PLCAA stops referring LCOs to insurance agency

By James E. Guyette Managing Editor

SPECIAL REPORT—The Professional Lawn Care Association of America has stopped referring LCOs to a Florida-based insurance agency because of some questions about its insurance policies.

PLCAA had been direct-

ing LCOs to Orlando-based Wilson, Wheeler and Schmidt for liability insurance. PLCAA initially referred the agency because it offers a policy that includes pollution coverage.

Most insurance companies stopped providing LCOs pollution coverage in 1986. Pollution coverage is required of LCOs in 27 states, though some states have waived that provision due to lack of availability.

PLCAA stopped referring the agency after learning that one carrier it was writing policies for, Stone Mountain Insurance Co. of Marietta, Ga., was ordered to liquidate.

Some LCOs had a difficult time getting answers about their policies after they were notified of the order, says Doug Moody, PLCAA's assistant executive director.

PLCAA also thinks the agency needs to provide more information about the carriers it has found to replace Stone Mountain, says Moody. At least two of the three are based offshore,

and therefore not regulated by American insurance laws.

A spokesperson for the Florida Department of Insurance reports that the two offshore companies, Oxford Indemnity and American Lloyds, are not licensed by the state and therefore not allowed to do

LAWN CARE INDUSTRY

Serving commercial mowing and chemical lawn care professionals

VOLUME 13 NUMBER 5

AN HITHELL PUBLICATION

MAY 1989

Drought didn't clip mowing boom

NATIONAL REPORT—Drought conditions caused a lot of complaints, but 1988 will be remembered with smiles by the 85 mowing/management contractors named to LAWN CARE INDUSTRY'S third annual

Million Dollar Mower's List.

The number of companies named to the list grew 36 percentage points over last year. Most companies had about 20 percent revenue growth over 1987.

Drought conditions created financial hardship for many mowing/management companies in 1988. Those that mowed on a contract basis, however, benefitted.

Explains Sam Russo of Bayville, N.J., property managers were not inclined to change contracts that they signed in the spring. And the slower growth made lawns easier and quicker to cut.

Companies that billed on a percut basis made out well if they were able to find other services to provide.

Tony Torma, co-owner of Indianapolis, Ind.-based Mainscape, Inc., says property managers were willing to spend their lawn mainte-

See LIST Page 9

Soil test—key tool in battling drought

By James E. Guyette Managing Editor

proper soil nutrition can be a big boost for plants that are struggling to survive drought conditions, and soil testing can help ensure that clients' properties are at the necessary levels.

It also can come in handy for tending lawns that were damaged during last year's drought. A simple lack of water was not the only problem.

"A lot of them suffered because of the poor soil substructure underneath," says Michael L. Agnew, Ph.D., extension turfgrass specialist at Iowa State University.

A plant that gets the right amount of nutrients can better withstand drought stress.

"The best prevention would be to have your soil test levels at the optimum limit," says Richard Christ, an agronomist at A&L Laboratories, Inc. in Memphis, Tenn.

"In a drought situation your roots are not going to be able to get at the nutrients, so See **TEST** Page 22

Nader attacks lawn care

LATE NEWS—Ralph Nader's consumer lobby has issued a report calling for a ban on some lawn care chemicals, claiming they are suspected human carcinogens.

The 24-page report, Keep off the grass: A review of the health effects of pesticides most commonly used by the lawn care industry, was sent

See NADER Page 11

INSIDE

1986

TODAY'S TURF

LESCO's Bruce
Augustin describes a
comprehensive
approach to yearlong weed
management.

CLASSIFIED

See what's for sale, employment opportunities.

29

1987

ChemLawn rebounding, 1988 Ecolab report says

By ELLIOT MARAS Editor

1988

SPECIAL REPORT— ChemLawn Services Corp. posted a strong second half following a disappointing first half in 1988, according to the 1988 annual report of its parent company, Ecolab, Inc.

The report shows Chem-

1988 was \$13.9 million on net sales of \$374.6 million, compared to a pro forma 1987 figure of \$2.2 million on sales of \$359.9 million.

The pro forma figure assumes Ecolab owned Chem-

Lawn's operating income for

sumes Ecolab owned Chem-Lawn for all of 1987. The reported 1987 operating income was \$67.6 million on sales of \$297.7 million, but this does not include the traditionally difficult first quarter, when Ecolab did not own ChemLawn.

The \$13.9 million does not fare well against Ecolab's initial projection of \$30 million.

See REPORT Page 11

LATE NEWS

Venture firm buys into Barefoot

WORTHINGTON, Ohio—A Chicago-based private investment firm, Golder, Thoma & Cressey, has acquired majority interest in Barefoot Grass Lawn Service, Inc.

Golder, Thoma & Cressey manages \$400 million and has invested in 60 companies in what it calls "fragmented service industries."

William V. Galstris, Jr., an associate with the investment group, says Barefoot has all the capital it needs to grow internally, through acquisitions, and through franchise sales.

Investment amount was not disclosed.
Pat Norton, president of Barefoot, described the transaction as a leveraged management buyout.
Owners besides the investment firm now include Norton, W. Page Mays and John Dunham.

The company was previously owned by six individuals, including Mays, Norton, Dunham and

See VENTURE Page 19



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"Sometimes things are so obvious that they take you by surprise." No, that's not Yogi Berra double talk . . . It's the essence of what so many of our turf friends said when they sampled Trimec Plus last year.

Listen to Sandy Queen,
Certified Superintendent of Golf
for the city of Overland Park, Kansas. "The minute I read the Trimec
Plus label, I said to myself, Hey, this
will work! I just know it will!"

It was in August of 1988 when Sandy saw the Trimec Plus label and the first thought that came to his mind was to test it against a \$250.00-a-gallon post-emerge he



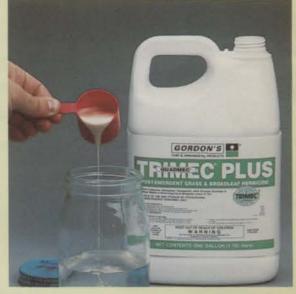
Everett Mealman
President
PBI/Gordon Corporation

had already purchased to use on the goosegrass of a newly seeded drivingrange tee at the Overland Park Golf Course.

"You remember the weather last year," said Sandy, "so you won't be surprised to learn that,

even though a pre-emergent had been used, the tee was loaded with goosegrass and crabgrass. We sprayed half of it with the super expensive exotic and the other half with Trimec Plus, which I believe costs \$27 a gallon and, based on the rates we used, cut our cost per acre in half.

"The super expensive exotic only



New free-flowing formulation: Active ingredients are in a stable, uniform suspension that is as easy to work with as any other Trimec Complex.

got the young goosegrass. It did virtually nothing on the mature plants. But that one application of Trimec Plus virtually cleaned out all the grassy weeds as well as a good deal of yellow nutsedge that was also immune to the more costly treatment."

We'll tell you what Sandy Queen saw on the Trimec Plus label that made him so sure it was a winner, but first, here are a few more comments from your peers.

Works with no burning or discoloration







1) Tom Tomlinson, left, of Lawn Doctor in Trumbull, West Redding, Connecticut with two of his drivers, Gary Schwarz (center) and Matt Werthmann. Tomlinson reports excellent results with Trimec Plus on yellow nutsedge.

2) Russell Kestler, of Russell's Landscaping, Malverne, N.Y. Kestler used Trimec Plus to control crabgrass in 85° temperature with very good results and no burning or discoloration.

sell's Landscaping of Malverne, New York out on Long Island, said, "We used Trimec Plus last season on approximately 140,000 sq. ft. of residential turf that was loaded with crabgrass. We got excellent results with just one application — and there was no discoloration or burning of the turf, even in August."

Tom Tomlinson of Lawn Doctor in West Redding, Connecticut used it on over 40 lawns last year to clean out yellow nutsedge and crabgrass. "The results were excellent," said Tomlinson. "Trimec Plus totally cleaned up an unusually heavy infestation of nutsedge and crabgrass in spite of erratic and difficult weather conditions, and in most instances only one treatment was needed.

"And guess what," continued Tomlinson. "Trimec Plus also cleaned up our clover problems."

After listening to Tomlinson, we almost think we should have named our new herbicide Trimec Plus-Plus-Plus: nutsedge plus crabgrass, plus broadleaves, plus economy.

Why Trimec Plus is so efficient

Now, back to what Sandy saw on the Trimec Plus label that got his enthusiasm up — it was MSMA as an ingredient in a new Trimec Complex. As a Certified Superintendent of Golf, Queen is quite naturally a dyed-in-the-wool user of Trimec and, of course, he has had extensive experience with MSMA.

He knows that MSMA is surely one of the most effective herbicides for use on grassy weeds and sedges, but that it has a major flaw. To get enough of it into a grassy weed to kill it requires repeated applications, or so much of a wetting-and-penetrating agent that burning and discoloration will occur.

And he also knows that Trimec has a unique eutectic characteristic that gives it unparalleled penetrating power.

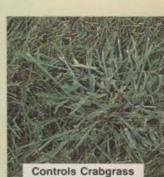
A new Trimec Complex

So, when MSMA is locked into a Complex with Trimec — which is precisely what Trimec Plus is — you have a superior system for delivering the MSMA to grassy weeds such as crabgrass, dallisgrass, barnyardgrass and nutsedge — and, of course, the delivery system itself, Trimec, is the undisputed number one post-emergent broadleaf herbicide for ornamental turf in all the world!

Trimec plus MSMA. But, wait! Remember that word, Complex.







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You'd have to buy at least two or three other herbicides to do all of the things that Trimec Plus, alone, will do — control crabgrass; control yellow nutsedge; control the widest spectrum of broadleaves.

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HERBICIDE

Terminology can make a difference in the impressions you make when discussing pesticides with the media. Barry Troutman, education director for the Professional Lawn Care Association of America, says the terms "controlling agent," "weed control" and "pest control" are less intimidating than "pesticide."

Biological control agents do cost more than standard fertilizer products, but turfgrass managers also must consider the fungicide costs involved.

Joe Vargas, professor of plant pathology at Michigan State

University, notes that tests show biological agents prevent some turf diseases. He spoke at the Reinders Turf Conference in Waukesha, Wis.

A green industry coalition consisting of landscape architects, sod producers, landscapers, arborists, LCOs and others is in the making. Executives of nine associations recently met in Chicago and tentatively agreed on forming a coalition to represent the industries on political issues.

Task forces were established to determine a name and an organizational framework. A

September meeting is planned in Washington, D.C.

Another regional lawn care association is off and running:

The Colorado Association of Landscape Professionals. Close to 100 attended the first conference and trade show in March, held in

LESCO topped \$100 million in sales in 1988, according to the company's annual report. Earnings were \$2.7 million compared to \$2.1 million in 1987. The report notes that the results were particularly impressive in light of the summer drought. LCI

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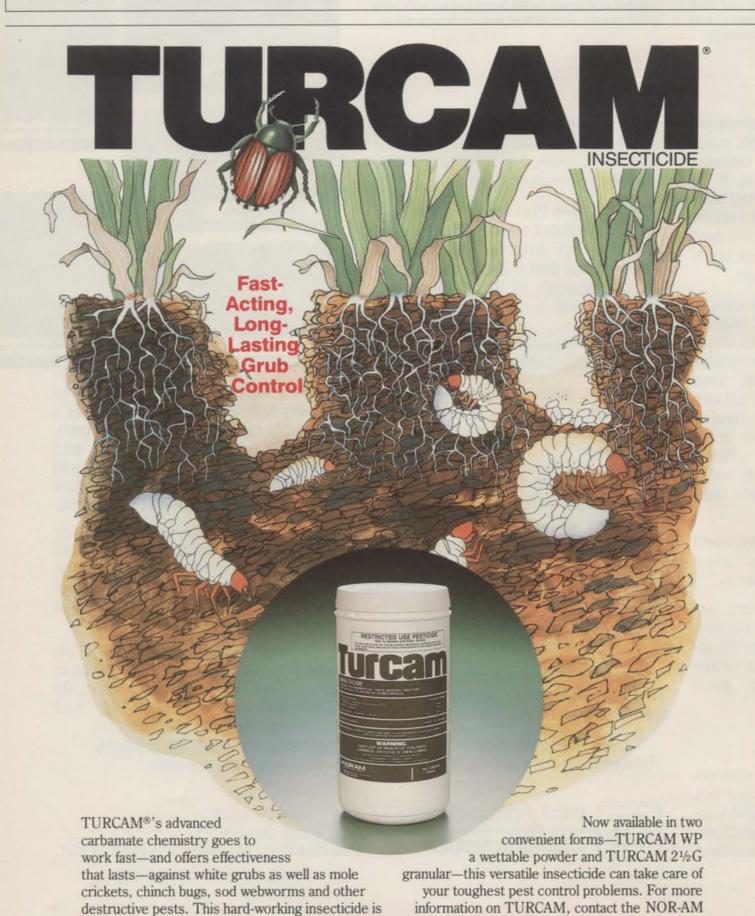


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> GET MORE FACTS

Be alert: food scare could be contagious

n the past year, the Professional Lawn Care Association of America set up a national network of local media relations contacts to monitor coverage of the industry. It was a wise move.

The industry needs people at the local level to keep abreast of the manner in which newspapers, radio stations and TV stations are dealing with the food scare caused by Alar-treated apples and cyanide-tainted grapes.

Local news directors who follow the examples of CBS' '60 Minutes" and Newsweek in covering the food scare are apt to paint the lawn care industry in an unfair light at some time in the future.

LCOs will have to make special efforts to educate these news organizations about lawn care.

Media that have tried to critically examine the food scare, like the Chicago Tribune, can be counted on for fairness.

Media bosses vie for rights to attention-getting stories, and objectivity is sometimes the casualty of their battles. The food scare is a case in

The National Resources Defense Council, an antipesticide group, positioned itself for maximum exposure by promising "60 Minutes" first right to its controversial report on pesticide residues in food.

The resulting hysteria has been so great that food chains are trying to convince customers that they're switching to more "organic" produce. If the pressure continues, food prices will surely jump, with no benefit to the consumer.

The alarmists behind the food scare hold the conviction that syntheticallyproduced products are particularly prone to harm human health. Their cause is ideological, not scientific.

The allegations aired on "60 Minutes" lacked scientific backup. Reporter Ed Bradley introduced the segment, saying: "The most potent cancer-causing agent in our food supply is a substance sprayed on apples to keep them on the trees longer and make them look better."

Members of the American Society of Toxicology who watched the show were shocked, according to the Chicago Tribune.

Arthur Craigmill, the society's communications chairman and an environmental toxicologist at the University of California, got a copy of the NRDC report and found its methodology faulty. He noted that the report relied on tests done in the 1970s that were tagged as scientifically dubious by an

independent advisory board created by Congress.

Newsweek was not to be outdone in its March 27 cover story, "How Safe is Your Food?"

The story itself is actually well-balanced, but the headline blares, in huge, black letters: "Warning! Your food, nutritious and delicious, may be hazardous to your health."

Possibilities of risks are raised throughout the story, but none are documented by scientific studies. Every cause for concern is followed by a



ELLIOT MARAS **EDITOR**

qualifying statement which leads one to wonder why the concern is raised in the first

The article points out that health officials are much more worried about natural toxins like salmonella and

aflatoxin, a fungus that has ruined much of last year's corn crop, than pesticides.

It also points out that the Food and Drug Administration examines all food products in their final form, and has always found food to be very safe.

Nevertheless, the article is followed by "A Guide to the Grocery," a grocery shopping guide for reducing health

The Chicago Tribune does not require any reading between the lines. A front page

story on March 26, "Did media peel away facts in apple scare?" gives a balanced, historical overview to the concern about apples.

An editorial in that same issue points out that the National Academy of Sciences says the risks posed by pesticide residues are "greatly outweighed by the benefits' of eating more fruits and vegetables to prevent cancer.

Some sensationalist reporting is a fact of business life today. Ongoing monitoring is necessary.

Ellix Maras

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MILLION DOLLAR MOWERS

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* - designates new to Million Dollar List

Rank	Firm	1988 Revenue	1987 Revenue	% Growth	Rank	Firm	1988 Revenue	1987 Revenue	% Growth
1	Environmental Care, Inc. Calabasas, CA	36	30	20	36	Evergreen Services Corp. Bellevue, WA	1.786	1.22	46
2	The Brickman Group, Ltd. Langhorne, PA	16.6	15.4	8	37	Lawn Ranger, Inc. Zionsville, IN	1.7	2	-15
3	Lancaster Landscapes, Inc. Arlington, VA	12	11	9	37a		1.7	1	70
4	Northwest Landscape Industries, Inc. Tigard, OR	5.6	5	11	37b	Pennink-Arrimour Bryn Anthyn, PA	1.7	1.2	42
5	Oyler Bros., Inc. Orlando, FL	5	4.7	6	40	*BGT Landscape Co., Inc. Mundelein, IL	1.6	NA	_
6	Cagwin & Dorward Novato, CA	4.71	4.2	12	41	The Ground Crew, Inc. Arlington, TX	1.5	1.85	19
7	Maintain, Inc. Dallas, TX	4.55	4.2	8	41a		1.5	1.26	24
8	Las Colinas Landscape Services, Inc. Dallas, TX	4.5	3.9	15	43	The Spencer Co. Houston, TX	1.475	1.8	-18
9	Shearon Environmental Design Plymouth Meeting, PA	4.1	3	37	43a	2005-1200-1000	1.475	1.5	-2
10	Heyser Landscaping Norristown, PA	3.6	2.5	44	45	*Rand Landscape Dallas, TX	1.4	NA	-
1	AAA Lawn Industries, Inc. Tucker, GA	3.3	3.5	-6	45a	D.B. Ctavet Inc.	1.4	1.2	17
12	*Sam S. Russo Landscaping Co.	3	NA	-	45b	Oak Brook Maintenance Oak Brook, IL	1.4	1.4	0
13	*Environmental Landscape Services	2.8	NA	_	45c	Green Leaf Landscape Management, Inc.	1.4	1.5	-7
4	Memphis, TN *William Vandergeest Landscape Care	2.6	NA	_	45d	The state of the s	1.4	0.37	278
15	Santa Ana, CA Pampered Lawns, Inc.	2.562	3	-15	50	Earthtone Development	1.3	1.2	8
16	*Carlaccio Industries	2.5	NA		50a	Houston, TX Contra Costa Landscaping, Inc.	1.3	1.2	8
160	Fullerton, CA California Landscape Maintenance, Inc.	2.5	2.2	14	50b	*Rood Landscaping Co.	1.3	NA	_
6	Canoga Park, CA Clark-Morrell, Inc.	2.5	2	25	50c		1.3	1.2	8
19	Lithonia, GA Clarence Davids & Sons, Inc.	2.425	2	21	50d	*Green Grass, Inc.	1.3	0.94	38
20	Blue Island, IL Ruppert Landscape Co., Inc.	2.4	2.2	9	55	*Green Carpet Lawn & Landscape Co.	1.289	0.75	72
21	Ashton, MD Moore Landscapes, Inc.	2.31	1.4	65	56	Worcester, MA *Big Pine Farm	1.276	NA	-
	Glenview, IL Chapel Valley Landscape Co.	2.3	1.5	53	57	Marietta, GA Allen Keesen Landscape, Inc.	1.25	1.2	25
22	Woodbine, MD Landcare Industries, Inc.	2.22	1.8	23		Denver, CO North Haven Gardens	1.2	1.1	9
23	Tampa, FL Lied's, Inc.	2.2	1.8	22	58	Dallas, TX *Ron Yerardi Co., Inc.	1.2	0.5	140
24	Sussex, WI	2.2	2.2	0	58a	Waltham, MA	1.2	NA	_
24a	Irvine, CA Gibb's Landscape Co.	2.17	1.9	14	58b	St. Simons Island, GA SKB Lawn Industries	1.1	1	10
26	Smyrna, GA Proscape Maintenance, Inc.	2.1	1.9	11	61	Clarkston, GA *Stiles Corp.	1.1	0.85	29
27	Dallas, TX Greenleaves	2.1	1.7	24	bla	Ft. Lauderdale, FL The Bruce Co.	1.1	1.2	-8
2/a	Chamblee, GA	2	2	0	61b	Racine, WI			
29	American Landscape, Inc. Canoga Park, CA				61c		1.1	1	10
29a		2	1.3	54	61d	Colorado Landscape Enterprises Arvada, CO	1.1	1	10
31	Minor's Lawn Care Ft. Worth, TX	1.98	1.7	16	61e	TOTAL STREET,	1.1	NA	_
31a		1.98	1.4	41	67	*Tecza Bros., Inc. Elgin, IL	1.03	0.98	5
31b	Nanak's Landscaping of Orlando Altamonte Springs, FL	1.8	1.2	50	68	B.L. Cohen Landscape, Inc. San Jose, CA	1	1	0
34	L&L Landscape Services, Inc. Santa Clara, CA	1.91	2	-5	68a	*Vidosh Bros. Sterling Heights, MI	1	0.475	111
35	Green Thumb Enterprises, Inc. Fairfax, VA	1.8	2	-10	68b		1	8.0	25
					68c	*Davis Landscape Maintenance, Inc. Harrisburg, PA	1	NA	-

OVER \$1 MILLION, FIGURES NOT RELEASED:

Keesen Enterprises Englewood, CO

*Patrisi Landscaping, Inc. Hartford, CT

Moon Landscaping Yardley, PA *Lambert Landscaping Dallas, TX

*Industrial Landscape Services San Jose, CA

*Grounds Management & Landscaping, Inc. Mitchellville, MD Doerler Landscapes Lawrenceville, NJ

Davey Tree Expert Co. Kent, OH

Environmental Landscape Services, Inc. Houston, TX KEI Enterprises, Inc. Cudahy, WI KT Enterprises Alexandria, VA

Reinhold Landscape Flat Rock, MI Hydro West Agoura, CA

Buckeye Landscape Services, Inc. Worthington, OH

LIST

from Page 1

nance funds on ornamental and bed work when the grass wasn't in need of cutting.

Companies whose clients had good irrigation systems also fared well.

Pete Scholz, landscape maintenance manager for Sterling Heights, Mich.-based Vidosh Brothers, notes that his company caters to clients that have sophisticated irrigation systems. Maintenance revenue jumped 111 percent in 1988.

Most companies attribute their growth to the strong demand created by the heavy building activity in the last several years.

And the recent slowdown in building construction isn't expected to dampen maintenance needs as much as installation needs, notes Dave Amorose, vice president of Worthington, Ohio-based Buckeye Landscape Services Inc. Once a lawn is installed, it needs to be maintained.

Contractors that have established good reputations have found the growth easy. "You grow with your client," notes Amorose. "Maintenance sells itself."

Scholz of Vidosh Brothers notes that the public sector's trend toward contracting out landscape work holds promise for the industry. Schools and cities facing high labor and insurance costs are starting to eliminate their in-house staffs.

Twenty-four firms joined the list this year, as indicated by asteriks on the list. This marks significant growth over last year, when 14 firms joined.

Four companies fell off the list: Earth Enterprises, Auburn, Wash.; Hillenmyer Nurseries, Lexington, Ky.; Milford Landscaping & Maintenance, Milford, Conn.; and Torre & Bruglio Landscape Contractors, Inc., Mt. Clemens, Mich. In addition, a fifth firm, Livingstone, N.J.-based Dubrow's Nurseries, did not wish to participate this year.

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

The top five companies held their respective positions from last year: 1) Environmental Care, Inc.; 2) The Brickman Group, Ltd.; 3) Lancaster Landscapes, Inc.; 4) Northwest Landscape Industries, Inc.; 5) Oyler Brothers,

Ovler Brothers will fall off next year since it has been purchased by Environmental

Twenty-two percent of the companies subcontracted a portion of their chemical work, the largest firms subbing the least

Shearon coasts with property mgmt. firm

PLYMOUTH MEETING, PA.—Networking—the buzzword of the career-concious vuppies of the eightiesworks wonders.

Just ask the folks at Shearon Environmental Design. They experienced a 37 percent jump in mowing/management revenue in 1988, largely on the long-established relationships with property management professionals.

Shearon services 5- to 50acre multi-family and industrial properties.

Ed Shearon, secretary/ treasurer, says property management firms that manage multi-family buildings and industrial parks are a great resource for competent landscape firms. The managers remember who the good contractors are when they take on a new property.

"You gain entries by doing well in a given environment,' Shearon says. "It just grows geometrically." Much of the firm's growth, he says, reflects the growth of property management firms he started working with several years

network with property managers, Shearon says. Oftentimes, a service professional will be asked to give a talk before a local property management association.

Shearon's contacts with property managers took the company to Princeton, N.J. last year, where they opened up a third branch. The company now services properties in Pennsylvania, New Jersey and Delaware.

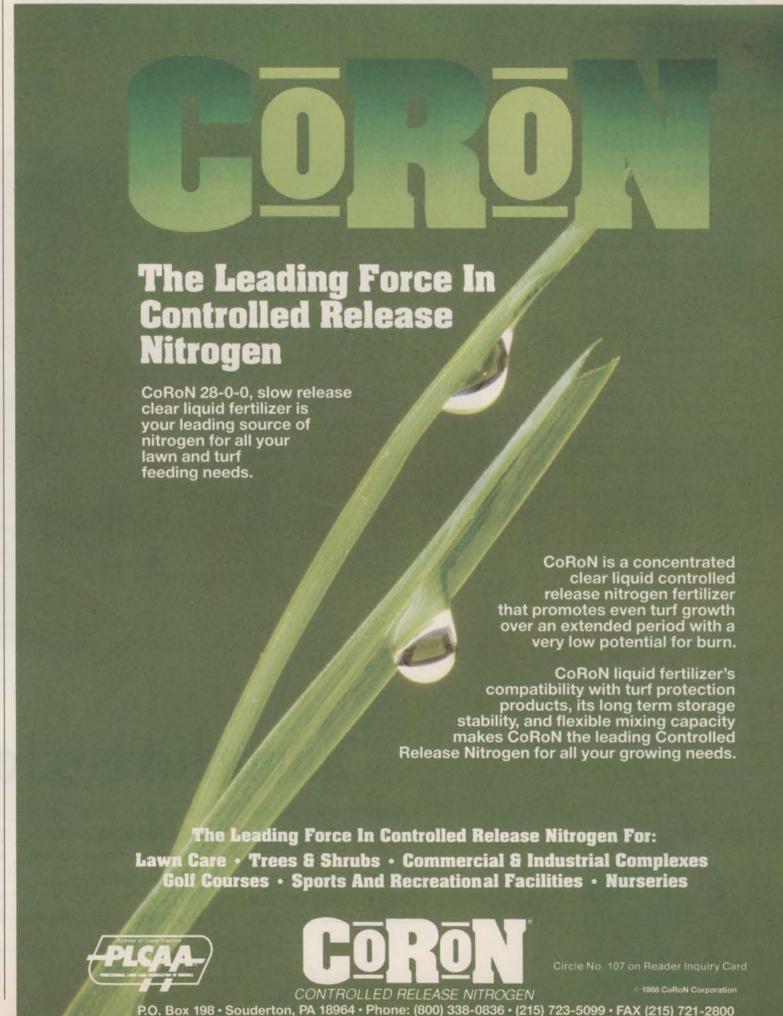
Shearon says crews should not have to travel more than 25 miles to a jobsite in an ur-Don't pass up a chance to ban area. Otherwise, the travel

time becomes too cumbersome.

When networking with property managers, be advised that their primary goals are optimum occupancy and minimum turnover of tenants. Shearon says a property manager will pay more if the service provider can accomplish these goals.

One of the company's greatest successes was when a building's occupancy rose from 80 percent to 100 percent after his company took over the outdoor maintenance.

"Try to sell the owner on



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the philosophy that aesthetics are very important," Shearon says. Landscape costs are a small part of any property manager's budget, he says, but the returns are among the

If the property manager turns a deaf ear, Shearon is not afraid to go to the building's owner. "If it's obviously in need of something and we have the capacity to service them, we'll do whatever it takes to reach the right people," he says.

In the future, Shearon sees a lot of potential servicing schools and universities. He says many are finding it more economical to contract landscape services than hiring an in-house crew.

fences or retaining walls, Russo's five-man crews can cut at least 10 lawns in a row. His crews average 250 to 300 lawns per day; 2,000 per day for the company.

The production is made possible by the 42-inch deck riding mower from Walker Manufacturing Co., Russo says. The mower's low profile design enables his crews to mow all but the most minute spots, which they then attend to with 21-inch deck walk-behinds from Snapper Power Equipment.

When Russo signed up his first retirement communities, the contracts stipulated no riding mowers. The trustees felt the riders dug up the turf and didn't get all the small spots.

When he showed them his papers saying a 42-inch, Walker mower would be used, they signed, thinking a Walker was a walk-behind.

"The first day I showed up on the job, they were somewhat disturbed," Russo muses. He told the trustees he'd use a walk-behind if they didn't like the results. But they did.

Now, many of the contracts in the area read: "Walker lawnmower or equivalent."

Russo also owns a power equipment dealership, selling Walker and other lines. LCI

Videos show operating safety

SACRAMENTO, CALIF.—The California Landscape Contractors Association recently released a series of safety training videos for workers who operate power equipment.

The four VHS volumes are: Power Hand Tools, Riding Mowers, Push Mowers, and Bobcat and Backhoe Safety.

Each demonstrates how to start and safely operate the most widely-used equipment, including weed eaters, blowers, riding mowers, push mowers, edgers, chainsaws, bobcats, and backhoes.

Special segments also cover proper clothing for each job, how to avoid the most frequent accidents, refueling safety, maintenance guidelines, and how to safety-check equipment before using it.

Each video comes with illustrated guides and group training materials. Cost is \$89 per video or \$295 for the complete set. For information, contact CLCA at 2226 K Street, Sacramento, CA 95816. Phone: 916-448-2522.

MOWERS

Russo finds fortune in residential

BY ELLIOT MARAS Editor

BAYVILLE, N.J .- No one would believe a mowing/management firm could rake in big profits in the single-family residential market.

And Sam Russo, who does just that, admits it would be pretty tough if he had to bill each of his 11,000-plus homeowners individually.

Instead, Russo signs up 500 lawns at a time. He contracts with retirement communities-single-family developments for retired people. Trustees in each community decide who will do the landscape work for all the proper-

Russo's firm ranked 12th on the 1989 Million Dollar Mower's List with \$3 million. He says his company's growth directly reflects that of retirement communities in New Jersey: Developments were first built 20 years ago and really picked up in the last four.

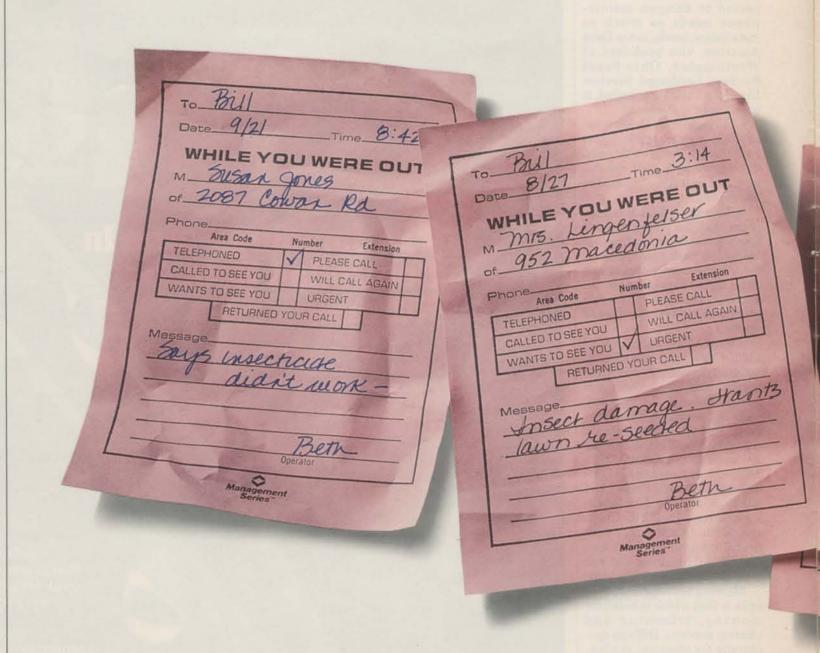
"What it created was not enough landscapers for the area," Russo says.

He estimates there are 36 retirement communities in Ocean and Monmouth counties, where he works. Retirement communities are also common in the Carolinas, Georgia and Florida.

Because the 4,000- to 5,000square-foot lawns have no



Russo: Filling a need.



Triumph gets rid of the toughe

Constant callbacks and retreatments can drive even the best lawn care business right into the ground.

But you can reduce your callbacks —and increase

your profits - simply by re- at controlling problem turf placing whatever insecticide you've been using with and mole crickets. Triumph.

cide is proven more effective has been shown to deliver

pests, including white grubs

For example, in 10 years of Because no other insecti- university testing, Triumph

REPORT

from Page 1

But that projection was modified during the year due to the drought and expenses incurred from the reorganization.

The 1987 annual report says ChemLawn's \$2.2 million was down from \$11 million for a pro forma 1986 due to \$9 million in unusual expense items incurred in 1987 prior to the acquisition. The pro forma operating income reflects an annual amortization cost of \$12 million.

Pro forma amounts are based on historical results and do not take into account the cost reductions and other

changes implemented after the acquisition.

The business mix was pretty much the same for both 1988 and 1987. With 1988 figures first: lawn care-76 percent (79 percent); tree/shrub care-15 percent (14 percent); commercial-8 percent (6 percent); pest control-1 percent (1 percent).

"It was a good year" for ChemLawn, says Bruce Bentcover, Ecolab's vice president/treasurer. "We're encouraged by progress made in the second half."

The 1988 report says second-half revenues increased by 10 percent over 1987 levels; 7 percent in the third quarter and 15 percent in the fourth.

In retrospect, Bentcover says Ecolab officials tried to implement changes too quickly. The changes, however, will enhance long-term profitability.

"Given what our expectations were at the beginning of the year, there were some disappointments," he says.

The most significant change was the reorganization of job responsibilities at the branch level.

Service specialists had previously been responsible for selecting their own routes, filling and washing the trucks, servicing accounts, and some of the sales. Ecolab set up sup-

YOU WERE OUT

port structures for truck maintenance and routing to let specialists focus on customer

"There was so much change that we tried to implement in a short period of time that there was some upheaval in the branch structure," he says.

Analysts agree there was improvement in the second half. Most feel it is too early to judge the success of the changes Ecolab has made.

"They realized the one critical element to their strategy is to maintain a high quality of service," says Dave Snyder, an analyst with Salomon Bros., Inc. of New York City. He thinks significant improvement will be evident in 1989 or

Snyder says Ecolab has shown that it is structuring ChemLawn for long-term instead of short-term profitability. "I think it's going to work for them," he says. "I think it's going to be a lot better than a lot of people think.'

Ed Rolfes, an analyst with Dain Bosworth, Inc. of Minneapolis, Minn., says the fourth quarter was "extremely strong." "If they are able to continue the way the fourth quarter was, they'll have a very strong year this year," he says.

One analyst who wished to remain unnamed says analysts should not judge ChemLawn's earnings potential by its customer count, which has suffered a two-year slide. He points out that ChemLawn's revenue per customer is up.

Taking issue with that is Ed Wandtke, a lawn care industry consultant and a former corporate finance manager for ChemLawn.

Wandtke says revenue per customer is up because of the unusual amount of renovation work that occurred in the fourth quarter which will not be repeated.

Wantke also thinks the company experienced a significant customer drop in 1988.

When reminded that some customer loss can be attributed to significant price increases in 1988, Wandtke responds that there have been more price increases this year.

The 6 to 8 percent 1989 increases (Wandtke's figures) will continue to drive customers away following 15 to 25 percent increases last year, he

Wandtke also questions the value of the "menu" of lawn care programs being offeredcustomers are given a choice of three programs. "Customers only want two options,' LCI Wandtke says.

Area Code Extension TELEPHONED PLEASE CALL CALLED TO SEE YOU WILL CALL AGAIN WANTS TO SEE YOU URGENT RETURNED YOUR GALL lessage

st turf pests, including these.

90 percent control of white grubs within just 2-3 days of application.

cides, Triumph consistently provides lasting control

for a full 8-10 weeks. So one late summer or early fall application is all you need And, unlike other insecti- for effective turf protection.

> Which doesn't mean you won't still collect notes from

your clients. Just that they'll more often be the green, negotiable variety.



sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the applicator certification

NADER

from Page 1

to national media in mid-April.

"You can expect a strong response from us," says Barry Troutman, education director for the Professional Lawn Care Association of America.

Troutman says PLCAA received an inquiry for an interview from USA Today on the Nader group's report.

The report by Public Citizen claims that of the 40 pesticides used in lawn care only one has been fully tested and reviewed by the Environmental Protection Agency

The report claims the EPA has failed to assess lawn care pesticide health risks and that companies mislead consumers about risks.

Troutman says the report implies that all 40 of the pesticides are regularly used by LCOs when most firms only use four or five.

AGENCY

from Page 1

business in any state.

Wilson, Wheeler and Schmidt officials did not respond to requests by LAWN CARE INDUSTRY for com-

ilson, Wheeler and Schmidt has been seeking business from LCOs through magazine advertisements and booths at the PLCAA national conventions in San Antonio and New Orleans.

In early March of last year, PLCAA sent its members a letter and brochure announc'We will not recommend anybody to them until we get this straightened out.'-Doug Moody

ing the agency's entry into the lawn care insurance business. The firm had previously sold insurance to structural pest control operators.

The letter states: "The Association has learned of an insurance company that is currently writing liability insurance for pest control and lawn care firms-including pollution coverage.'

On June 14, 1988, state authorites ordered Stone Mountain to "cease and desist writing any and all lines of insurance business, new and renewal, in the State of Georgia.'

Florida followed suit on July 15, issuing a notice that said the company's lack of available resources "has created an immediate serious danger to the health, safety and welfare of the public and policyholders, subscribers, claimants and creditors dependent on Stone Mountain."

According to an Atlanta Journal-Constitution story by Reporter Peter Mantius, a Stone Mountain official maintains that its brokers were notified in writing of the June 14 Georgia order.

However, on July 27, an agent of Wilson, Wheeler and Schmidt wrote a Stone Mountain certificate of insurance, signed by Michael H. Schmidt, to ACRO Pest Control, Inc. in Boca Raton, Fla.

racking the firm's business techniques involves tracing a complex paper trail that includes different company names and disconnected phone numbers.

Wilson, Wheeler and Schmidt has done business under names that include American Group Marketing, Inc. (a PLCAA member); American Pest Control Purchasing Group, Inc.; Aggressive Insurance; and National Insurance Consultants, Inc.

LCOs who contacted PLCAA with concerns about obtaining the hard-to-get pollution coverage were referred to American Pest Control, American Group Marketing and National Insurance Con-

"There are enough questions there to not recommend anybody to them," says Moody. "We will not recommend anybody to them until we get this straightened out."

Moody says PLCAA needs assurance that LCOs are being given all the information they need to make a proper purchase decision. "I think it's time for National Insurance Consultants to provide some further information on how they operate."

One LCO who purchased a Stone Mountain general liability policy-which included pollution coverage-through American Group Marketing is James Connelly, president of Evergreen Lawn in Belmont,

Mass.

He has sought, so far without success, the return of a \$1,762 deposit.

"It's too bad PLCAA got themselves involved with something like this," he says. "I'm sure PLCAA had good intentions.

"That sucker just went down the tubes," rendering the policy useless, says Connelly.

The policy was issued on May 2, 1988—about a month before Stone Mountain got the "cease and desist" orders.
In February of this year, a

Georgia judge ordered Stone Mountain to be liquidated.

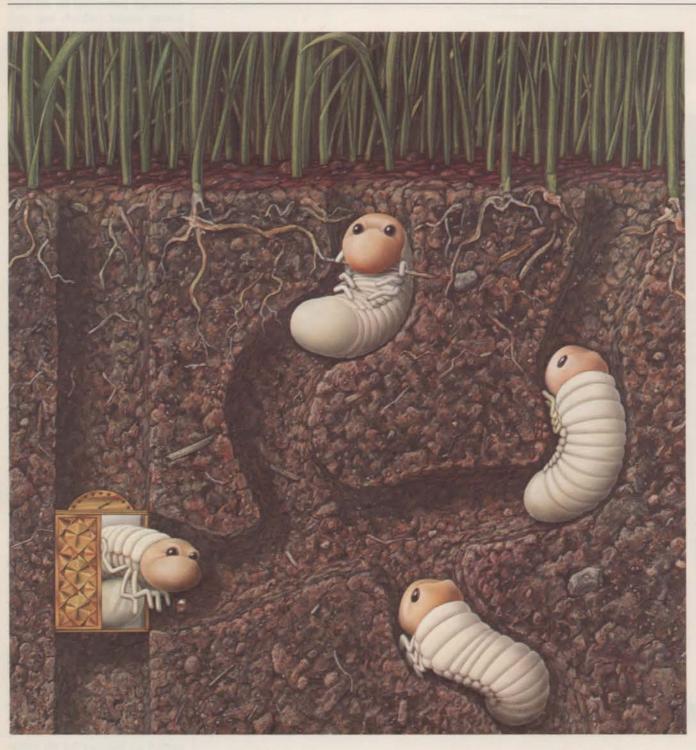
On March 3, Connelly received a letter from the Georgia insurance commissioner attached to one from American Group Marketing, both telling him of Stone Mountain's demise. The commissioner's letter was dated Feb. 3, 1989, while the agency's was dated Feb. 22,

As a result, Connelly had just a few days to secure another carrier for pollution coverage-which is required in Massachusetts.

Connelly was originally attracted by the bargain rates offered by American Group Marketing.

They were four times lower than what he's currently paying-more than \$6,000 annually for \$1 million worth of coverage. He secured his new policy through a local agent.

PLCCA's Moody says LCOs anxious to meet state requirements might have purchased policies without first



Give grubs an inch and they'll take a whole yard.

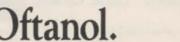
Grubs feed at many levels in a yard, but it's at 1" to 11/2" below the surface where they do their real damage. And because grubs are constantly moving from one level in the soil to the next, a single treatment of most insecticides will only get the ones closest to the surface.

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But with OFTANOL® insecticide, you have the strength to knock out those grubs closest to the surface now, and the staying power to deal with grubs, rising up from the depths, in the future.

So take away that inch. And keep the whole yard.

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Mobay Corporation

checking out the firms that were involved.

"It's been such a scramble for members (to get coverage) that I don't think they've taken the time to completely investigate the company," he says.

n regard to Wilson, Wheeler and Schmidt and its related operations, "There really wasn't anything out of the ordinary until this Stone Mountain thing," Moody recalls. "Then again, we're not very astute when it comes to insurance."

For four years prior to its demise, Stone Mountain had an NA-3, "insufficient experience," rating in the Best's Key Rating Guide, the standard industry rating source.

The head of American Group Marketing and National Insurance Consultants is a John B. Wilson, Jr., according to employees of the agency. A John Wilson, Sr. is

'It's been such a
scramble for
members that I
don't think
they've taken the
time to completely
investigate the
company.'

reportedly in charge of Wilson, Wheeler and Schmidt.

Moody says the disconnected phone number for American Group Marketing had two or three PLCAA members "going bonkers" as they sought to discuss Stone Mountain with the agency.

Meanwhile, National Insurance Consultants continues to sell policies. "We have received assurances from Stan (Stan Shaw, an agent at the agency) that the insurance they are (currently) writing is viable," Moody reports.

But PLCAA wants to know how claims will be handled by the new carriers that are based offshore, Moody says.

Agent Shaw tells Lawn Care Industry that policies for LCOs are provided by three companies: Oxford Indemnity, Millers National Insurance Co. and American Lloyds. Oxford Indemnity and American Lloyds are based offshore.

Carolyn Daniels, acting administrator for the Florida Department of Insurance's surplus line section, says neither Oxford Indemnity nor American Lloyds are licensed to do business in Florida. This means these companies' policies should not be sold anywhere in the United States, Daniels says.

"They (Wilson, Wheeler and Schmidt) should not be saying they are representing them (the two carriers)," she

Millers National, headquartered in Chicago, Ill., is licensed to do business in Florida. It was, however, recently bought by a company called Forum Insurance, which appears to be an offshore firm.

Betty Masters, a spokesperson for the Forum Insurance Co. in Schaumburg, Ill., says her company has no involvement with Millers National. She adds that there is a company in Bermuda that also calls itself Forum.

Daniels of the Florida insurance department says there is no offshore Forum Insur-

ance licensed by her depart-

Millers, prior to being purchased by Forum, did not rate well in the Best's Key Rating Guide. For three years Millers was rated NA-7, or "below minimum standards," until 1988, when it was rated NA-5, "significant change."

ocuments show that Wilson, Wheeler and Schmidt has been selling LCOs insurance through a Risk Purchasing Group, which is where a group insurance program is prepared—many times by an agent—and coverage is bought through an insurance carrier.

Bob Norris, assistant chief examiner for the Florida Department of Insurance, says LCOs should be careful when considering Risk Purchasing Groups that are headquartered in Florida. "They're not an authorized insurer or reinsurer in Florida."

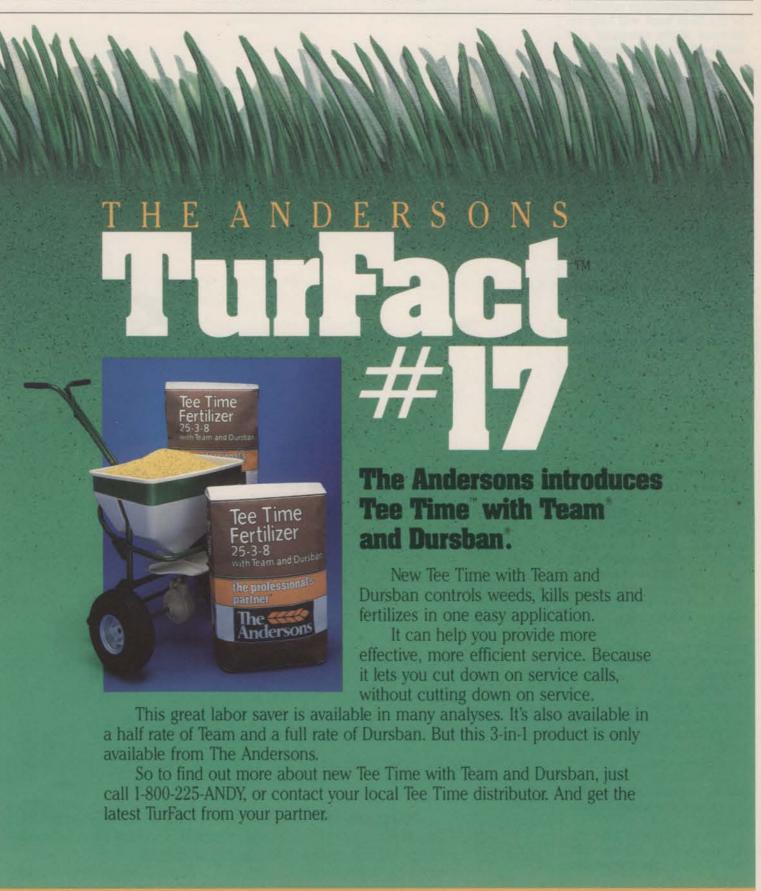
He says some companies maintain they are permitted to do business there on the grounds that federal laws approving such arrangements override state regulations.

Florida is disputing that in a federal suit. Enforcement efforts are currently on hold, says Norris. "It's kind of up in the air until this court thing is settled."

Dow, Elanco will merge

INDIANAPOLIS, IND.—
Eli Lilly and Co. and The Dow Chemical Co. have agreed to merge their plant science operations under the name of Dow Elanco, Inc., forming the largest research-based agricultural chemical company in North America.

Dow will have the majority position, according to a release from Elanco. Chief executive officer will be John L. Hagaman, president of Dow Agricultural Products.



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LCOs told to check ratings when buying insurance

BY JAMES E. GUYETTE Managing Editor

hen pondering the purchase of insurance coverage, "Beware of the 'good deal,"" cautions Tim Buresh, manager of the Kramer Insurance Agency in Bismark, N.D.

"First, you want to check the financial status of the company," says Buresh.

The insurance industry standard is Best's Key Rating Guide, published by the A.M. Best Co., Oldwick, N.J. "It will be in any library.'

The information contained in the Best book will help determine if the company is a stable operation, he reports.

One aspect to check is whether the operation is foreign-based. "Offshore" insurance firms often take on the names of established American insurance carriers.

"Find out whether or not

'You're better off paying a little more with the admitted carrier.'-Buresh

the company is licensed in the state that you are in," Buresh advises. "If it's licensed in your state most states have a state guaranty fund."

Under this fund, the state insurance commissioner will cover claims up to a certain amount of money should the insurance company go out of business. You may also be able to recover premiums paid.

However, the guaranty fund could hold restrictions. A state may say, for example, that an insured company with assets of more than \$3 million is not eligible to receive any money. Find out what the rules are in your state.

The insurance industry uses the word "admitted" to describe a company that's properly licensed in a state.

"If you have an alternative between an admitted carrier and a non-admitted carrier, you're better off paying a little more with the admitted carrier," Buresh says.

"If the company is not admitted, you're on your own" if the insurer goes under, Buresh

"The insured has no coverage (as of) that day, and they don't get their premium back."

A non-admitted insurance company can also be called a "surplus lines" firm. A surplus lines firm usually sells insurance-such as pollution coverage-that other companies are reluctant to underwrite.

"Pollution is one of the few

BE WARY OF THE 'GOOD DEAL,' EXPERT CAUTIONS

areas where there's a problem getting commercial coverage," says Harvey Seymour, spokesman for the New Yorkbased Insurance Information Institute.

A surplus lines insurance company generally is subject to less state regulation than an admitted company.

Buresh says if circumstances demand that you go with a surplus lines company, make sure you do it through a local agent, or one you can

Agents have a network of insurance companies that offer obscure or high-risk policies. "I can sell rain insurance to a concert," Buresh says as he cites an example.

He acknowledges, though, that obtaining pollution coverage may require extra research to find an adequate-or affordable-carrier.

"There's coverage available, but for your small mom and pop operations in small towns, it's just not feasible," he notes, referring to premiums of about \$10,000. "There's no use being in business if you have to pay premiums like that."

Unless it's required, it might not be necessary to retain pollution coverage. "Try to think back to when anyone in your (lawn care) business got called on the carpet for a pollution accident."

In states where you absolutely, positively have to get pollution coverage, extreme caution should be used when selecting a carrier.

Avoid the johnny-comelately insurance agent, Buresh warns. "These companies are a dime a dozen. One starts up every day and the state shuts one down every day.'

Buresh describes what can

happen:

"I can offer you a policy for, say, \$1,000, and someone can come rolling through town and say, 'I can give it to you for \$900.'

"Then you say, 'Oh, that sounds good, I'll go with that.' Then you find out that the company went bankrupt, or that the agent owned the com-

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provides consistent and effective CHIPCO® SEVIN® brand SLis algrub control.

care operators that is effective, ally less - than anything else on

Plus you get the peace of

CHIPCO® SEVIN® brand SL mind that comes with knowing so widely used for the control of At a cost no greater—and usu-mites, ticks, and fleas on poultry. pets, and game birds.

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Frith: Select an "A" firm.

pany and it's just a shell. "Then you can't find the agent any more-he's left

town-and you are stuck."

Bill Gunter, former insurance commissioner for Florida, advises buyers to never pay in cash. "To protect yourself, always pay your insurance premiums by check or money order made out to the company, not the agent or agency."

Be aware of a process called "twisting," says Gunter. "Insurance agents usually receive their largest commissions for the first year a policy is in effect, with lower commissions in subsequent years. Because of this, some agents may urge you to change policies or companies, claiming the new policy has better coverage or is less expensive."

Ask for the street address of any insurance agent or company-and look at the rating, urges Russell J. Frith, president of Lawn Doctor, Inc. and a past president of the Professional Lawn Care Association of America.

"You're entitled to know," Frith points out, comparing it to checking out a used car. "What kind of tires does the car have?"

Buying insurance can be confusing because the marketplace can be unstable, he

"The insurance industry is in such a dither, it changes every week."

Frith likes to deal with well

established insurance companies, and he checks the Best book.

"We do not get involved with any company that is not rated 'A."

He does not like spreading the insurance around among different carriers.

"We try to get our coverage pretty much with one carrier. It makes you a more valuable customer."

When you are a larger buyer "you're going to be treated more importantly," Frith ob-

"There is a degree of credibility that arises out of the size of the business," Frith

ChemLawn will test bacterial insecticide

COLUMBUS-ChemLawn Services Corp. will field test strains of Bacillus thuringiensis, a bacterial insecticide known as BT, under a cooperative agreement with Langhorne, Pa.-based Ecogen,

Ecogen, an agricultural biotechnology firm specializing in biological pest control, will identify and produce BT strains which ChemLawn will test in the field.

Products that test well will be formulated and marketed by ChemLawn.

"We are impressed with Ecogen's development of biological insecticides for agri-cultural applications," says Robert W. Miller, Ph.D., vice president of support services at ChemLawn. "Their work dovetails with our continuing search for effective, natural pest controls."

"The potential market for biopesticides to control turf and ornamental plant insect pests is substantial," says John E. Davies, chairman of Ecogen.

Ecogen markets Dagger G cotton biofungicide and Collego rice bioherbicide.

Ever-Green founder leaves industry

DENVER-Dick Miller, founder of Ever-Green Lawns Corp. and Professional Tree & Turf Equipment of Golden, Colo., has left the lawn care industry after 15 years.

He was Southwest regional manager for Tru Green Corp., which purchased Ever-Green and Professional Tree & Turf at the end of last year. Miller started Golden-based Ever-Green in 1975, when he broke with the St. Louis, Mo.-based Ever-Green.

Miller says the decision to leave was entirely his. He has no plans at present, but hopes to get involved with another service business.

"I got my job done. It's time to move on and do something else," he says. "I just need to look at my options right now."

Ever-Green had about \$12 million in yearly revenue when Tru Green purchased it last

Tru Green had not named a replacement for Miller as of this writing. Professional Tree & Turf, which manufactures turf equipment, will continue to be managed by Bob Smith.

"I liked Dick and he had a real wealth of knowledge," says John Slocum, Tru Green president. "It's a real loss to us."

These we don't.



area frequently used by people like chinch bugs, billbugs, armyand animals.

And with CHIPCO* SEVIN* brand SL, you not only get effective control of the white grub complex, but 27 other turf pests, as well. Including tough ones

worms, and sod webworms.

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line that includes CHIPCO® brand 26019 fungicide and CHIPCO® RONSTAR® brand 2G pre-emergent herbicide.



Customer must help LCO for ongoing weed control

BY BRUCE J. AUGUSTIN

he basic service of weed control presents many challenges to lawn care companies because of the year-to-year variation in the weather and in growing conditions in lawns. Also, the approach to weed control continues to change due to economic and regulatory pressures.

In today's marketplace, routine and blanket herbicide applications in rounds two through four are becoming rarer. More directed applications are being made in both timing and weed species.

Companies are striving to provide customers with weedfree lawns while minimizing the inputs necessary to achieve this goal.

The most important factor in achieving good weed control in turf remains proper agronomic practices.

A thick, vigorous lawn will be weed-free. The challenge for lawn care companies is to integrate their services with the homeowner's efforts. Communication and follow-through with the customers is the key.

Customer responsibilities

Although the customers may know what they want from watching golf matches on television and reading promotional brochures that promise a sward of lush green turf, usually they do not possess the agronomic knowledge to achieve this.

General lawn care instructions and a list of the homeowner responsibilities given at the beginning of the service are a good method to ensure adequate agronomic care is given to the lawn. Doorhangers or bill stuffers can serve as follow-up reminders.

Sometimes instructions will have to be given face-to-face during a service call.

The No. 1 homeowner responsibility is proper mowing. It is essential for a good quality, weed-free lawn.

The overall turf health, vigor and density relate to proper cutting height and frequency.

The optimum cutting height is determined by the turfgrass growth habit and leaf width. Grasses that spread horizontally can usually be moved shorter than an upright-growing bunch grass.

A properly mowed lawn will create a dense turf that keeps out weeds through competition for sunlight and nutri-

A lawn mowed too short will drastically reduce turf density and open up the lawn to weed invasion.

A side benefit of proper mowing height is a good root system. The higher the topgrowth, the deeper and more vigorous the root system will be.

The growth rate of a lawn determines the mowing frequency. The growth rate is influenced by weather conditions, level of management and grass species. The mowing frequency should be determined by the growth of the grass.

Mow often enough so that no more than one-third of the blade height is removed per mowing. Infrequent mowing can reduce grass vigor and allow weed invasion.

Monitor moisture

Adequate soil moisture for turfgrass growth is another factor in helping minimize weed problems. Weeds can germinate and grow if turf competition is reduced from turf wilting due to the lack of soil moisture.

This can occur either during periodic rainfalls or at the end of a drought where the weeds can establish themselves quicker than the turf can recover.

Irrigation appears to be an easy answer to soil moisture problems. In-ground systems or hoses and sprinklers certainly can get the job done.

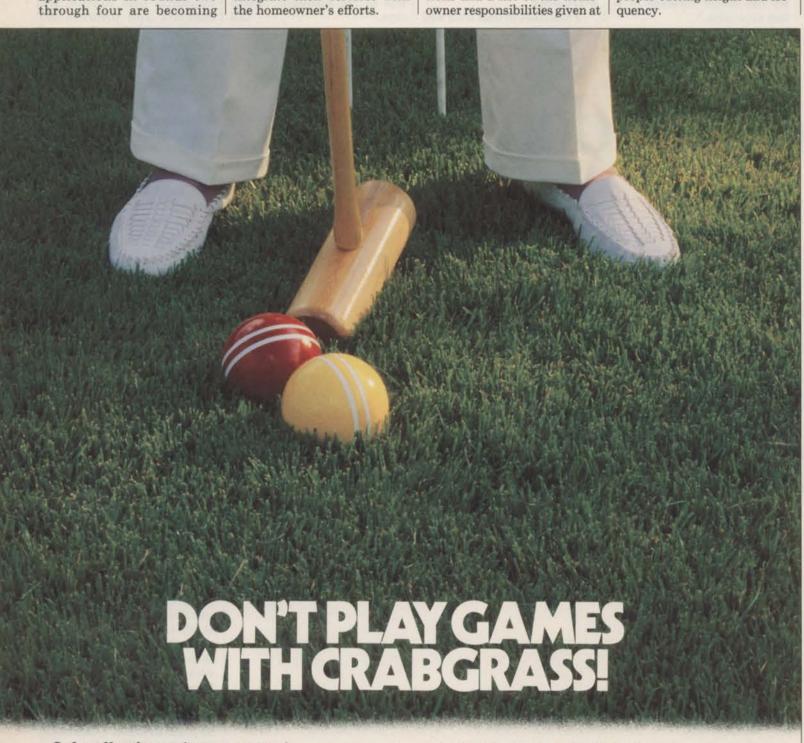
However, if last year's drought is a continuing situation, it is doubtful how practical irrigation will be in areas in the country with water shortages.

In lawns where irrigation is practiced, customer recognition of proper irrigation is also essential.

Irrigation amounts and frequencies are more difficult for



About the Author
Bruce J. Augustin, Ph.D., is
director of technical services for
LESCO, Inc. in Rocky River,
Ohio.



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the homeowner to understand than the other basic cultural practices.

Oftentimes, over-irrigation is more of a problem than under-irrigation.

In Florida, where most turf is irrigated, sedges and dollarweed are sure signs of over watering. By reducing irrigation to an as-needed basis, these weed problems can be eliminated through a cultural practice rather than a herbicide treatment.

Irrigation practices will vary depending on the soil type and turfgrass species.

Generally, the turf should be irrigated when it just begins to show signs of moisture stress (wilt) and sufficient water should be applied to bring the root zone up to field capacity.

Again, simple instructions from the lawn care company to the homeowner can provide proper directions for irriga-

Weeds also appear throughout the year by "magic," or so it seems. On an otherwise dense, healthy lawn, this usually means there was some sort of mechanical disruption of the soil to expose weed seeds for germination.

In most of these cases the lawn care company unfairly gets the blame. People take divots, repair gas mains, edge driveways and flower beds, dogs bury bones, animals dig for grubs, and worms come to the surface.

All activities that expose soil also expose new weed seeds for germination. It is often difficult to pinpoint these activities when you examine the lawn for weeds because the cause may have occurred many weeks earlier.

The drought last year caused many problems because of cracking soil. Once the soil is wetted, weed seeds are exposed and can become established at a quicker rate than the turf can recover.

Cracking soil also can eliminate an effective pre-emergent barrier. These weed problems require a post emergent control.

Weeds can be a problem where grubs are active. The grubs are not causing weeds to appear, but rather animals feeding on the grubs tend to stir up the soil.

Birds, skunks, raccoons and armadillos all feed on grubs. The precautionary treatment would be an insecticide applied to eliminate grubs before animals begin to dig for them.

The effect of aerification or dethatching on weed problems is often questioned. Some recent university research has shown that aerification does not effect the pre-emergent herbicide barrier and weeds are still prevented from grow-

This response is likely under ideal conditions where the turf is vigorous and the open

Suggested Mowing Practices For Lawns

Turfgrass Species	Recommended Heights (inches)	Frequency (days)
Bahiagrass	3.0-4.0	7-14
Bentgrass	0.5-1.0	3-7
Bermudagrass	0.5-1.0	3-5
Centipedegrass	1.0-2.0	10-14
Kentucky Bluegrass	2.0-3.0	7-14
Fine Fescues	2.0-3.0	7-14
Ryegrasses	2.0-3.0	7-14
St. Augustinegrass	2.5-3.5	7-14
Tall Fescues	2.5-3.5	7-14
Zoysiagrass	1.0-2.0	10-14

soil holes are quickly covered

Under practical working conditions, turf vigor cannot always be assured. Mechanically tilling the soil when the turf is under any amount of stress is a way to guarantee massive weed problems.

This is why summer is not recommended for aerifying or dethatching. Also, these times are optimal for weed seed germination.

Fall renovation is favored because of optimal turf growing conditions and minimal weed pressures.

Weeds can find their way into customers' lawns from weeds that have gone to seed in flower beds, fence rows and the neighbors' lawn.

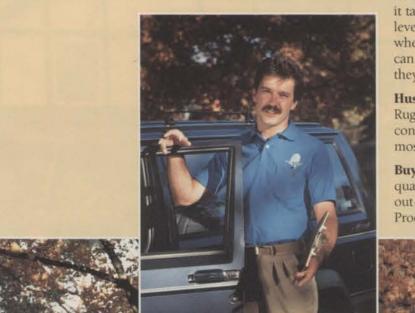
Weed sanitation is an old field agronomic practice that still needs to be practiced in the urban landscape.

Clean up the potential sources of weeds to prevent new ones. The neighbor with the dandelion-filled lawn is a classic scene of poor weed sanitation.

Beyond the agronomic practices of weed control is customer expectations.

No reasonable amount of herbicide will give a 100 percent weed-free lawn. Such a promise will result in numerous additional service calls and a loss of profit.

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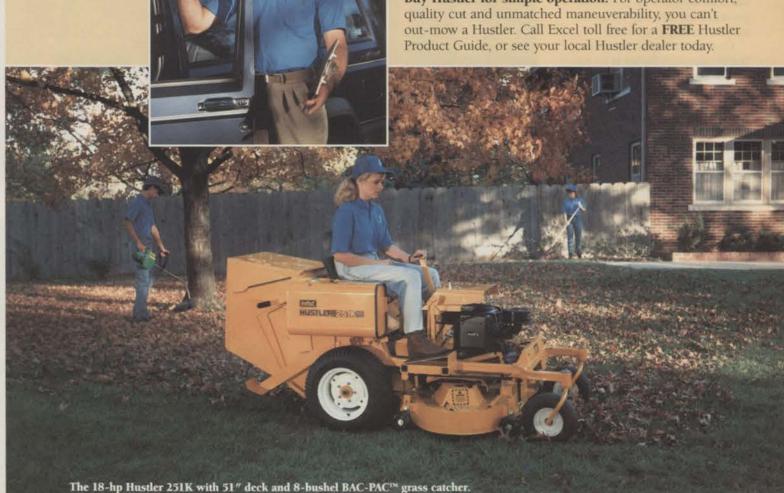


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Estimating landscape maintenance costs—Part I

very landscape maintenance estimate should be based on known, accurate quantities. No estimate can be more accurate than the quantities on which it is based.

In landscape maintenance estimating, the first step is to convert the square and linear feet quantities into production hours. This is done by dividing the quantities by the production factors.

The calculation of estimated travel time based on a known distance is an example of the conversion formula using the production factor.

If you plan to travel from Point A to Point B over a 150-mile distance, under average conditions, at 50 miles per hour, you divide 150 miles by 50 miles per hour. Your travel time will be three hours.

In this example, the 150 miles is the known quantity, and the average speed of 50 mph is the production factor.

If the conditions of the 150-mile quantity were changed from average road conditions to a well-maintained, unpaved, two-lane road over the same terrain, the production factor would be lowered to meet the changed conditions. However, we don't know how to adjust the production factor because we have no recent experience in driving long distances on unpaved roads.

One method of determining the production factor is to run a test. Drive for 15 minutes on a well-maintained, unpaved road, and clock the number of miles on the odometer.

Multiply the miles traveled in 15 minutes by four, and this will equal the projected miles traveled in one hour. If our test showed a production factor of 35 miles per hour, the travel time would then change from three hours, under normal travel conditions, to 4.28 hours on an unpaved road.

What if the 150-mile distance was changed to a super six-lane highway with no



About the Author
Philip D. Christian, III, is a
business consultant based in
Alpharetta, Ga. He was chief of
ChemLawn Service Corp.'s
maintenance division in the
1970s.

stops and no speed limit? A production test is not needed in this case, because there are other logical factors that will control the safe speed at which we cover the 150 miles.

Standard production factor

An example of changed conditions in landscape maintenance could be a 10,000 square foot turf area to be mowed with a 21-inch, gasoline-powered, rotary push mower.

The standard production factor of 10,000 square feet per

hour has been established by test and production experience. But what if the terrain is unusually steep and is divided into several small areas?

The estimator would lower the production factor to perhaps 7,500 square feet per hour to compensate for the increased difficulty factor.

Production factor is defined as the amount of work that can be produced by one person in one hour.

Production factors are expressed in square feet or linear feet per hour, and take into account all the work associated with the completion of the activity. This could include clean-up time, unloading and adjustment of equipment, and the normal interruptions and delays experienced during the day to day production.

Look back at the first example of estimating travel time. Let's examine the significance of the Law of Compensating Error in estimating production factors. The law states that when you produce the same task over the same area using the same equipment and

procedures, the number of times you finish early will equal the number of times you finish late.

The result is that the overruns cancel out the underruns, preserving the accuracy of the estimated production factor.

Use of the estimating form

The sample maintenance labor estimating form, as shown, has several columns and room for 20 line item estimating activities.

same task over the same area using the same equipment and tities taken from the Property



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Analysis Report (See March LAWN CARE INDUSTRY, Page 26).

Column 2 is the production factor for each of the line items.

Column 3 is the result of dividing column 1 by column 2 expressed in hours.

Column 4 is the frequency, or number of times the activity will be performed per year.

Column 5 is the result of multiplying column 3 times column 4, and is expressed in man hours per year.

Column 6 is the price per man hour, and includes labor, equipment, overhead and profit.

Column 7 is the result of

multiplying column 5 times column 6, and is the total dollars projected per year for that activity.

The sample estimating form is self explanatory except for line 5, trim, under mowing turf. The trim time is calculated by multiplying the number of riding mower hours, 4.68, times a factor of 0.33 to get a total time of 1.54 hours.

Each hour of riding mower time generates 0.33 of estimated trim time in our example.

Please note that of the seven columns shown on the labor estimating form, only column 2, the production factor column, contains numbers that have to be estimated.

Column 1 are known quantities that can be measured in the field according to our measuring guidelines.

Column 4, frequency, is provided to the estimator by specification, contract requirement, or by an established company standard.

Column 6 is the price per man hour that must be charged to recover the cost of field operations and the profit projections set by the company.

LCI
NEXT MONTH—Part II gives examples of price per man

hour.

VENTURE

from Page 1

majority shareholder Donald Brattain. Brattain will continue as a director and minority shareholder, Norton says.

In addition, he says a group of veteran managers will become shareholders for the first time.

"The managers and employees are both very proud of the rapid growth that we have been able to achieve for the last several years," Norton says.

Barefoot ranked No. 4 on LAWN CARE INDUSTRY'S Million Dollar Lawn Care List in 1988, with \$30.9 million in corporate and franchise revenue for fiscal 1987. This marked a 36.3 percent one-

"We feel that there is more growth in it (the lawn care industry) than a lot of people think," says Glastris. "Good companies in consolidating industries can grow very profitably."

Glastris says his firm looked at several lawn care companies and were most impressed with Barefoot for its management. He emphasized that his firm invests and doesn't manage.

"He (Norton) is a tremendous manager," Glastris says.
"We think the (lawn care) business is becoming more and more sophisticated and more and more professional."

Stan Golder, founder of the investment firm, will sit on Barefoot's board of directors, Glastris says.

There's an easier way to stop surface feeding insects.

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Part of the "hit list." DURSBAN is particularly effective against billbugs, chinchbugs, sod webworms, cutworms and armyworms, among others. And because

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Packaging options. DURSBAN turf insecticide is available as an emulsifiable concentrate in 2.5 gal. plastic jugs and 55 gal. drums. If you prefer a wettable powder, you can get the same efficacy in DURSBAN 50W, now offered in water soluble packets, pre-measured for the simplest, quickest mixing ever.

Why horse around? Control surface feeding insects the easy, sure way. With DURSBAN turf insecticide. Talk to your distributor today.



Preventing, recovering spring cancels

ne of the most difficult challenges for any lawn care company is to reduce or recover customers who cancel in the the spring.

The spring service round is generally the most expensive in terms of material cost, and certainly the busiest, since the major part of the marketing/sales effort occurs around that time.

A preventative approach works best.

Everybody in the organization must be aware that everything they do is important to stopping spring cancellations.

The consumer builds up a set of expectations every time an offer is made by a service company. The expections include the way the lawn will look, having professional people do the work, and having courteous people communicating with them.

As for recovering cancels, some customers cannot be recovered, but many can. One key is to have someone designated to register the cancellations.

You should have a daily rec-

ord of cancellations at your disposal. It should include the name, address, phone number, how long they have been a customer, when they canceled, and why they canceled.

This last piece of information is extremely valuable. However, don't always expect the consumer to give you correct information. Consumers forget, and sometimes they don't want to reveal their true reason.

Many companies have a category which simply says "dissatisfied with service." This isn't much help. All the customers who cancel are unhappy or they wouldn't cancel.

You need to find out what it was about the service that forced the cancellation. Once you have this piece of information you can go ahead with the next step.

Usually the branch manager is in charge of handling the cancellation. Don't just leave this function to someone who happens to be there. It is an extremely important part of making sure you make a profit.

If the manager has few or no

communication skills, you might want to find someone else to do this job. It's important that the person be good on the phone.

If possible, the manager should make an effort to see these people in person, particularly those who have been customers for at least one year.

If this is not possible, the customer should be called on the phone.

Try to find out the real reason for the cancellation. This is a key to saving the cancels.

If there is anything you can do to make sure that you can solve the problem, tell the customer. This is when it is helpful for the manager to be handling the cancellation, since the manager can promise more than a technician can.

You must be certain not to compromise the organization. You could do this by offering to lower a price, for instance, which will hurt your reputation in the long run.

If you save the cancel, make sure that you call the saved customer after the next application to be certain that they are now pleased with your company's work. Do this about two to three weeks after the application.

Check to see if one technician has more cancels than the others.

Also see if one salesperson's customers have a higher cancel rate than the rest. This may occur because he or she is overselling the service, or because he or she is putting too much pressure on the people to buy.

Every day you are in a service business, you must pay attention to the customer. In order to make sure that you reduce cancels, you must find out why people cancel and deal with it on a personal basis.

Large companies forget this occasionally, but all good companies are aware that fewer cancellations means higher profitability.

You should be aware that the best time to start saving cancels is before you actually begin delivering the service—not after. This will help ensure that everyone in the organization is working toward preventing cancels.



About the Author
Rudd McGary, Ph.D., is a senior
partner with All Green
Management Associates,
Columbus, Ohio.

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INDUSTRY NEWS

LCOs told not to answer NY survey

NEW YORK—The New York Green Industry Council has advised LCOs not to answer a survey sent out by the state attorney general's office for the time being. The council first wants to know what the information in the three-page questionnaire will be used for.

The survey includes questions about the number of customers, whether LCOs notify customers about spraying in writing, whether customers ask LCOs to notify their neighbors about spraying, what type of information is provided, how pesticide containers and tank residues are disposed of, and whether a personal injury claim has ever been made against the firm.

An introductory letter states the purpose of the questionnaire is to "better acquaint ourselves with the day-to-day operation of lawn care businesses."

Elizabeth Seme, spokesperson for the Green Industry Council, says the council fears the attorney general's office may be invoking investigative powers it doesn't have. The council will ask for an explanation of the survey.

The green industry council and the state have been locked in a legal battle over state pesticide regulations.

An industry appeal of a federal ruling and an industry challenge in state court are presently pending.

Use help in complying with OSHA

DENVER—The new hazard communication law mandated by the Occupational Safety and Health Administration is easy to comply with. But be sure to use the guidelines that have been made available by industry associations.

Under the new law, LCOs and others that work with potentially hazardous materials must have written employee safety programs. The Professional Lawn Care Association of America has provided compliance guidelines.

Barry Troutman, education director for the PLCAA, explained how to comply with the law at the first annual conference and trade show of the Colorado Association of Lawn Care Professionals.

"Don't try to go through the law by yourself," Troutman said. "Your time is too valuable." The PLCAA's or any other credible source's



Troutman: Use guidelines.

guidlines will make the job much easier.

"They're simple things (the guidelines), but you want to customize them to your own operation," he said.

For example, the written program must explain how Manufacturer Safety Data Sheets (MSDS) are collected from the suppliers. The MSDS sheets must be kept in a location where they are accessible to employees

"On balance, I think this is a very good piece of legislation," Troutman said. "It does something that we want to do ourselves."

The PLCAA has already sold more than 200 sets of its guidelines. For information, contact PLCAA at 1000 Johnson Ferry Road, N.E., Suite C-135, Marietta, GA 30068. (404-977-5222) LCI

Wisconsin will require licensing

waukesha, wis.—All who apply pesticides on a for-hire basis in Wisconsin will have to be licensed and certified under a new state law.

The Ag 29 Bill, an upgrading of an existing state law, was explained at the Reinder's Turf Conference in Waukesha by Ed Bergman, a state supervisor.

He said the law will require certification and licensing for commercial applicators and their supervisors.

Customers will also have to be given pesticide label information three days in advance of applications, Bergman said.

Sign posting requirements under the bill only apply to products that require specific re-entry intervals. Bergman said this wouldn't apply to LCOs.

"There are no additional posting requirements at all," he said.

Mixing and loading pads will be required for companies that use 1500 pounds of active ingredient per year, Bergman said.

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TEST

from Page 1

you're going to have limited uptake," Christ explains.

Soil test results can aid the turf manager when it comes time to select the numerous soil nutrient products currently on the market.

Nowadays a soil test can be run through a computer to give recommendations for the type of nutrients needed and the proper time to put them down. Specific recommendations will vary according to the location of the property.

Also, drought-sticken soils will have differing reactions to lack of rainfall depending on the area. "Soils don't wet uniformly—nor do they dry uniformly—within the root zone," says Eliot Roberts, Ph.D., director of The Lawn Institute in Pleasant Hill, Tenn.

"Some lawn care operators are using wetting agents," he adds. "It keeps the soil more uniformly wet."

Wetting agents will help keep the soil uniformly moist when drought strikes, he points out.

A uniform soil helps the spread of nutrients.

Roberts suggests using slow-release nutrient products to ensure that nutrient levels remain somewhat stable during periods of drought.

Desired nutrient levels vary from place to place. Therefore, a soil test and analysis can determine what's best for your area.

"Basically, there's no way we can physically look at a soil and know what its requirements are," notes Arthur H. Bruneau, Ph.D., of the Crop Science Department at North Carolina State University.

"It's kind of like going to the doctor: The first thing they'll tell you is, 'We're going to take some tests."

At Senske Supergreen in Yakima, Wash. they do yearly soil tests in the fall. "We take 10 to 12 samples around town," says Bo Hepler, turf agronomist.

They test lawns that they've tended for more than a decade, they test lawns that are new on the client list, and they test lawns belonging to non-customers. "It keeps us in line with what we're doing to the soils." Hepler explains.

the soils," Hepler explains.

They check the nitrogen, phosphorus, sulfur, calcium, magnesium, pH, organic matter content and soil type.

The results are analyzed by a university at a cost of \$10 to \$25 a test.

The extension service at Land Grant state universities—and some commercial labs—conduct tests and issue recommendations for corrective treatments.

For example, the sheet returned after a test conducted by A&L Labs suggests, in part, that the turf manager "apply 0.5 to 1 lb of phosphate per 1,000 sq. ft. in spring and fall and the balance during the summer at a rate not to exceed 1 lb per 1,000 sq. ft."

Directions and containers are sent out, and the person pays when returning the samples. Usually the samples have to be dried—by air, not an oven—before sending them in.

Be aware that results from various labs are not likely to be identical, so turf managers may wish to deal with one outlet. "Some labs have different ways of doing their testing," says Agnew at Iowa State. The direction sheet should explain everything.

When the results are returned they can be shown to the customer. "It looks good for the lawn care company to offer something unbiased with the extension (service) name on it," Agnew adds.

ob Riley, owner of Green Pro Services in Hempstead, N.Y., has developed his own soil testing procedure that he makes available to lawn care professionals. He has an outside person analyze the sample. The results are run through a computer program that he formulated.

To gather the material, he first makes sure that no thatch or grass blades will end up in the sample. Then he picks up about two-thirds of a cup of soil (total) from six to eight points on a property up to 20,000 square feet.

"You want to get the lay of the land. You want to determine what is different and what is unique," he explains.

"The critical factor in soil testing is to make sure you get a representative sample," says Roberts at The Turf Institute.

When dealing with a problem area on a lawn, don't mix the soil sample from the bad part with a sample from the good part. Keep them separate.

If a client has a lawn that's perfect, perhaps that, too, may call for a test. "It's just as valuable to sample a soil where the grass is excellent," says Roberts.

Riley does consulting work nationwide, and he reports that "from Massachusetts, to Oregon, to Texas" clients be-



Agnew: Lab techniques differ.

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lieve that a soil test should be part of the program. "Customers don't know what it's called, but when we tell them we're going to take a soil test, they say, 'Why of course you are."

"It's excellent public rela-tions," says Roberts. He calls it "lawn care with a service flair."

arrying soil probes, magnifying glasses, pH meters, thermometers, moisture probes and small microscopes can help project a more scientific and skillful image to the clients.

Roberts predicts that the industry will see more and more soil testing being done in the field as portable testing kits become more sophisticated.

"It really ties in with this concept of Integrated Pest Management," observes Richard Lankow, director of commercial development at Agri-Diagnostics Associates in Cinnaminson, N.J. His company makes turf disease detection kits for use in the field.

Keeping tabs on the soil conditions can be a big aid when deciding which procedures are most appropriate.

A portable soil sampling kit is next on the market. "We're working on a series of tests for detecting disease organisms," says Lankow. "We're able to detect pathogens in the soil before they infect."

"If you're new to a site get a soil test done right away so you can catch any problems early on," advises Christine A. Casey, IPM agent in ornamental horticulture at Rutgers Cooperative Extension in Vineland, N.J. "You can prevent problems rather than react to them later on."

A brand new housing tract invites a thorough examination to check on soil types and potential drawbacks. "The builder will often take the topsoil away and sell it," Casey points out.

"Debris is often left in the area," and anything that's buried can have a negative impact on a future lawn.

Casey recalls one problem vard that had people scratching their heads: "Someone had actually put in a lawn over a piece of old asphalt roadway."

When branching out into a new service area, "I'd sample a number of lawns in a subdivision just to get an idea" (of the soil content), says Jeff Lefton, extension turf specialist at Purdue University.



Riley: Testing helps program.

For the test record-keeping, "I'd do it by zip code because I could control the program by zip code," states Lefton, who also is president of the Turfgrass Technology Center in West Lafayette, Ind.

Nitro-Green Corp., headquartered in Fort Collins, Colo., has a number of standard turfgrass treatment programs that are used. "Before we go into a potential new area we take soil samples to see if we're familiar with it," says Brian Dean, director of arboriculture and research.

The company has branches in Montana, Wyoming, North Dakota, Idaho and Colorado. "We have a lot or iron deficiencies. It's difficult to get a green lawn," Dean says.

"From the soil samples we can counteract what's down there," he points out, by adjusting iron distribution accordingly.

Nitro-Green eats the \$12.50 cost of a test. "If we can't get that lawn green we don't charge them a cent because they're paying to have a green lawn," Dean says.

Soil testing also helps protect the company in case there is a potential legal problem. "We've had a couple of instances where people thought we polluted or put down too much material," Dean reveals.

The company did soil and

tissue samples, plus interviews regarding the history of the property, and in each case Nitro-Green was found to be blameless. "It's just a way of clearing ourselves."

oil sampling can also be used as an income-producing item in some neighborhoods, according to Lefton at Purdue. "I think that with all the gardens out there, that would be a nice add-on service," he says.

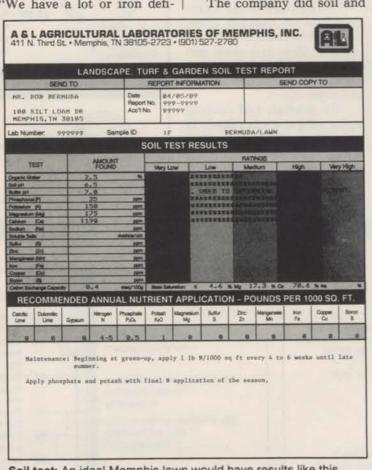
"The marketing should remain rather low-key," Lefton

suggests. "It's a way to make revenue and do something good in off-peak times of the year."

Fall sampling might be useful because the homeowner would be acutely aware of the success-or failure-of that year's yield. The end of the growing season "would make an easy time to go in there and pull a sample," he notes.

"You can easily spot neighborhoods where people have gardens. I would just direct mail it (a flyer)."

Lefton thinks that perhaps



Soil test: An ideal Memphis lawn would have results like this.

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Bruneau: Charting soil temps.

the sampling fee can equal the price of a lawn treatment-say \$30. When you get the results back, "I would draw these recommendations up on my own stationary."

When pitching the service you could say to the homeowner, "You can send in soil samples as good as I can, but I can do it for you."

n addition to keeping tabs on soil content, paying attention to soil temperature can also be useful for the turf manager.

"I always make my recommendations based on soil temperatures," reports Agnew at Iowa State.

Although certain events tend to happen at certain | continues, "goosegrass and

*Optimum turf performance may not coincide with optimum root and/or

AIR TEMPERATURE

Source: North Carolina State University

shoot performance

times of the year, it's not a bad idea to keep a soil thermometer handy. "We know these dates-but still watch your temperatures."

Knowing soil temperatures can help you time the application of pesticides.

"Different weed seeds will germinate at different temperatures," notes Hepler at Senske Supergreen.

If you know the soil temperature you can have better control. "The key is to get it (the pre-emergence material) on before hand," says Agnew.

'Soil temperatures under turf-covered areas can be one to four days behind the baresoil temperatures reported by weather stations," says Bruneau at North Carolina State. "This can be advantageous since time can be alloted for planning."

Bruneau prepared the information in the accompanying charts along with North Carolina Meteorologist Gregory L. Johnson and Joseph M. DiPaola, a turf researcher.

"For example," Bruneau

20°- Low temperature kill possible if

rapidly below 20°F

temperature subsequently drops

SOIL TEMPERATURE

spurge usually germinate when soil temperatures approach 60 degrees Fahrenheit in the spring. A turf manager monitoring soil temperature conditions for bare ground will know that he or she may have several days grace to apply pre-emergence herbicides even though the reported soil temperature is 60 degrees. Sandy soils will reduce this grace period."

Bruneau recommends that soil temperatures be taken onsite. However, soil temperatures are given over the air on some radio stations, particularly those carrying farm re-

"Although soil temperatures are typically monitored for inches below the soil surface, there is a close correlation with temperatures monitored under turf cover," Bruneau says.

"In general, turf-covered areas will warm more slowly in the spring and cool down more slowly in the fall on any given day or season because of the buffering effect provided by the vegetation. The differences should be less pronounced on cloudy, windy days, with turf-covered areas staying somewhat warmer than bare ground after the passage of a strong cold front," Bruneau says.

Areas with little vegetation, or new seedlings, will have temperatures closer to bare ground levels.

According to Johnson, the

minimum soil temperature occurs at 8 or 9 a.m., with the high being between 5 and 7 p.m.

Soil temperatures will vary on any given property, particularly on slopes. You can expect warmer temperatures near foundations, driveways and sidewalks. A septic tank that rests near the surface can also generate heat.

WEED CONTROL

SOIL TEMPERATURES

60-65°- Germination of spurge and goosegrass is expected, therefore, apply preemergent materials when soil temperatures approach this level.

- Germination of crabgrass is expected, therefore, apply preemergent materials when soil temperatures approach this level.

INSECT CONTROL

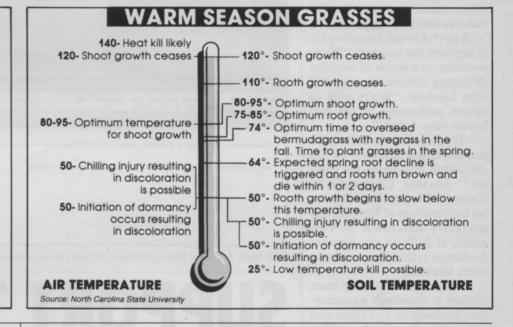


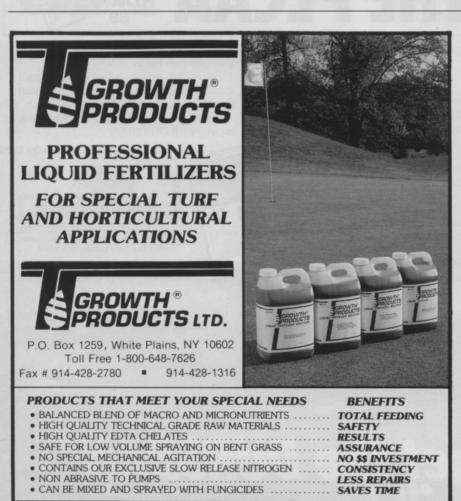
SOIL TEMPERATURE

55°- Minimum temperature for white grub and male cricket activity

Source: North Carolina State University

COOL SEASON GRASSES 131- Heat kill likely 90- Shoot growth ceases. 90°- Shoot growth ceases 77°- Root growth ceases. 70°- Maximum temperature for root growth of any consequence. 70°- Time to plant grasses in late summer. 60-75°- Optimum temperature for shoot 60-75- Optimum temperature growth. 50-65°- Optimum temperature for root for shoot growth* growth 40°- Shoot growth ceases. 40- Shoot growth ceases-33°- Root growth ceases.







NEW PRODUCTS

Crabgrass killer now in sprayable form

Spring Valley Turf Products of Jackson, Wis. is announcing Environmental Protection Agency approval of a new herbicide.

The new sprayable Team crabgrass preventer is called Crab Spray 10 Percent.

The active ingredient ratio is the first of its kind in the sprayable formulation, according to the company.

The product comes in a 40pound bag that will cover 2 acres and provide 2 pounds of active Team per acre along with .13 pounds of nitrogen per 1,000 square feet.

The flexible rates of application will fit a variety of programs. The labeled rates range from 1.5 pounds to 3 pounds active ingredient per acre. Split applications can be made, too.

Circle No. 135 on service card.

rounded edge that helps prevent damage to the grass, according to the company, located in Keswick, Ontario,

The drums have two fill/ drain plugs for convenience.

The handle bar steering is aided by a side-mounted assist lever that gives beefed-up steering control, according to the company. Circle No. 137 on service card.

Exmark mower sulky reigns just like a rider

Exmark has added a new patented self-steering sulky to its 1989 product line.



The sulky inexpensively turns any Exmark intermediate mower into a rider, according to the company, which is headquartered in Beatrice

The unit is designed to keep operating controls within easy reach-even while turning.

The wide-wheel-base tires track directly behind the drive wheels, leaving no extra tire tracks on a freshly mowed turfgrass area.

According to the company, the low center of gravity provides stability on slopes and the steering mechanism prevents jack-knifing.

The flexible mower attachment eliminates "whipping" action when cornering.

The self-steering sulky can be attached in seconds, according to Exmark. Circle No. 138 on service card.

CAUTION

PESTICIDE STORAGE AREA

Hazard warning signs useful in many settings

Safety Specialists, Inc. in Santa Clara, Calif. has released a catalog that features safety signs.

The signs, labels and placards can be used to convey health and safety warnings about machines, chemicals and transportation.

Circle No. 139 on service card.



2-sided trimmer cuts while coming and going

Deere & Co. is introducing the new Model 172 hedge trimmer.

It is powered by a 21.2cc 2cycle engine with a diaphram carburetor for operation at any angle. The fuel capacity is 10.1 ounces.

The 172's double-sided cutting bar allows the operator to trim in both directions.

The blade is 19.7 inches long, and the unit weighs 9.5 pounds.

Other features include electronic ignition, centrifugal clutch and a chain saw-style

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Boost your fees by tending thirsty trees

Spring will bring out signs of drought damage suffered by trees during last year's drought, and wise tree care contractors can use this as an opportunity to offer their services to new clients.

"I expect substantial decline in some areas," says
Craig Weidensaul, a forest
pathologist at Ohio State
University. Decline is characterized by thin foliage,
reduced growth, and dieback—indicators of severely
stressed trees.

"Some trees might not leaf

out to the periphery of the crown," Craig points out. "We'll see bare twigs sticking out beyond branches that have leaves."

Insect borer damage may also be present. Craig says these bugs can sense a "weak sister" tree that is ripe for infestation.

Fungus-caused diseases also can strike weakened trees.

Why is the damage appearing now? Early spring growth is supported by food stored in the roots during the



JAMES E. GUYETTE MANAGING EDITOR

summer and fall. Moisture stress—drought—during food manufacturing and storage leads to poor root starch reserves, says Craig. And poor root starch reserves foster poor spring growth.

Shallow-rooted trees are

particularly prone to drought damage.

A tree that would normally fight off a pest problem can fall victim while in a weakened state.

Craig says judicious pruning can help drought-affected trees. Decreasing the size of the crown will lessen the demand for water on already weakened roots. "Anything you do to lessen the amount of foliage, up to a point, makes it easier on the roots," he says. "It creates less demand for water. It makes for

a healthier tree all the way around."

These above points can be made to potential clients when pitching your services to them.

Some potential customers, though, will remain unimpressed, or perhaps intimidated by the price.

Instead they will decide to wait until the tree suffers more visible damage—perhaps even death.

When dealing with these people, perhaps the best method is to simply point to the offending tree and explain its monetary value.

The United States Forest Service reports that research shows that trees can contribute about 7 percent to the value of a half-acre home site. It can become about 27 percent of the appraised value of the property.

Some developers will charge 10 to 15 percent more for a wooded lot.

Several trade organizations have computed formulas—based on species, size and condition—to determine the value of a tree.

The New York Times cites an example that ought to make any homeowner's eyes pop out: A 14-inch diameter tree has a basic value of \$4,158, based on \$27 per square inch and 154 square inches of cross section. A 25-inch tree has a basic value of \$12,204!

"While large, healthy trees can increase property value, trees with dead limbs or tops, cavities and other problems can become a liability," the paper says.

A tree that is not pruned makes a big target for storms just waiting to snap off limbs and send them crashing down upon helpless houses and cars

In areas subject to wildfires, a thinned-out tree is less likely to burst into flames, according to George Ogle, an engineer with the Santa Barbara, Calif. City Fire Department.

And, not only does a tree's shade provide a relaxing place to sip an ice-cold refreshing drink, but it also cools down the house inside.

In steamy Florida, properly placed trees can reduce the cost of air conditioning bills by a whopping 20 percent!

A University of California researcher, Art Rosenfeld, suggests that Los Angeles plant 5 million new trees over the next five years to help cool that city down.

The reduction of trees through development has resulted in an increase in peak temperatures. In the 1930s the average peak was 98 degrees. That figure now shoots past 106 degrees.

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grams have a program retention test. Included in this one of a kind training series are: Safety — Everyone's Concern; Trim Mower; Stringtrimmer/Brushcutter; Power Edgetrimmer; Power Edger; Backpack Power Blower; and Mid Mower.

Play it smart. Order the Maintenance Training Video Series Today. The set of seven tapes costs \$400 for association members. For non-members the price is \$600. Individual videos can be purchased for \$65 each

if you are an ALCA member and \$95 if you are a non-member.

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