

Jared Arminger and his mother said chemical safeguards needed to protect the public.

They say they're victims

WASHINGTON D.C.-They claim to be victims of the irresponsible use of lawn care

They told their stories to a U.S. senate subcommittee

Christina Locek, River Grove, IL, said she was sprayed in the face by a non-English speaking lawn applicator near her Illinois home. Since then she's been so ill she's been unable to perform as a concert pianist. She says pre-notification is a joke. LCOs don't use it.

Katherine Shannon, a stu-

dent at Colorado State University, Boulder, CO, said inadvertant exposures cause her to miss classes.

Thomas Latimer, Dallas, described how a lawn chemical he applied to his yard reacted in his body with a presription drug he needed. It destroyed his health.

Garnering the most attention at the hearing, however, was grade-schooler Jared Arminger who claimed to be a virtual prisoner in his Baltimore-area home because of chemical poisoning.

More PHOTOS on page 6

N CARE INI

Serving the needs of the professional lawn care operator

JUNE 1991

VOLUME 15 NUMBER 6

PLCAA: give us 'reasonable' regulation

BY RON HALL

WASHINGTON, D.C.-The Professional Lawn Care Association of America brought a message of compromise here

Its forum was the senate subcommittee hearing on the safety of professional lawn care and pest control.

"PLCAA endorses the concept of reasonable and respon-

sible national S. 849, proposed lawn care bill, in total on page vices industry," Ann

McClure, executive vice president of PLCAA, told the standing-room-only audience in a room in the Dirksen Senate Office Building.

She spoke directly to U.S. Senators John Warner (R-VA), Harry Reid (D-Utah), and Joseph Lieberman (D-CT), members of the Subcommittee on Toxic Substances.

She spoke after several witnesses testified bitterly about the lawn care industry and its disregard for customer safety. These witnesses supported Senator Lieberman's proposed bill S. 849 that calls for

PLCAA Executive VP Ann McClure addressed senate subcommittee. Thomas Delaney, PLCAA government affairs, provided support.

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Supreme Court decision is expected soon

WASHINGTON D.C.-Too close to call.

Industry representatives sitting through the hour-long oral arguments of the case Mortier v. Town of Casey wouldn't speculate on a ruling by the U.S. Supreme Court.

The ruling is expected sometime this month.

The outcome of the casethe last heard on the last day of

the session by the justicescould have a profound affect on professional pesticide users, particularly LCOs.

> "We've had a real hard time See COURT on page 12

Dependable, economical

Crabgrass

Plus the broadleaves

Read how three turf professionals with totally different situations are



using Trimec® Plus Herbicide to help them cope with nutsedge, grassy and broadleaf weeds in today's environmental age.

Everett Mealman, President PBI/Gordon Corporation

I f you think that controlling yellow nutsedge and goosegrass in turf is a tough assignment, you should have Tom Hilferty's challenge:

Hilferty is superintendent of the Tatum Ridge Golf Links in Sarosota, Florida and he has to control these pests with his hands tied behind his back. "At least that's the way it feels sometimes," laughs Hilferty.

Tatum Ridge is a semi-private course that also caters to affluent, discerning, fee-paying guests. The layout must be immaculate and the environmental constraints are monumental.

The course comprises 111 acres of bermuda turf, 30 acres of water, 54 acres of protected wetlands and is a refuge for wildlife and endangered species. Furthermore, it is only seven miles from the gulf shore, so excessive winds and high temperatures mean that there are very few days when suitable spraying conditions exist.

"Nutsedge and goosegrass and broadleaves love those protected wetlands," says Hilferty, "so we're going to have them in our turf and, of course, that's unacceptable."

Hilferty goes on to say that he watches for that special day when the wind is down and the weeds are coming up, and it's then that he delivers his one and only wall-to-wall broadcast spray treatment of the year — a tank-mix of Trimec Plus and Ferromec® AC Liquid Sprayable Iron. "If you can only do it once, you better do it right the first time," insists Hilferty.

If any nutsedge or broadleaves ever show up after the broadcast — and they do show up — Hilferty goes after them with his trusty spot sprayer, loaded with Trimec Plus.

Does the program work? "Count the golfers and take an inventory of the wildlife," challenges Hilferty.

#1 for crabgrass control

If Trimec Plus is now the number one post-emerge for economical control of nutsedge and goosegrass, it is also number one for crabgrass. Just ask Paul Branon, who owns two Lawn Doctor franchises in the Acton, Mass. area, an upscale suburb of Boston.

"Crabgrass used to be our number one problem in bluegrass," says Branon, "but since we discovered Trimec Plus several years ago, crabgrass has become our favorite grassy weed. Our ability to control it and to guarantee a crabgrass-free lawn has been a factor in our growth."

Branon's customer base consists primarily of affluent, environmentallyaware homeowners who want immaculate lawns — no crabgrass, and a minimum usage of chemical.

"Our goal is to create turf that is so thick and healthy there is little room for weeds to germinate or disease to get established," says Branon. "Consequently, we want to treat those lawns at least five times a year to properly space out the feeding and monitor for disease. We also need the revenue from five treatments to generate enough cash flow to maintain our level of service."

Branon goes on to say that before he discovered Trimec Plus several years ago, he was limited in the number of customers he could serve because his first treatment consisted of fertilizer, Trimec Classic, and a pre-emerge herbicide. Consequently, it was confined to the window after the broadleaves start to grow and before the crabgrass germinates.

So if the crabgrass germinated before we finished our first round," says Branon, "we simply lost the treatment because we had never found a postemerge for crabgrass that was economical enough and sufficiently reliable to justify our no-crabgrass guarantee. Today, if the crabgrass is there before we complete our first round, we simply change the postemergent herbicide to Trimec Plus. With one gallon covering an entire acre, the price is right."

How well does the Trimec Plus postemerge control of crabgrass work? There is no room in Branon's office for any more Performance Evaluation trophies from Lawn Doctor, and these trophies not only reflect the quality of his work, but also the profitability of his franchise.

Ideal spot treatment

When you read about the experiences of turf professionals like Tom Hilferty and Paul Branon, don't you have an urgent desire to give Trimec Plus a trial? Obviously, most of your peers do, because Trimec Plus is surely the most exciting and fastest-growing herbicide to enter the field in many years.

PAR 4
• 381

TAUM RIDGE

Tom Hilferty, Supt. of Tatum Ridge Golf Links in Sarosota, Florida has extreme environmental problems and is restricted to one broadcast post-emerge spray per year to get goosegrass, nutsedge and broadleaves. Trimec Plus has proven to be the answer.

post-emerge control

Nutsedge

in ornamental turf



Jim Deiman of Metro Airports Commission, Minneapolis-St. Paul, bought a jug of Trimec Plus last year so he could order an SP1E back pack sprayer for only \$49.95. Today he insists that the back pack sprayer loaded with Trimec Plus is the ideal combination for spotspraying crabgrass, nutsedge and broadleaf weeds.



Paul Branon, a Lawn Doctor franchisee in Acton, Mass., used to lose business when crabgrass germinated before he was able to put down his pre-emerge. Today, he couldn't care less when crabgrass germinates because now he knows he can get it economically and dependably with post-emerge Trimec Plus.

"You can count me as one of those who wanted to test Trimec Plus," says Jim Deiman. "But I'll admit my yen for a back pack sprayer was every bit as urgent as my curiosity about Trimec Plus."

Deiman is in field maintenance for the Metro Airports Commission (MAC), based at Minneapolis-St. Paul International Airport. The MAC is not only responsible for the restricted 3,200 acres in Minneapolis, but also the six reliever airports in the seven-county metro area.

The landscape maintenance in the highly visible non-restricted areas which comprise the public entryways to the airports is handled by subcontractors appointed by MAC.

"We've been using a broadcast of Classic Trimec in our low-visibility restricted areas for a number of years," says Deiman, "but we've never been especially interested in Trimec Plus because we're not too concerned about crabgrass in low-visibility turf.

"But my home lawn is different," continues Deiman. "Crabgrass is a major problem for me."

Needless to say, Jim Deiman is one of the thousands of landscapers who has bought a jug of Trimec Plus and sent in for a back pack sprayer. So what does Deiman have to say about it now?

"We are very definitely going to recommend Trimec Plus and the back pack sprayer to our subcontractors who maintain the highly-visible turf in front of our airports," says Deiman. "Nothing makes as much sense in this environmental age as spot-spraying ornamental turf with Trimec Plus.

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"Politicians will follow opinions widely held by their constituents. On the other hand I've never seen a politician run from a fact. If there are facts, they would always rather face the issue with facts and not opinions. But opinion drives politics in the absence of fact." So said turfgrass expert Dr. Tom Watschke, Penn State, at the recent Ohio Pesticide Applicators for Responsible Regulation (OPARR) meeting.

The 1990 Georgia Turfgrass Conference attracted 1,229 attendees, up six percent over 1989. About 165 of the attendees were LCOs. The 1991 conference is set for Dec. 9-11.

Michigan LCOs should read an excellent article about that state's proposals concerning storing large quantities of pesticides or fertilizers. Tim Doppel, president Atwood LawnCare, Inc., wrote the piece in the March issue of The Landsculptor magazine, Southfield, MI.

In January 1993, all yard
waste will be banned from
Wisconsin Landfills. On May 4
Milwaukee held its second annual
Yardfest to educate homeowners
about taking care of their lawns
and disposing of yard wastes.

LCOs should seek to participate in these types of events.

The Federal Trade Commission

will hold public hearings to examine environmental advertising issues. The Chemical Specialities Manufacturers Association has been pushing the FTC to take the lead on this issue because it doesn't want every state to make up its own rules about what it will allow and what it won't in regards to such terms as "environmentally safe" or "ozone friendly," etc.

American Association of Nurserymen Convention is July 11-15 at Disney World, Orlando. LCI

OFTANOL USERS KNOW THE BEST WAY TO OUTSMART GRUBS IS WITH A LITTLE EXTRA HOMEWORK.

PERCENTAGE OF

CONTROL

Sevin Diazinon Insecticide Insecticide

SOURCE: 18 trials conducted by Mobay in 1990.

OFTANOL

Getting rid of grubs that attack your customers' lawns can be pretty tricky sometimes. Unfortunately, simply treating against these destructive pests doesn't always guarantee success.

But many lawn care operators have learned that all it takes to outsmart grubs is a little preparation—finding the right product and the right time of year for application. The product is

OFTANOL® Insecticide. Studies show that time after time, OFTANOL provides consistent grub control. And delivers superior control over widely used products such as Sevin® and Diazinon Insecticides.

The right time to apply it? That
will vary from region to
region. But a good
rule of thumb is

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to treat with OFTANOL when grubs are at the surface. An easy way to check is by just pulling back a bit of sod and looking for infestation. Or call your local Extension office to determine peak periods of grub

feeding in your area.

These are, of course, just the basics of effective grub control. If you'd like to learn more about OFTANOL and its proper usage, contact your local Mobay representative. Or just give us a call at (800) 842-8020. One of our trained pro-

fessionals will be standing by to answer your questions. Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120.

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Group Editor
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Graphic Design
MARILYN COPP
Senior Circulation Clerk
Gall PARENTEAU

BUSINESS STAFF

Midwest Office: JON MIDUCKI (216) 826-2855 Publisher

ANNE LANGHENRY
Regional Sales Manager
(216) 891-2739
7500 Old Oak Blvd.
Cleveland, Oh 44130
(216) 891-2739
FAX (216) 891-2675

DICK GORE (404) 233-1817 FAX (404) 261-7022 3475 Lenox Road, N.E., Ste. 665 Atlanta, GA 30326

Western Office: **BOB MIEROW** (206) 783-0549 FAX (206) 784-5545 1515 N.W. 51 Street Seattle, WA 98107

DAWN NILSEN (218) 723-9349 1 E. First St., Duluth, MN 55802 Please send advertising materials to: LAWN CARE INDUSTRY 120 W. Second St. Duluth, MN 55802 218-723-9465

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♥BPA

We can help solve solid waste mess

BY RON HALL editor

Within two years Ohio landfills will be off limits to landscape waste. By that time few landfills anywhere in the United States will accept them.

If they do the costs are likely to be steep.

It's already starting in my small corner of Ohio. When the local landfill raised the rates on landscape wastes my small city said it couldn't afford to dispose of piles of weeds and grass clippings anymore.

My wife wasn't convinced.

She dragged a bushel basket of weeds, twigs and leaves out to the curb. It sat there a week, seven days of warm rain and sunshine.

The pile coalesced into a brown blob.

Editor: "Dear, the city isn't going to pick up this stuff anymore. They say it's costing too much to take to the landfill."

Editor's wife: "But they took the big limbs. They shredded them in their shredder thing. Just leave the weeds there. They'll pick them up.

Editor: "But it's killing the grass. We're going to have a big bare spot."

Editor's wife: "So, what do you want me to do?"

Editor (scratching his head): "We...uhm..."

We've got a small problem. Small yard.

The green industry has a BIG problem. It's a big industry, a multi-billion dollar industry.

Actually we've several problems in the solid waste arena, and some we probably haven't even thought about yet. The most immediate is probably grass clippings even though some of us don't mow.

If you've picked up a copy of LCI anytime in 1990 or 1991 you've likely read about the Professional Lawn Care Association of America's Grasscycling campaign. (Read Lynn Novelli's story about Grasscycling in this issue.)

But Grasscycling obviously isn't the total answer. It's just one partial solution to a bigger problem.

New equipment, like the new mulching mowers, is another step in the right direction.

Chemistry may help too. Turf growth regulators have been around for a decade or so. Maybe they're ready to be taken to home lawns.

With all of this, lawn care pros are still



going to be faced with the problem of clippings. The nature of healthy grass is, after all, to grow, repair and regenerate itself. And many homeowners aren't going to want clippings left on their lawns, particularly if you haven't been able to mow that property for a couple of days after the lost soft, drenching rain.

You don't offer mowing?
You will have some tough decisions to make too.

LCOs are telling me that some of their customers are

wondering aloud if, perhaps, LCOs aren't part of the problem. If, maybe, professional fertilizations aren't adding to the clipping problem.

The message we should be giving our customers is that we're aware of the problem and we can help solve it.

We fertilize lawns to make them healthy and attractive. We apply the correct types and amounts of nutrients to maintain turfgrass health without generating unnecessary leaf growth. That's why our fall fertilizations, after the grass blades have quit growing but the roots are still active, is so beneficial to the lawns.

We're going to have to have the right answers—maybe even get these answers to our customers before they ask. LCI

Ron Hell



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This quality nitrogen source offers...

- · Quick greenup
- Controlled-release nitrogen feeding for up to 16 weeks
- Both hydrolysis and microbial action not dependent on coating or particle size for release
- · Minimal leaching and volatilization
- Consistent release of all nitrogen in one growing season, under all conditions, even during cool soil temperature situations
- · Low salt and low burning potentials
- 40-0-0 guaranteed analysis



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COVER STORY



U.S. Senators Harry Reid (D-NV), left, and Joseph Lieberman (D-CT) skeptical of LCOs' efforts.

Our harshest critics

Deja vu. All over again. (Apologies to Yogi Berra or whoever said it first.)

The senate subcommittee hearings on lawn care chemicals May 9 were a replay of 1990. With a vengance.

There were more people

this go around—at least there seemed like more, but maybe that was because the hearing room was about half the size it was last year. More media, both the sound bite types and the pencil pushers. Definitely more press.

By 9:30 a.m. on that warm drizzly Thursday in Washington D.C. there was hardly enough space left in Room 468 of the Dirksen Senate Office Building to squeeze in another solumn face.

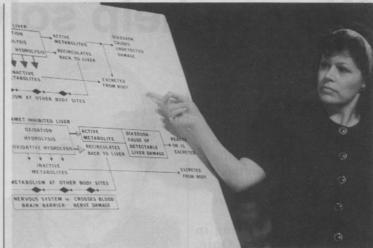
There were few smiles. LCI



Press row was filled to capacity, and the media had plenty to keep them busy.



Dr. Janette Sherman, Alexandria, VA, linked pesticides to illness and plugged her book. Looking on Robert Abrams, Attorney General of the State of New York, a critic of LCO advertising.



Thomas Latimer's testimony alleging pesticide poisoning included detailed charts and chemical diagrams.



Longtime industry critic Jay Feldman attacked EPA.



Thomas Latimer says health was ruined by chemicals.



Christina Locek, River Grove, IL says her careers as a pianist and skater died when an applicator sprayed chemicals on her.



College student Katherine Shannon of Boulder, CO, claims she often has to miss school because of exposures to pesticides.

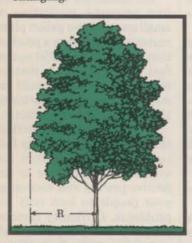
Measuring and pricing tree and shrub services

BY PHIL CHRISTIAN

Have you noticed the growing importance of non-turf areas to your customers?

If not, take a closer look because customers are increasingly dissatisfied with a landscape with excellent turf and average everything else. That's why some enterprising LCOs are helping clients upgrade their non-turf areas including tree, shrub, and flower beds.

Non-turf areas have always been the most expensive part of the landscape and may represent the customer's largest uninsured asset. Even so, maintenance of these areas has lagged behind turf. This is changing.



RADIUS	CHART
RADIUS	CANOPY
0.1	=3
2	=12
3	=28
4	=60
5	=78
6	=113
7	=154
8	=201
9	=254
10	=314
11	=380
12	=452
13	=531
14	=616
15	=707
16	=804
17	=908
18	=1018
19	=1134
20	=1257
21	=1385
22	=1520
23	=1662
24	=1809
25	=1963
26	=2124
27	=2290
28	=2463
29	=2642
30	=2827

How do you begin? One of the first steps is to develop a solid measuring and pricing procedure.

Traditionally tree and shrub services consist of one or two rounds of fertilization and three or four rounds of insect and disease applications. Let's save pruning, mulch, weed control, and other "total bed maintenance" activities for another time.

The theory of measuring and pricing of non-turf areas is almost identical to the theory of tree and shrub measurement and pricing.

Accurate measurements

Trees and shrubs are measured in canopy square feet. The canopy area is defined as the area inside the drip line of the tree or shrub. Canopy area is also referred to as the footprint or shaded area if the plant is looked at from a plan view.

Most tree canopy areas are round, and the area can easily be calculated by measuring the radius, or R factor, the distance from the outside of the canopy to the center of the trunk.

By using the canopy radius chart you can calculate the square footage quickly and accurately without the use of formulas.

Shrubs are easy to measure because you can look down on them to determine the exact size of the canopy. You may measure a typical shrub and multiply that number by all shrubs similar in size to establish the total area.

For shrubs planted close together, measure the outline of the bed. Length times width equals total area in square feet.

Hedges, or hedge rows, may be easily measured by multiplying the entire length of the hedge by the average width. This will equal total square feet.

Measure plants and trees in containers as though they're not in containers. A tree in an island, hanging over a paved area, is also measured as though it were in the landscape without the paved area.

There are some exceptions. We don't measure or treat mature trees for insect and disease control or fertilize them unless there is a visible lifethreatening problem. We don't treat any trees over 25 feet in height unless there's a special problem.

Take-Off Sheet

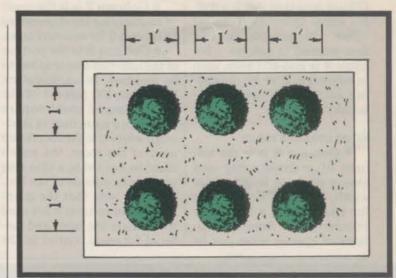
The Quantity Take-off Sheet helps you measure and price. (Page 11).

First, fill in the top of the page including the date measured and the person measuring the property. The description of the area can be brief and abbreviated, such as front yard, rear yard, side yard, area adjacent to drainage ditch, etc.

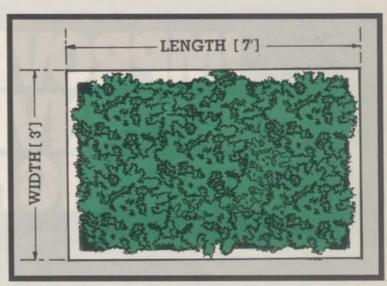
The object is to identify the areas so you can modify the program during negotiation with the property manager.

The design of the sheet allows the measurer to record all dimensions. Begin by entering the dimension (length times width, ½ length times width, or r) in column 6 of the Take-off Sheet.

If you're working with turf area, fill in the appropriate space on the left side of the



Shrubs close together can be measured outside of bed.



Typical shrub is 1 foot by 1 foot or 1 square foot times six shrubs.

sheet. If it's a non-turf area, fill in the columns to the right of column 6.

Write the area description or special notes on the lines to the left or the right of the length times width entry in column 6.

The non-turf area is the remaining area of the softscape and includes tree and shrub beds, flower beds, ground

cover beds, and mulch only areas.

There could also be some large bare areas under trees or in the shaded corners of the landscape.

Wildscape areas aren't usually measured unless they require special maintenance. In this case, they should be measured and used on a separate

See PRICE on page 8

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PRICE

from page 7

Quantity Take-off Sheet. (Please note that this is a double entry Quantity Take-off Sheet. The quantity must be first entered in column 7 because it is non-turf area, then in column 8, 9, or 10, depending on what is being measured.)

What columns mean

• Column 6 is is the column of original entry and always contains length times width, ½ length times width for triangles, or a radius for circular areas. Area descriptions or special notes can be

written on the right-hand side of column 6 for turf areas, and on the left-hand side of column 6 for non-turf areas.

 Column 7 is is the result of multiplying the dimensions in column 6 for non-turf areas.

• Column 8 is the portion of the non-turf area that has to be mulched. In an immature landscape, 100 percent of the area measured could require mulch. In a more mature landscape where the shrubs take up most of the room, the mulch could be limited to a thin ring around the outside of the bed.

Please note that the quantities from column 8 are used to estimate the labor and material for weed control in the

heds.

• Column 9 is the canopy area in square feet to be pruned. This includes shrubs, trees, and groundcover. Please note that the pruning area in column 9 will also be used to calculate the labor and material for fertilization, insect, and disease control.

• Column 10 is for other non-turf areas, or special activities in the non-turf area.

Why square footage?

Why does canopy square footage work for estimating purposes? In short, it's proportionate to the time required to serve that area. This short answer works for the fertilization rounds because fertilization is only applied to the canopy area.

But what about insect and disease rounds? The canopy area, or footprint, does not take into account the height of the plant. The height, up to twenty feet, must have some effect on the time required to treat it. It does, of course, but not as much as you might think.

In the 1970s, the early days of tree and shrub service, we sprayed 100 percent of the plant material each round. We established production rate in square feet per minute. Years later the industry adopted the policy of inspecting each plant and applying insect and disease control chemicals only as needed.

This didn't effect production rates because it took the same amount of time for a "look and see" selective application as it took for a blanket application of the entire canopy area.

A time and motion study would confirm that the amount of time spent with the trigger down on the spray gun is relatively unimportant compared to the time required to get to the property, take the hose off the reel, drag it around the property, and inspect the plant material.

The only time height is relevant to time is during the actual application, and that's a small percentage of total time spent.

The low, almost insignificant, cost of material also contributes to the lack of importance of plant height. When exceptions to the general rules occur, either in immature plant material or very mature, tall, thick plant material, the measurer/estimator can take these exceptions into account by changing the production rates to fit the exact situation.

Tree/shrub services

The tree and shrub pricing model, or formula should be familiar to most readers. It's very similar to the turf pricing model.

The formula may be used to price any activity we ask our crews to perform.

Look at line 7. The measured canopy area is 1,400 square feet, and the production factor is 200 square feet per minute. The production factor must come from your experience and field tests. It should fit the conditions of the specific property.

An immature 1,400 square foot property, consisting of small one and two gallon plant material, could have a production factor of up to 250 square feet per minute. A mature overgrown property could reduce the production factor to 150 square feet per minute.

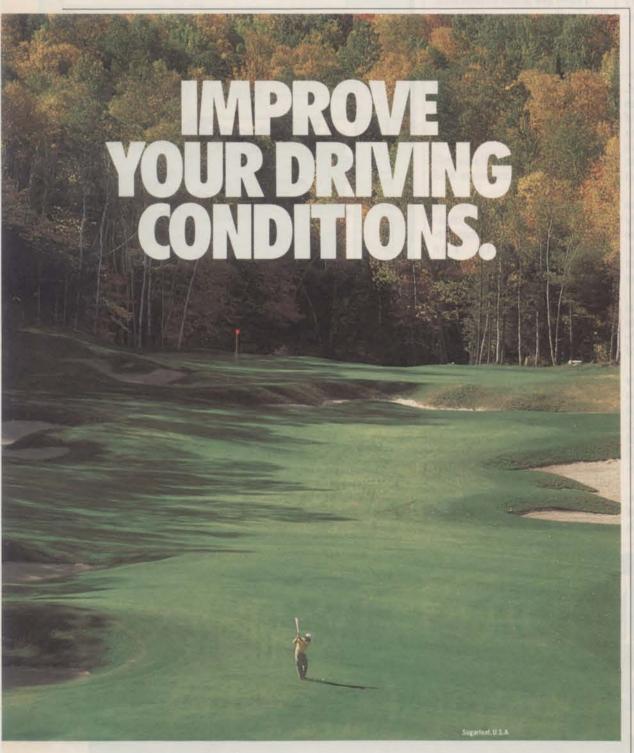
Don't think of the production factor as a "difficulty factor." Difficulty factors are symptoms of negative or defensive pricing and encourage your people to look only for problems. Difficulty factors, properly used, must be balanced by using "simplicity factors."

So, let's just call it what it really is, a production (reality?) factor.

Pricing Model for Tree & Shrub Services

14000 Sq. Ft. Residential Canopy Area

- 1. INCOME PER DAY..720.00 + 38,15...758.15
- 2. MATERIAL COSTS @1.25 per 1,000 sq. ft
 \$38.15
- REVENUE PER DAY. (No material included) \$720.00
- 4. TIME PER DAY....8 hrs X 60 min per hr 480 minutes
- 5. COST PER MINUTE 720,00 per day/480 mins 1.50
- 6. AVG TRAVEL TIME.(from test results) 15 minutes
 7. AVG PRODUCTION TIME......1400
- sq. ft./200 sq. ft. per min7 minutes
- 8. TIME PER STOP...15 mins plus 7 mins 23 minutes
- STOPS PER DAY...480 mins per day/22 mins per stop.....\$21.8 each
- 10. PRICE W/O MATERIAL....22 mins X 1.50 per min....\$33.00
- 11. MATERIAL COST PER STOP....1.4000s sq. ft. x 1.25 per 1000 sq. ft....\$1.75
- 12. PRICE PER STOP ..33.00 plus 1.75 ..\$34.75
- 13. PRICE PER 1000 SQ. FT 34.75/1.4 \$24.82



ORTHENE® Turf, Tree & Ornamental Spray keeps pests out of your club.

Stop pests from playing a round on your course with ORTHENE Turf, Tree & Ornamental Spray. One treatment provides a broad spectrum of protection for turf as well as a wide variety of trees and ornamentals.

ORTHENE kills quickly on contact, then by systemic action. So you'll keep hard-to-kill pests like mole crickets, armyworms and leafhoppers under control. ORTHENE supplies longlasting residual action against other insects including tent caterpillars, aphids and thrips.

ORTHENE Turf, Tree & Ornamental Spray. It's more than enough to drive unwanted pests right off your course.

ORTHENE®

Turf, Tree & Ornamental Spray
Avoid accidents. For safety, read the entire label including precautic
Use all chemicals only as directed. Convenint & 1990 Valient U.S.A.



ALSO CONTROLS FIREANTS.

Those who believe that standard production has wild variances, from 50 square feet per minute to 500 square feet per minute, misunderstand the dynamics of time-related production. The window is small but consistent. Don't use the example factors-run your own tests.

Line 3 is the revenue per day required to pay all costs, overhead and profit, except materials.

This must be calculated by each LCO to reflect specific accurate operating costs, overhead recovery, and profit requirements.

What if the production factor of 200 square feet per minute, you note on line 7, was reduced by site conditions to 150 square feet per minute?

 1400 sq ft/150 sq ft per minute equals 9.33 minutes

• 9.33 minutes plus 15 minutes travel time equals 24.33 minutes total stop time

 24.33 minutes times \$1.50 per minute equals \$36.50

• \$36.50 plus \$1.75 material equals \$38.25 stop price.

Interestingly, the 25 percent variance in production rate only produced a price variance of \$3.50 per stop. LCI

About the Author

Philip D. Christian III of Alpharetta, GA, is a consultant with All-Green Management Associates, Columbus, Ohio,

Dues adjustment brings members to PLCAA's roll

MARIETTA, GA-When the Professional Lawn Care Association of America (PLCAA) lowered its dues for smaller companies, more of them joined.

PLCAA took the action for companies grossing less than \$600,000 annually this past winter.

'Response has been excellent," says Ann E. McClure, executive vice president of PLCAA. "Many LCOs are responding favorably to the change in dues, and the association hopes this means PLCAA will have far broader national representation."

The dues rates were adjusted to reflect dues of comparable national associations, says PLCAA. By early May association membership had increased two percent with another 10 percent taking advantage of PLCAA's early discount payment plan.

PLCAA membership included 978 companies in 1990. The association membership committee hopes to add another 400 in 1991.

In an unrelated matter, PLCAA reports that 46 of its members attended the association's 1991 Legislative Day-On-The-Hill in March. Senate Minority Leader Bob Dole (R-KS) welcomed the group. LCI

QUANTITY TAKE-OFF SHEET

MEASURED BY: NAME: Mr. Bob Alpha

DATE: 4-10-91

		TURF AREA		L	ENGTH X WII	TH	NON	-TURF AREA	- MULCH/T	REES/SHRUBS
EDGE	OTHER	21" PUSH MOWER	36-60" MOWER	SQ. FT.	LXW	SQ. FT.	MULCH SQ. FT.	CANOPY SQ. FT.	OTHER	REMARKS
1. Beds	in front	of house			80 x 4	320		320		Transfer "
2. Front	tyard - 3	x 28			3 ea R - 3	84		84		
3. Shrul	b at mailt	oox			6 x 6	36		36		
4. Hedg	e - side y	ard			45 x 2	90		90		
5. Beds	- left side	9			50 x 4	200		200		
6. Crab	in front	THE REAL PROPERTY.			1 ea R - 6	113		113		
7. Pine	trees - Rt	side - 6 x	50		6 ea R - 4	300		300		
8. Beds	- back ya	rd			85 x 3	257		257		

When it comes

to grubs, it's

not enough

just to sup-

press them.

You want

insects combined.

Unlike

to squash them. ticides, which are **Pulverize** them. unpredictable at

over ten

PERCENT OF GRUBS CONTROLLED

Grind them into best, Triumph dust. Send the lithas been

tle buggers to the proven in

And who could years of

root zone eternal.

blame you? testing

After all, this one to consiscreature has probtently rid

ably baffled more turf of over

turf professionals, 90 percent

of grubs presmade a mockery of more chemical ent. And within

just 2-3 days of company claims,

SQUASH A GRUB.

than all other turf application.

So one preventive application in late summer or early fall is all that's tor or Ciba-Geigy needed to protect turf from costly

To find out more, contact your turf products distriburepresentative.

TRIUMPH

© 1990 CIBA-GEIGY Corporation, Turf and Ornamental Products, Box 18300, Greensboro, NC 27419. Always read and follow label directions

Better yet, once grub damage. Triumph® applied to the soil, And protect you is changing Triumph keeps on from losing what all that. working for up to profits you have 10 weeks, dependmade to callbacks. most insecing on the target



Robert Andrews, PLCAA, signs GIE agreement. Teddi Davis, left, is with PGMS; Tom Garber, ALCA.

DYNAMIC

DUO.

Lebanon Pro 20-3-5

DURSBAN'

What two products have teamed up to lead the

crusade against insect pests? It's Lebanon Pro

improved fertilizer/insecticide formulation. We've

taken our 20-3-5 fertilizer base, with four units of

20-3-5 with 1% DURSBAN - a new and

PLCAA to remain show manager through 1994

PLCAA, ALCA, PGMS reach GIE consensus

CLEVELAND, OHIO—Three industry groups will continue to co-sponsor the Green Industry Expo (GIE) at least through 1995.

Representatives from the Professional Lawn Care Association of America (PLCAA), Associated Landscape Contractors of America (ALCA) and the Professional Grounds Management Society (PGMS) signed the agreement here in mid May.

Last year's GIE in Nashville, TN, was well attended, and exhibitors appreciated the opportunity to show their wares to members of the three different groups at one location. The 1991 GIE is in Tampa.

According to terms of the agreement, PLCAA remains show manager through 1994. Then ALCA and PGMS can decide if they want to bring in a third party manager for 1995.

The allocation of gross profit is on a sliding scale with PLCAA getting 55 percent on gross profits up to \$400,000 and 54 percent on anything over \$450,000; ALCA 25.3 percent up to \$400,000 and 24 percent over \$450,000; PGMS 19.7 percent up to \$400,000 and 22 percent over \$450,000.

"The discussions have been spirited," said Robert Andrews, the owner of a lawn care company near Indianapolis and PLCAA's signer.

"The turning point was when the organizations agreed to appoint three principles to discuss the agreement instead of working through committees," added Andrews. "We hit it off right away and could talk about some of the issues that had to be talked about."

Tom Garber, a landscape contractor in Denver, said he put in hours each day for the last eight weeks to represent ALCA's interests in the negotiations.

Said Garber, "the show will develop a life of its own as 1995 approaches. The industry as a whole can relax and count on this show through 1995."

PGMS representative Tom Smith was unable to fly to Cleveland for the signing but added his name to the agreement days later.

There was some pressure to finalize the agreement so that arrangements could be started for the 1992 GIE planned for Indianapolis.

Negotiations had been underway for several months prior to the signing. Last fall was the first GIE.

Marting leaves PLCAA staff

MARIETTA, GA—Sandy Marting resigned from the staff of the Professional Lawn Care Association of America.

She served as PLCAA's public relations specialist for 1½ years, and is the fourth key staff member to leave PLCAA within the past year.

Last spring Dr. Barry Troutman, PLCAA education director, returned to private industry. Several months later James Brooks stepped down as executive vice president to pursue other career goals. And, late in 1990, Doug Moody, deputy executive director, was dropped in a cost-cutting move.

Neither Troutman's nor Moody's posts were filled again.
Marting told LAWN CARE INDUSTRY that the PLCAA
public relations budget (\$40,000) is too small for the projects
demanded of it. She said she has no immediate plans for the
future but will remain in public relations.

LCI

Fire destroys Gro Tec plant

EATONTON, GA—Fire destroyed the recently built Gro Tec plant here early April 7. Gro Tec is a manufacturer of lawn and garden fertilizer, including organic-type fertilizers.

Dan Pennington, vice president of Gro Tec, Inc., said he was relieved that no one was injured during the fire. He said he was also pleased that the fire did not create pollution problems.

"The plant was designed to protect the environment in the event of a major catastrophe and it worked," said Pennington.

Results of EPA air quality samples taken during the fire did not reveal any measurable level of toxic materials released into the air. Subsequent testing both on and off the site confirmed these findings.

Construction is underway to rebuild the plant. It should be complete and on line by November 1991 in time to premanufacture desired inventory levels for the 1992 season.

Pennington said a new line of lawn and garden chemicals will be introduced in the fall of

sulfur-coated urea, and added a higher concentration of DURSBAN, a time-tested and effective insecticide. So you can get early green-up and sustained feeding while controlling surface and soil insects — without the time-consuming

efforts of two applications. And for straight granular insect control, try Lebanon DURSBAN 2.32%. From your source for premium quality

turf products.

Lebanon Pro

The Season-To-Season SCU
Lebanon Pro is a product of Lebanon Chemical Corporation.



*DURSBAN is a registered trademark of DowElanco.

1991 Lebanon Chemical Corporation

COURT

from page

getting people in the industry to realize how significant this case is," said Steve Hardymon, ChemLawn's government affairs specialist.

Hardymon and Thomas Delaney of the Professional Lawn Care Industry were a part of the small industry contingent finding seats in the courtroom for the oral arguments.

The case hinges on the Wisconsin Town of Casey's claim that it can pass and enforce its own pesticide-use regulations. From 1981 through 1985 it had enacted five separate pieces of pesticide law.

Industry insists if communities are allowed to pass their own pesticide regulations, it may result in a patchwork of laws that would all but strangle the professional pesticideusing community, particularly companies doing business in different communities.

Pesticide use, industry claims, is covered by the Federal Insecticide, Fungicide, Rodenticide Act.

"It's pretty much a guess about how this will go," said PLCAA's Delaney.

"The judges were asking a lot of common sense, a lot of everyday-type questions."

Delaney said it didn't appear that either the Justices or counsel for either side of the

case knew FIFRA in any great detail.

"It's a complicated law and people just don't understand it very well apparently," said Delaney.

Whatever way the decision falls, ripples will be felt by LCOs. PLCAA is battling the community of Milford, MI, over basically the same issue. "Basically when they (Supreme Court) rule on this case (Mortier), they'll be ruling on our case," said Delaney.

"It's wait-and-see until the decision is here," said Chem-Lawn's Hardymon.

He said that if communities can draft any pesticide law..."let your imagination run free."

LCOs mobilize for a proactive strike

PLCAA endorses issues management group for continuing say in D.C.

BY RON HALL editor

washington D.C.—An 11thhour industry effort took some of the sting from the U.S. Senate subcommittee hearing on lawn chemical safety here on May 9.

More importantly it may have lessened the chances for restrictive federal legislation aimed at professional, non-agricultural chemical users.

The lawn care industry here took a unique approach to the hearing and the expected media carnival surrounding it: they agreed with its critics on matters like posting, pre-notification, applicator licensing and training, etc.

That was its message in a pre-emptive news conference the day before the hearing.

Disagreements remain fundamental—implimentation mainly—but an important dialogue may have been established, say industry figures, perhaps even grounds for future compromise.

A united effort?

Beyond that, several involved in the industry lobbying/education assault on Capital Hill seemed buoyed by a new alliance of industry leaders now focusing on federal issues. (Several industry members arrived in Washington D.C. and began establishing contacts two weeks before the hearing.)

This alliance, working under the umbrella of the Professional Lawn Care Association of America (PLCAA), began taking shape in March and April.

Late March, that's when Steve Hardymon, ChemLawn, and Pat Norton, Barefoot Grass, contacted PLCAA President Neal DeAngelo for a meeting to discuss industry's role in Washington D.C.

On April 10 representatives from 10 of the nation's largest applicator companies met in Chicago to develop a pre-emptive program.

Immediate concerns focused on the subcommittee hearing and proposed legislation by U.S. Senator Joseph Lieberman (D-CT).

Lieberman's proposal (S. 849) would—if it became law—amend the Emergency Planning and Community Right-to-Know Act of 1986.

Among other provisions, the Lieberman bill calls for contracts between customers and application companies prior to any (emphasis ours) application of chemicals. It outlines stringent posting and pre-notification require-

ments. These requirements would be virtually unworkable and would strangle the chemical lawn care industry, say industry representatives.

S. 849 won't fly

Even though Senator Harry Reid (D-Utah) lent his name to the bill, sources in Washington D.C. tell LAWN CARE INDUSTRY the proposal has little chance of making it out of Reid's Subcommittee on Toxic Substances, Committee on Environment and Public Works. Senator John Warner (R-VA), also a member of the subcommittee, didn't endorse the proposal as it was written.

Lieberman's bill will likely die a quiet death now that it's reaped its prerequisite media coverage.

That, of course, does not rule out future legislation for federally mandated posting or pre-notification.

LCOs, with their new issues management group (That was the name given the coalition at the PLCAA board of directors meeting the week after the hearing.) want a say the next time.

The hastily organized industry response took shape when about about 10 of the nation's largest lawn care companies contributed from \$5,000 to \$40,000 each, with representatives of several of them agreeing to take a personal role in the nation's capital.

The group, working under the umbrella of the Professional Lawn Care Association of America (PLCAA), enlisted the aid of the Washington D.C.-based issues management firm of Capitoline International Group, LTD. This arrangement will be continuing.

LCOs fund effort

PLCAA's board of directors accepted a check of \$97,000 on behalf of the new issues management coalition which will be headed by a separate group of trustees. PLCAA contributed \$5,000 to the fund with the proviso that it be given the authority to review the group's efforts and progress.

Any PLCAA member can contribute to the fund which will be used primarily for federal issues, says ChemLawn's Steve Hardymon, also chairman of PLCAA's government affairs committee.

"We're working with a handshake and if we've got a problem let's go after it," adds Hardymon.

One of the new issue management groups biggest and

immediate tasks, however, may not be on Capital Hill but within the specialty chemical industry itself.

This month members of the group will meet with representatives from other industry groups such as Responsible Industry for a Sound Environment (RISE), Speciality Chemicals Manufacturers Association (SCMA), etc. to forge a united assault on antichemical interests in Washington.

The new PLCAA group will

also try to sooth the fears of these other groups, most of whom represent manufacturers and distributors. Product manufacturers and distributors understandibly don't want anti-chemical sentiment to grow any more than it already has. And they certainly don't want the situation to deteriorate into applicator versus product safety issues. Most provide products for both the professional and the much larger do-it-yourself market.



Steve Hardymon, driving force in issues management group.

PLCAA

from page 1

stringent federal regulation of commercial (non-agricultural) chemical applicators.

(Lieberman's S. 849, an amendment to the Emergency Planning and Community Right-to-Know Act of 1986, has little chance of becoming law, sources in Washington D.C. tell LAWN CARE INDUSTRY. Other legislators show little support.)

McClure's statement was conciliatory but firm. If Washington wants tighter regulation of the lawn care industry, it must develop a more workable plan.

She firmly suggested that any federal law address both commercial and non-commercial users of lawn care products.

Here are the six primary areas McClure covered:

- Customer's right to know;
- Pre-notification;
- The establishment of a registry of sensitive persons;
- Posting
- Applicator licensing and training;
- Preemption of local requirements.

Right to know

PLCAA, said McClure, supports customers' right to know about the lawn care services they receive: brand names of products, types of products, reason for product's use, concentration of end-use products and rates, special instructions, and labels.

Pre-notification

McClure said PLCAA supports pre-notification a day ahead of intended applications to customers who wish to be pre-notified, persons whose property abuts treated property who indicate they wish to be pre-notified, and any chemically sensitive individual whose property abuts a treated customer's property.

Registry

McClure said PLCAA supports a national registry of sensitive persons. However, people wanting to be on the list would need to submit a doctor's certificate.

These people should pay a one-time registration fee and an annual renewal fee (waivable in cases of financial hardship) to have their names on the list.

Posting

PLCAA supports posting requirements but urges that they be extended to do-it-yourself lawn chemical users too. "Any regulatory plan which neglects an overwhelming majority of lawn care product users may not meet its aims," said McClure.

Verifiable licensing and training

PLCAA recommended that Congress mandate state or EPAcertified verifiable training for all commercial pesticide applicators, regardless of whether the pesticies are classified for general or restricted use.

She added that state enforcement personnel should be required to undergo the same training and meet the same standards as certified applicators, and that Congress adopt a "voluntary training or information program" for do-it-yourselfers.

Preemption

McClure reiterated industry's stand that any regulation directed at commercial applicators be at the federal and state level and not through local laws.

"Preemption is not only vital to the continued well being of PLCAA's members, but will assure their customers that the full weight of federal and state authority and expertise is behind the regulations that are on the books," said McClure.

Don't let THATCH suffocate your turf!

Thatch that exceeds 1/2-inch in depth helps support serious lawn and turf problems. The reason: Thatch is composed mainly of living and dead roots, stolons and rhizomes—plants high in lignin, a fiber slow to decompose.



Excessive thatch (more than $\frac{1}{2}$ -inch in depth):

- Prevents moisture and fertilizers from penetrating soil
- Provides habitat to harbor diseasesEstablishes breeding ground for
- insects

Use the non-toxic thatch reducer

Bio-Groundskeeper® liquid thatch reducers contain biological extracts and bio-catalysts that aid and accelerate natural decomposition of thatch.



Thatch reducer helps:

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Circle No. 105 on Reader Inquiry Card

Ideas for chasing away those old summer technician blues

BY ED WANDTKE

Now's the time to take action against a summer letdown.

Fatigue, heat, customer complaints (hopefully not many), production pressure, etc. can beat down your employees. Even monotony can lower the morale of your workforce.

But what do you do to head off falling morale, maybe even employee turnover, for the rest of the year?

Psychologists tell us there are things we, as business managers or owners, can do to relieve some of the strain of the day-to-day grind for our employees. There are techniques we can use to keep morale and productivity up. During the 20 years I've been involved with the lawn industry I've seen some successful programs and others that didn't work as well.

Some companies find the solution for a while, then move to something else while others never uncover the formula.

How about a contest?

Employees respond to contests. They really seem to like contests that offer tangible rewards. Developing various contests could be a simple way to relieve some of the stress and pressure they're feeling.

The key to a successful motivational contest is to make it easily understood, that winning's clearly determinable, and there's a payoff, either for an individual, a team, or an undetermined number of employees.

As I've worked and consulted with service companies I've become convinced that contests that are shorter in duration motivate employees best. The contest it seems should run two to three weeks. This isn't chiseled in stone somewhere and you may want to extend the time of the contest, particularly if it's having a noticably positive effect in keeping employees focused on their duties.

Keep running results

As a successful business person you're unquestionably a competitive person. You may not have thought of your employees as competing also but they do, against each other daily

Post the daily status of your employee contest. This is important to many of them and can spur the results you're seeking. You should, of course, develop your own posting system to highlight the good results without discouraging other employees.

You might consider:
• Periodic sales leads

Your goal is to generate new customers. Your employee's goal is to generate as many legitimate sales leads as possible to earn a reward. Pay off for the employee who submits the most leads which become clients.

 Production efficiency—You goal is to increase the bottom-line efficiency of your company. Your employee's goal is to most effectively and efficiently use his time to earn the reward. You can keep score by number of stops, time needed to mow a property, etc. The reward might be nothing more complicated than extra time off for the employee that improves his efficiency. (You must be careful to emphasize your goal of quality service hasn't changed and can't be sacrificed at the expense of efficiency.)

Best looking vehicle—
 See IDEAS on page 15

"You may not have thought of your employees as competing against each other but they do"—Ed Wandtke, senior partner All Green Management



It only takes one insecticide to protect your customers from top to bottom. By using TEMPO® 2 Ornamental Insecticide, you can treat home lawns, flowers, plants, shrubs, even trees with unmatched effectiveness.

Reduce exposure. TEMPO uses 80% less active ingredient than the leading insecticide, so there's 80% less chemical to impact the environment. And that reduces the potential for exposure to your customers and their pets.

Since TEMPO is a broadspectrum, advanced generation
pyrethroid, it gives excellent
control at low dosage rates.
This allows you to control
tough surface-feeding
pests like sod webexposure to
worms, cutworms,

without yellowing the grass or interfering with fertilizers or fungicides.



A Little Tempo Will

On top of all that, TEMPO is practically odorless.

No phytotoxicity on ornamentals. Using TEMPO on all your customers' flowers, plants and shrubs is an excellent way to control leaf-feeding insects without burning the leaves or blooms.

Plus, the fast knockdown and long residual of TEMPO make it effective on tough pests like pine shoot moths, webworms and sawflies.

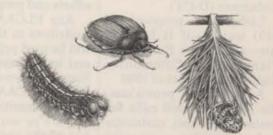
And again, 80% less chemical means less handling, mixing and disposal hassles.

as well as less impact on the environment.

Less chemical needed to spray trees.

Nothing is better on trees than TEMPO.

Because not only are you spraying less



TEMPO effectively controls surface and leaf-feeding pests like tent caterpillars, Japanese beetles and bagworms.

©1991 Mobay Corporation, TEMPO is a Reg. TM of Bayer AG, Germany, 911534

IDEAS

from page 14

You want the public to see a company that sparkles. It starts with what the public sees the most of-your vehicles. Clean vehicles often carry over to improved self image for your employees.

 Appearance—Are you proud of your employees? Do you hold them in high regard? If they look sharp your customers are more apt to value their service too.

 Most organized vehicle-Has anyone in your organization ever gotten to a job site either missing an important tool or with inappropriate

product? This is a real time and profit killer. An offshoot of this idea-Which employee can design the most effective system or checklist to make sure that service vehicles are outfitted properly?

 Material efficiency— Your goal is to maximize the effectiveness of the materials you use by applying them properly and at the proper times. A contest along these lines seeks to improve documentation on the real sizes of properties and employees ability to account for the materials they use.

· Change order selling-Do your employees accurately track customer changes requested at job sites. If they do this it will lift billable time for improved profitability.

 Daily attendance— When an employee misses a day somebody, sometime is going to have to make up that production. If this is a problem for your company (tardiness too), you better be thinking of a way, maybe even a contest, to solve it.

The above suggestions are just that, suggestions. You might have better ideas or, at least, ideas better suited to your business philosophy.

Contest rules

contest you put into place, make sure all the participants know the rules. Write them out. Have them on a single page with the method being used to determine the rewards. Keep it simple and clear.

Seeking out new ways to keep employees alert and ready to do their jobs may not be a particularly easy task for any manager or owner, but it can be worthwhile.

When an program or technique clicks and employees respond, managers may find out that performance has increased agove what the company expected.

This is admittedly a chal-No matter what type of | lenge and may require some experimentation but the rewards for the company may be far larger than anyone could have anticipated.

Ciba-Geigy says it will market **Biosys** product

GREENSBORO, NC-Ciba-Geigy will market nematodebased insecticides to turf professionals.

In April the company announced a marketing agreement with Biosys, a producer of biological insect-control products. Ciba-Geigy is to market all current and future products developed for commercial turf and ornamental markets by Biosys, Palo Alto,

Says Scott Moffitt, Ciba-Geigy insecticide product manager: "We think this new agreement is a win-win situation for both companies. Biosys has strong formulation, manufacturing and research capabilities. Ciba-Geigy adds years of experience with developing and marketing commercial products to professional turf and ornamental markets.'

Exhibit® is the first product resulting from the agreement. The insecticide controls a variety of pests, including surface feeders on turf, says the company. It can be applied with standard spray equipment, says Ciba-Geigy.

ChemLawn to aid a big celebration

COLUMBUS, OHIO-Chem-Lawn Services Corporation is the official supplier of lawn, tree and shrub care for AmeriFlora '92, the 1991 international exposition commemorating the Christopher Columbus Quincentennial.

ChemLawn is contributing core aeration services to hightraffic areas; lawn application to promote dense, healthy turf; and tree/shrub fertilizations in 1991 and 1992.

AmeriFlora is set for April 20-October 12, 1992, here.

The City of Columbus is expecting several million extra visitors during the seasonlong celebration of America's discovery.

Ohio Nurserymen sets a lofty goal

WASHINGTON, D.C.-The Ohio Nurserymen's Association (ONA) says it will raise \$500,000 for the Ohio Research Endowment Fund to benefit the Horticultural Research Institute.

Presently the Ohio Fund is at \$145,000. The nursery industry is a \$1.25 billion industry in Ohio. The ONA has 1,120 member firms.



Cover The Whole Lot.

chemical into the air, TEMPO also costs less than other leading insecticides.

In addition, TEMPO is compatible with all types of spray equipment and won't cause downtime due to clogging.

And it's effective on such leaf-chewing and leaf-skeletonizing insects as gypsy moth larvae, oakworm caterpillars, leafrollers, bagworms and cankerworms.

With 80% less active ingredient, it only takes a little TEMPO to cover a lot of ground. And that has big advantages for you and your customers.

For more information, contact the Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120 (800) 842-8020.





LCOs fire up community support for Grasscycling

These lawn pros tell how you can help your town ease it's solid waste blues

BY LYNN NOVELLI

andfill bans on grass clippings coupled with skyrocketing waste disposal costs are turning consumer attention to Grasscycling.

This is an opportunity for LCOs to take the lead as experts in turf management, says Sandy Marting, Professional Lawn Care Association of America (PLCAA) public relations director.

Grasscycling, the natural recycling of clippings by leaving them on the lawn, is PLCAA's catchy new name for a familiar concept.

"Basically, it promotes everything we've been trying to get our customers to do for years," says Marting.

Waste management experts are all for the idea. With clippings accounting for an estimated 12 percent of landfill material, Grasscycling can significantly reduce landfill loads.

"It's a winning situation for everyone involved," says Larry Ellmaker, lawn care manager for Deiter Brothers in Allentown, PA. An active PLCAA member, he was asked to serve on the community's Grasscycling startup committee.

"Grasscycling is helping consumers become more educated about healthy lawns and promotes proper cultural practices," Ellmaker says. "When attention is focused on healthy lawns, everyone in the industry ultimately benefits."

In addition to serving as technical advisor for the Bethlehem-Allentown project, Ellmaker is promoting Grasscycling among his customers by distributing brochures and newsletters.

t was also through PLCAA that Larry Shields, of Memphis-based Beauty Lawn Spray Inc., got involved in Germantown, TN's Grasscycling program. When the city and local trash hauling company realized the impact clippings could have on their landfill problems, they turned to the Memphis affiliate chapter for help.

Shields, already a

distribution, serve as technical advisor and provide complimentary fertilization for demonstration lawns.

A cooperative effort between area PLCAA members, the city and the cooperative extension service, the program is a major publicity/education campaign that includes brochures, neighborhood meetings and a cable TV show.

"Our goal," says Shields, "is for everyone in Germantown to hear about Grasscyc-

It's great when communities get interested in Grasscycling, but if you're enthusiastic about it, don't wait for someone to come to you," recommends Denny Lennell, vice president of Salt Lake City's Lawn Life Corp.

Lennell believed the PLCAA program was a good, environmentally sound project, and he approached the city about starting a Grasscycling campaign.

fter six weeks of knocking on city hall doors without results, Lennell called the local landfill company.

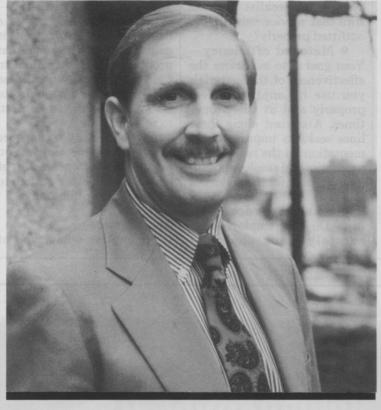
"They were immediately interested and were invaluable in getting the right people in city government to listen," he reports.

As a result of Lennell's persistence, the newly created Salt Lake City and County Yard Waste Management Task Force kicked off a countywide pilot Grasscycling program April 13. Like the Germantown effort, the Salt Lake program focuses on public education, targeting both commercial and residential property owners.

They plan 31 demonstration lawns, selected with the assistance of the cooperative extension service.

Georgia's statewide program is also a joint venture between PLCAA, headquartered in Atlanta, and the cooperative extension service. Every county has activities and demonstration lawns planned. The Governor's mansion is the official Georgia Grasscycling

Gil Landry, University of Georgia turfgrass specialist, Grasscycling advocate, volun- reports county agents have the project.



"It's an opportunity to let people know our business services the environment"—Denny Lennell, Lawn Life Corp., Salt Lake City.

demonstration lawns. He feels this is an indication of public

"The landfill situation has created an opportunity to promote principles of sound turf management that we and PLCAA have been trying to encourage for years," says Landry.

In California, the landfill problem has been brought to a head by the passage of state law 939. Cities must reduce their waste 25 percent by 1995 and 50 percent by 2000.

s a result, Los Angeles, Long Beach and Pasadena are targeting reduction of green waste, which makes up about 30 percent of their solid waste, reports Joan Edwards, solid waste manager for Los Angeles.

She anticipates voluntary Grasscycling will put a significant dent in that figure.

The California tri-city Grasscycling program, emphasizing good turf management, got underway this spring. Area PLCAA members are working with residential and commercial property owners to provide technical assistance and information for

teered to help with literature | easily found volunteers for | Utah's Denny Lennell

thinks more LCOs should get involved with Grasscycling. It's a wonderful community service, he says, but LCOs should be careful to present

member. "It's an opportunity to let people know our business services the environ-

their efforts as an environ-

mentally concerned PLCAA

ment," he says.

What's the first step in promoting a Grasscycling program in your community? "Call PLCAA and get their packet," say Lennnell, Ellmaker and Shields. Next develop a contact with the local landfill company who can help you approach the city.

Lennell and other LCOs who have become involved with community Grasscycling

A TYPICAL UTAH LAWN PRODUCES ABOUT A TON OF GRASS CLIPPINGS EACH YEAR THAT YOU BAG, HAUL AND SWEAT OVER!

GRASSCYCLE!

LEAVE YOUR GRASS CLIPPINGS ON THE LAWN!

Yardwaste takes up of our landfill space!

Grasscycling is good for your lawn and the environment--do your part, start grasscycling TODAY!

TELL YOUR NEIGHBORSI
GRASSCYCLE
AT HOME, WORK, SCHOOL AND AT CHURCHI



Brochures, like this one from

Utah, explain program

programs have found extension service personnel as supportive allies.

County agents are invaluable for getting information to the public," says Lennell. "As an added bonus, they frequently appear on local radio and television gardening shows-the perfect opportunity to get the word out."

Other suggestions from Lennell for starting a program: invite someone with appropriate media contacts to be on the committee; enlist the support of product suppliers (particularly turf fertilizer and mowers); and build a quantitative evaluation process into the demonstration lawn program.

For more information about developing a Grasscycling program in your community, contact PLCAA at 1-800-458-3466.

Moss in lawn is correctable

COLLEGE PARK, MD-Moss in a lawn? It often invades thin or bare areas of the lawn and generally will not grow in a strong, vigorous lawn.

The University of Maryland Cooperative Extension Service says moss growth is encouraged by poor fertilization, poor drainage, compacted soil, shade and an acid

To remove any unwanted moss you may have to handrake it, then improve the site to discourage its return.

A bulletin from extension says you may want to reduce the shade by pruning trees, have the soil tested and add the recommended fertilizer and lime to improve the soil. Soil aeration is helpful also.

Moss is a primitive low-growing plant that is actually made up of thousands of tiny individual plants. They grow from spores and attach themselves to a suitable substrate with tiny root-like structures.

Some Sandoz labels bilingual

DES PLAINES, IL-Sandoz Corp Protection says it will begin providing bilingual labels on Mavrik, Pentac and Enstar.

"In many parts of the country, the primary language of applicators in the greenhouse, nursery and landscape maintenance industries is Spanish," said Ron Fister, director of specialty sales for Sandoz.

This should be particularly welcome in California where since January 1991 all applicators must be certified. LCI

Keep-the-clippings plan touts waste savings

This Memphis newspaper article let the public know about PLCAA's Grasscycling

LAWN CARE INDUSTRY JUNE 1991

Pennsylvania tests measure clippings; monitor turf health

KUTZTOWN, PA—A half-acre lawn can generate nearly 5,500 pounds of grass clippings, about 465 bags of yard waste each season.

Dr. Terry M. Schettini, horticulture coordinator at the Rodale Research Center, arrived at these numbers by mowing a 1,078-square-foot area of turf with a bagging mower from June to October 1990. After the mowings he collected 292 pounds (23 bushels) of grass clippings, and projected these findings to the typical half-acre sized lawn (21,780 square feet).

Meanwhile a similarly sized plot was mowed with a mulching mower (a Bolens walk-behind model) and the clippings were allowed to return to the turf

Although Schetini said it was "too early after only two cutting seasons to receive definitive data from soil core samples," he did indicate that grass cut with the mulching mower had a healthy appearance with no clumps of grass or visible thatch buildup.

The tests are being held at the research center's 305-acre facility in Kutztown, PA. They will continue to be monitored through the 1991 growing seaason by Schettini and his research staff of the Rodale Institute, and by Mike Ferrara, senior product/equipment editor for Organic Gardening magazine, Emmaus, PA.

For each year of the three-year program, the same two identical grass-covered plots will continue to be mowed on a weekly basis—one with a walk-behind mulching mower and the other with a walk-behind side-discharge model with a collection bag.

The grass on each plot will be cut the same way, and at the same time, each week, at two-to-three-inch heights, and intermediate and deep-soil cores will continue to be taken.

The cores will be analyzed by the Pennsylvania State University Soil Analysis Lab for nitrogen, phosphorus, potassium, magnesium, calcium and other mineral activity.



To mulch or not to mulch. Dorothy Murray, left, and Cyane Gresham mow similarly sized turf areas as part of research on grass clippings at the Rodale Center. Murray is using a mulching mower and Gresham a bagging model.

Here's how mulching mower differs

columbus, ohio—Just adding a new mower blade to a standard mower doesn't turn it into a mulching mower.

"These blades will chop some clippings, so that's good," says Bill Pound, a lawn care specialist at Ohio State University. "But without adding the other features of a mulching mower, a cutting blade alone does relatively little mulching."

Pound says a mulching mower relies on a bigger engine to power cutting and mulching and a taller mowing chamber to keep clippings suspended long enough to be chopped up. Some have a series of deflectors to send clippings back into the blade. Others have blades with special edges that both chop up and deflect cut grass.

In the chamber of a mulching mower, cut grass will rise

Ohio Confab is in Cincy again

CINCINNATI, OHIO—The 1991 Ohio Turfgrass Conference and Show will return to the Cincinnati Convention-Exposition Center Dec. 2-5. Over 4,000 people from 35 different states attended in 1990.

ANN Leadership Conference Sept.

washington D.C.—The American Association of Nurserymen's first Legislative Leadership Conference here is Sept. 23-24.

State and national leaders of AAN and Associated Landscape Contractors of America are invited for a firsthand look at the issues and challenges facing the nursery industry.

AAN, 202/789-2900. LCI

and fall over a cutting blade several times in one second, being transformed into hundreds of tiny pieces that are returned to the lawn. The tiny grass pieces help the grass and soil retain moisture, and put back nutrients. And there's no clippings to bag or throw away. Mulching mowers come in push and riding models.

Most major manufacturers now offer mulching mowers and market them aggressively. Their use will lessen the need to bag clippings.

However, in spite of the use of a mulching mower, most homeowners will have to mow their lawns more often (perhaps once a month more often) to reduce clippings. LCI



Governor recognizes Lawn Care in MA

BOSTON—Masschusetts Governor William Weld (fourth from left) presents LCO Ed McGuire with a proclamation recognizing National Lawn Care Month this past April. McGuire is past president of the Massachusetts

Association of Lawn Care Professionals (MALCP). Also pictured, from left: Representative Tim Clark, MALCP Executive Director Karen Connelly, MALCP President Paul Harder, and Representative Ed Teague. LCI

Brooks aids associations in seminar

BOSTON—Representatives from throughout New England attended a seminar March 14 to strengthen their respective industry associa-

James Brooks, former executive director of the Professional Lawn Care Association of America, ran the day-long program and workshop.

The theme of the seminar was "Building and Promoting Your Association." Brooks (Lawn Care Industry magazine's "Person of the Year" in 1990) stressed that each green industry association should survey both members and non-members to determine their needs.

"Participants left the session with a greater sense of mission and the realization that their efforts can lead to even greater achievements for their associations," said Karen Connelly of the Massachusetts Association of Lawn Care Professionals. MALCP sponsored the event.

Joining MALCP were green industry people from throughout New England.

Malathion to receive support from task force

WAYNE, NJ—Malathion is a low-toxicity organophosphate insecticide widely used around the world.

In April the Malathion Reregistration Task Force said it would support many of its labeled uses for reregistration before the U.S. Environmental Protection Agency (EPA), including its turf uses.

The task force is comprised of the two worldwide manufacturers of malathion insecticide: American Cyanamid Company, Wayne, NJ, and Cheminova A/S of Lemvig, Denmark.

"In deciding which uses to support, we concentrated on what our customers demanded and on the largest uses," said Charles J. Galley, Jr., business manager of Malathion and Public Health Products for American Cyanamid Company.

"Excessive cost" was the deciding factor in dropping some uses (none related to turf), said the company. Data generated to support malathion's continued use in the U.S. market will cost over \$12 million.

Do you know where they're going?

GREEN R"

Intelligent routing allows technicians to spend more time on lawns and less in trucks

BY JAMES E. GUYETTE

he more time your technicians spend on the road, the more expenses they pile up and less money they make for the company. And themselves.

'Whether it's mowing or lawn care, there's nothing more unproductive than unnecessary drive time," says Mike Bailey, president Super Lawns, Gaithersburg, MD.

"One of the most effective methods of losing money is the poorly organized route or routing system," he says. He feels most LCOs could improve production eight to 15 percent with sharper routing.

Because Gaithersburg, MD, is just outside Washington, D.C., Bailey knows something about traffic. That city is awash in one-way streets, kamikaze taxi drivers and vicious rush hours.

Surprisingly, sometimes LCOs don't take their market area's particular-and sometimes peculiar-traffic patterns into account when building service routes.

Super Lawns runs on zip codes refined and made understandable to technicians by color coding-10 base colors, then combinations of colors for specific locations.

similar concept works well in Wisconsin, where Rider Enterprises of Racine Inc. sharpened its zip code-based routes with actual behind-the-wheel research, says company president Mike Rider.

When developing a routing sequence don't overlook the importance of geography and climate.

In Racine, a city hugging

Lake Michigan, Rider knows his technicians can attend to lakefront customers late in the treatment cycles. The lakefront area warms last in spring, and cools last in fall. The lake has a moderating in-



Mike Rider must take into account a difference in climate in making his routing efficient in Racine, Wisconsin.

Most of Cooper's clients have turf-type tall fescue lawns, while a few have warmseason grasses such as Bermudagrass, zoysia or St. Augustine.

or the most part, though, says Cooper, his company breaks the city into geographic areas. Divisions are recognizable by pen-ninsulas, highways, "The Beach" and armed forces installations.

"It's a logical sequence. It may take four days to finish,' says Cooper.

At Grasshopper Lawns Inc., Edwardsville, PA, "we have our maps divided into three sections. It's refined down to three to five streets,' reports Michael Kravitsky III.

We have a computer and we also work from a card," Kravitsky notes. Computerization is particularly helpful to the technicians who perform jobs in at least five different Pennsylvania communities.

"When the guy is out there he has a three-year history of the lawn," he says.

A water shortage in Montana presents a challenge to John Bass, president of Lawn Master Inc. "We have odd and even watering days," he says for his market area, Missoula.

This makes planning more complicated. "We have to go to that neighborhood twice a week," Bass explains. "We don't want to show up on the day when the sprinklers are set to come on," he points out.
"To make things more effi-

cient we've set up zones within the city. If you're driving all over town you're not making any money," he says.

he routes are planned in the office ahead of time. "We give the drivers the route and they know where they're going to be during the day," says Bass. "When I give him 30 (lawns) I want 30 done.'

Drivers at the Green King division of G&L Distrbuting Inc. in Kalamazoo, MI, play a large role in the day's activities, according to President Robert E. Bushouse. 'They're responsible for their own routing. They have the cards all set. They're all colorcoded."

To prepare the cards, "We broke the areas into quarters and we went through zip codes. It's nothing fancy,' comments Bushouse.

At Bennett Enterprises in Lomita, CA, the location served is pretty much a dense neighborhood of beautiful luxury homes. "The majority of our work is in one area," says president Sean Bennett.

"We're pretty area-conscious," he continues. "We can hit a lot more places."

ith limited travel time to contend with, Bennett is more concerned with how many people it takes to complete a task. "It comes down to crew size. We wouldn't want to send a five-man crew to a twoperson job," he explains. "Do we add another guy or set up

See ROUTE on page 21



Sean Bennett serves a tight market area and he's glad.



Top planters!

Houston Mayor Kathryn J. Whitmire and Charles Racusin (to her left), president of Environmental Landscape Services, Inc., with the winning "Environmental Team" that planted 25 trees in 19 minutes and 20 seconds in a tree planting contest during Houston's Spring TreeFest.



Lesco eyes big 1991: service centers grow

ROCKY RIVER, OHIO—James I FitzGibbon sees 1991 as a record year for Lesco Inc., according to a news item in the Cleveland Plain Dealer.

"Our service centers are on target, and one store in Orlando, FL, reached \$2 million in sales this past year," the chairman and chief executive officer said in the story.

The company operated 50 retail service centers at the time of the interview in April but plans to have 70 in operation by the end of 1991. The service centers reportedly account for almost 40 percent of business this year.

Jeffrey S. Stein, an analyst at McDonald & Co. Securities in Cleveland said the company should prosper as the golf course industry continues to grow and demand more service.

Seeded Bermuda is now available

DUBLIN, OHIO-Fine Lawn Research, Inc., says C2 Bermudagrass, an improved seeded turf-type Bermudagrass is available.

Fine Lawn says it uses as much as 1/3 less water than common Bermuda. This selection was made from a population discovered along the banks of the Colorado River.

FL foliage up

ORLANDO, FL-Sales of Florida foliage at the producer level in 1990 totaled \$280.8 million, up more than \$9 million from 1989. Earl Wells, executive vice president of Florida Nurserymen, said the figures probably reflect increased wholesale prices.

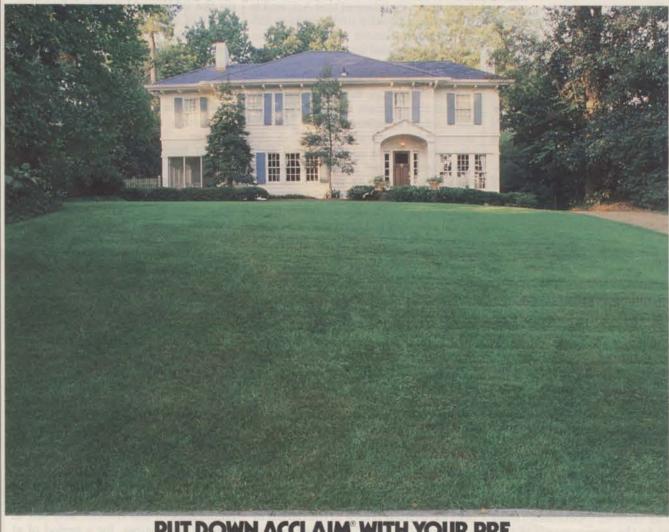
another crew?"

Paying more attention to crew size than the small amount of travel time for everybody is more important to the firm's bottom line: "You can't say, 'Sorry, we're booked.' You have to get the accounts when they're available," Bennett observes. LCI



Gary Cooper says routing should be logical.

AREYOU OPEN TO A NEW WAY TO PROFIT FROM CRABGRASS CONTROL?



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This season, break with tradition. Use an application of postemergence Acclaim* 1EC Herbicide plus a presuch as Balan, Dacthal, Pre-M, Betasan or othersat the time crabgrass germinates. It's a crabgrass control strategy that really works.

With Acclaim plus a pre, you can control crabgrass lawn. You'll keep your customers satisfied and eliminate costly callbacks. And that means more profit.

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Save \$100 gallon this season on Acclaim. See your distributor.

ACCLAIM. Because your turf is always on display.

Proposed U.S. Senate Bill 849; every word

A bill to amend the Emergency Planning and Community Right-to-Know Act of 1986.

Mr. Lieberman (for himself and Mr. Reid) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Notification of Chemical Application Act of 1991".

SEC. 2. FINDING.

The Congress finds that—(1) exposure to many commonly used chemicals can result in serious adverse effects to human and animal life and health and to the environment;

(2) such chemicals are being applied at an increasing rate and are present in urban drinking water wells at a level approximately two and one half times that found in rural drinking water wells; and

(3) advance notice of an impending application of such chemicals can greatly reduce the risk of direct exposure, and thereby reduce, although not eliminate, the risk of adverse effects from such chemicals.

SEC. 3. APPLICATION OF CHEMICAL SUBSTANCES ON OUTDOOR AREAS, AND WITHIN PUBLIC BUILDINGS.

The Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001 et seq.) is amended by adding at the end thereof the following:

"Subtitle D—Commercial Application of Certain Substances

"SEC. 341. IDENTIFICATION OF CHEMICALS.

"(a) Establishment and Publication of List.—The Administrator shall, within 180 days following the date of the enactment of this subsection, identify and publish in the Federal Register a list of those chemicals applied to public and private outdoor areas, and inside public buildings, by commercial applicators, expect those chemicals used for the purpose of cleaning, sanitizing, disinfecting, or painting, and those chemicals used in construction or renovation. Effective 90 days following the date of such publication, the substances contained on the list so published (hereafter in this section referred to as 'covered substances') shall be subject to the requirements of this section. The Administrator shall, from time to time, review such list and, if necessary, modify it. Any such modification shall be published in the Federal Register. Effective 90 days after such publication, such modifications shall be a covered substance and subject to this Act.

"(b) Contract.—(1) Prior to any commercial application of any covered substance, the commercial applicator shall enter into a written contract with the site owner or this agent. Such contract shall specify, among other things the exact location of such applicator, the date or dates, or approximate date or dates, of such applicator, number of applicators, and total cost for the service provided, or to be provided. A copy of such contract shall be made available to the site owner or his agent, and to all residents, tenants and other occupants of such site, including residen-

tial and commercial sites. Such copy shall be in at least 12-point type. Such contract shall further include—

"(A) the exact location of the site to which the covered substance is to be applied;

"(B) the number of applications, to be carried out at such location;

"(C) a list of the covered substances to be applied, including brand names and generic names of the chemicals;

"(D) all warnings required to appear on the label or Material Safety Data Sheet of all covered substances to be applied that are pertinent to the protection of humans, animals, or the environment; and

"(E) the company name, address, telephone number, business registration number and if applicable, the commercial applicator's identification number.

"(2) The use in any such contract or notice required by this subtitle of a false statement or representation that a covered substance has been approved by the Environmental Protection Agency is a violation of this Act, and is subject to a penalty under section 325 in the same manner and to the same extent as provided for a violation under section 304.

"(C) Date of Application.—In the event that the date or dates specified in the contract for application of the covered substance is changed, the commercial applicator shall give the site owner or his agent, and all residents, tenants, and other occupants of such site, including residential and commercial sites, oral or written notice of the proposed alternative date or dates, and shall not carry out the application on such date or dates unless the owner or his agent has first approved such date or dates.

"(d) Copy To Be Retained.—A commercial applicator entering into a contract pursuant to this section shall retain a copy of the executed contract for a period of 36 months following the date such contract is executed. A copy of such contract shall be made available to the Administrator upon request.

"(e) School Grounds.—Prior to any application of a covered substance to or upon the grounds of any daycare facility, whether for-profit or not-forprofit, any public or private preschool, elementary school, or secondary school, the commercial applicator shall provide written notice to the parent or guardian of each child enrolled in such school. Prior to the application of a covered substance to or upon the grounds of any post-secondary school, including any college, university, trade or other vocational school, the applicator shall notify all students enrolled in such school. Such notice shall be given not less than 7 days prior to the application of the covered substance. Such notice shall be in at least 12-point type and shall further pro-

"(1) the exact location of the school grounds on which the covered substance is to be applied;

"(2) the number of applications to be carried out on such grounds;

"(3) a list of covered substances to be applied, including brand names and generic names of the chemicals;

"(4) all warnings required to appear on the label or Material Safety Data Sheet of each covered substance to be applied that are pertinent to the protection of humans, animals, or the environment; and

"(5) the company name of the commercial applicator, together with the address, telephone number and registration number of such company, and, if applicable, the commercial applicator's identification number.

"(f) **Posted Notice.**—(1) Any person providing commercial application of a covered substance shall affix posted notices within or along the perimeter of the site, whether it be an area or structure, or both, where such substance is applied for the purpose of identifying such site including the following:

"(A) the exact location of the grounds on which the covered substance is to be applied;

"(B) the number of applications to be carried out at such location;

"(C) a list of the covered substances to be applied, including brand names and generic names of the chemicals;

"(D) all warnings required to appear on the label or Material Safety Data Sheet of all covered substances to be applied that are pertinent to the protection of humans, animals, or the environment; and

"(E) the company name, address, telephone number, business registration number and, if applicable, the commercial applicator's identification number

"(2) Such posted notices shall be placed so as to be clearly visible to individuals immediately outside the perimeter of such site, in a manner reasonable to facilitate visibility. The notices shall be posted at least 12 inches above the ground and shall be at least 4 inches by 6 inches in size. Notices shall also be posted at all entrances to such sites, at least 48 inches above the gorund and at least 12 inches by 18 inches in size. Entrances include driveways, walkways, paths, doorways, gates, and other such areas commonly used to gain entrance to a facility or a facility's grounds.

"(g) Placing of Posted Notices.—The posted notices required by subsection (f) shall be in place at least 72 hours prior to when such substance is to be applied. Such posted notice shall further inform individuals of the scheduled times of application, and warn individuals not to enter the site within the exterior boundaries of the notices, and not to remove the notices, for a period of at least 72 hours subsequent to each such application. The information required by this subsection shall be printed in bold letters of at least one-half inch in

"(h) Written Notice-Each commercial applicator shall notify, in writing, all site owners and occupants, any part of which site is within 1,000 linear feet of the outermost extent of the site to which any covered substance is to be applied. The notice shall be given at least 72 hours prior to the application of the substance, and shall include the date or dates that the substance is to be applied. Such notice shall also contain all warnings which are required under this or any other law to be included in the labeling, Material Safety Data Sheet, or any other warnings which are required to accompany a substance applied."

SEC. 4. DEFINITIONS.

Section 329 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11049) is amended by adding at the end thereof the following:

"(11) COMMERCIAL AP-PLICATOR.—The term 'commer-

cial applicator' means—

"(A) any person who, for hire, applies or causes to be applied any substance contained on the list compiled pursuant to section 341 to tree, ground areas, shrubs, plants, the atmosphere, or lakes and other open bodies of water; or

"(B) any person who, for hire, applies or causes to be applied any such substance in any public building.

"(12) PUBLIC BUILDING.— The term 'public building' means all schools, public and private, office buildings, and any other structure or facility frequented by the public in the ordinary course of business.

"(13) COMMERCIAL APPLICATION.—The term commercial application means applying, or causing to be applied, for hire, in commerce, any substance on the list published pursuant to section 341 of this Act to any tree, ground area, shrub, plant, or atmosphere, or applying or causing to be applied, for hire, in commerce, any such substance in any public building. "(14) FULL DISCLOSURE.—

"(14) **FULL DISCLOSURE.**—
The term 'full disclosure' means written disclosure, signed by all parties to a commercial transaction, of all known human health and environmental risks of the substances applied in such prominence and in such terms as to make such risks likely to be understood by the ordinary individual under customary conditions of purchase. Such disclosure shall also include a statement reflecting the level of testing for such risks which the substance has undergone."

SEC. 5. PREEMPTION.

Section 321(a) of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11041(a)) is amended—

(1) by deleting "or" at the end of clause (2),

(2) by deleting the period at the end of clause (3) and inserting in lieu thereof a semicolon and the word "or", and

(3) by adding at the end thereof the following: "(4) preemept in any way any State or local requirement regulating chemical use or requiring notification or posting.".

SEC. 6. AMENDMENT TO DEFINITION OF HAZARDOUS CHEMICAL.

Section 311(e)(3) of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11021(e)(3)) is amended by inserting immediately before the period at the end thereof a comma and the following: "other than those substances contained on the list established pursuant to section 341(a) of this Act".

SEC. 105. GENERAL AMEND-MENTS.

(a) AMENDMENT TO HEAD-ING.—The heading for section 325(c) of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11045(c)) is amended to read as follows:

"(c) CIVIL AND ADMINISTRATIVE PENALTIES

See BILL on page 23

Cantu named president of ServiceMaster Consumer

ServiceMaster promoted Carlos Cantu to president and CEO of ServiceMaster Consumer Services from president and chief operating officer.

The Consumer Services company, headquartered in Memphis, TN, offers a range of services including lawn care, pest control, cleaning, radon testing, etc. It encompasses 5,300 service centers and serves 3.5 million customers annually.

Cantu has led Consumer Services since 1987. Revenues for the company grew 40 percent and profits 45 percent in 1990 under Cantu's leadership, said a release from ServiceMaster.

Also from ServiceMaster, the company's founder Marion Wade, and former chief executive officers Kenneth N. Hansen and Kenneth T. Wessner were inducted in the American National Business Hall of Fame in

May.

Michael Dietrich is the new manager, Lawn Care Sales Division of Lesco, Inc., Rocky River, Ohio. Dietrich joined the company in 1988 and served as Lawn Care Custom Account



Michael L. Dietrich

Manager. Previous to that he worked for ChemLawn Corp. as senior buyer, research agronomist, and lawn spe-

cialist.
The Toro Company, Minneapolis, named Michael Anderson as director of sales for commercial products. He was previously vice president of national sales for the Waterous



Michael E. Anderson

Company, a business group of American Cast Iron Company.

Lawnmark of Youngstown named **Tom Bucci** as manager. "In the past year our business in the Youngstown area has doubled," said **J. Martin Erbaugh**, Lawnmark president. Prior to his promotion, Bucci worked for Lawnmark in Albany, NY.

Pat Loper joined Rain Bird Sales as corporate parts service manager.



Steve C. Board received the Golden Oak Award for highest scholastic achievement at the 1991 Davey Institute of Tree Sciences. Board is a foreman for Davey's Rochester, NY, office.

Left, Ward Peterson and R. Douglas Cowan, right, are shown above presenting the award to Board.

R.C. "Bob" Sears switches from executive vice president of the Irrigation Association to vice president of membership and technical services. He's been with IA for five years.

Ed Nachtsheim
was appointed
vice president of
finance and treasurer for
Cushman Inc.,
Lincoln, NB. He
was formerly
chief financial officer for the
Reach All Company, Duluth,



Ed Nachtsheim

MN. Cushman also appointed **David Legg** as district sales manager—Ohio, Michigan, Wisconsin, Indiana, Kentucky.

Elizabeth D. Owens joined ISK Biotech Corporation, Mentor, Ohio, as manager product registrations. Previously she was manager of regulatory affairs with Biotechnica International, Cambridge, MA.

The company also named Walter R. Slabaugh product development manager, Western Area (Oregon, Washington, Utah, Wyoming, Montana, Idaho and Nevada). He will live in Boise, Id.

Brady J. Surrena becomes ISK Biotech's business development manager. He will relocate to Marietta, GA.

Donald D. Ball became manager environmental, safety and quality assurance for ISK Biotech, and **Robert E. Moser** joined the company as manager corporate technology.

Cushman Inc. appointed Gregg W. KinKade director of marketing for Ransomes America Corporation, Lincoln, NB. He joined the company in 1989 as director of creative support services.



Sandi Gridley became advertising manager for Cushman Inc. She's worked for the company's marketing department and was named marketing communications coordinator in 1989. She's res-



Sandi Gridley

ponsible for the advertising and promotion for Cushman and Ryan turf care equipment. Cushman named Olivia Poggenpohl as communications coordinator in the marketing department.

The California Landscape Contractors named **Ernst Lehmann** as a Life Member this spring. Born in Switzerland, Lehmann travelled the world before starting a landscape business, later to be called Lehmann Landscaping Co., San Mateo, CA. He's won many awards for his landscaping.

Joseph D. Murphy is the 27th person to earn the Grounds Manager Certificate from the Professional Grounds Management Society.



1991 Pennsylvania Turfgrass Council Board of Directors: (I. to r.) Michael Smith, Edward Roynan, Barry Grote, Samuel Snyder, VII, Jerred Golden, Dennis Watkins, Michael Zedreck, and Charles Cadiz, Jr. Not present for photo: Bill DeHaven, Robert Jackson, James Walter, and John Yakubisin.



Ohio scholarship winners. The Ohio Turfgrass Foundation (OTF) presented scholarships to these students during 1990: front (I. to r.) Mark Seitz, Joe Wichie, Jim Kracker, Bob King and Donna Barlow; back (I. to r.) David Zahniser, Ron Swing, Monty Hale and Tim Kelly.

Foundation aids CSU's program

FORT COLLINS, CO—The Rocky Mountain Turfgrass Research Foundation awarded \$23,000 to Colorado State University for turfgrass research.

"We are very impressed by Colorado State's dedication to turfgrass research and our foundation wants to be a partner in that research," said Larry Mills, president of the Rocky Mountain Turfgrass Foundation. The grant was the result of fund raising efforts by the Association and the Rocky Mountain Golf Course Superintendents Association. The money goes to research.

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BILL

from page 22

FOR REPORTING REC-ORDKEEPING REQUIRE-MENTS.—"

(b) Section 325(c) of such Act is amended by adding immediately after paragraph (2), the following new paragraph:

"(3) Other than the reporting requirements covered by subsections (a) and (b) of this section, and paragraphs (1) and (2) of this subsection, any person who fails or refuses to (A) comply with any rule issued pursuant to this Act, (B) establish or maintain any record as required by this Act or any rule issued pursuant thereto, (C) or submit any report, notice, or other information as required by this Act or any rule issued pursuant thereto, (D) permit any entry or inspections as required by subsection (g) of this section, or (E) fully disclose all information required under any provisions of this Act, shall be liable to the United States for a civil penalty in an amount not to exceed \$10,000 for each such violation."

(c) AMENDMENT.—Section 325(c)(3) of such Act is amended to

read as follows:

"(4) Each day a violation described in paragraph (1), (2), or (3) continues, shall, for purposes of this subsection, constitute a separate violation."

(d) **AUTHORITY.**—Section 325 of such Act is amended by adding at the end thereof the following:

"(g) For purposes of administering this Act, the Administrator, State and local governments, and any duly designated representative of the Administrator, State or local governments may enter and inspect, issue subpeonas for the attendance and testimony of witnesses and the production of relevant papers, books or documents, and may obtain and execute warrants authorizing entry and inspection." LCI



New Cushman turf catalog is available

The full line of Cushman turfcare equipment for 1991 is highlighted in the new Cushman Turf Equipment catalog. For a free copy of the new catalog, contact your local Cushman turf dealer or contact Cushman, P.O. Box 82409, Lincoln, NE 68501. 800/228-4444.

Circle No. 121 on service card.



This tough cabinet stops expensive theft

Green Turf Lawn Sprinkling Systems offers a theft and vandal-resistant cabinet for irrigation backflow prevention devices.

The company says theft of the devices is becoming increasingly common (apparently they're bringing about \$40 from scrap dealers), and it costs anywhere from \$500 to \$1500 to replace backflow preventers.

The legs of the cabinet are embedded in a concrete pad. The cage is made of a combination of iron and steel. The lidded box is then placed over the equipment and bolted to the concrete base. The cabinet can be locked.

Circle No. 122 on service card.



Rebel and Rebel II have worthy offspring

Lofts says its Rebel Jr. is darker than other turf-type tall fescues. Other advantages, says Lofts: moderately low growth, excellent performance in full sun or moderate shade, and requires only low to medium maintenance.

Compared to extreme dwarfs, Rebel Jr. is quicker to establish; it's also faster to recover from wear and traffic because it replaces its damaged, old and worn-out leaves more rapidly.

Circle No. 123 on service card.

WeedBlock fabric in bigger pieces now

Easy Gardener, Inc., offers its WeedBlock landscape fabric in new four- and six-foot widths. Garden beds surrounding shrubs are often wider than three feet, requiring several pieces of fabric to be laid down to protect the entire area from weeds, the company says. WeedBlock is a non-woven geotextile that blocks weeks but lets air and water pass through freely. Circle No. 124 on service card.

New Scott product aimed for South

O.M. Scott & Sons Company offers new Turf Starter Plus Ronstar (trademark of Rhone-Poulenc Ag) that combines a high-phosphorus fertilizer with pre-emergent weed control to handle annual grassy weeds. It's for use during Bermudagrass sprigging and to help Bermudagrass reestablish itself after winter damage.

Turf Starter Plus Ronstar contains oxadiazon, a preemergent herbicide for use on Bermudagrass as well as St. Augustinegrass, which controls or suppresses crabgrass, Poa annua, goosegrass and foxtail.

The product supplies ammoniacal nitrogen and urea for quick greenup, and phosphorus for spring development and stolon establishment. Circle No. 125 on service card.



RedMax kit for best uses of power blowers

RedMax offers an informational kit outlining the most effective and courteous techniques for using power blowers. The kit contains 50 brochures, 10 posters and a VHS video. The posters and brochures come in five languages: Korean, Vietnamese, Japanese, Spanish and English. The kits were created to present a standardized format for safe and efficient use of both backpack and hand-held power blowers. The kit costs \$39.95 plus \$4 for shipping and handling. RedMax, C/O International Marketing Exchange, Inc., Dept. 6249, 540 Frontage Road 362, Northfield, IL 60093.

Circle No. 126 on service card.

Salsco's chippers now have big bite

Salsco, Inc. has three new chipper/shredders in its Stallion line—the 5 hp Briggs, the 7.9 hp OHV Kawasaki, and a 8 hp Briggs. Salsco says Stallions will handle 31/2" logs in the chipper side and brush up to 3/4" thick in the shredder side. Option include electric start, 12' hose kit, transport wheel, over the road tires, etc. Circle No. 127 on service card.



Jake adds new gas, and electric vehicles

Jacobsen added two new models to its utility truck line. The gas-powered 810 Express and electricpowered 610 Express trucks haul up to 1,000 pounds of passengers and cargo.

The 810 Express has a 8.5 hp, 4-cycle, two-cylinder, overhead-cam, gas engine with electronic ignition. The 610 Express has a 6.5 hp electric motor. Top speed for both is 12 mph.

This spill response

kit aimed at small jobs

pond efficiently to small emer-

gency spills in the field. It's

equipped to handle up to a 6-

nylong carry bag, three large

Chemsorb® tubes to surround

and contain the spill, and two

Circle No. 130 on service card.

It consists of a fluorescent

gallon spill.

Chemsorb pillows.

Both Express trucks have rugged steel bodies. A tubular steel chassis and four-wheel hydraulic shock absorbers are standard. Each has a 1,000 pound capacity, and eight cubic foot loadbox.

Circle No. 128 on service card



Koos says activator helps composting

Koos Inc.'s Nature's Best brand Compost Acti-Vator is an organic product to speed up the chemical and bacterial action needed to decompose vegetable and animal matter. It can be used in a bin, a bag, or a pile. It can be used in leaves, grass and shrub clippings, kitchen scraps, wood shavings and sawdust. The result is rich, useful compost.

Circle No. 129 on service card.



users reduce leaching The Spill Response Kit from Aquaterr Instruments says its Precision Laboratories Inc. gives workers the tools to re-

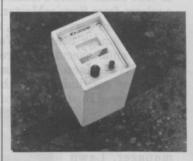
New moisture helps

Model 200 Moisture Meter provides instant digital reading of soil moisture. The instrument comes with a 30inch probe.

The company says the meter allows users to track feeder root zone moisture, improve water distribution and reduce fertilizer leaching.

The Model 200 is self contained and powered by a 9-volt battery. The measurement at the probe tip is automatically converted to percentage of moisture.

Circle No. 131 on service card.



This sprayer/applicator can be taken anywhere

Falkenberg Inc. introduces the Rickshaw ApliCart sprayer/applicator. The 20inch tires make it maneuverable over all types of terrain. The broadcast nozzle covers large-area swath spraying, while the trigger gun and adjustable nozzle are perfect for spot spraying.

The 10-gallon tank allows the user to switch chemicals or continue after running out. Simply disconnect the suppy hose and change tanks.

The 12-volt pump delivers up to 60 psi and 1.8 gallons per minute with pressure and flow control that allows you to reach 20 feet or more, or adjust to low-volumn mist.

Circle No. 132 on service card.

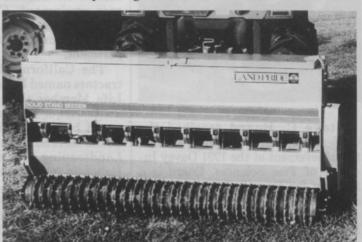
New Land Pride seeder

gives precise metering Land Pride's Primary Seeder features a six-bushel seed hopper with a paddle-style agi-

Seed is precisely metered through 10 non-corrosive, fluted cups. Cups are grounddriven by the front roller. One lever easily changes calibrations for all cups, either by the acre or per 1,000 square feet.

Seed is distributed between the rollers and released in a full-width pattern. Features: fi40 drive chain with springloaded idlers, track removers and lift hooks for easy loading and unloading.

Circle No. 133 on service card.



SUPPLIER SPOTLIGHT

SP's move from Nebraska to Indy aimed at better service for LCOs

INDIANAPOLIS, IN—This year marks an anniversary of sorts, the 10th year Special Products has served the professional lawn care market.

In 1990 this product distributor sent LCOs a message by moving from Fremont, NB, to Indianapolis, nearer the geographic center of the coolseason lawn care market.

"We want to do business here in our backyard," says Special Products General Manager Terry Higgins.

"Indianapolis is central to our market, our suppliers and our customers," says Higgins. "I think it sends a message to the industry that UAP is serious about the business."

Actually, the move is just one of several fundamental changes in SP since Higgins became its general manager in April 1990. (He had spent the 12 previous years with Rhone Poulenc.)

SP has changed both its focus and its methods, says Higgins. The company (one of several independent operating companies within the much larger UAP) now directs its efforts toward the most immediate level of the lawn care market—the end users, LCOs. Though "resellers" continue to be a sizable percentage of SP business, particularly in the Northeast, the focus is on ends users.

Gone, or at least going too hopes Higgins, is the perception that Special Products sells on price alone.

He says he wants Special Products to offer "the best value" and not necessarily "the cheapest price".

Along those lines, SP has put together a new 10-person sales staff; only one sales person remains from the premove days. All of the new staff are turf professionals with anywhere from seven to 13 years each in the industry.

Sales Manager Jerry Schroeder, Omaha, NB, says the recommitment to LCOs is, in a sense, a return to what SP did best anyway. "We were most successful when we were problem solvers and not just order takers," he remembers.

Sales Manager Rich Mulder, Columbus, Ohio, says Special Products is working hard to earn the reputation as "a service company from top to bottom."

Although SP is a distributor, it has several proprietary products of its own and will be introducing others in the coming months.

"It's difficult being in the distribution business and just distributing other manufacturers' products. Even a distributor has to have some diversity to survive in today's business climate," says Hig-

gins

"To be a viable company, you have to develop new products," adds Schroder, "and we're definitely back in the hunt."

Special Products, in its 10 years in the industry, has had some firsts—the first company with an outside formulation for Dacthal, the first with Turcam 2.5, the first to have a three-way combination other than Trimec.

Though LCOs from the Rocky Mountains and East (the Southeast eventually) are SP's immediate target, the company is moving into golf sales too. It's constructing a model program based on sales efforts in the market area bounded by Columbus, Lexington, KY, and Indianapolis.

"We have to be a factor in the golf course segment of the market too if we want to survive," says Higgins. LCI



Management team refocuses SP: (I. to r.) Jerry Schroeder, Rich Mulder, and General Manager Terry Higgins.

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MEETING DATES

July

■ 19 Hazard Trees—Their Recognition and Prevention.

Nebraska City, NE, Contact Dr. James Fazio, director, The Arbor Day Institute, P.O. Box 81415, Lincoln, NE 68501.

■ 10-11 Pennsylvania Pesticide Institute.

Embers Convention Center, Carlisle, PA. Contact Pennsylvania Nurserymen's Association, Inc., 1924 North Second St., Harrisburg, PA 17102. 717/238-1673.

■ 14-16 Mid-Atlantic
Nurserymen's Trade Show.
Baltimore Convention Center.

Baltimore Convention Center. Contact Mid-Atlantic Nurserymen's Trade Show, Inc., P.O. Box 314, Perry Hall, MD 21128. ■ 15-19 The Technical Arborist Advanced Training Workshop. Washington D.C. Contact Dr. James Fazio, director, The Arbor Day Institute, P.O. Box 81415, Lincoln,

■ 22-26 The Practical Arborist.
Minneapolis, MN. Contact Dr.

NE 68501.

■ 23-25 Penn Allied Nursery

James Fazio, see above.

Trade Show.

Valley Forge Convention Center, King of Prussia, PA. Contact Pennsylvania Nurserymen's Association, 1924 North Second St., Harrisburg, PA 17102. 717/238-1673.

■ 3-Aug. 4 American Sod Producers Association Summer Convention.

Summer Convention.
Red Lion/Lloyd Center, Portland.
Contact ASPA, 1855 Hicks Road,

Rolling Meadows, IL 60008. 708/705-9898.

Aug.

■ 22-23 Pennsylvania Landscape and Nursery Trade Show and Conference.

Monroeville, PA. Contact Pennsylvania Nurserymen's Association, 1924 North Second St., Harrisburg, PA 17102. 717-238-1673.

BOOKSTORE



665 - ARBORICULTURE: THE CARE OF TREES, SHRUBS AND VINES IN THE LANDSCAPE

VINES IN THE LANDSCAPE by Richard W. Harris
Provides comprehensive coverage of complete planting, site analysis, preparation and special planting methods, fully detailed coverage of fertilization, irrigation and pruning guidelines on preventative maintenance, repair and chemical control, how-tos of diagnosing plant problems, practical data on non-infectious disorders, diseases, insects and related pests and pest management. \$63.00



430 - DISEASES OF TREES AND

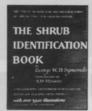
HAUS DISEASES OF TREES AND SHRUBS

By Wayne Sinclair, Howard Lyon and Waren Johnson

A comprehensive pictorial survey of the diseases of, as well as the environmental damage to, forest and shade trees and woody ornamental plants in the United States and Canada. Reflects the most important developments in fungal biology and taxonomy, plant bacteriology, virology, and environmentally induced stress in plants. Summarizes information about newly discovered diseases and provides up-do-date accounts of old ones. \$52.50



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110 - TURF MANAGERS'
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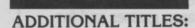
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