days, representing only 12.9 percent of a firm's asset base. Relatively few dollars are invested in inventory, accounts receivable, or other current assets, unlike many other consumer-oriented service businesses.

Tables contained within the report allow a firm to calculate and insert figures for their performance in 1984 and make a direct comparison to the "typical" figures reported for the industry. Figures are organized by the revenues of the company (under or over \$300,000), by region of the country, and the principal orientation of the business (chemical lawn care or landscape management).

The report is a vital and important one to the lawn care industry and should prove valuable to lawn care operators who are in the midst of reviewing their 1985 figures and 1986 strategies. One copy of the report has been mailed to each PLCAA member, with additional copies available at \$25 for members and \$150 for non-members. ■

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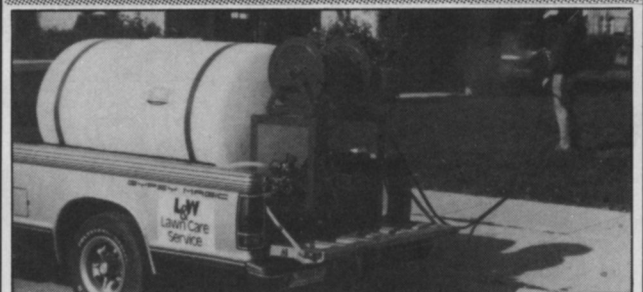
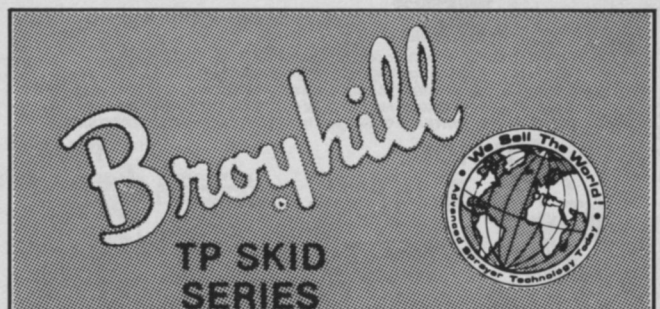
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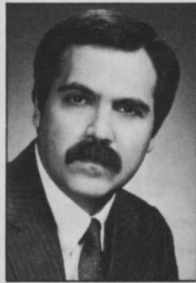
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PEOPLE

Planners, supporters, researchers, and extension service specialists came together at the 16th Annual Georgia Turfgrass Conference at the University of Georgia in January to form the Georgia Turfgrass Foundation. At the conference banquet, **Steve Mona**, Executive Director of the Georgia State Golf Association, presented a student scholarship to an undergraduate turfgrass science major and a grant for turfgrass research.

Randy Nichols, Georgia Golf Course Superintendents Association President, and **Bud White**, the Southeast Regional Director of the United States Green Section, acknowledged their organizations' intent to continue financial support for turfgrass research in 1986. The two day program was sponsored by the UGA Cooperative Extension Service and the Georgia Golf Course Superintendent Association with a record attendance of 343 people.

Joe DeLuca has been named to the new



Joe DeLuca



Mark Caffrey

position of Professional Products Marketing Manager, Lawn Fertilizer Division, for The Andersons. His responsibilities will include development of marketing programs for The Andersons' products to meet demands of the professional lawn service and distributor markets, and for expansion of the firm's growing bulk liquids business. DeLuca has been Advertising Manager for The Andersons for five years.

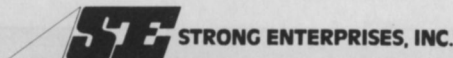
"The rapid growth of our lawn care business and expansion of our distribu-

tion into national markets has made it necessary for us to make a major commitment of marketing management and talent to enable us to keep pace with the many opportunities for our products in the lawn care industry," says Ron Meier, Manager, Lawn Fertilizer Division.

The company's professional products are sold in 26 states.

Mark Caffrey has been named Advertising Manager of Mobay Chemical Corporation, Specialty Products Group Division. The advertising position was created as a result of the Specialty Product Group's rapid growth since the division was formed nearly four years ago.

Prior to joining Mobay, Caffrey spent three years at Kansas City Power and Light Company where he initially held the position of cost analyst and then was promoted to marketing planner of the operations division. Caffrey also brings to Mobay five years experience as account executive for two major area advertising agencies. He earned his master of



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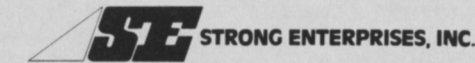
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Business Administration in marketing from Rockhurst College and an undergraduate degree in journalism from the University of Missouri in Columbia.

Bunton Company has announced three promotions in its sales division. **Robert M. Parks** has been assigned broader sales responsibilities. He joined the company in 1983, covering New York, Pennsylvania, Connecticut, and Delaware. His territory has been increased to include all of New England and the Mid-Atlantic states. Parks is a graduate of Ithaca College, Ithaca, New York where he earned his degree in Business Management. Previous to joining Bunton he was the Assistant Greenskeeper for Woodhaven Golf Club, Oneonta, New York.

Thomas A. Mann has been named Regional Sales Manager for Canada. Mann was previously National Turf Specialist for Bunton and will continue with those responsibilities. A graduate of Eastern Kentucky University, Mann has his degree in Technical Horticulture. He has been in the grounds maintenance business since 1979 and was Assistant Golf Course Superintendent at Audubon Country Club, Louisville, Kentucky, prior to joining Bunton.



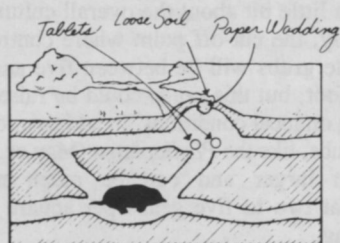
L.O. Snoddy (left), Weather-matic President and Kevin Gordon (right), South Texas Regional Sales Manager, congratulate GPM staff members Sally Pritt, Vicki Garza, and Ronnie Alaniz. GPM Irrigation Equipment Distributors, Inc. of San Antonio is Weather-matic's Distributor of the Year for 1985.

Richard G. Schmitz has been appointed Southeastern Regional Sales Manager for Bunton. Schmitz has been associated with farm machinery and commercial mowing for the last three decades. His most recent association is Service and Customer Training Manager for

Gulfshore Turf Supply, a Toro distributor. His background includes commercial equipment sales, consumer dealer sales and development, service shop administration, and the design and implementation of customer service training programs. ■

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IPM FOR LAWN CARE

Integrated pest management is an accepted practice in agriculture and a mark of professionalism in the structural pest control industry. Perhaps it is time lawn care operators adopt IPM practices.

Integrated pest management (IPM) is a term which is showing up in discussions of pest control in many different agricultural crops. Basically, IPM is an approach which attempts to identify what level of insect or disease activity is actually going to cause damage to a given crop and then uses a variety of chemical and non-chemical techniques to regulate the pest population so that it does not reach that damaging stage.

There are several keys to an integrated pest management approach. First, insect or disease populations are identified regularly through a "scouting" process, where an individual inspects the field (or, in our case, lawns), normally on a weekly or biweekly basis. The individual collects a specified number of samples and records the number of insects (or the incidence of disease) in those samples.

These population counts are compared to charts which have been derived from previous research, and a decision is made as to whether that population will ultimately develop into a population dense enough to cause damage. If samples indicate that the population will become damaging, the scout may recommend that an insecticide or fungicide be applied to the area to prevent the projected population build-up. Another alternative, depending on the pest involved, may be to suggest that certain cultural or biological control techniques be employed to reduce the population build-up so that the

These population counts are compared to charts which have been derived from previous research, and a decision is made as to whether that population will ultimately cause damage.

population does not reach a damaging stage.

A second key to understanding integrated pest management is realizing that insect and disease populations will, under most circumstances, *never* be eradicated. That is, the turf manager must accept the fact that an area which normally has a white grub population will always have at least a small population of grubs, regardless of any chemical control efforts. It becomes essential for the turf manager to determine how large a population a lawn can tolerate without damaging the grass.

It is equally important for the turf manager to educate

the homeowner and to explain that turfgrass is much more tolerant of insect (or disease) activity than we might think. You should never guarantee 100 percent grub control, for example, because you will not be able to attain such a level of control under most circumstances and because it really is not necessary in the development of a fine turf stand.

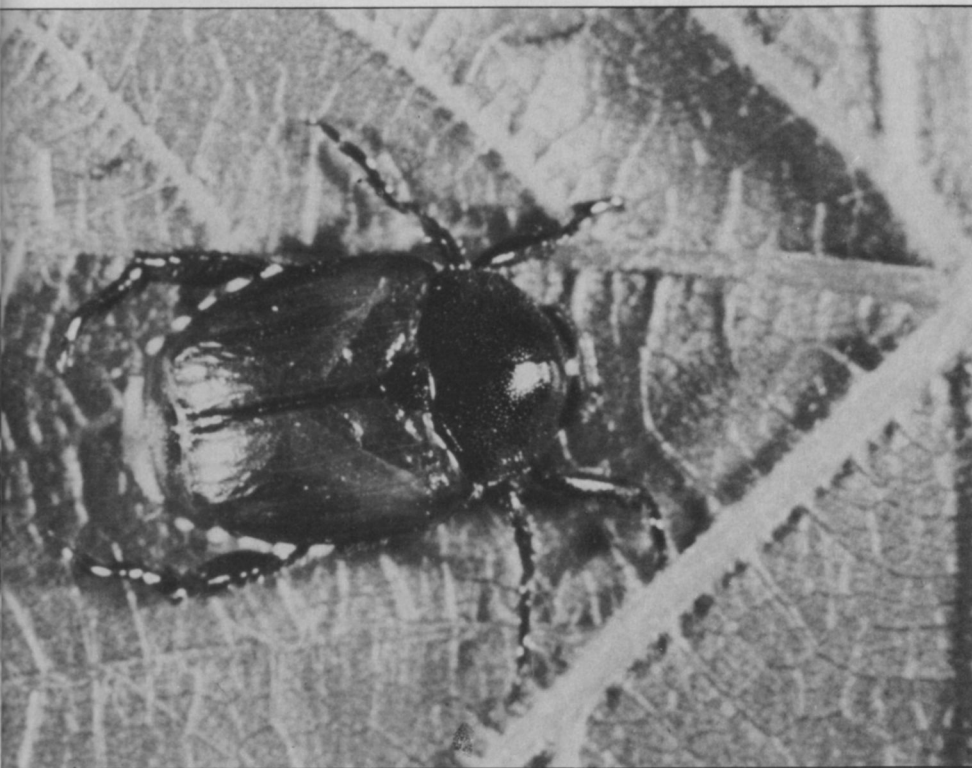
Our experiences in New England have demonstrated that turf which is grown under ideal conditions and is not subject to stresses such as heavy traffic or playing of games, can tolerate at least 10 Japanese beetle grubs (or other species of about the same size) per square foot with no visible damage to the turf. For our purposes, "ideal conditions" mean frequent light applications of fertilizers, maintenance of a proper soil pH, at least weekly mowing at between 2 and 2-1/2 inches, and watering weekly such that the soil is wet to at least 6 inches. However, if the grass is stressed in any way — mowed shorter, not receiving adequate moisture, or subjected to lots of foot traffic — five grubs per square foot can weaken the root systems enough to result in a weaker turf stand.

The bottom line is that no one can say how many grubs are necessary to cause visible damage to a turf setting without knowing a little bit about the overall culture of that area. Generally, the cut-off point where control is necessary for white grubs will be between five and 10 grubs per square foot, but this range could be raised or lowered depending on local conditions. In addition, other species of white grubs, like the *Phyllophaga* (May or June beetle) are much larger and can be much more devastating, so that two to five grubs per square foot would be damaging.

A third key to carrying out an IPM program is learning to incorporate many cultural and biological control techniques into your maintenance program. All of these techniques can aid in providing ideal growing conditions for the turf and can enable it to tolerate insect or disease pressure which otherwise might be debilitating. For example, you need to study the proper fertilization procedures for your area. These procedures will vary from one region of the country to another, but they can have a direct bearing on disease activity, in particular.

Although many lawn care operators do not handle





Japanese beetles, like this one, attracted to nearby trees and shrubs are a sign that your lawn may become grub infested.

diseases in their general program, many diseases can be discouraged by proper fertilization. Red thread thrives in areas of low fertility, so just a rudimentary fertilization program should be enough to reduce or eliminate it. In contrast, excessive amounts of nitrogen (which sometimes occur when efforts are made to green-up a lawn rapidly in the spring) can result in severe outbreaks of *Pythium*, *Rhizoctonia*, *Fusarium*, and many other foliar pathogens. The wisest route seems to be one of moderation. Forfeit some of the short term benefits of heavy fertilization in return for a more balanced and healthier turf stand.

Some insect pests are affected by various "biological control" agents. These usually are either parasites or predators and, under some circumstances, they can keep the pest population at a low to moderate level. For example, Japanese beetle grubs, as well as a few other species of white grubs, are subject to a milky spore disease, caused by a bacterium (*Bacillus popilliae*). This organism is ingested by the grub and then proliferates inside the grub. Eventually the sharp-edged spores break through the gut lining, and the grub dies from internal contamination.

The beauty of this system is that the bacterial spores are toxic only to grubs, and have no effect on birds, fish, pets, or people. This approach is more expensive initially than a standard chemical application, but if it works, a single application normally works for several years. (Note: Again, you should check with local university or county personnel, because this milky spore approach does not perform as well in northern climates as it does in the Middle Atlantic States, so you should check your local conditions before committing to large scale use of this approach.)

This is one of the classic examples of a risk-benefit comparison. You must weigh the risk of using a standard

chemical and its benefit, against the risk of using a biological control agent and its benefit. Standard chemicals are relatively toxic to people and other animals, but they are also normally very consistent in their level of control. On the other hand, biological control agents are normally more expensive than a standard chemical and less predictable in their performance, but they are much less toxic to the overall environment, especially to people and pets. Not only are they less toxic, but biological controls also have a potential for long-term control.

Another key to conducting an IPM program is realizing that using standard insecticides, such as diazinon or Dursban® or Oftanol®, normally will provide an acceptable level of control of the target pest, but this often will destroy a whole battery of beneficial organisms at the same time. A small area (for example, one square foot) of a healthy lawn normally contains hundreds of spiders,

This is one of the classic examples of a risk-benefit analysis. You must weigh the risk of using a standard chemical and its benefit, against the risk of using a biological control agent and its benefit.

mites, ants, predator beetles, and earthworms. All of these beneficial organisms play an essential role in breaking down organic matter and making it available for the perennial turf crop to use.

Research at Cornell University has indicated that long-term use of fungicides can lead to a build-up of thatch, because the wide range of non-target organisms (the spiders, mites, and various non-pathogenic fungi and bacteria) are killed and not available to break down the grass clippings and other organic matter that accumulate constantly. Similar studies have not yet been conducted

with insecticides, but it stands to reason that continual use of insecticides also may lead to a build-up of thatch.

The use of insecticides and fungicides has many obvious short-term benefits, but the long-term difficulties may eventually cause turf managers major headaches. Again, the bottom line seems to be to do all things in moderation. If you have a devastating insect population, by all means, deal with it. But you should begin to get away from the concept of treating every April and August for white grubs, just in case a population shows up.

Researchers in several states, including Florida, Maryland, and Wisconsin, are looking at the establishment of integrated pest management programs for turf. Maryland conducted a detailed study which involved homeowners and professionally trained scouts. This study centered on ornamental plantings, but also included turfgrass maintenance. Each home was visited weekly from late May to mid-August by a scout who was trained as an observer. The scout or his supervisor was able to identify 90 percent of the insect and disease problems which occurred on the wide range of ornamentals and turf. (The remaining problems were identified by the university plant diagnostic clinic.)

Each scout was responsible for visiting 60 homes each week. Participating homeowners received a written report each week. (The report consisted of a sketch map of the home and plantings, which had been photocopied, with the insect and disease activity pencilled in on the appropriate spots on the map, along with the written recommendations for chemical or cultural controls.)

At least a third of the recommendations involved cultural problems, such as low soil pH or soil fertility. Weed control was another major factor needing attention. In



Get down on your hands and knees to check the turf for pest infestations.

tion levels, an observant turf manager can begin to get a feel for what is appropriate in his area. He can begin to educate homeowners to learn to tolerate moderate insect or disease populations, and explain that most of these populations will never be totally eradicated.

The use of insecticides and fungicides has many obvious short-term benefits, but the long-term difficulties may eventually cause turf managers major headaches. Again, the bottom line seems to be to do all things in moderation. If you have a devastating insect population, by all means, deal with it.

most cases, pesticide use was reduced, compared to previous years or compared to neighbors on a conventional lawn and ornamental care program, and generally homeowners were pleased with the overall appearance of their property.

In conclusion, IPM programs can be devised for lawn care. While formal numbers may not yet be available in all areas identifying damaging pest popula-

He can concentrate on providing optimal growing conditions for the turf, by checking the soil pH and fertility every year and providing an appropriate level of lime and major nutrients. He must remember, however, to use moderation. Overfertilizing is as harmful as underfertilizing. The astute lawn care professional can begin to encourage the homeowner to mow the lawn at higher cuts (2 to 2-1/2

inches for most home lawn blends) and to water no more than weekly, with a good deep soaking. These practices will encourage deeper root systems and enable the turf to tolerate more insect and disease pressure and to compete with the weed population.

The incorporation of a formal integrated pest management program, with regular scouting, into your firm may have to be gradual. You might consider offering an IPM approach as an option, stressing the benefits of the program (normally fewer pesticides, overall less detrimental to the environment), but also explaining the risk. An IPM program can be risky because sometimes a pest outbreak will occur which results in loss of turf if a scout misses a visit or misidentifies a problem.

You will probably want to start on a small scale until you can work out the cost of the program. IPM is much more labor intensive than a standard lawn care operation, because the scout really needs to visit a site at least every two weeks to maintain records of any pest development. However, IPM normally — although not always — will result in less

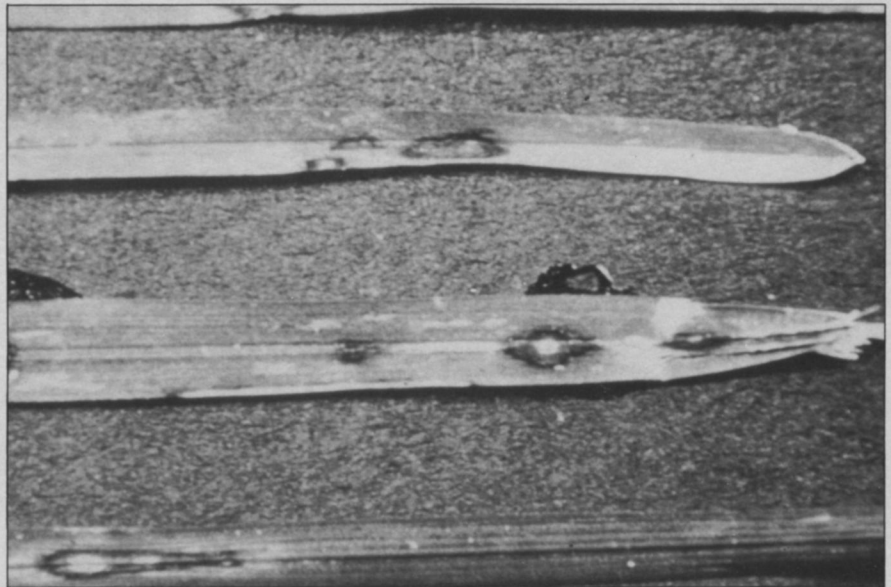
(continued on page 39)

IPM FOR LAWN CARE

(continued from page 36)

use of standard pesticides. This point, by itself, may make it very attractive to many clients who are sensitive to the environmental issues surrounding pesticides. The trade-off is that insect populations normally will be slightly greater than in standard lawn care operations. This difference in population should not result in any visible differences in turf vigor. Indeed, the turf often can tolerate more insects, for example, than the homeowner can! Meanwhile, the total turf environment, including all the non-target spiders, mites, predator beetles, earthworms, and beneficial fungi, will not be as disrupted if fewer pesticides are applied to the area.

The essential concept in integrated pest management is moderation. If you fertilize, mow, and water in moderation, the turf will tolerate moderate levels of insects and diseases. Homeowners should be encouraged to strive for strong, vigorous turf — not necessarily golf green quality — and should be encouraged to tolerate low levels of insect or disease activity. The days of eliminating insect pests with long-term insecticides like DDT or chlordane are behind us. Insects and



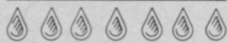
Helminthosporium leaf spot lesions on Kentucky bluegrass (courtesy of NY State Turfgrass Association).

diseases are rapidly developing resistance or tolerance to many of the pesticides we now have available. There is no assurance that the chemical industry will be able to stay ahead of the pests, so we should learn to manage what we have now. We should avoid using a pesticide if we can use cultural, biological, or other non-

chemical techniques to manage turf instead, so we can preserve existing chemicals. — *Dr. Patricia Vittum* ■

The author is Assistant Professor at the University of Massachusetts' Suburban Experiment Station, Waltham, Massachusetts.

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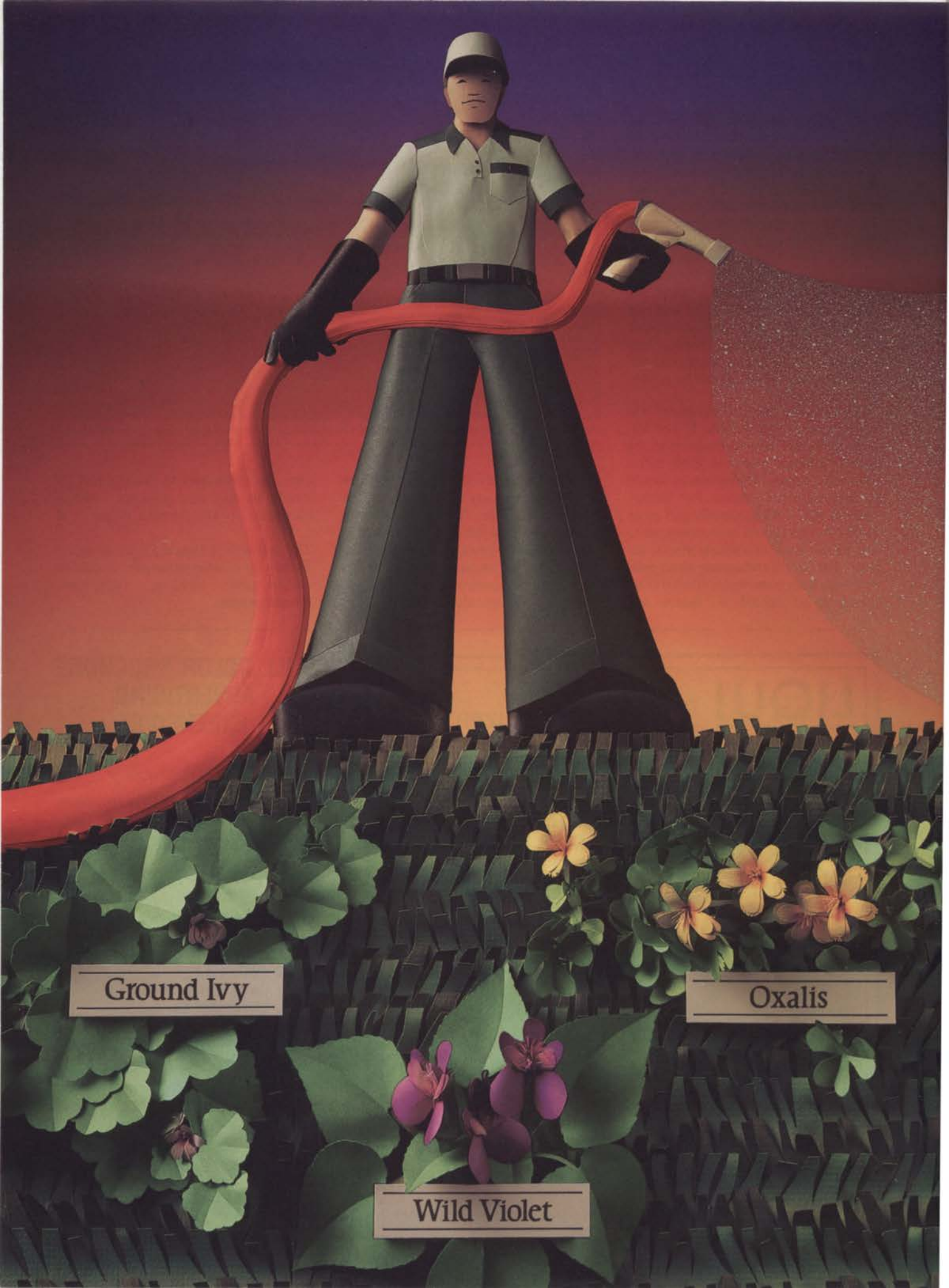
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ALA/MARCH 1986 39



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CLOBBERING CRABGRASS

General weed control is a difficult job for lawn care professionals to tackle, so it is always a good idea to update our knowledge of preemergent control of crabgrass with herbicides.

Crabgrass (*Digitaria* sp.) is one of the most troublesome weeds in turf. The success of crabgrass, as a weed, can be attributed to several factors. First, each plant has the ability to produce large numbers of seed. Second, the plants are able to persist through hot, dry environmental conditions, the same conditions which induce summer dormancy in many cool-season turfgrasses. Third, crabgrass has an efficient metabolism that enables it to increase photosynthate production during periods of high temperature and high light intensities, while the capacity of cool-season turfgrasses to produce photosynthate decreases. And finally, this weed has the ability to rapidly colonize open areas in turf created by the injurious effects of disease, insects, compaction, wear, and environmental stress.

Any discussion of weed control should be prefaced by a consideration of how weed problems develop. Perhaps

Among the most prominent managerial turf-grass abuses are: mowing too closely; light and frequent irrigation; and late spring/early summer applications of water soluble, nitrogen fertilizers. Mowing turfgrass too closely leads to deterioration of stand density.

the most significant factor contributing to crabgrass encroachment in turf is poor management, which causes a reduction in turf density (Figure 1). Sunlight is required for germination of crabgrass seed, and also accelerates the germination process by warming soil. Therefore, turfs having poor density are likely to develop crabgrass pro-



Figure 1. Weed encroachment is often caused by poor management. Yellow foxtail readily invaded this poorly maintained lawn.

blems because sunlight will more easily penetrate a thinned canopy of leaves. This is corroborated by the general absence of crabgrass in dense, high cut turfs or turfs grown in shaded environments. Among the most prominent managerial abuses are: mowing too closely; light and frequent irrigation; and late spring/early summer applications of water soluble, nitrogen fertilizers.

Mowing a turf too closely leads to deterioration of stand density. Observations in a University of Maryland study have shown that tall fescue plots mown at 1 inch, contained 70 percent weeds; whereas, plots mown at 3 inches had only 12 percent weeds. Hence, by increasing mowing height, weed encroachment can be greatly reduced. Light and frequent irrigations enhance crabgrass seed germination by ensuring that soil remains moistened for extended periods. By allowing soil to dry out between irrigations, crabgrass seed germination is inhibited.

Application of fertilizer during late spring and early summer provides nutrients that may benefit weeds more at this time than the turfgrass. Also, application of high levels of nitrogen during this period may predispose turf to injury from heat and drought stress during summer. Other factors, such as disease, insects, and stress, that cause or contribute to the loss of density, promote

crabgrass encroachment.

In spite of hard work and strict adherence to sound cultural practices, crabgrass frequently becomes a serious problem. For this reason, use of preemergence herbicides often becomes a necessity. Spring application of a preemergence herbicide is the most effective and easiest approach in controlling crabgrass. Postemergence control involves repeated applications of methanearsonates, e.g. DSMA and MSMA, on critical 7 to 14 day intervals. These compounds can be phytotoxic, especially when applied during hot weather. A new alternative to the methanearsonates is the herbicide Acclaim® (common chemical name, fenoxaprop), which effectively controls many annual grassy weeds postemergently. Tupersan® also provides postemergence control, but only when crabgrass plants are seedlings in the one- to three-leaf stage.

Crabgrass seeds begin germinating when soil temperatures rise above 60 degrees Fahrenheit, and when air temperatures rise above 65 degrees for five consecutive days. Germination in northern regions generally begins mid- to late May. However, in southern and transition zone regions, it can occur as early as March. For a preemergence herbicide to be effective, it must be applied one to two weeks prior to germination. Because effective preemergence control of crabgrass is dependent on good timing, an extension specialist in your region should be consulted for the best dates for herbicide application.

Most crabgrass seeds germinate during a six to eight



Figure 2. A Type II fairy ring fungus has helped to liberate nitrogen in a Kentucky bluegrass turf. The dark green area contains less crabgrass because the nitrogen had improved the turf's density.



Figure 3. The lawn on the left is well-maintained and was treated with a preemergence herbicide in the spring. Crabgrass invaded the untreated lawn.

week period in late spring and early summer, but germination may continue in open or disturbed sites as late as September. Preemergence herbicides kill crabgrass seedlings shortly after germination of the seed. Once substantial populations of seed have germinated, and the first leaves have emerged, it is too late, except for siduron, to apply a preemergence herbicide.

Preemergence herbicides provide effective control for several weeks or months, depending upon dosage and product, by forming a continuous herbicide barrier in the soil. Once the barrier has been disturbed, efficacy of the herbicide is reduced or lost. It is therefore essential that cultivation practices, e.g. verticutting, aeration, dethatching, etc., be performed prior to application of a preemergence herbicide. Overseeding, like cultivation, must be completed and turf established before the herbicide is applied. A notable exception to this rule is Tupersan. Tupersan, because of its selectivity, can be safely used in the seedbed or on seedling, cool-season turfgrasses.

It is also very important to water-in preemergence herbicides within 72 hours of application or to apply them just prior to an anticipated rain. Because of the problem of predicting rain, it may be wise to apply these herbicides during a gentle rainstorm. This approach works well on sod farms and other large turf areas where irrigation is not available. If these herbicides are not watered-in within a few days of application, reduced weed control should be expected.

Occasionally, overseeding becomes necessary before the preemergence herbicide has broken down and its activity lost. In this situation, it is better to seed into grooves using a slit seeder than to broadcast the seed. The grooving operation will help disrupt the herbicide barrier and

place the seed below, and out of contact with, the herbicide. Some herbicide manufacturers recommend applying powdered, activated charcoal seven days prior to overseeding to help deactivate the herbicide.

All preemergence herbicides, with the possible exception of Tupersan, have been reported by several university researchers to provide good to excellent season-long control of crabgrass using a single application. In the South and transition zone, however, crabgrass seed germinates three to six weeks earlier than in more northern regions. For this reason, preemergence herbicides must be applied weeks earlier than in northern regions and higher use rates or a second application are often recommended.

For example, in transition zone areas of Maryland, Dacthal® (10.5 \times 5.2 pound ai/A) and Balan® (3.0 \times 1.5 pound ai/A) are often applied twice, with the second application (at half rate) being applied six to eight weeks after the initial application. Tupersan, because of its short soil

THE PROCEDURE FOR APPLYING A PREEMERGENCE HERBICIDE

- Apply at recommended rate and be aware of sensitive turfgrass species (Table 1).
- Apply one to two weeks prior to crabgrass seed germination. Early spring, about the time when forsythia blooms begin to drop. Forsythia bloom drop, however, is often not a good indicator and a local extension agent should be consulted for the best time of application in your region.
- For uniformity of coverage, apply half the needed material in each of two directions at right angles.
- Apply prior to a rainstorm or irrigate with 1/4-inch of water within two to three days of herbicide application.
- After application, do not disturb the soil surface by cultivation practices. Sporting events may disrupt the soil surface and reduce efficacy of the herbicide.
- Reapplication of some products (e.g. benefin, DCPA, and pendimethalin), five to seven weeks after the initial application, may be necessary to provide season-long control of crabgrass in transition and southern regions.

residual, is generally not recommended for the purpose of obtaining season-long crabgrass control in established turfs. — Peter H. Dernoeden ■

The author is Associate Professor, Department of Agronomy, at the University of Maryland, College Park, Maryland.

Common Name	Trade Name(s)	Recommended Rate (lb ai/A)	*Formulations	Minimum Time Before Reseeding	Comments
benefin	Balan®	2.0—3.0	G	6 (weeks)	Not recommended for use on fine fescues or bentgrass turf. Use on established turf only.
benefin & trifluralin	Team®	1.5—3.0	G	6	Not for use on creeping bentgrass. Use on established turfs only. Do not use the spring following a fall seeding.
bensulide	Betasan® Pre-san® Lescosan® Betamec® others	7.5—10.0	G, EC	16	Safe to use on all turfgrasses. Use on established turf only.
DCPA	Dacthal®	10.5	G, WP	8	Not recommended for use on fine fescues or bentgrass turf. Use on established turf.
oxadiazon	Ronstar®	3.0—4.0	G, WP	16	Not recommended for use on fine fescue or bentgrass turf. Use on established turf.
oxadiazon & bensulide	Scott's Goosegrass/ Crabgrass Control®	7.6	G	16	Can be used on most turfgrasses, but may yellow bentgrass for 10 to 14 days.
pendimethalin	Lesco PreM® Scott's Turf Weedgrass Control	1.5—3.0	DG, G	16	Do not use on bentgrass or where <i>Poa annua</i> is the desired species. On new seedings, wait until grass has been mowed at least four times and has filled in. Do not apply more than twice per year. Keep off cement, stone, clothing, and shoes.
siduron	Tupersan®	2—6 for Seedling turf 8—12 for Established turf	G, WP	N/A	Not recommended for use on bermudagrass or on several cultivars of bentgrass. May be applied at time of seeding or on seedling turf. Provides postemergence control of crabgrass in the one- to three-leaf stage.

Table 1. Rate, formulation and other information about preemergence herbicides. *G = granular, EC = emulsifiable concentrate, WP = wettable powder. **Minimum time for reseeding when lowest recommended rate is applied.

THE BLUEGRASS BILLBUG: DIAGNOSIS AND CONTROL

The bluegrass billbug is one of our most serious turfgrass pests, so we could all use some more basic information about this insect.



Overwintered bluegrass billbug adults resume activity early in the spring.

A multitude of reasons exist for the large and small areas of "brown spots" often seen on Kentucky bluegrass home lawns in July, August, and September. Such symptoms are frequently attributed to sod webworm larvae because moths of the second generation are often seen as one walks through the turf. Another symptom particularly common during July and August is dormancy caused by moisture deficiency.

While these factors often are the cause for "brown spots," they are by no means the only ones. With the sod webworm, it is often a case of "guilt by association." The moths and brown spots are seen at the same time, thus leading to the associa-

tion. Of course, damage from sod webworm larvae does occur, but it is not nearly as common as damage from the bluegrass billbug or hairy chinchbug.

The purpose of this article is to reacquaint the reader with the bluegrass billbug.

Similarly, turf dormant from moisture stress often masks damage being done by bluegrass billbug and chinchbug. The real truth of the situation appears when irriga-

tion or rainfall occurs. If the brown spots were caused by moisture deficiency, they turn green; if caused by the bluegrass billbug or chinchbug, they remain as brown spots.

The purpose of this article is to reacquaint the reader with the bluegrass billbug; its life history, diagnosis, and control.

LIFE HISTORY. In the northern states, bluegrass billbugs pass the winter as adults. While most remain in the lawn, hidden in the thatch and upper inch of the soil, many are found under shrubbery and other protected areas around homes. A favorite overwintering site is where the

(continued on page 50)



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BLUEGRASS BILLBUG

(continued from page 45)

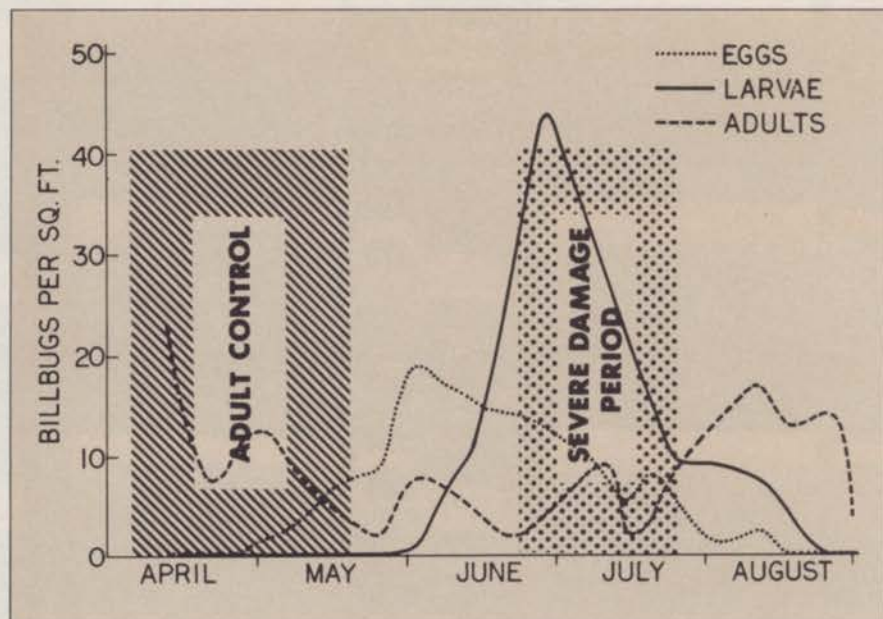
turf and sidewalk meet.

Adults of most billbugs are gray to black weevils with a distinct snout. In the spring these adults begin to move about and are sometimes observed wandering around on driveways and sidewalks. Though the adults feed on grass stems, occasionally chewing transverse holes through them, the damage inflicted is usually minor, compared to that from the later larval stages. During May and June, females chew slits in the grass stem about 3 millimeters above the crown and deposit a single egg into each of them.

Generally, no more than one egg is laid in each stem. The eggs hatch in about two weeks. Upon emerging from the egg, the larvae feed within the grass stem for a time and then burrow down the stem and begin to feed on the crown. As feeding continues, the larvae consume the entire crown, leaving the stems originating from the crown to die from lack of moisture and nutrients. Later, the larvae move to the root zone where they feed on the roots and rhizomes.

The legless larvae are easily found mid-July to mid-August. During periods of abundant moisture, the larvae are often found near the surface, but when moisture is deficient, they frequently move deeper into the root zone. Upon completing development, the larvae move 3 to 4 inches into the soil and transform into the pupal stage.

The new adults begin emerging in August and by mid-September are often abundant. During warm afternoons in September and October, these adults are



This graph outlines the life history and seasonal occurrence of the bluegrass billbug. Insecticide application directed at overwintered adults, as soon as they resume activity in the spring, but before they lay eggs, prevents the development of damaging populations during July, August, and September.

frequently seen in considerable numbers on sidewalks, driveways, and other paved surfaces. As the winter months approach, the adults seek shelter in the lawn or move to shrubbery, hedgerows, or other protected areas.

DIAGNOSIS. Damage from the bluegrass billbug is easily distinguishable from all other types of injury because of the characteristic way in which the larvae feed on the plant. The fact that the larvae consume most of the crown, leaving the stems to die, means that damaged plants

will break off easily at the crown. Further evidence of larval presence is the characteristic tunneling in the stems. This injury is easily exposed by the "tug test."

Grasp the turf in the damaged area and tug on it. If the turf comes up easily, look for evidence of larval chewing at the base of the stems as well as tunneling in the stems. If evidence of either are present,

A fine, white, sawdust-like material is often left by the larvae. Location of legless larvae confirms the diagnosis.



The "tug test" will indicate the presence of bluegrass billbugs.

a diagnosis of bluegrass billbug larval injury is a certainty, because no other insect in this latitude causes similar injury to turf.

Further examination of the crown area of the plant(s) from which the sample was removed should show further evidence of larval feeding. A fine, white, sawdust-like material is often left by the larvae. Though one may conclude that the damage was caused by the bluegrass billbug, whether or not the larva was found, further examination of the root area usually confirms the diagnosis by actual location of the legless larvae.

There is a severe damage period when the billbug does the most damage to turf. The period from July to early August is the single most critical time for turf to be damaged from the bluegrass billbug. It is



The eggs produce a legless larvae that first feed in the stem, then move to the crown, usually killing the plant.

during this time that grasses are frequently under moisture stress, while the feeding activity of the billbug larvae is at its peak. The combined effects from these two stress factors occurring simultaneously is responsible for this insect being ranked high among the damaging pests of turfgrasses in the northern regions.

DAMAGE CONTROL. Basically, there are two approaches to controlling damage from the bluegrass billbug: prevention and cure.

The curative approach involves waiting until the insect is actually present; a fact determined by careful examination of the turf during June and early July, or by the evidence of visible injury. Labelled rates of diazinon, trichlorfon (Proxol®), or bendiocarb (Turcam®), are generally effective if applied in June while the larvae

are still in the stems or feeding at the crown. Such applications may be unsuccessful when made during very dry conditions and/or when the larvae have moved deep into the root zone. Under such circumstances, pretreatment irrigation is helpful and posttreatment irrigation (1/2-inch plus) is essential. Isofenphos (Oftanol®), at 2 pounds AI/a (pounds actual insecticide per acre) applied at mid-June, controls feeding billbug larvae and also provides control of late summer grub infestations.

The preventative approach to controlling summer billbug injury can be used when there is confidence that damage will occur during the summer. Application of chlorpyrifos (Dursban®) at 1 pound AI/a or diazinon at 2.5 pounds AI/a, made from mid-March to late April and aimed at the overwintering adults, prevents



Bluegrass billbug life stages.

development of summer infestations by killing the adults before they lay eggs. Treatment at this time also prevents summer infestation of the chinchbug for the same reason. Application of isofenphos at 2 pounds AI/a made at this time has prevented development of both the billbug and grub infestations during late summer.

FINAL WORD. Place the billbug in its proper perspective by using the "tug test" when brown spots are observed during July and early August. If the symptoms seen were caused by disease, drought, or other factors, the damaged grass will not come up easily. If the damaged turf does come up easily and shows evidence of crown chewing and tunneled stems, it is a sure bet that the bluegrass billbug was the cause. Try it! - Dr. Harry Niemczyk ■

The author is an entomologist at Ohio State University's Ohio Agricultural Research and Development Center, Wooster, Ohio.

ADD-ON SERVICES

There is a real trend afoot today toward diversifying lawn care businesses by offering various add-on services. It makes a lot of sense to increase revenue, extend the working season, and solidify customer loyalty with add-on services.

Amongst today's average-sized to smaller lawn care businesses, diversification seems to be the name of the game. Many lawn care companies have found that add-on or auxiliary services are almost a prerequisite to survival in the lawn care industry of the 1980s. It is almost meaningless to speak of services such as liming, aerating, dethatching, and ornamental care as "add-on" services because the term "add-on" infers that the professional has added the services to his repertoire simply to supply supplemental income.

Seldom are "add-on" services added-on at a lawn care businessman's leisure. For one thing, the cost of living has forced most lawn care operators to find services that will extend their working season as long as possible to bring in as much revenue as possible to hold them over the idle winter months. For another thing, professionals tell us that homeowners have begun to expect more and more services from their lawn care company. Homeowners are looking for one company to fulfill all their landscape maintenance needs, from fertilizing the lawn to pruning the shrubs.

COMPLETE LAWN SERVICE. The all-inclusive lawn maintenance needs of today's homeowners is summed up nicely by Joseph W. Stout III, President of Complete Lawn Service, Inc. in Arlington, Virginia. "It is like a bank," observes Stout. "If you go to a bank and they just have checking accounts and don't do loans, that is not a good bank."

Stout offers his customers virtually everything that could possibly be done to a landscape. "Everything from snow removal to sprinkler system installation," says Stout. "We have pretty much always been a complete service. I started the company 14 years ago and I really started mowing lawns, but quickly added on the turf care."

More than one type of lawn service is taken by about 60 percent of Stout's customers, but he admits that it was quite expensive to gear up for those services. The vibratory plow he bought to install sprinkler systems cost him \$16,000 and the truck he uses to haul around sprinkler components cost \$25,000. "It is extremely expensive to start," says Stout. He says investing in snow removal equipment can be not only expensive, but risky.

"Snow removal is great if you get snow, but this year has not been a good year. Two years ago we had a great year. We don't think it is too expensive to get something like a new snowplow in the event we will get a good year of snow and make enough money to pay for that."

Though the equipment is expensive, Stout says various pieces can do double or even triple duty. "The sprinkler

installation and drainage work are very similar, so we use the trencher to put in pipe for drainage work as well," says Stout. "Chain saws are used in landscaping to cut railroad ties and of course we use them to cut down trees too." Trucks get the most utilization at Complete Lawn Service. The same truck might be used to haul lawn mowers, plow snow, and carry trenching equipment.

While Stout is trying to meet a demand from his customers for more services, he also admits that when he was getting started he found that extra services were necessary to keep his key employees with him year-round. "The main motivation when I started it was to keep my good people from the summer over because I knew they wouldn't be there the next year."

Stout says most of his employees have no problem with adapting their work habits to different types of landscape maintenance tasks. "Some enjoy the variety and some don't like it," admits Stout. "A good employee has no job description. If he is needed, that is where he goes."

There has been some concern that offering a multitude of services will tarnish the industry's image, that it will reinforce the "handyman" stereotype. But Stout feels that offering a complete lawn maintenance service will do just the opposite.

"If you just spray lawns you are really not into the business," says Stout. "The business involves the customer's outside property. You may not build retaining walls, but if you mow the lawn, you should be able to take care of the turf, and vice versa. If you only spray it, you are normally there six times a year with a check-back. When we mow a guy's yard 32 weeks a year, we





see his yard every week. My guys are trained to recognize disease and insect damage, and stress damage from lack of water. If there is a problem developing, we usually catch it before it develops. I think the guy who just sprays the lawn is the guy you have to watch out for."

BECHTEL'S GROUNDS MAINTENANCE. As far as Jack R. Bechtel of Bechtel's Grounds Maintenance, Goshen, Indiana, is concerned, you are only as professional as you look and act, regardless of how the rest of the industry conducts itself. In addition to lawn care, Bechtel also of-

fers commercial customers snow removal and he considers himself a professional in both services.

Although Bechtel offers lawn fertilization and pest control, he actually considers that an add-on to his full maintenance services. Bechtel got into full-service maintenance because he wanted relatively few high-dollar accounts, rather than hundreds of low-dollar accounts. He has about 600 customers, of which about 200 are commercial accounts. Bechtel estimates that spraying brings in 40 percent of his revenue, mowing services 40 percent, and snow removal the bulk of the final 20 percent.

"I started out mowing and the next winter I plowed snow," explains Bechtel. "In about two years we started spraying. Our biggest customers are commercial accounts that we can offer a yearly package to. We do a lot of residential spraying besides that, but spraying is sort of the add-on service to mowing." He also offers such services as aerating, dethatching, and parking lot sweeping to commercial accounts.

This will be Bechtel's year to push the need for aerating to his residential customers. He guesses that 20 percent of his customers now receive his aerating service. "I know we need to push aerifying harder," admits Bechtel. "It is something our customers need and we need to be the ones to sell it to them."

Sports turf is another area that Bechtel is just getting started in and would like to take advantage of. "We have done some baseball diamonds," says Bechtel. "We want to do that and make it as accessible and inexpensive as we can." Bechtel says he would like to be known as the local expert. "When the high school baseball coach calls it makes us feel good and we want to play that to the hilt."

While add-on services may be expensive to get geared up for, Bechtel has found them to be a good way to keep his key employees from jumping ship. "You can't hire good people and let them go," says Bechtel. "We try to keep key people and that is how we justify doing snow plowing."

To keep costs down, Bechtel makes sure he utilizes his equipment to its fullest potential. "We have eight trucks that we plow with," says Bechtel. "The trucks we use to pull mower trailers in the summer are four-wheel drives and are the same vehicles that are used all winter. We are even getting switched to low-volume spraying to use the same pick-ups for our spray routes. We are going to low-volume with an induction system to get rid of our big trucks."

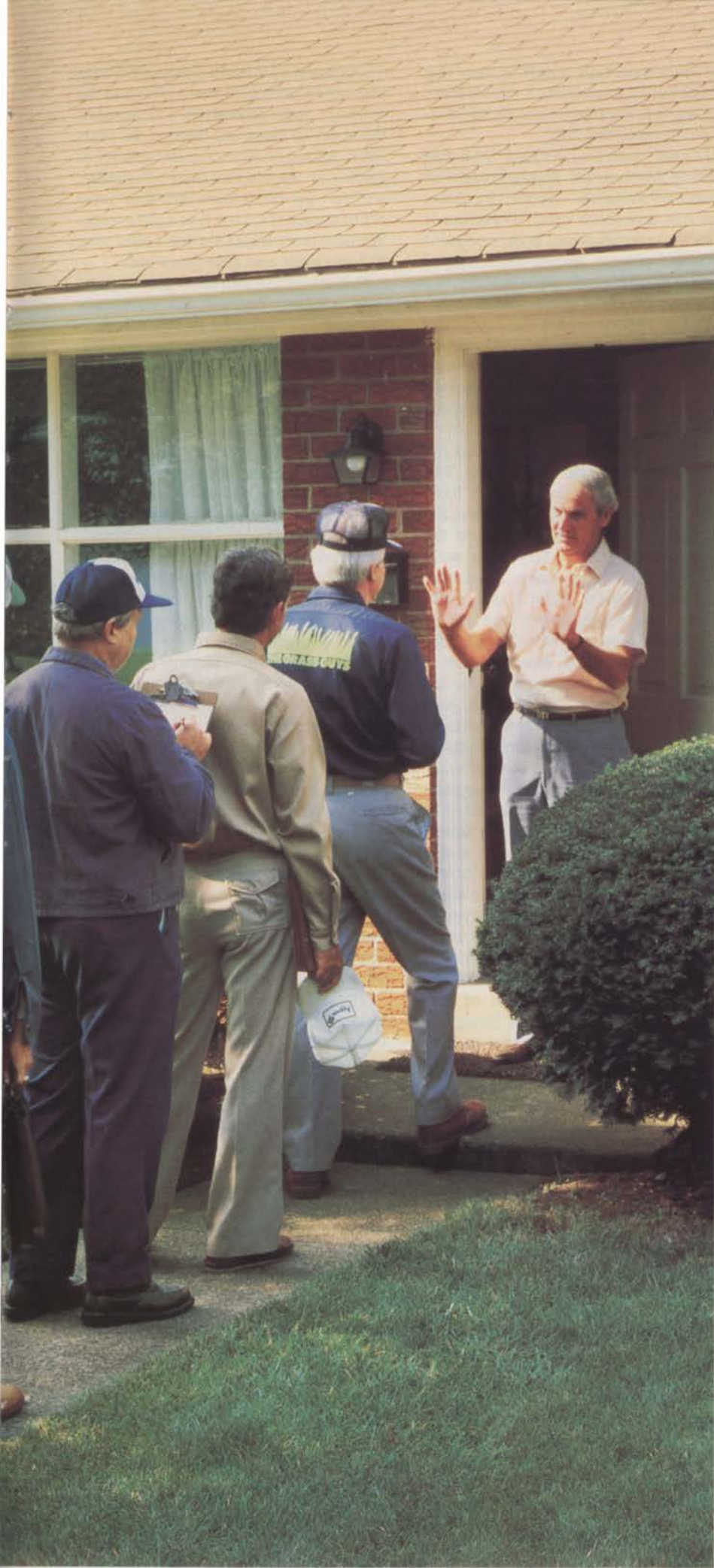
Bechtel's employees have no problem with the many services the company offers because they all have their own job descriptions. "We try to push that we all do what's good for all of us," reasons Bechtel. "If the spraying guys need to mow, then that is what they have to do. But most everyone has their department and that is where they stay. The spraying guys are usually so busy they don't have time to do something else."

CREATIVE TURF, INC. Like Bechtel, David Boos, President of Creative Turf, Inc., Florissant, Missouri, has no problem with employees because everyone is assigned a specific task. He runs two to three crews and two of the three are assigned lawn maintenance tasks. His key service, lawn renovation, is handled by himself and a separate crew. In addition to lawn renovations, Boos of-

(continued on page 56)

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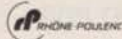
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ADD-ON SERVICES

(continued from page 53)

fers several add-on services, including sodding, finished grading, snow removal, and lawn mowing. "All of our trucks are equipped with plows," says Boos. "Our snow plowing of residential accounts is pretty much secondary. The key thing in plowing is taking care of our commercial accounts."

Boos estimates that 50 percent of his customers take all his services. He admits though that his estimate may be slightly skewed by the number of people who hire him to do one-time services, such as two fertilizer applications and an overseeding. Of his total revenues, Boos estimates that mowing constitutes about 30 percent of his total gross income. Renovation and new lawn installation bring in another 40 percent, and the remaining 30 percent consists of his other combined add-on services.

Like Bechtel, Boos would also like to get into sports turf care, but he is running into some opposition. "I am pushing to get into it," says Boos. "Like the sports complexes, when you get into a renovation, getting the program going is alright, but the grounds people there feel they can do a better job down the road. It is hard to take hold of as an on-going thing."

CUSTOM CARE BUILDING SERVICE. At Custom Care Building Service in Boca Raton, Florida, the emphasis is on total landscape maintenance. Ted Molitor, General Manager of the Landscape Division, says his company offers such services as mowing, fertilization, insect control, tree and shrub care, flower installation, plus landscaping. "It started as grass cutting only, it evolved from grass cutting into fertilization, from fertilization into tree and shrub care, and it is evolving right now," says Molitor. "We are presently going into pressure cleaning, which in southern Florida is a very large market."

Part of Custom Care's motivation to offer a complete outdoor service came from a demand for such service from the marketplace. Custom Care also has a janitorial division which Molitor says fits in nicely with the company's theme. "We found that they both worked together in that there was a demand for the other aspects of the field," says Molitor. "On the other hand, we saw a need that was there from the commercial consumer. We have tried to go out and sell them on this service."

Molitor says 90 percent of his customers take all of Custom Care's services. "We really try to stress that. To do it piecemeal is more expensive and is not as efficient, in that you can let things go but it will catch up with you. You pre-

sent them a package which stresses that everything is inter-related. In southern Florida, it is very important for the consumer to recognize this."

Of total revenues, Molitor says that mowing accounts for approximately 60 percent of the total. "About 15 percent is in tree and shrub care, 10 percent is probably in fertilization, insect control is probably 5 percent, and the rest is lumped in general clean-up," says Molitor.

He says the initial investment in equipment was expensive, but the equipment paid for itself rather quickly. "If I can pay for 40 to 50 percent of the equipment with one contract, we'll purchase it because we have found through experience that the other 50 percent will cover itself."

Labor problems have been sorted out by assigning everyone specific tasks. The cutting and pruning crews have fixed tasks, but the fertilization crew does the odd jobs. "The cutting crews and the pruning crews are set, they know what their work is, they have been trained for that," says Molitor. "But it still is difficult to find quality people who can do the different aspects of it." Custom Care schedules educational sessions once a week for everyone, but especially the fertilization crew that does the odd jobs because Molitor believes they need to be continually updated on new procedures.

Molitor cannot believe that offering multiple services could somehow degrade the industry's image. "I have talked to different people throughout the country, and our problem in this industry seems to be that nobody perceives it as a professional job." He thinks the entire country is headed toward a service-oriented economy and complete lawn maintenance services are just a part of that trend.

ENVIRONMENTAL MANAGEMENT.

William Teamerson, President of Environmental Management and Design in Webster, New York, feels that professionalism relates to the way each company conducts its business, rather than the number of services offered. "Explain to them as you pick them up for a snowplowing contract," says Teamerson, "that snowplowing helps carry you through the winter, it is not a major part of your business. We have a very close working relationship with our clients."

Teamerson's business is primarily landscape maintenance and he actually sub-contracts lawn application work. His add-on services include light hauling, snow plowing, service work on other companys' equipment, and aerating. He just recently got into tree moving with the purchase of a tree spade, which extends his season almost into January. The tree moving business picks up again in March.

Light hauling and snow plowing also keep Teamerson going through the winter, but not without side effects.

"Trucks used for landscaping in the summer can be used for snow plowing in the winter," notes Teamerson. "It increases the utility of that truck through the year, but it definitely decreases the number of years you can use that truck. Normally, we can't get much more than four years out of a truck if we use it as a plow truck. We have other trucks we don't plow with that are eight and nine years old."

Teamerson got into snow plowing and light hauling because his customers demanded it. Since he maintained their properties in the spring, summer, and fall, they wanted him to provide winter services as well. Teamerson estimates that 90 percent of his customer base has used all of his services at one time or another. His tree moving service constitutes the other 10 percent of his customers, since tree moving is a one-time proposition.

Of his gross profits, Teamerson would say that mowing maintenance accounts for about 35 percent, new lawn installation amounts to another 40 percent of his gross profits, the tree spade brings in about 15 percent, and snow plowing is probably worth about 10 percent.

The most expensive piece of equipment Teamerson owns is the tree spade. He found a used model in another marketplace about 100 miles from his area. "We checked through the phone books and found there weren't that many of them in the area," says Teamerson. "We made some phone calls to find out what the going rates were, called some of our contractor's clients to see what the need for it was, and found that it could be justified. At the time we bought it, we had purchased a large amount of trees from an established nursery. The only way to move them with any kind of grace was with that machine."

The only labor problems Teamerson has experienced have stemmed from the tree spade. "The switch to the tree spade is definitely a problem," says Teamerson. "You have a heavy piece of equipment that not everybody can operate, and I don't want everybody to operate it." Aside from finding qualified people to operate the tree spade, the only other real employee problem Teamerson has is with scheduling. During the busy season, there is sometimes a situation where a truck that is being used for lawn installation may be needed to do some light hauling.

Teamerson's employees do switch back and forth between various tasks, but he says they actually appreciate the variety. "They like it because it gives them something different to do. They are not really fond of the hauling, because they are usually cleaning up after a contractor, or picking up block or stuff like that. It is heavier work than a lot of them are used to."

ESTATE MAINTENANCE. Like Teamer-

son's employees, the technicians at Estate Maintenance in Emmaus, Pennsylvania appreciate the change of pace in doing different types of landscape maintenance tasks. President Edward Wigfield says in the spring one person does all the weed control work, while everyone else is mowing lawns. "By summer we try to rotate, maybe one day a week they do shrubs or something," says Wigfield. "Mowing can get boring. They appreciate the change and it makes them more well-rounded. We do the same in the winter time. When there is nothing to do and they are sitting at home collecting unemployment, they appreciate it and will come out and learn anything."

He admits though that since about 80 percent of his service is comprised of mowing, it can be a hassle transporting a mowing crew to a residential lawn. "With the small residential properties, we spent more travel time getting to some of them than we did doing the work," complains Wigfield. "When you take a three-man crew in to do a lawn, you sometimes spend 20 minutes getting there and an hour to do the place." Although Wigfield considers mowing the staple of his business, he would rather restrict his activities to large residential or commercial accounts.

Wigfield's add-on services consist of fertilizing, weed control, and virtually anything else under the umbrella of landscape maintenance. "We advertise that we can take care of anything from the front door out to the street," claims Wigfield. "Anything I can't do, I will sub-contract out. Anything from trees and shrubs to sealing your driveway." Wigfield founded his business on mowing because he considers that guaranteed income. "When customers start asking for other things, rather than referring it someone else and possibly losing the original job, we just add it on to meet the needs of the customer."

His customers don't always have to ask for extra services since Wigfield maintains close contact with all his customers and can spot a needed service. "Last year we had a big problem with grubs, and rather than trying to instruct customers on the need for insecticides, this year we just put it right in and planned on it."

Wigfield might have only about 50 customers, but the average lawn size is 87,000 square feet, so he can still claim that he services a couple million square feet of property. "A lot of times we do completely unrelated things," says Wigfield. "One lady wanted a compost bin built for her garden. We had a guy who used to be a carpenter, so we had a slow afternoon and he built a compost bin for them. It kept her happy and made us look good that we were able to meet her needs."

With the exception of snow plowing, Wigfield says about 90 percent of his customers take every service he has to offer. In fact, this year he plans to drop those customers who will not agree to take all of his services! "I have maybe two or three people whom I don't fertilize and weed control and they try to do it themselves. They get skip marks and stripes," complains Wigfield. "The neighborhood sees me cutting the grass and they think I did the fertilizing too. It gives me a bad name, so I have told the people either I am going to do everything or nothing. I am at the point where I can afford to lose a few people."

However, Wigfield is not so prosperous that he can afford to toss his customers aside at random, so he appreciates the fact that his repertoire of services allow him to offer year-round service to his customers. "I'm afraid if a guy gets someone else to snowplow his lot during the winter, there is a good chance that guy might be another person in the lawn care business," reasons Wigfield. "He slips them his card and gives them a second price and the next thing you know I'm out the door. This way, as long as I'm there for everything, there is no need to talk to someone else unless they are unhappy with what I'm doing."

AMERICAN LAWN CARE COMPANY.

John Biebrach, President of American Lawn Care Company, Niles, Illinois, has come up with an ingenious way to extend his working season and keep his customers happy at the same time. Biebrach bills his company as the "Cadillac lawn maintenance service" because of the wide range of maintenance services he offers, but one service in particular is rather unique. Biebrach is building a firewood processing facility.

"We are having an engineer draw up plans and will have it done within a year or so," claims Biebrach. "It will take a whole tree log and cut it into lengths and then split it into firewood, pretty much in a one-step operation." He got into selling firewood three years ago because he found there was such a big demand for it in the Chicago area, but fierce competition made it unfeasible to tackle on a large scale.

But then he discovered firms that actually design firewood processors and is now building one for himself. "By doing so, you will be able to beat your competition's price," says Biebrach. "We know what our competition is doing around here and we know the price of firewood. The only way to be on top of things here is to have a processor. There is definitely money in firewood. We didn't believe it until we got into it."

The real beauty of selling firewood is the nearly endless supply of free material. "There are a couple large tree companies

in Chicago that don't want to deal with firewood for the mere fact that it can be a headache if not done properly," says Biebrach. "In Illinois we have a lot of problems with Dutch elm disease, so they are eradicating all the Dutch elm and bringing them either to the dump, and the dump is charging them almost \$300 a load, or they can bring them to us for nothing. We process the wood, treat it, let it dry out, and sell it to the public."

Biebrach's basic lawn maintenance program includes mowing, trimming, edging, and cultivating. His add-on services include core aeration, a spring clean-up service, power raking, and a fall clean-up service. This will be Biebrach's big year to push core aeration. "Every year we mail out 100,000 brochures and we will push heavy on core aeration this spring," claims Biebrach. "We want to get more money out of our direct mail campaign, so we figured we should offer some services more people can afford."

Biebrach wants to get on the aerating bandwagon because he has seen the large lawn care companies begin to promote this service and he hopes the public's increased aeration awareness will have a synergistic effect for his company. "Core aeration can be offered to just about everybody reasonably," says Biebrach. "We are mailing out these brochures and we know we will get a large percentage of rejection, because people cannot afford complete lawn care, but at least they will be able to afford a power raking or core aeration. We felt core aeration was a real good service to jump on because it is a one-man one-truck operation."

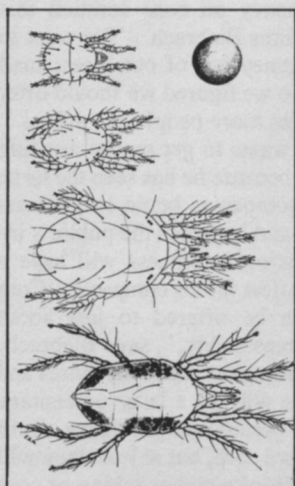
Biebrach claims that *all* of his customers take all of his services. "I know we are limiting ourselves to customers that way, but we have look at it from the standpoint that every customer is our calling card. If one customer only takes three fertilizations, and another customer only gets cut once a month or twice a month, we have got to remember that is a reflection on us."

Biebrach is conscious of how the public perceives his business, but he is not concerned that people consider him a "jack-of-all-trades" and therefore unprofessional. "Since the business is so seasonal, the majority of the public know we have to snow plow," explains Biebrach. "Firewood started as a hobby and turned into a business that has really started to make some money. Once fall comes, people know landscapers don't landscape anymore. It is not like we are landscaping, snow plowing, and doing firewood all at the same time. That would definitely take away from the professionalism of it." — *Tim Weidner*

The author is Managing Editor of ALA magazine.

ORNAMENTAL PESTS

Ornamental care is probably offered by more lawn care professionals than any other type of add-on service. As an auxiliary service, ornamental care is a natural tie-in to an existing lawn care business.



Four-spotted spider mite life stages; egg to adult.

There are a great many types of add-on or auxiliary services available to the lawn care businessman interested in expanding his cash flow. One of the more traditional add-on services many companies have offered to their lawn care clients is ornamental care. The service seems to be a natural tie-in since the lawn care company is already maintaining the turf, so why not offer to care for the ornamentals on the property as well? Much of the equipment used for lawn care can also be used for ornamental care, but you had better be prepared to adopt some new horticultural skills.

For one thing, ornamental care encompasses a whole new universe of pests. The many pests that plague

turf culture are relatively few by comparison with the multitude of pests that beset the many different species of ornamental plants found in the typical urban setting. No one knows this better than Dr. Richard Miller, an entomologist at Ohio State University, Columbus, Ohio. At the recent Ohio Turfgrass Conference and Show, Miller gave a presentation entitled, "Top 20 Ornamental Pests — Life Cycles and Controls," in which he identified and outlined some common ornamental pests professionals are likely to encounter. We have listed some of Miller's pests-of-concern here:

APHIDS. Miller says 1985 was one of the worst years for aphid infestations on record. "We had aphids on just about every plant you can think of," says Miller. Aphids can be identified by the two tubular projections on their abdomen called cornicles, according to Miller. "They are very common in aphids, but there are some species without cornicles, so you can't always use that as a distinguishing character," warns Miller.

Aphids are pest insects because they suck sap, curl leaves, transmit diseases, and produce honey dew. The honey dew is a problem because it contains sugar and tends to encourage the growth of a black, sooty mold. "In some cases, it is very difficult to wash that mold off," notes Miller.

BLACK VINE WEEVIL. "The pest that has probably been the number one pest longer than any other I can think of is the black vine weevil," says Miller. The black vine weevil is one of the largest weevils and is very interesting

in that the male insect has never been found. The all-female population reproduces parthenogenically. These weevils also have wings, but they are fused together so they can't fly.

The damage it causes as an adult is not very extensive, but the larva stage is destructive. The larvae cause characteristic feeding notches on the edge of taxus leaves which serve as a good diagnostic character. It is often difficult to spot the weevil itself because it is nocturnal. "Basically, they are night feeders, so if you want to determine what kind of a population you have, you are probably going to have to do some night work," advises Miller.

PINE NEEDLE SCALE. "Pine needle scale has become one of the most troublesome pests for Christmas tree growers in white and scotch pine," says Miller. The pest is a white scale insect that deposits 20 to 30 eggs under each scale. The eggs overwinter in this state. In the spring, the eggs hatch, the young crawler larvae move out onto the needles, and start feeding and secreting a waxy coating over themselves. Depending on location, during July there is a second generation. Pine needle scale infestations build up quickly. As the wind blows, it picks up the young crawlers and spreads them to other plants. When this occurs, the infestation really begins to explode.

"One of the problems we have had in controlling the pine needle scale, and many of our other scales, is that some of the equipment we are using does not get enough volume of spray onto the needles and the inner part of the plant," complains Miller. Therefore, only the scales which are readily exposed are being controlled. "We are using good spray materials, but we are not getting the coverage we need."

OYSTER SHELL SCALE. Oyster shell scale is very similar to the pine needle scale in that eggs are laid underneath the scale to overwinter. Miller advises using either a horticultural spray oil or a dormant oil against this type of scale. Later, a foliar treatment may be necessary.

FALL WEBWORM. "Another insect that was quite common this year was the fall webworm," notes Miller. Fall webworm infestations can be identified by noting leaves with webbed foliage. This feeding pattern is a little bit different than the eastern tent caterpillar which is a very common problem on wild cherry, flowering crabs, birch, and a few other plants. The eastern tent caterpillar will feed in the crotch of a tree and then go out and feed and then come back to the web area. As it moves from one area to another, it lays down silken threads. "Where you have a very heavy infestation, the whole trunk will be covered with trails of silk," explains Miller. "This is not

the case with the fall webworm.”

As the fall webworm larvae continue to grow, their shed skin and fecal material is deposited in the webbing and becomes unsightly. The amount of damage done by fall webworm probably is not that great, according to Miller. “I have never seen a tree that has been killed by them. If you get them while they are young, you probably can eliminate the infestation without too much difficulty.”

Both fall webworms and eastern tent caterpillars seem to be susceptible to bacterial sprays of *Bacillus thuringiensis* and other materials, according to Miller.

SPIDER MITES. Spider mites, such as the two-spotted spider mite, the spruce spider mite, or the southern red mite, have been problem pests in recent years. Mites are easily detected on spruce by striking a branch with a stick while holding a white piece of paper beneath the branch. The dislodged mites will appear as moving specks on the paper. The mites can also be spotted with a hand lens by examining individual needles.

The two-spotted spider mite is a real problem because not many miticides have any effect on the eggs, according to Miller. Therefore, an effective mite control program would require repeated miticide applications. The first application will kill all of the adults and some of the young that hatch from eggs, but within a week or so, most of the miticides are ineffective and new mites hatch from eggs that were laid after the first treatment. Miller advises applicators to follow up the first treatment with another treatment in 10 to 14 days. Continue to apply on a 10 to 14 day schedule as needed.

FLETCHER'S SCALE. Fletcher's scale is a scale insect that causes problems on taxus. It is a soft scale which secretes a waxy coating which is actually a part of the insect. In the pine needle scale, the insect is actually underneath the scale and is more or less loose from the waxy coating. The reproductive capability of this insect is quite great, so serious infestations are common.

JAPANESE BEETLE. One of the all-time top ornamental pests is the Japanese beetle. It feeds as an adult and is a very serious problem as a turf pest. The adult feeds on over 300 different kinds of trees, shrubs, and flowers. “Sevin does a reasonably good job on the adult, but because they migrate, even though you get 75 to 80 percent control of a population, the next morning you may have that many more back again,” says Miller.

LEAFHOPPERS. “We have had quite a rash of leaf hoppers,” says Miller. Leaf hoppers can be trouble because there can be anywhere from one to three generations per year and some of them migrate in from other areas. Leafhoppers have also been implicated in plant disease transmission. They generally will lay their eggs on the leaf tissue. The damage is probably done more by the nymphs than by the adult stage, according to Miller.

“The insecticide phenoxychlor has always seemed to do an excellent job on leafhoppers,” says Miller. “There are many other materials that will give good control.”

ADELGIDS. The adelgids are gall-producing aphids that attack pine and spruce buds about the time the buds are just beginning to grow and shed their scales. The needles are exposed and the adelgids will attack these needles and simulate them, not to form a branch, but to form a characteristic sausage-shaped gall, according to Miller. They feed inside the gall. Later in the season the galls will open up, and in some cases the adelgids will fly to another host.

In the case of coolie spruce gall, they will fly to Douglas fir. On Douglas fir, they do not form the gall, but they do feed on the needles. Yellowed areas will appear where they have been feeding. Then they will migrate back to spruce. Very often, with this particular species, if Douglas fir are in the area, you need to treat the fir to break that cycle. Oak has over 800 different kinds of galls associated with it.

White pine is becoming a very popular tree in Christmas tree production and a pest that is also growing in popularity is pine bark adelgid, according to Miller. It is similar to the insect that causes the coolie spruce gall. In this case, a distinguishing characteristic is a white material which will accumulate on the bark. The purplish adelgid can be uncovered by scraping off the white material. Cottony material around the base of the needles, especially in the spring, is also an indication that pine bark adelgids are present. This pest can kill the tree.

“We have had some pretty good luck using Orthene® in the later part of May,” says Miller. “Very often, when you get an early infestation, you will see speckling of the foliage.”

The eastern spruce gall adelgid causes a gall which looks like a little pineapple. The galls form at the base of shoots. When cut open, little chambers which house the adelgids are revealed within the gall. These galls will dry up a little later on and are very unsightly.

MAPLE BLADDER GALL MITE. This mite forms little wart-like structures which at first are green, and then turn pink, and then red, and eventually will turn black. “This particular mite is very susceptible to Sevin®,” says Miller. “About the later part of April, an application of Sevin will really do a good job of reducing a population.”

BIRCH LEAF MINER. “Birch has a lot of problems and this is only one of them,” says Miller. The birch leaf miner was a particularly severe problem last year, according to Miller. The insect lives inside the leaf proper and feeds between the upper and lower surface of the leaf, leaving only the upper and lower surface remaining. “If you pull one of those leaves off and hold it up to the light, you will either see the insect in there or the frass that it left while it was feeding,” instructs Miller. “This is the simple way to distinguish this type of damage from spray burn or some disease.”

BRONZE BIRCH BORER. The bronze birch borer is another insect that has discouraged the use of birch in the landscape and put researchers to work trying to find more information about it. The first indication of bronze birch borer damage is often the death of the terminal-most branch. Since the larvae work under the bark, little can be done.

This is one of the metallic wood boring beetles. It is a little different from the long-horn wood boring beetles. The damage is done primarily by the larvae working under the bark. They girdle the tree and translocation can go neither up nor down. Very often, puffy areas will form where the sap has accumulated, according to Miller.

“We really don't have any materials that are effective against the bronze birch borer,” says Miller. “Some of the newer materials are being looked at, but because of the life history of this insect, emerging over a period of two or three months, one application of any material is not going to be enough.” — *Tim Weidner* ■

The author is Managing Editor of ALA magazine.

MALL SHOW MARKETING

Have you been to a mall lately? If you have, you probably noticed a mall show going on there. A growing number of lawn care professionals are taking advantage of mall shows as marketing vehicles.

Thousands of potential lawn care clients gather in any given shopping mall on any given weekend. Those shoppers just don't realize they could be receiving a lawn service. It is up to enterprising lawn care businessmen to convert all those unknowing citizens into solid leads.

Mall shows or exhibitions provide the perfect vehicle to market lawn care to these teeming masses. Lawn care operators in the Cleveland, Ohio area who are interested in exhibiting at a mall show have found an ally in Mall Attractions, Inc. Mall Attractions, Inc. was created by partners Donna Gazzana and JoAnn Best on February 4, 1984. Gazzana and Best organize and market several kinds of mall events, such as bridal and educational shows, but their favorite is home improvement. Gazzana says that most of the exhibitors they deal with in the home improvement industry are very professional, with lawn care businesses at the top of the list. "These people know their business and take special pride in having an exceptional display," says Gazzana. "They realize it represents their company and the quality of their work. If a company can't handle a 10- by 12-foot area in Parmatown mall, how can they claim to perform the best lawn care service for a client."

Gazzana is the salesperson of the team and Best is the organizer, since Best previously held a management posi-

Tom Emmett, of Tom Emmett Landscape Company, finished a seven-day home show at a local mall in February that produced 25 good leads at a cost of \$650.

tion at a local mall. Gazzana credits much of their early success to the local media and business "connections" they have been able to draw upon.

Mall Attractions serves as the liaison between mall management and mall show exhibitors. Gazzana and Best first formulate an idea for a mall show, such as a home improvement show, and then sell the idea to a particular mall. After the mall management agrees to a particular mall show theme, a date is set and a mutually agreeable contract is signed. Then Mall Attractions rounds up exhibitors for the show.

Exhibitors are asked where they would like to be positioned in the mall and what they will need for their exhibits. "We say you can have booth number five, it is

10- by 12-foot, do you need electricity, etc." says Gazzana. "The the exhibitor gives us a deposit with their contract to guarantee that exhibit area."

"Home shows are generally the most expensive shows to get into," says Gazzana. "Our Parmatown show runs from \$500 to \$1200." However, Gazzana is quick to note that exhibitors are also getting a week's worth of exposure in a mall where the average traffic is 100,000 people per week. "Twelve hundred dollars sounds like a lot of money, but those people (exhibitors) come back year after year. They want that spot because those people walking through the mall *buy*," says Gazzana.

Tom Emmett, President of Tom Emmett Landscape Company, Richfield, Ohio, knows that people will buy his services at mall shows. He finished a seven-day home show at a local mall in February that produced 25 good leads at a cost of \$650. "We have begun to make appointments with those people and they are very enthusiastic to see us," says Emmett.

"Aside from the 25 sound leads we had, several hundred color brochures were taken. I don't know what the residual will be from those 30 to 60 days down the road," says Emmett. Mall shows have worked 100 percent better than newspaper display advertising for Emmett. "Display advertisements in local newspapers have never performed the way we would like and they have been very professional ads."

The only major drawback, as far as Emmett is concerned, is the 11 hours a day his personnel must spend manning the booth. Because of the drain on his work force, he says he would never consider exhibiting in a mall show during the prime landscaping season. Emmett believes either himself or key sales personnel must be in the booth at all times. He says there are services available to provide people to man booths, but he is convinced these individuals would not have sufficient knowledge of his business to answer the questions of potential clients.

Emmett says most malls restrict exhibitors to displays 8 feet in height. "That might limit some of the landscaping material you can use," says Emmett. "You are also requested to use their tables, draped to the floor." Any deviations from the rules must be checked out in advance by the mall management, according to Emmett. He says landscapers in general may want to bend the rules a little to accommodate unusual display items. "You have got to be willing to work with the mall people to get outside their restrictions a little bit," advises Emmett.

Emmett has nothing but good things to say about his association with Mall Attractions. He says their contract sheet was self-explanatory. He found them very gracious



Eaton Center mall in Toronto, Ontario.

and very good follow up sales people. "Too many other mall shows are governed by a group or a board that consists of the actual exhibitors that have been exhibiting there for years," warns Emmett. "Too much politics come into play. Their good buddies would get away with murder. If you were in competition with them you were up against a wall."

Emmett's experience with mall shows dates back to his involvement with mall shows attended by the Ohio Landscaper's Association and the Akron Regional Landscape Association. "I saw the responses we were getting," says Emmett. "I even got some leads from the membership lists that were handed out at those shows."

Emmett's interest in malls isn't strictly for the good of his business. "I have always wanted to do a show as a kind of ego thing," admits Emmett. "You are displaying your wares; you are proud of them." But Emmett hasn't been completely lost in the limelight, he has also been studying the demographics of the various malls in his area. "For instance, Summit Mall was deluged by landscapers, which has its advantages and disadvantages. Number one, people go there specifically to see the landscaping, so you are drawing the right crowd. The disadvantage is all the competition." Emmett says some landscapers and lawn care operators attempt to undercut their competition in the next booth with one-upmanship, such as offering free landscape designs.

Emmett has been attending one local mall in particular for the past several years because he has seen no nice landscaping displays there from a design/build firm. Although people would not come to this mall show just to see landscape displays, as they had at Summit Mall, Emmett would have the novelty factor on his side since he is the only design/build landscaper who ever exhibits at the show. "We won first prize with the booth, so we had a quality display there," says Emmett. "We are definitely going to do it again next winter."

Bob Kautzman, President of Lawnco, Inc., Brooklyn Heights, Ohio, another of Mall Attractions' clients, is also pleased with mall shows, although he can't pinpoint the accounts he has gained from mall show contacts. "I really go to mall shows more because I enjoy the direct contact with the people," says Kautzman. He says direct mail brochures and referrals have probably produced more leads for him than mall shows, but he still appreciates the contact with customers and prospects which mall shows afford him. He also notes that mall shows are good for the industry's image, in that they help quell the fear recently associated with lawn care chemicals.



Perfecturf, Inc.'s mall show display and personnel.

Kautzman has serviced lawns in the Cleveland area for 15 years, but he says he can still exhibit at the Parmatown Mall in the suburb of Parma, where his market is centered, and find people who have never heard of his company. "I believe that sending them a bill or a spring reminder with the price isn't enough," says Kautzman. "If you can talk to them and they see you are working for a living and not trying to take their money away from them, you can gain a lot more confidence from them. That is why we started it and that is why I'll probably keep going to it, too."

He says it is essential to have clear, concise written material at the booth that people can take away with them, because mall shoppers "don't like to talk at the shows any more like they used to five years ago," observes Kautzman. "They aren't as free to give out their name and address anymore."

Someone who has no reservations about the benefits of mall shows is Keith Waller, President of Perfecturf, Inc., Mentor, Ohio. Waller is a third Mall Attractions client who has also been pleased with the services rendered by that company. "Those shows work so incredibly well for us and I'm always the only one in them!" says Waller. "I have walked away from five-day mall shows in my hometown, and hometown shows always do much better, with over 400 surveys. It is great for someone who is just getting into the business. It is not expensive. It might cost me \$1,000 or \$1,200 to put the tanker in, but you have got the best display going." Waller says the mall shows produce more leads for him than the 100,000 four-color direct mail brochures he sends out each year.

Waller has just begun to franchise his operation and he suggests exhibiting at mall shows to all of his new franchisees. He says all shows of this type seem to

work well, including outdoor food fairs at parks. However, March is the best time to get involved in a mall show, according to Waller, because you have not yet gotten into production for the new season and people are still frequenting the malls while the weather is nasty.

Waller only exhibits at local malls in his suburb of Mentor because he wants to contact Mentor residents. "I didn't want to go into the Cleveland Home and Flower Show because that is too much of a shotgun approach." Local mall shows can also be failures, however, as Waller experienced when he worked with ChemLawn Corporation. During his eight-year tenure with ChemLawn, his branch exhibited at a suburban mall show, but pulled out of the show before it was over because they drew so little interest.

But Waller was not discouraged from trying a mall show when he started his own business. He approached his first show as a means to get his company recognized, rather than a source of sales leads. "I decided that I would get public recognition if nothing else," says Waller. "I followed up with radio advertising. In turn, when the radio station saw I bought all that air time, they came down and interviewed me at the show. That is the show I walked out of with about 436 surveys. That was my introduction several years ago as a new lawn care company. It turned out to be probably my number one source of leads."

To get into a mall show, Waller suggests calling your local mall to find out who does their mall shows. "Tell them you want to go into the home and garden or home improvement show," advises Waller. After you contact the mall show organization that handles such shows, that company will generally mail you a packet of information with an application.

Although the contract seems cut and dried, Waller suggests that the mall show

organizers may be open to negotiations. "Don't always take the first price they quote," warns Waller. If you are buying a specific booth space, they won't deal, says Waller, but lawn care trucks can occupy unusual spaces. "When I put my truck in, I am not buying three spaces for my truck. I pay them for two and they throw in the third one. They always want the money up front. They want half now and the other half two weeks before the show. I never give them that second half until my truck is in that mall."

The actual dealings with the mall show organizers is very simple. From his experience with Mall Attractions, Waller says they will first send you a list of specifications for the booth. Then they will meet with you, collect a check for the first half of the payment, and have you sign papers. "It is very simple and doesn't take much time," says Waller. "What takes time is preparing for the show."

He says it is a good idea to have a company truck on display and it should be either brand new or repainted. "It should be immaculate," says Waller. "It should look like your company should look and carry all the sizzle that a professional lawn care company carries." He says you should bring attractive covers, preferably green, for your tables. Waller also exhibits neat and clean spreaders accompanied by empty bags of the granular materials he applies.

Waller wants his display to be as visible as possible, so he adds a little glitter. "I put spot lights on the truck. I hang helium filled balloons from the tanker. I have nice display signs that announce the free drawing." On the practical side, Waller also says personnel manning the booth should look as polished as possible. "Have your uniforms ready and your people versed on their approach so they don't look like high pressure salesmen, and yet don't look so lackadaisical that

they are sitting behind the table not caring if somebody signs up. Be ready to answer questions and hand out brochures."

Waller places two tables at each end of his truck, where he places his brochures and the all-important prize give-away cards. "We gave away free lawn care for the year for one lucky person." Waller's prize drawing cards give the mall shopper a choice of selecting either a 15-point analysis and cost estimate on their lawn and entry in the prize drawing, or a no-obligation chance to win the free lawn care for a year.

But remember, regardless of how it is set up, the prize drawing is the key to a successful mall show. "The most important thing you should do is give something away," says Waller. "You have got to have something to draw their attention to your display."

These sign up/prize cards are also essential to keeping the traffic at your booth organized. If shoppers are given index cards or asked to sign their name and address on a sheet of paper, it looks unprofessional and prospects tend to drift away if they have to wait in line too long. "There have been times when I have had eight people deep at the table waiting to sign up," says Waller.

Waller also considers his participation in the mall show as a public training seminar. "We answer questions that people might have regarding their lawn care," says Waller. "That works really well because they are not defensive."

If the exhibit is to serve as a public training seminar, as Waller suggests, key personnel must man the booth. "I only put the lawn specialists in there, whether they are assistant managers or lawn applicators, but I don't put rookies in there. They don't have to be salespeople, just knowledgeable specialists." But it is not enough that personnel at the booth be knowledgeable, Waller also expects them

to be polite and enthused. "Smile all day long until your face hurts," says Waller. "People don't do it and they fail to tell their people to do it."

It is also a good idea for the owner or manager of the company to be in attendance for at least 80 percent of the show, according to Waller. "If he does nothing else, he should be there in the evenings and must work Friday, Saturday, and Sunday. The weekend is where you really are going to do well."

Waller says choosing between week-long shows and weekend shows is really a Catch-22 situation. The week-long show will generally produce more leads than a weekend show, but the weekend show ties up personnel for a shorter amount of time. But weekend shows can also produce a significant number of leads, as many as 150 leads, even from a summer weekend show.

Before going into a mall show, Waller says you should be sure the exhibition company you are working with knows the fire codes and other safety regulations of the particular city where the show will take place. "I have worked with companies that did not know the laws of a city, especially when a company first works with a particular mall, and I was not able to set up with everyone else and lost a day of the show until the fire marshal could come down and give my exhibit an OK."

Each mall and city will have different safety codes. For example, when Waller brings his tanker to Great Lakes Mall near his hometown, he must purge the tank, run the gas tanks dry of fuel, tape the gas cap, disconnect the batteries, and the truck has to be pushed into the mall to its spot. Whereas at another nearby mall, Euclid Square Mall, exhibitors are allowed to drive vehicles in, but they must tape the tank and disconnect the battery. "In all the malls you have to put something underneath the truck," says Waller. "We just take green cloth that matches the table and lay it underneath the truck."

Despite some of the hassles associated with exhibiting at mall shows, such as complying with safety codes, most lawn care professionals who have exhibited at mall shows will tell you they are worth the effort. Even Bob Kautzman, who is somewhat skeptical, will admit that inquiry cards picked up at mall shows in late winter will help boost the number of first-round calls he will make in the spring. Booth prices may sound steep, but if you can pull as many leads as the professionals we talked to, you will probably find mall shows the cheapest form of advertising per account acquired. — *Mary Arnold and Tim Weidner* ■

The authors are free-lance researcher and Managing Editor of ALA magazine, respectively.



A dining area in Great Northern Mall, North Olmsted, Ohio.

THE QUESTION OF INSURANCE

As fingers point at unrealistic court settlements and blame is put on insurance companies' poor underwriting policies and pricing procedures, American businesses all over the country are searching for ways to survive the nation's insurance crisis.

Suing has become trendy. According to a recent article in *Forbes* magazine, Americans are looking at civil lawsuits against businesses and municipalities as a kind of lottery — trying to win as much as they can as often as they can. In fact, the article notes that in 1984 one private civil lawsuit was filed for every 15 Americans.

With court awards being granted almost as frequently as lottery prizes, it's no wonder that insurance companies have felt the heat. According to *Forbes*, the property and casualty insurance industry as a whole paid out \$116.10 for every \$100 received in premiums in 1984, and reinsurers paid out nearly \$141 for every \$100 in premiums. You don't have to be a mathematician to figure out the problem, nor a business analyst to predict the financial consequences for the insurance industry.

For the lawn care professional, the bottom line means the inability to obtain general liability insurance, particularly pollution coverage, or paying sky-high premiums if a policy is secured. But lawn care businessmen are not alone. Increased insurance rates, arbitrary cancellation of policies, and exclusion of certain coverages have become typical problems for any businessman or firm with *any kind* of a liability, including doctors, lawyers, accountants, construction crews, day care centers, fuel distributors, utility companies...and the list goes on.

Many people believe the insurance industry is seeking relief by "playing politics." According to Jerry Faulring, President, Hydro Lawn, Gaithersburg, Maryland, "There's no question that the



insurance industry has got problems. And what they've probably done is create a worsened environment for insurance so that the government will take action and force them into providing it. At the same time, they hope the government will reduce their liabilities by putting a cap on some of these (awards), so they can have a predictable loss as opposed to an infinite loss."

And indeed, as long as judges keep expanding the definition of liability and juries continue awarding phenomenally large sums of money in settlements, the insurance industry will remain gun-shy. David O'Leary, an insurance analyst with the London brokerage firm of Fox-Pitt, told *Forbes* magazine, "It's impossible for insurance companies to price liability products when they have no idea what the settlements and risks are going to be."

Marc Rosenberg, Vice President for Federal Affairs of the Insurance Information Institute, a clearing house for about 300 property and casualty insurance companies, recently talked with the *Cleveland Plain Dealer* about the insurance crisis. According to the *Plain Dealer's* article, "Rosenberg said insurers were looking for stability, not the erratic, unpredictable awards and settlements that vary from

state to state and court to court. 'It is the unpredictability that has caused insurance to dry up in some markets,' he said."

European reinsurers, which back-up about one-third of all American insurance policies, according to Rosenberg, have lost faith in America's legal system. The infinite ceiling on awards has caused many foreign reinsurers, such as Lloyd's of London, to severely cut back and even deny coverage to U.S. insurance companies. They're tired of losing money on them. According to *The Plain Dealer*, Rosenberg said American insurance policies make up about 12 percent of European insurers' income and 90 percent of their losses.

Some people believe the U.S. government should establish its own reinsurance program so companies wouldn't have to seek financial support from foreign reinsurers. Others believe the entire crisis is a scam created by the insurance industry to make up for years of financial losses caused by poor pricing strategies.

"In the past few years, when interest rates were high, insurance companies were writing policies on anybody and everybody and not really checking them that close," explains Max Graham, President of Graham Lawn Care, Douglasville, Georgia. "They were writing policies for less than they should have, because they could make some money up on the high interest rates when they reinvested it. Now it's to the point where they're no longer getting those high interest rates, they're not getting a return on their money, and they still have some of the bad policies that they've written," he says. "Insurance companies have had

some heavy losses in the past few years, and it looks like they're trying to get even all at one time."

According to the Professional Lawn Care Association of America (PLCAA), a \$3.8 billion pre-tax operating loss was recorded for the insurance industry in 1984. "Insurers are now trying to compensate for these losses by raising prices and avoiding the types of businesses that already have resulted in, or could potentially result in, large losses," according to Jim Brooks, Executive Vice President. "With public and media awareness high as to the dangers of hazardous landfills, toxic substances, and other forms of pollutants, there is little wonder why the lawn care industry has been caught in the pollution liability coverage problem."

There's no question that any industry which deals with chemicals will suffer more than others during today's insurance troubles, according to Wayne Jones, Deputy Director of the Ohio State Insurance Department, Columbus, Ohio. "Any industry that has potential problems with the environment is a much larger problem than the average risk." Consequently, as of January 1 of this year, most insurance companies stopped writing pollution coverage. It's believed that some companies will allow the insured to buy back pollution coverage, but it will

As of January 1, most insurance companies stopped writing pollution coverage.

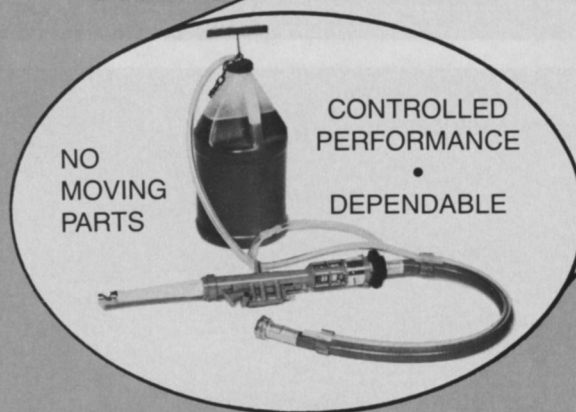
probably be written at very high premium levels and on a "claims made" basis rather than on a "per occurrence" basis.

According to Jones, a "claims made" basis means the insured will only be protected for claims made during the policy year. A "per occurrence" policy protects the insured from any claims made years after an incident occurs. For example, if you spray a customer's lawn this spring and a year or more later that customer alleges his well was contaminated by your chemical application, your "claims made" policy will not cover you.

Given that it's only March and many lawn care professionals have yet to renew their insurance policies, it's difficult to tell how many operators have been effected by these changes. However, almost everyone *American Lawn Applicator* talk-

(continued on page 68)

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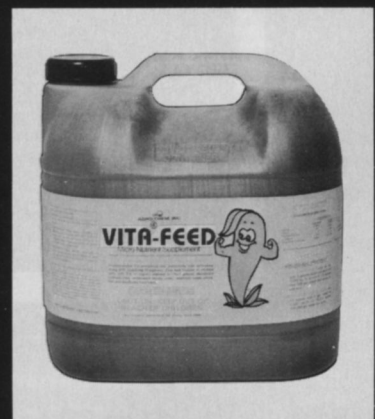
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INSURANCE

(continued from page 65)

ed with — even those who had not yet reached their insurance anniversary dates — were extremely concerned about the availability of pollution insurance and the astronomical costs of general liability coverage.

“It used to be that when you’d buy insurance, if the rates were too high, you’d buy (from) another company. Now you just find a company that will insure you at any rate,” says Denny Linnell, President of Lawn Life Corporation, Salt Lake City, Utah. From 1984 to 1985, the cost of Linnell’s insurance more than doubled.

ed. He expects about a 30 percent price increase in 1986, and anticipates some question over pollution coverage.

Jerry Faulring of Hydro Lawn is currently in the process of renewing his insurance policy. “We are probably not going to be rewritten on pollution coverage. We’re continuing to look for alternatives, but don’t really expect to find any,” he says. “What we’re really looking at is a self-funding sort of situation, not by design and not because we want to, but because we’ll have to respond with our own resources should an incident occur.”

After discussions with his insurance carrier, Faulring doubts he’ll even be able to purchase a stop-loss policy which

assumes a self-insurer’s liability after a specific loss is met. Without that protection, self-funding your own pollution coverage can be as dangerous as “running bare.”

Operating without pollution coverage is a high-risk situation despite the fact that pollution claims made by the lawn care industry are very, very minimal, Faulring says. “You don’t know how much the claims might incur. It could technically put a company out of business.” Especially in today’s litigious society, where everyone sues for *millions*, not thousands of dollars.

In Georgia, the minimum state operating requirement regarding liability

STATE INSURANCE COMMISSIONERS

Don’t let your insurance questions go unanswered. Contact your state insurance commissioner for answers, attention, and advice on the problem of securing liability insurance. The following names, addresses, and phone numbers were provided to the Professional Lawn Care Association of America (PLCAA) by the National Association of Insurance Commissioners, Kansas City, Missouri. They originally appeared in PLCAA’s *Turf Talks* newsletter.

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MISSOURI

ty insurance for lawn care operators is \$20,000. Posting a \$20,000 bond for liability coverage may give the lawn care professional a license to operate, but it certainly doesn't offer much protection, says Max Graham. "Twenty thousand dollars is not going to go far where a lawsuit is concerned."

John K. Stephan of Johnson & Higgins of Ohio Inc., a Columbus-based insurance company, spoke to PLCAA members about the liability insurance problem at last year's Tampa show. "Our society today expects anyone who is physically or fiscally disabled to be reimbursed by some organization, be it the government or be it an insurance company. Our socie-

ty demands reimbursement for everything...Until there is a revision in the court system in this country, you and I can expect to see a continued erosion of markets and coverages in our business."

The long-term solution to the insurance crisis, he believes, is the revision of the U.S. tort system. "Until the laws are corrected permitting insurance contracts to be fairly interpreted, and until our judicial system revises its thinking with regard to fault, we will see these horrendous insurance problems continue."

Stephan encourages lawn care businessmen to take an aggressive role when it comes to educating the country's lawmakers on their insurance woes. "We

as citizens must actively take our problems to the people and the legislative bodies. Go to your council meetings, go to your town meetings. Talk to your state representative and your congressman. Become an activist for the revision of the tort system. This is our only solution, and believe me it will take time."

In addition to educating government officials and supporting any legislation that proposes fair and reasonable caps on court awards, Stephan advises lawn care operators to "shop early" for their property and casualty insurance. "Be in contact with your agent. Insist that he enter the marketplace and provide you with

(continued on page 82)

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LANDSCAPING TEXAS STYLE

Charles R. Racusin's Environmental Landscape Services, Inc. has become one of Houston's premier landscape companies. Once again, Environmental has swept the Texas Association of Landscape Contractors' awards.

Prize-winning work is the standard at Environmental Landscape Services, Inc., of Houston, Texas. For the third year in a row, the company has been honored by the Texas Association of Landscape Contractors (TALC) as one of Texas' finest commercial landscape firms. With two Grand Awards and three Merit Awards, Environmental virtually swept the 1985 awards.

"We didn't set out to win awards," noted Environmental's President Charles Racusin, "but we did set out to do award-winning work. The result is that we've been successful at achieving both."

Originally from Corpus Christi, Texas, Racusin graduated from college in the late 1960's with a background in business and

finance. He entered the booming Houston real estate market, and soon noticed that many of the projects being developed at the time were ignoring one crucial element. "Most developers and owners treated landscape as a stepchild. They didn't feel that curb appeal was that important to a property at that time," says Racusin. "I saw a void in the marketplace for a firm that would offer high quality service and an excellent product."

Starting with a small crew, he did some projects for a real estate investment trust. The company grew quickly, and Racusin attributes much of his success to his business experience. "I'm a businessman more than a gardener, which may have been to my benefit at the time, because in the early 1970's the landscape business

in Texas, was relatively unsophisticated. Many people didn't approach landscaping as a business, and that is the only way I think you can approach it."

Founded in 1971, Environmental Landscape Services now has about 70 full-time employees. The firm has three major divisions: landscape construction, landscape management, and irrigation system repair and installation.

The company began by constructing landscapes. Today they provide a complete service to their customers, from the first design concept to the management of the finished product. This vertical integration of the market has meant continued growth even after the building boom ended in Houston.

By considering landscaping to be a long-term project that isn't finished after the actual construction is done, Racusin provided a base for the company to expand. "When you complete a project, you're really not finished with it, at least from our point of view," noted Racusin. "We want to care for the property from that point on. We want to protect the integrity of the design and we want the client to consistently have an aesthetically pleasing project. If he's a developer, we want him to be able to maintain his image and his curb appeal, because that's what his customers are buying."

Irrigation is the smallest division. Racusin considers the irrigation service to be a strong compliment to the landscape management service. He employs professional licensed irrigators that only work on irrigation repair and installation. Due to the hot, dry climate of the Houston area, he feels that irrigation is an integral part of any strong landscape management program. Without proper watering, even established landscapes are not going to



Displaying Environmental's 1985 T.A.L.C. Awards are (left to right) Environmental's Director of Operations, Paul V. Marks; Director of Landscape Management, Jeff Corcorran and President Charles C. Racusin.

flourish and thrive, and that holds doubly true for new plantings.

The spectacular growth of Houston in the 1970's has slowed in recent years. New landscape construction is down because new development is down. Compounding the problem is the fact that many things, including office space, shopping centers, apartments, were overbuilt. Houston is also very involved with the energy industries, and you only need to visit a gas pump to see the turmoil that the oil industry is going through today.

"There's been a lot of overdevelopment up to this point, and now we've had the most recent oil industry setback," notes Racusin. "So we're going through some times when new landscape developments are obviously not in as much demand. On the other hand, landscape management and irrigation has maintained its momentum and grown. I attribute it to the fact that there's a competitive market out there now. A property has to stand out in order for developers to sell or lease it quickly. So they're realizing that now more than ever a property's curb appeal can be enhanced and created through better landscape management. This can help tremendously in marketing their property."

"There's one project in Houston that I'm particularly proud of. We've won awards every time we've ever landscaped another building at Litton Industries Western Geophysical complex, and each one has been a beautiful project to work on. I think the honors we've received for our work are a tribute to the client as well. It shows that they care enough about their image and their employees to provide a handsome environment." The 1985 TALC Grand Award for landscape construction was presented to Environmental for its work at Litton's newest building.

"It's always a pleasure and it brings a lot of satisfaction and pride to myself and all of our employees when we win awards for doing things well. I think it's a by-product of having the discipline, enthusiasm and the drive to always excel at what you do and always strive to deliver the best end product. I believe that and I know that it's been shared throughout our organization."

Honors and awards can provide a welcome boost to a company's reputation, but Racusin is well aware that prizes are only a minor part of a successful organization. "There are many firms that are capable of doing award-winning work. I think consistency is what a company needs for real success," he says.

Racusin maintains an office with the

company controller, the director of operations, and his administrative assistant. Operations are located in another area where all the personnel report on a daily basis. He feels that this allows his managers to be more independent. They are able to make their decisions and carry out their duties without the boss looking over their shoulder.

Although he believes that this type of management leads to better results, it isn't something that Racusin would recom-

mend to other operators. "I think that you have to have a certain inherent attitude to be able to deal with that situation," he says. "Most owners are more apt to be involved on a day-to-day basis, and they need to be. There was a time when I needed to be there on a daily basis, but today it's different. We've got very competent personnel."

One of the most difficult tasks that a maintenance company faces is maintaining the services of competent personnel.



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Racusin acknowledges the problem, but feels that it is one his company is handling well. "We offer good benefits, including a profit sharing plan," he says. "We also offer health and life insurance and many other benefits that I don't think most people in our industry offer. That helps to maintain some stability within your organization."

Racusin believes that most people appreciate the benefits and respect the firm for offering them. "You've got to be good to your people, and in turn, they're good to you," he notes.

"Attracting people is hard. We're looking all the time, and we're very selective. I think it's just a matter of a lot of time, a lot of hunting, and a lot of interviewing. Eventually, if you keep after it, you'll find some people that share the same goals and attitudes as you do."

Racusin believes that the landscape industry can benefit greatly through involvement in community and professional organizations. "We have long-standing memberships in the Chamber of Commerce, the Professional Grounds Management Association, the Texas Association of Landscape Contractors, the Texas Turfgrass Association and many others. We've always been very supportive of both community and professional organizations. We've always answered any calls when they've asked us to lend support. For example, several years ago in Houston there was an unfortunate situa-

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Racusin believes that most people appreciate the benefits and respect the firm for offering them. "You've got to be good to your people."

tion that existed on our freeway system. The state evidently didn't have enough funds to monitor the litter situation. We have a very dynamic city, and one that the local people are very proud of. But the freeway system was very unattractive and littered, and it detracted from the image we wanted to present. So a group of prestigious businesspeople decided to clean them up and get the city and state more involved in recognizing the difference that it could make. We participated in the beginning stages of that project, and we've always rallied to support whatever we've been called upon to do."

Environmental primarily covers the Houston area. They have done some consulting work in other parts of Texas, as well as Oklahoma, New Mexico and

(continued on page 75)

TEXAS STYLE

(continued from page 72)

Flórida.

Expansion into other markets isn't in their immediate future. Racusin believes that his ability to monitor quality would be harmed by too fast an expansion. "There is still plenty of potential business and clients in Houston who can benefit from our services and professionalism. We do have some substantial growth plans, but most of them will be on a local basis."

Looking to the future, Racusin remains optimistic about the potential of the industry. He feels that over the years he's been in the industry there's been a tremendous change in attitude and achievement among landscape companies. There has been a real movement toward higher quality of service and greater professionalism.

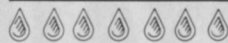
"There is still plenty of potential business and clients in Houston who can benefit from our services and professionalism." — Charles Racusin

This change has been noticed outside the industry. There is a greater demand now from developers and institutional accounts for quality landscaping. "If you think about it," he says, "you realize that the people who develop property need your service. They have to entice buyers when they're trying to market their property, and the quality of the landscaping presents the first impression. So they're finally becoming aware of the importance of landscaping and spending more money, and I believe they'll continue to spend even more in the years to come. They need to achieve and maintain curb appeal."

"This is a great industry! It's certainly been great to me. If a new company asked me what I thought were the key elements of success in this business, I would tell them the answer is twofold. First, always provide the highest quality end product possible, and second, deliver the best service and response to the needs of your client. You should try to be even better than he or she would expect. If you practice those two things, I don't see how you could do anything except be successful." —Amy Sheldon ■

The author is Circulation Manager of ALA magazine.

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RENOVATING HOME LAWNS

The labor-intensive nature of home lawn renovation has discouraged turf care professionals from taking on this lucrative sideline for some time now. However, many brave souls are now offering renovation to their customers.

Home lawn renovation falls into the high-dollar, long-man-hour segment of the turf care industry. Lawn renovation has traditionally been a service offered almost exclusively by landscapers. But the growing trend toward diversification in the residential lawn care industry has led more and more operators to consider home lawn renovation as an auxiliary service. Companies that bill themselves as complete property maintenance operations are expanding the time and effort necessary to offer lawn renovation.

BECHTEL'S GROUNDS MAINTENANCE.

Some companies, like Bechtel's Grounds Maintenance of Goshen, Indiana, are still experimenting with the lawn renovation concept. "We have been playing around with it and getting our feet wet for about three years," says Bechtel. "We don't have a slit seeder yet and that is something I would really like to have. We use Roundup® and then cut it as short as we can, thatch it at least twice, aerify it, clean it up and seed it and we have had pretty good luck."

The advent of glyphosate, trade-named Roundup, has really revolutionized the home lawn renovations. Before Roundup, renovations entailed rather intense mechanical cultivation of the turf area to turn under or remove the offensive turf cover and replace it with desirable turf cover. Roundup has allowed renovations to occur without actual mechanical cultivation of the soil.

"We really only make two trips," says Bechtel. "We have to spray Roundup and let it go the 14 days and then come in with the equipment and finish the job." Bechtel would like to have a slit seeder because he believes that machine would allow him to sidestep the twice-over dethatching process which is now a part of his renovation process. He currently



Dethatching is a step many professionals take following knock-down of the lawn with Roundup and close mowing. After the lawn is dethatched and raked off, the soil is then ready for seeding. The Ryan Ren-O-Thin is one dethatching machine on the market.

runs a dethatching machine over the lawn twice to cross-hatch it or create a diamond-shaped cut. "That would save a lot of time and would also save a lot of seed, but until we find out what we can charge the market and get our place established, you don't go out and pay \$5,000 for a machine until you know what you can do with it," reasons Bechtel.

Bechtel currently charges his renovation customers by the number of hours required to do the job. "Everything comes down to the hours, but you have got to make some kind of charge for the square foot," notes Bechtel. "If you say it is going to cost \$15 an hour, that is going to scare a customer. We try to figure what our labor costs are, how long it takes, and how many times you have to come back and touch up the next spring."

Luckily, Bechtel has found that his customers are generally patient with the amount of time required to turn a lawn around after it has essentially been killed and re-seeded. For the most part, his

renovation jobs are done to homeowners who have been his regular lawn maintenance customers in the past. In most cases, they have decided that their lawn doesn't look quite the way they would like and he has informed them that renovation is the only way to improve it.

"I think people realize that their lawns are as good as they are going to get," says Bechtel. "If they want a better lawn they are going to have to start with something better. Or they have quackgrass or some problem grass that you can't really get rid of with regular herbicides." He also likes doing renovation jobs for established customers because he knows he can trust them to water the newly-seeded lawn while he is away.

But Bechtel has had experience with the unrealistic expectations of customers and has realized the value of good consumer education. "We found that people were expecting the wrong thing or they were expecting their dandelions to die tomorrow. So we made a newsletter, that is a good way to tell them what to expect. That is also our way to plug our extra services. Consumer education has got to be number one all around."

ESTATE MAINTENANCE. Edward C. Wigfield, President of Estate Maintenance, Emmaus, Pennsylvania, also knows the value of consumer education. But he admits that customers generally expect their lawns to recover a little sooner than possible. One instance in particular stands out in Wigfield's memory.

"Last year we had a big grub problem and a gentleman was really hesitant to put any kind of insecticide down," recalls Wigfield. "He wanted to wait and see how bad it would get. He has an 80,000 square foot lawn and lost half of it. It was the end of September, and he wanted to

(continued on page 78)

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RENOVATION

(continued from page 76)

lost half of it. It was the end of September, and he wanted to have his lawn in by the end of the year. We got it in and got a good start. It will look good by summer this year, but sometimes they just expect a little too much."

Wigfield emphasizes the importance of sitting down with the customer and telling them what to expect from the service. "Generally it is just a matter of what you tell them. Be up-front with them and don't try to make promises you can't keep." Like Bechtel, Wigfield tries to limit his renovation jobs to his existing customers because he has established a rapport with them.

Like Buchtel, Wigfield also charges for renovation jobs by the hour, but if the job is big enough, with few obstacles, he will charge by the square yard.

Since mowing is one of Wigfield's staple services, renovation work can get in the way of production. "Depending on how wet of a winter we had, we can start working around here by the middle of March if not sooner," reasons Wigfield. "Our mowing season doesn't start until the middle of April. It gives me 30 days to get some renovation and other work in. Usually, I have one or two guys who just go around and do the auxiliary stuff, like weeding beds and fertilizing. If there is a return call, then one of those two guys will handle it."

AMERICAN LAWN CARE COMPANY. Unlike Wigfield and Bechtel, John Biebrach, President of American Lawn Care Company, Niles, Illinois, has found that customers in his market are not interested in renovation with Roundup followed by reseeding. "People don't seem to think that the renovation is worth the money spent," says Biebrach. "If people are going to do something with their lawn in this area, they are going to go with straight sodding. They seem to go for that or nothing at all. We get very few requests for top-seeding."

The fact that he is resodding rather than renovating makes for a rather labor-intensive operation, but Biebrach has worked out the details. "If it is an extensive job, I usually will put two or three key men on it," says Biebrach. "It is not a real problem to tie up a crew for a length of time. Renovation jobs are few and far between. We may do 15 to 20 a year. If I can devote one specialty crew to do the renovation work, some landscaping, and also the fertilization or weed killing, between the specialty items we offer in our programs and renovation, they are pretty much booked up solid for the year."

Since Biebrach lays sod, his customers have an instant lawn and they are happy with that, but he usually does a complete landscape make-over which includes shrub and flower bed work, and that takes time to turn around. "They see slow and steady progress," says Biebrach. "From day one they have a smile on their face. When you have to start hacking away at shrubbery that has been growing wild for 20 years, you want to show them how it is going to look afterwards, and they are going to have to accept it for awhile until the plant finally starts to blossom out again. They know that something that old is going to look bad for a little while."

Such entire landscape renovations are usually priced strictly by time and material. "That way," says Biebrach, "we are guaranteed we can do the job perfectly. I get into going out there with a group of guys and setting up."

CUSTOM LAWN AND LANDSCAPE. Reg Robertson, Owner of Custom Lawn and Landscape, Olathe, Kansas, has a two-pronged approach to lawn renovations. He offers his customers either simple over-seeding or what he calls a "new lawn" service. "With overseeding, we take a lawn which is thin and needs seed, and overseed that lawn," explains Robertson. "A 'new lawn' program consists of eliminating the existing grass and weeds with Roundup and then planting a new lawn, which we guarantee. We usually do it during the fall."

(continued on page 80)

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RENOVATION

(continued from page 78)

Robertson's pricing schedule is set up on a 1,000 square foot basis. "Our prices are not exactly firm," admits Robertson. "Our 'new lawn' program would cost \$149 per 1,000 square feet. For over-seeding, we usually charge \$49 per 1,000 square feet."

Like most professionals who offer renovation, Robertson has found that customer education is critical, but even so, customers tend to be impatient. "That is one of the biggest problems," says Robertson. "If you have enough time you can usually get any lawn to come up and fill in. In difficult situations, it can take as long as two years to get a lawn from scratch to where it is 100 percent filled in."

THE CUSTOM GROUNDSKEEPER. Brian H. Reynolds, President of The Custom Grounds Keeper in Bristol, Connecticut has found that renovations are a good way to "lock-in" an account. Wild violets are a real problem in Reynolds' area and it is often necessary to wipe out an entire lawn with Roundup and start over again.

"After the application of Roundup," explains Reynolds, "I let the lawn sit at least seven to 10 days. I have run into problems where we have gone in earlier, do the scheduling for weather and if we are trying to wipe out some tall fescue or something, we see some tall fescue come back. We have cut the rhizomes and they haven't taken the Roundup up yet and the rhizomes come back through. That becomes a little disappointing when you tell people you will clear the tall fescue out."

Reynolds isn't afraid to ask the customer to pitch in and do his part. "We try to get the customers to scalp the lawns with their mowers. If they don't, we'll cut the lawns very short. We do it a little different than Monsanto (the makers of Roundup) suggests, we broadcast the seed. If the thatch isn't too thick, let's say they have a 1/2-inch of thatch and we get through it fairly easy, we will broadcast the seed first and run power rakes over the yard. We cut it two ways, rake it off, give it a very light rolling, fertilize it, and apply lime if needed, depending on the soil test."

If all has gone well, Reynolds then gives the customer a second application of fertilizer in three to four weeks. "If we did the seeding in the spring, we'll touch up any thin areas in the fall, or if there are some corners that didn't come out, we will re-seed them within four to six weeks," notes Reynolds.

Reynolds figures that a spring renovation job should cost about twice as much as a fall renovation job because spring renovations involve more hassles. He generally tries to talk customers out of a spring renovation, put them on a maintenance schedule until late summer, and then do the renovation in the fall. "If people don't want it done in the fall, they want it done in the spring," explains Reynolds, "the job is going to be twice as expensive because, number one, we are going to be coming back for treatment of crabgrass. Number two, if the germination isn't good, we will be filling it in, so the price of a spring job reflects the extra check-backs."

Reynolds charges by the square foot, but his minimum price is \$200. "Spring renovation costs anywhere from 12 to 15 cents a square foot and fall renovation is between 6 and 8 cents a square foot."

Reynolds generally has no problem with upset customers following a renovation because he tells them and *shows them* what will happen. "I have a little portfolio of photos of previous renovation jobs so I can show them what the lawn looks like after application with Roundup. I get people so geared up that if the lawn doesn't start to turn brown within three to four days, they are calling me up, saying something isn't right, I want a brown lawn!" - Tim Weidner

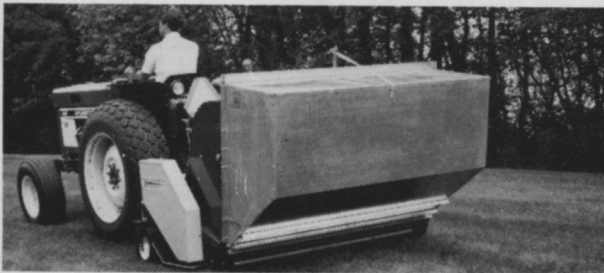
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INSURANCE

(continued from page 69)

some assurance that he will be able to place your renewal coverages."

There are several other steps lawn care professionals can take to help ease the burden of escalating insurance costs and protect themselves from catastrophic losses. First of all, when meeting with your insurance agent make sure you carefully review the coverages that are included in your policy. If you have questions concerning what something means, ask them! If you don't understand what's covered and what's not, you might end up getting burned later.

When talking with your insurance agent, educate him on the nature of your business and the safety precautions you implement to help prevent accidents. His lack of understanding of your operations will certainly cause concern. Try to alleviate any of his chemical fears.

The next step is to practice what you preach. Safety has always been a major concern in the lawn care industry, but it's even more critical today. "The sloppy guy is going to find himself in deep trouble," says Bill Fischer, President, Spring Green Lawn Care Corporation, Plainfield, Illinois. "We are absolutely boning up on safety in our company like we never have before."

Lawn care professionals must emphasize driver and product safety to all employees. In addition, both applicators and office personnel must be made aware of the existing insurance problems and be willing to help control losses.

Make sure your technicians know what to do and how to do it — that's the key to avoiding any mistakes which would draw further attention to the industry, says Max Graham. He suggests all lawn care employees become certified even if the state does not require it. "If they were each certified by the state," he explains, "they would at least have a minimum amount of training."

When it comes to securing a liability insurance policy you may have to opt for higher deductibles and less protection in terms of dollar amounts. "An insurance company is going to look at the policies with greater interest if the deductibles are up, because they get involved on a less frequent basis," says Jerry Faulring. "I think most of the claims that occur in this industry are in low dollar amounts. So if we can get those deductibles up, the insurance companies' involvement is going to be reduced and their liability is going to be reduced. Therefore, they're going to have a little better attitude toward us."

John Stephan agrees. "You must consider deductibles on your coverages which will reduce the insurance company's risk. Naturally, you must keep

these deductibles within your own economic framework, but be willing to accept some of the risk."

If you are unable to obtain coverage, such as pollution insurance, make sure you protect your assets as much as possible. For instance, if you are a sole proprietor or part of a partnership and you are not fully covered by insurance, it would be wise to incorporate your business. From a legal perspective, a corporation is a separate entity from its owner(s). By incorporating your company, you will shield your personal assets by limiting your liabilities to corporate assets. In other words, if you're sued you may lose the business, but you won't lose your house, your car, the shirt off your back, etc.

Another way to limit your liability is to consider a change in your mode of operations. Dave Dietz, Program Director for the Pesticide Public Policy Foundation (3PF), offers this advice: "A lot of companies today go out and buy their own trucks, buy their own spray tanks, buy their own spray equipment, build a building and own it. To shield themselves from liability in a corporate structure, they can go to a leasing situation whereby they lease from third parties that don't have any connection with the business. That way," he says, "if you get sued you aren't sitting there losing your whole world."

It's doubtful that any of you envisioned having to plan such tactics to protect your business when you entered the lawn care industry. "When you went into business, you expected insurance to be a rather simple area for you or your treasurer or bookkeeper to look after," explains John Stephan. "It was a question of contacting an agent, discussing your insurance needs with him, and purchasing the necessary coverage to protect your property and your corporate and personal net worth in the event some incident occurred which could possibly invade your financial position. Quite simple."

Well, it isn't so simple anymore, but it doesn't mean the end of your business either. Most lawn care operators seem to be finding general liability insurance; and although it's costing dearly, lawn care companies aren't going under because they can't afford coverage. The situation is making lawn care businessmen more creative and flexible in their approach to the insurance issue, and in many cases, forcing them to make some concessions for insurance protection, such as taking higher deductibles.

Greater concern is focused on the inability to obtain pollution coverage. PLCCA and other industry-related organizations have presented the problem to government officials, and they continue

to look for solutions. Three different insurance brokers are seeking to establish a new group liability policy that would include pollution coverage for PLCAA, but the search continues. If your pollution insurance is cancelled and there's no opportunity to buy back restricted coverage, consider banding together with other local lawn care firms to fund your own insurance company. If this is a feasible alternative in your market area, make sure you consult an attorney before starting your endeavors.

If that is not a possibility, don't give up hope. Try calling your state insurance commissioner to see if any referral program has been established to match businesses with insurance underwriters. For example, the state Department of Insurance in Ohio has set up a Market Assistance Program, which operates somewhat like a dating service. If someone cannot find insurance, they can file an application with the Department of Insurance. The state then tries to find an insurance company that will write the uninsured's risk. Applications are available from all insurance agents in the state.

It wouldn't hurt for you to call or write your state congressman or senator, either. Your public officials are there to represent you and your problems. "There's a ground swell taking place right now at state levels regarding insurance," according to Bill Fischer of Spring Green Lawn Care. "Our representatives and senators from Illinois are going around the state and holding hearings. We know they're doing it over in Iowa and down in Georgia, too, because businessmen are just screaming bloody murder. The problem is going to be resolved."

Although optimistic, Fischer remains realistic, too. "I don't think we'll ever go back to the good 'ole days where we had complete coverage at very inexpensive rates," he explains. But he believes the current insurance climate will cool down in a couple of years.

PLCAA attorney Richard I. Lehr of Sirote, Permutt, Friend, Friedman, Held and Apolinsky, shares Fischer's outlook. "The crisis is not forever, but it's not temporary either," he says. "It took a number of years for the insurance companies to get into the problem. I think it's certainly going to take a few years for them to get out of it. It's almost like looking at the federal deficit — cutting it is going to take a few years to do."

Of course, society's trends must change, too. Litigation cannot remain as fashionable as it is today. Let's hope our country's "surge to sue" is like most other fads — soon just a passing fancy. — Vivian Rose ■

The author is Assistant Editor of ALA magazine.

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PRODUCTS

Landoll Corporation announces the introduction of the Landoll one-ton Centerfold which offers quick and easy ground loading of all your lawn and garden equipment. The design of this one-ton unit allows for a 10-degree ground-load angle, which is the lowest in the industry. A 7-foot, 5-inch-wide by 17-foot-long polished aluminum bed provides adequate deck space for multiple unit loads. The extruded aluminum bed features heat-treated extrusions with vertical cross-members throughout.

The 5-inch-deep side rails are a solid panel and provide a complete 7-foot, 5-inch load clearance width. A sophisticated system of double-acting hydraulic cylinders provides a totally smooth operation when loading and unloading. A heavy-duty hydraulic winch is available on this compact, mobile unit. This unit will make your business an easier one through professional and efficient handling of the many different types of loads necessary in the lawn and garden industry.

Write 153 on reader card

A March opening is scheduled for the **LESCO, Inc.** Irrigation Center in Rocky River, Ohio. The new center is designed to service irrigation contractors, landscapers and homeowners. According to Irrigation Manager Bob Hobar, "the LESCO Irrigation Center will be organized as a self-serve store. We will sell all types of irrigation equipment, ranging from garden hose to hand-held spray nozzles to components necessary to install a complete automatic irrigation system." In addition to selling irrigation equipment and supplies, the center will also rent in-



stallation equipment, such as pipe pullers. A professional design department will be available to assist in irrigation system designs.

The Irrigation Center will be located adjacent to the company's corporate headquarters in Rocky River. The entrance for the center will be 700 Linda Street; hours will be 7:30 a.m. to 5 p.m., Monday through Friday, and 7:30 a.m. to noon on Saturday.

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Band-It,[®] an easily-applied strip that forms a flexible rubber band by adhering to itself and nothing else, provides long-term support for maturing nursery plants, while significantly reducing nursery costs. Available from **Dickinson Nursery**, the long-lasting plant band is

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To use, simply wrap the plant band around the plant stem and support stake, stretching only enough to hold the plant in place. Press the two strip ends together and Band-It immediately begins to cure, adhering to itself and forming a con-

(continued on page 86)

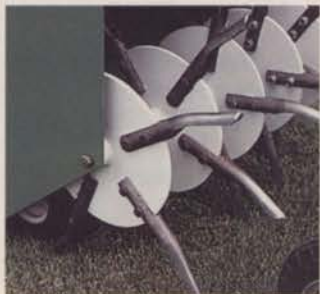




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PRODUCTS

(continued from page 84)

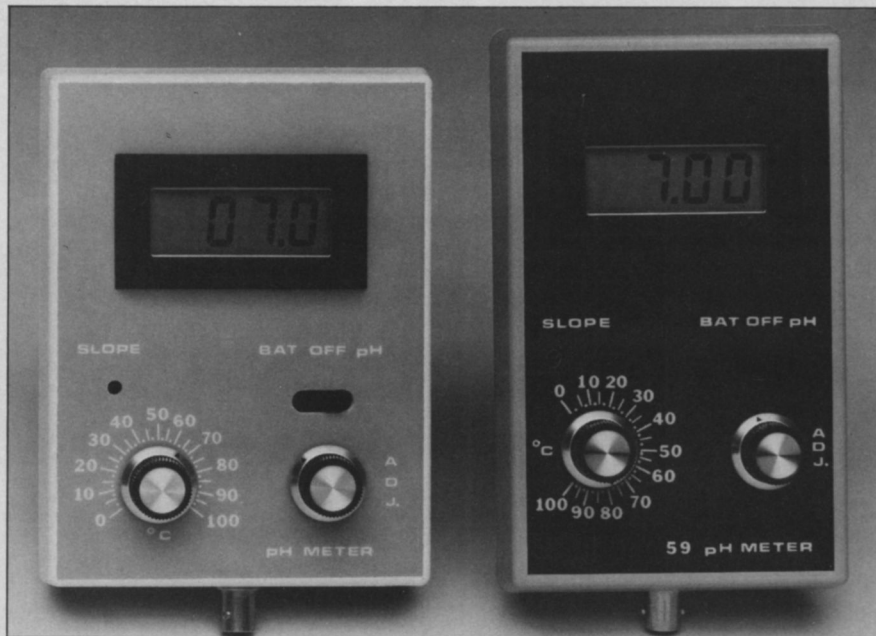
tinuous, flexible rubber band. Over the life of the plant, the band will stretch (as much as 300 percent), growing with the plant to maintain a long, snug fit.

Write 155 on reader card

Engineered Systems and Designs announces the introduction of two new portable, digital pH meters, models 57 and 59. These models are designed for convenience and accuracy in the field or laboratory. The model 57 reads to an accuracy of .05 pH and displays to .1 pH. The model 59 reads to an accuracy of .01 pH and displays the same. Both meters read the entire pH range of 0 to 14. They also feature manual temperature compensation from 0 to 100 degrees centigrade, a standardize control, an externally-accessible slope control, a BNC connector, and an on/off battery check switch.

Both instruments have all solid-state circuitry and are powered by a single 9-volt battery. Both models come in a foam-lined carrying case.

Write 157 on reader card



Dr. Jerry Pepin, Director of Research for Pickseed West, Inc., reports that Plant Variety Protection Certificate Number 8500214 was issued for Spartan hard fescue. Spartan is an advanced generation

synthetic cultivar selected from the progenies of 142 parent clones. It was developed using a population improvement program initiated in 1968 to im-

(continued on page 88)

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PRODUCTS

(continued from page 86)

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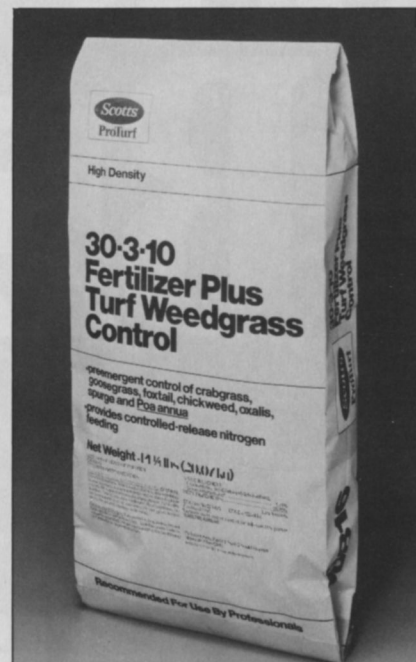
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ryegrass, fine fescue, tall fescue, Bermudagrass, St. Augustinegrass, and bahiagrass. An application in the spring controls weeds sprouting at that time; control of goosegrass requires a second application. To prevent fall germination of *Poa annua* and chickweed, the product should be applied to dry foliage at the recommended rate in mid-August to mid-October; repeat treatment for yearly control.

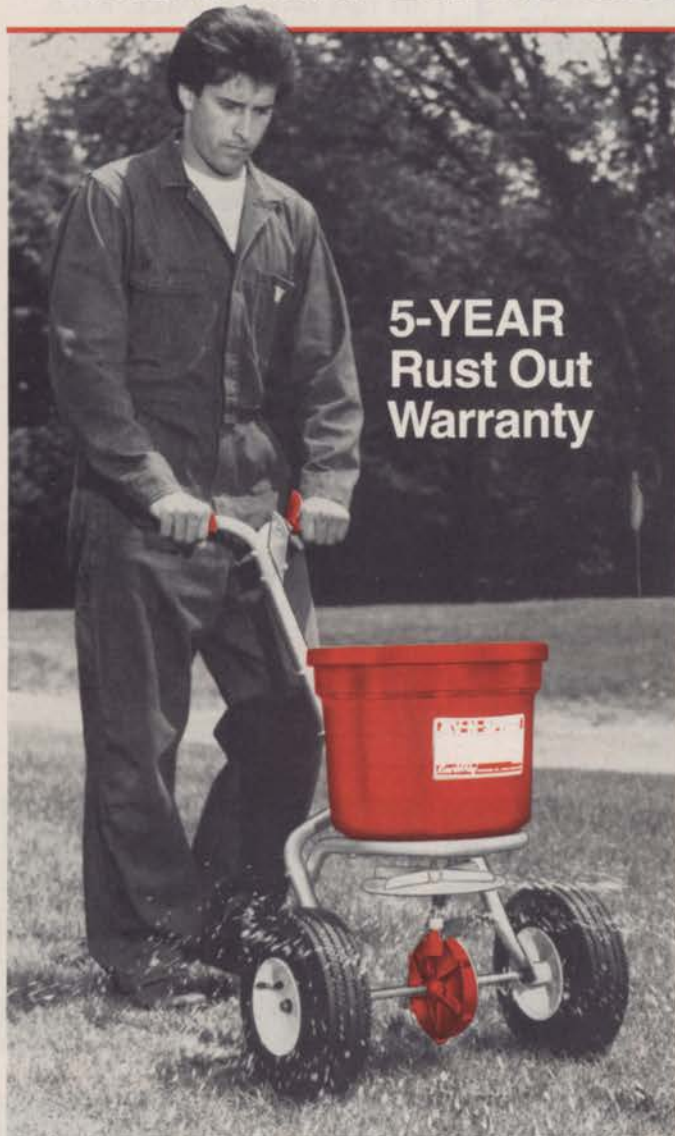
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AD INDEX

Agro-Chem	65	Micro Trac	72
The Andersons	5,8,9	Middlesworth	90
Bluebird International	78	Mobay Chemical Corp.	2
Broyhill	31	Nice 'N Green Plant Foods ..	80
Bush and Cook	39	Nor-Am Chemical Co. 24,25,77	
Ciba-Geigy Corp.	6,7,66,67	Olathe Manufacturing	22
Classen Manufacturing	31	PLCAA	15
Cushman/Ryan Turf Equip ...	13	Practical Solutions	88
Dow Chemical	37,38,40,41	Professional Turf Equip. ...	14,30
Earthway	89	RGB Labs, Inc.	83
Feldmann	72	Rhone-Poulenc	54,55
Fortunate Enterprises	26	Ringer	28
Franko Industries	33	Salsco, Inc.	11
Fumigation Service & Supply	33	SDS Biotech	16,17
GNC Pump	28	Snapper	23
Gravelly	27	Spring Valley	79
Great Northern	91	Stauffer Chemical	46-49,87
Green Pro	18	Strong Enterprises	32
Imler Industries, Inc.	26	Terracare Products Co.	32
Lawn Masters	71	Tuflex	10
LESCO	85,92	United Ag	21,81
Liqui-Land	39,75	Waller	88
Mathews	30		

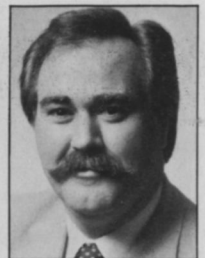
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