LCOs do hi-tech telemarketing

By Elliot Maras
Editor

Answering machines, busy signals, disconnects and no-answers all spell lost time for the telemarketer.

But modern telecommunications offers a solution—computer-controlled dialing with automatic screening. It's a new technology that a handful of LCOs are taking advantage of.

This past year, some large, regional lawn care firms introduced "demon dialer" systems to their telemarketing programs. The computerized dialing system enables callers to talk to three to four times the number of customers they can reach by standard telemarketing.

Besides reaching more customers at a lower per-connect cost, the systems enable all telemarketing to be centralized in one location. This is cost efficient for multi-branch operations.

See **HI TECH** Page 24

LAWN CARE INDUSTRY

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VOLUME 13 NUMBER 2 — AN EDGELL PUBLICATION — FEBRUARY 1989

Big rear-dischargers wanted

By James E. Guyette
Managing Editor

Rear-discharge mowers are becoming more and more popular as turf managers are finding that new deck designs have reduced clumping.

The rear-discharge decks are found on riders and trim mowers, but what about applying that easy-to-maneuver trait to the bigger, self-propelled walk-behinds?

Pondering chute direction when deciding mowing patterns would be a thing of the past if such a design takes hold. (Machines like this are found in Europe.)

In the United States, several mower makers are looking into the idea.

"The technology is not new," maintains Consultant Philip D. Christian III. "Why don't you apply it to the larger mowers?"

A number of professional mowers are intrigued with the concept.

"I think a rear-bagger is the way to go," says Wayne DuBoise, president of Mission Landscape Services, Inc. in Costa Mesa, Calif.

See **MOWERS** Page 36

INSIDE

TODAY'S TURF — Prof. Bill Lewis offers a comprehensive approach to managing weeds. **30**

ENGINES — Tips for making sure lawnmowers will be ready for the spring. **26**

CLASSIFIED — See what's for sale, miscellaneous items. **45**

NEXT MONTH

- A university researcher discusses managing turf to reduce insect pests.
- Financial ratios for operating a landscape business.

Hayes leaves Tru Green

ATLANTA, GA.—The last of the old guard has stepped down at Tru Green Corp.

John Hayes, who has served as president for the past year, recenty resigned. He has been replaced by John Slocum, a vice president of Waste Management, Inc., which bought Tru Green in 1987.

Hayes will remain as a consultant.

"The resignation was on John's part completely," says Jerry Seegers, president of Waste's services unit, which includes lawn care and pest control. "He'd like to pursue some other entreprenuerial

See **HAYES** Page 37

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LCO sells branches, adds more services

NEW CARLISLE, OHIO—Perf-A-Lawn Corp., one of the nation's largest lawn care firms, recently sold three of its branches to Orkin Lawn Care. The New Carlisle, Ohio-based company is also phasing out its franchise operations.

Sold were company-owned branches in Atlanta, Cincinnati and South Bend, Ind. Remaining are branches in the Dayton, Tampa, and Nashville areas.

The changes are part of a restructuring designed to enhance future profitability, says Jim Wheeler, president. The company is expanding its tree/shrub and commercial maintenance services in its remaining branches.

"They were all pretty much the underdogs in those markets," Wheeler says. "They were more of a drain on the profitable branches that we do have. We had about half winners and half losers."

Wheeler says the level of competition had no bearing on any branch's success.

Perf-A-Lawn posted a total of $10 million in revenue in 1987; $5.2 million from branches and $4.8 million from franchises.

Corporate revenue for 1988 stands at about $3.5 million, Wheeler says. He notes that the 1987 figure included

See **SALES** Page 25

LATE NEWS

N.H. will regulate spraying

NEW HAMPSHIRE—LCOs in New Hampshire will have to provide customers with written pre-notification of pesticide applications if a current proposal is signed into law. Sign posting would be required for multi-family properties only.

A hearing was scheduled in mid-January before the Pesticide Control Board, which has been working with industry and environmental groups.

Written information on the pesticides would have to be given to customers when they enter into a service arrangement.

Customers would have to be told the name and address of the company doing the spraying, what formulations will be applied, and the approximate dates of the applications. Customers would also have to be given the chance to be pre-notified of each application.

See **REGS** Page 37

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Shell sells Western Farm

WALNUT CREEK, CALIF.—Shell Oil Co. has sold Western Farm Service, Inc., parent company of Yearound Lawn Care, to Texas businessman Herman T. Wilson, Jr. for an undisclosed sum.

Yearound is the largest lawn care company based in the western states, with more than $5 million in annual revenue. The company has eight branches in Washington, Oregon, Idaho, California and Arizona.

Shell sold Western Farm to Wilson along with another subsidiary, IND/AG Chemicals, Inc. as part of a withdrawal from the agricultural chemicals industry. In 1986, Shell sold its Agricultural Chemicals Business to E.I. DuPont and Co.

The sale is not expected to affect Yearound, says Curtis Couch, Yearound's general manager.

Couch says Yearound is one of Western Farm's seven divisions that generate a total of $200 million in annual revenues.

"Nothing's changed about Western Farm Service whatsoever" except the ownership, says Wilson, "We've not made any commitments to any changes in this point in time." LCI

TG buys 5 Hydro Lawn branches

ATLANTA, GA.—Tru Green Corp. has entered the Pennsylania/Western New York market by purchasing five branches from Hydro Lawn Corp. The New York branches are in Rochester and Syracuse; Pennsylvania branches are in Allentown, Harrisburg and York.

Annual sales for the five branches was $1.85 million, says Don Karnes, senior vice president for Tru Green.

Tru Green had bought Hydro Lawn's Philadelphia branch this past summer, Karnes says.

For Hydro Lawn, it was a move designed to enhance profitability in the more profitable market—Washington, D.C.-Baltimore.

"We wanted to get ourselves in a position where we could focus our energies in the Washington, D.C.-Baltimore market which we believe is our strength," says Jerry Faulring, president.

He notes that he can get to any of the five branches in the area in 45 minutes or less. "It's just a matter of becoming more efficient and productive in the operations that are here," he says. "The motivation was to come back to our roots. It makes a lot of sense to put all of your energy where you're getting the most for it."

Faulring notes the Capital area is growing by leaps and bounds, and the people are very receptive to lawn care. "We need to probably open two or three more branches just to service all the opportunities that exist," he says.

That won't happen, however, until 1990.

All of the New York and Pennsylvania employees will remain with Tru Green, he says.

The focusing on one geographic area will help the company service those customers better, he says.

This is particularly important in light of the fact that the company is introducing new services. LCI

ALCA to host 13th student field days

FALLS CHURCH, VA.—The Associated Landscape Contractors of America will host its 13th Student Field Days at the Milwaukee Area Technical College, April 7-9.

Students majoring in horticulture and related programs from colleges across the country will compete in areas like landscape design, sales presentations, surveying, and other areas.

There will also be an evening social event to allow students to meet prospective employers.

For information, contact ALCA at 405 N. Washington St., Falls Church, VA 22046. LCI

Ryan wins design award

Winning design: *Agricultural Engineering* magazine has named the Ryan GA30 Turf Aerator as one of 50 top design innovations in the industry. Some of the unique features include the rider-type structure and an "on the go" adjustment for core spacing. Chief Engineer Kirk Reimers, left, and Project Engineer Mark Lamb celebrate the victory. LCI

MEMOS

Rumors that Perfco has been sold are false. The producer of lawn care brochures remains a wholly-owned subsidiary of Perf-A-Lawn Corp., New Carlisle, Ohio.

The company is, however, for sale.

Erbaugh Corp. isn't the only lawn care firm using signed customer contracts this year. Orkin Lawn Care is doing it, too.

Stay of enforcement on the worker right to know law has been lifted by a federal court. Enforcement of the Occupational Safety and Health Administration's Hazard Communication Standard for non-manufacturing employers was put on hold late in the fall due to a challenge from the construction industry.

The U.S. Court of Appeals for the Third Circuit in Philadelphia lifted the stay late in November after dismissing the challenge.

ChemLawn's third quarter sales were 7 percent above 1987's, according to a recent Ecolab shareholder's report. It said the gain was achieved despite the number of drought-related repeat service calls and customer requests to defer service.

The gain shows that the 1988 start-up production problems due to branch reorganization have been addressed, the report said.

Revenue was up 1 percent from last year's nine-month level, based on pro-forma results which assume Ecolab owned ChemLawn from the start of 1987.

The Andersons of Maumee, Ohio made Forbes' 400 largest private companies, listed in the Dec. 12 issue. The agrichemical firm ranked 271 on the list with sales of $566 million in 1988.

Worker protection standards could cover non-ag pesticide handlers at some time in the future, the U.S. Environmental Protection Agency stated in a proposed draft.

The proposal dramatically extends the applicability of the standards beyond the original focus, farmworkers, according to the Pesticide Public Policy Foundation.

Best Blooper at the Green Team Show during the Brag and Blooper session went to Joe Skelton, co-owner of Lifescapes of Atlanta.

Skelton was working in his dad's landscape firm when a manager, unaware that Joe was only 15, asked him to drive a truck full of bales to a school building. The ambitious lad didn't know the school was 30 miles away.

He managed to move the truck off the railroad tracks in time to avoid an oncoming train, but when he finally arrived at his destination, his foot slipped the clutch and ran over the foreman's feet.

Best Brag went to Steve Bell, maintenance manager for Caribbean Maintenance.

He told a heart-warming story of how he turned a maintenance worker's negative attitude around, just by taking the time to talk with him. LCI

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ABP BPA

Success comes to those who persevere

ELLIOT MARAS
EDITOR

What does it really take to make it in the lawn care business? The question gets asked a lot these days as success seems as evasive to some companies as it seems easy to others.

I pondered the question recently with my childhood chum, Mike, who is presently assessing his career options. Mike operated a small lawn care firm for about a year after working for larger firms.

He sold his business to stay home with his kids when his wife wanted to go to work. Now that the kids need less attention, he's back in the job market.

A puzzled look overtakes Mike's face when he thinks about getting back into the lawn care business. On one hand, he has some solid experience in the business. On the other, he's unsure whether he could be successful.

Mike did mowing, trimming, fertilization and weed control for about 50 customers.

The work was hard and the profit marginal. He paid his bills and had enough left over to support his family. But it didn't seem like enough to justify the long, hard hours.

Mike talks about the lawn care business as if there is some elusive formula for success.

He surmised that the companies that were making higher profits were able to get their crews on and off the properties faster than he could.

So I asked him how the guy was doing who bought his business. Down the tubes, Mike said. Why? Because he won't spend the time Mike was willing to spend on the properties.

This fellow's bad fortune added to Mike's apprehension about lawn care; Mike was being paid for the accounts on a contingency basis, so he wasn't getting the full payment he had hoped for.

Mike wasn't seeing the big picture.

If you want to succeed, you have to service your customers. The operators getting on and off the properties fast don't keep their customers satisfied—and don't keep them for long.

Mike wasn't making as much as he should have because he wasn't charging enough. Like many greenhorns in the business, he pulled a price out of a hat, and it was too low.

The question for Mike and anyone else contemplating the formula for success is: Can you learn from your mistakes?

The formula for success is not magical. A hard worker who can learn from his or her mistakes, whatever they may be, will learn the proper operating techniques.

Everybody in business—any business—makes mistakes. It's how they respond to their mistakes that determines success or failure.

Do you respond with anger and self-doubt, or with the determination to make the necessary changes?

To be successful, one must be determined to identify the causes of and solutions to the problems encountered. In a highly technical business like lawn care, this isn't easy. It takes perseverance.

One LCO I know has problems getting products and equipment to work properly. When I ask him why he thinks he is having a particular problem, he responds, "That product just doesn't work." He doesn't identify the specific cause.

The perseverance factor is also important in developing a good staff.

Are your managers good motivators? Sometimes, the best technical person is the worst people manager. Other times, the best motivator can't execute technical tasks well.

Perverance plays a role in establishing effective financial control of the company, particularly a lawn care company, since most owner/operators don't have strong business backgrounds.

Those involved in mechanical services have an especially hard time, since trial and error is necessary to provide those services profitably. The tasks must be performed several times before the full costs can be known with a degree of certainty.

Identifying and addressing these various problems is an ongoing challenge.

Success is often a reflection of one's determination to meet it.

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Greenscape comes full circle—back to full service

By Elliot Maras
Editor

ST. LOUIS, MO.—It's the story of one company, but in large measure, of the entire industry.

In 1979, John Loyet was contemplating what to do with his landscape maintenance company as he enviously noticed the growth of the chemical lawn care companies.

He couldn't help but notice—his customers' lawns had to be cut more frequently because LCOs were pumping them full of fast-release nitrogen.

Rather than complain, he decided to take matters into his own hands: he started a chemical lawn care division. The division outpaced the landsape maintenance work so fast that by 1982 the company was strictly a lawn and tree spray operation.

Loyet was one of many who rode the crest of the chemical lawn care wave. And as the wave now ebbs into a tide of total landscape management companies, Loyet finds himself coming back to his landscape maintenance roots.

This year, Loyet's company, Greenscape Lawns, Inc., will offer a maintenance package that includes mowing, trimming, bed and border weed control, in addition to the standard fertilization and weed control program. "It's going back to our roots," he says.

The major difference between Loyet Landscape Maintenance, which the original company was called, and Greenscape Lawns, is that the customer base is now primarily single-family residential.

How it happened

The metamorphosis in detail:

Loyet Landscape Maintenance provided mowing, cleanup and snow removal. Customers were 70 percent commercial/multi-family and 30 percent single-family residential.

Loyet first diversified in 1978 by adding hydroseeding. The focus for this new service was the same, commercial customer.

But as interest rates rose and construction activity hit a lull at the end of the decade, the hydroseeding faltered. It was discontinued altogether in 1981.

Fortunately, Loyet was not one to put all his eggs in two baskets. In 1979, he added a lawn and tree spray division. "We were tired of the liquid (lawn care) companies stepping on our feet in the actual maintenance of the grounds we were taking care of," he says. "We were tired of excessive nitrogen being applied to the lawns."

These new services were marketed to existing accounts, also to single-family homeowners as well, via direct mail.

"It just had incredible growth," Loyet says. He raked in 800 customers in the first year.

Seeing a great future in lawn care, Loyet sold the maintenance accounts and stopped offering maintenance services in 1982.

Why is he bringing them back?

Back to full service

"The people are expecting more today than they were 10 years ago," he says. "That's why they want a total service package."

Loyet's not doing it on a whim. A written questionnaire revealed that 15 percent of his customers are "very interested" in full landscape management service. Many are presently dealing with separate maintenance companies.

"We want to give our customers full service because, from indications from our survey, they are crying out for it."

A slackening of new customer acquisition in recent years is what prompted Loyet to examine the possibility of adding new services. The St. Louis market, like most others in the Midwest, is saturated with lawn care companies.

The maintenance services will be offered as part of the full service program only—they won't be offered separately. "We want to have total hands-on control," Loyet says.

"The only thing we won't do is watering, but we will make customers aware of watering needs."

There will be separate crews for maintenance work. Average cost for the total package will be $1,000 per year.

"The only reason we can do some of this is because of our past experience when we had the maintenance division," he adds.

Loyet does not plan to switch back to the commercial market, however.

He finds the commercial and multi-family customers more cost conscious, and the accounts must be rebid every year. LCI

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Model plan available for storage, mixing, recycling

By Elliot Maras
Editor

NEW ORLEANS—Pesticide storage containers are, for the most part, leak proof. But accidents can occur.

In the event of a spill, will the pesticide saturate the entire storage area? Cleanup costs could be high, and health officials might slap you with a hefty fine. Not to mention the fear such an incident could stir in your employees and the public, should they find out.

On-site pesticide accidents can be prevented if the facility is specially- designed for storage, mixing and recycling.

Fred Haskett, owner of Greenworld Lawn Service, Dover, Ohio, is a self-taught expert on designing a lawn care pesticide facility. He designed his own facility in 1985 when his company expanded, and presently serves as a safety consultant to other companies.

"You should, as profit and safety conscious operators, be in compliance with these (safety) issues," Haskett told his colleagues at the Professional Lawn Care Association of America conference in New Orleans. He spoke on designing a pesticide facility.

Haskett: Don't generate waste.

Haskett identifies five basic components for a safe pesticide facility:

1) Storage—The storage area should be divided into primary and secondary containment areas.

2) Spill containment—The storage areas should be enclosed by dikes, and the floors should be sealed and coated.

3) Safe, efficient handling—Handling procedures should be spelled out for employees. Wash and fill areas should be segregated.

4) Recycling residues—All spray residues should be pumped back into the pesticide containers for future use.

5) Water and sewer protection—All storage and mixing should be done in an area from which pesticides cannot travel to water sources and sewers.

Haskett sought advice from the state Environmental Protection Agency in 1985 when he began designing his 5,000 square-foot facility. It was completed in 1987.

The facility

Greenworld's facility has two distinct sections—a servicing area and an equipment maintenance area.

The servicing area will hold about 3,000 gallons of material in the event of a spill. It has a four-inch dike located at all doorways and openings.

The area also has a stainless steel, 80-gallon sump wrapped in five inches of concrete under the floor. If a chemical spills, it is recycled into the spray mix.

The primary containment section within this service area has a six-inch dike surrounding it. This is where all pesticides are stored. The floor of this section is coated with a chemical-resistant substance.

> ***'You should, as profit and safety conscious operators, be in compliance...'—Haskett***

The equipment maintenance area is surrounded by cinder block walls and contains concrete floors and floor drains leading to sanitary sewers. This is where trucks and equipment are washed.

The benefits

Haskett estimates the cost of the facility will be recovered in two to three years, in savings from spills and accidents. He says he received a reduction in his liability insurance premiums.

One of the most significant benefits, he notes, is the waste recycling. He says he would be paying $5,000 to $8,000 per year for disposing his rinsewater.

The system also makes the employees more comfortable.

Haskett presently consults with other small businesses in constructing pesticide facilities and in upgrading existing facilities. For information, contact Haskett/McCausland & Associates, 425 W. Howe St., P.O. Box 337, Dover, Ohio 44622. (216-364-1442) LCI

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CONVENTION REPORT

Study: 2,4-D persistence minor in soil, water, turf

By Elliot Maras
Editor

CINCINNATI—Tests measuring pesticide residues in soil, turf and water show compounds applied at standard rates dissipate or degrade within a matter of days.

Tests were conducted this past year at the Guelph Turfgrass Institute in Guelph, Ontario in response to concerns about the carcinogenic potential of 2,4-D herbicide. Results were discussed at the Ohio Turfgrass Conference in Cincinnati by Gerry Stephenson, Ph.D., an environmental scientist at the University of Guelph.

"There would be very little risk of human health effects through the immediate use of properly treated turfgrass areas," Stephenson said in discussing the studies.

He said there are individuals who are sensitive to any chemical, and those sensitive to pesticides should receive special consideration. He said research in pesticide persistence should continue.

The turfgrass industry's objective, Stephenson said, is to reduce dislodgeable pesticide residues in the environment without reducing effectiveness. Dislodgeable residues are those that humans and animals can be exposed to.

The Guelph studies indicate this goal is being met with recommended rates, Stephenson said.

Tests showed that low percentages of applied herbicides and insecticides, 1 to 6 percent, can be physically dislodged by vigorous scuffling with cloth covered boots immediately after application. The dislodgeable residues then decline to below 1 percent within one day for insecticides and within four or five days for herbicides.

Stephenson provided the following summaries of the tests:

Herbicide persistence in soil—2,4-D and dichlorprop were applied at typical field rates. Dissipation of 50 percent occurred in less than seven days in all soils except for the northern sandy soil. "We have plenty of time for 2,4-D to completely degrade in the soil," he said.

In all cases, residues were below biologically active levels by the season's end.

Herbicide persistence in water—Aquatic persistence of 2,4-D was examined in a naturally acid, bog lake in two concentrations. Within 15 days, less than 5 percent of the herbicide could be recovered in the water.

Up to 25 percent of the applied amount was found to be bound to the polyethylene walls of the limno corral, and lesser amounts were bound to bottom sediments. These residues degraded after release into the water.

Herbicide persistence in foliage—In field studies, only 5 to 6 percent of applied 2,4-D could be dislodged immediately upon application by vigorous scuffling onto cheesecloth attached to rubber boots.

Less than 0.1 percent could be dislodged after five to seven days.

Cultural practices

Watering was found to be a major benefit in reducing dislodgeable residues. Rainfall, even on the day of application, reduced dislodgeable residues to less than 0.01 percent. Stephenson pointed out that water will not reduce effectiveness for up to six hours after application.

Mowing caused only a small reduction in dislodgeable residues.

Granular formulations of 2,4-D with fertilizer were less dislodgeable than the same quantity of 2,4-D applied as a spray, particularly on the day of treatment. However, recommended rates for granular formulations are higher than for liquids. Dislodgeable residues were similar for recommended rates of both formulations.

Movement in runoff water—When turf was exposed to simulated rainfall immediately after application of 2,4-D, more than 70 percent could be recovered in the runoff water. After 0.5, 2, 7 and 11 days in outdoor studies, water dislodgeable residues dropped to 57, 48, 32, 25 and 12 percent of that applied. LCI

Stephenson: Rates adequate.

"Be a partner" with Special Olympians

A Special Program with Special Rewards

Under a bright winter sun, an icy breeze brings roses to cheeks as skiers move along a trail, some smoothly, others struggling. It could be any cross-country skiing event.

But soon differences appear. As the athletes cross the finish line, they are greeted with cheers of encouragement and congratulations—and hugs for every skier.

The contest is a winter event of the Special Olympics, patterned on the traditional Olympic games and conducted for athletes of all ages who have mental retardation. And while their movements may not be those of polished athletes, there is no mistaking the intensity of their effort, or the joy of their achievement, wherever they finish.

Dow and Industry to Sponsor. In 1989, Dow and the lawn care industry, through PLCAA and state associations, are Official Bronze Medal sponsors of the International Winter Special Olympics Games, by contributing more than $100,000. To be held in April 1989 at Lake Tahoe, the games will attract more than 1400 athletes from around the world. Events will include Alpine and Nordic skiing, speed skating, figure skating and floor hockey.

Special Olympics: a Special Program. The Special Olympics program, founded in the 1960s, is run by more than 600,000 volunteers. It provides year-round sports training and athletic competition for more than one million people with mental retardation.

For many of these participants, the program is their only opportunity to take part in activities which most of us take for granted. To say that Special Olympics are a bright spot in their lives is an understatement.

Special Volunteers. All types of volunteer helpers, from coaches and managers to trainers to fund raisers, pitch in to keep the program going.

One unique group of volunteers are the "huggers." They see to it that all participants at every event get warm personal recognition—regardless of where they finish. Competition is intense, but the medals won are less important than the effort put forth. The huggers have the rewarding job of rewarding the effort. And they love it.

If you'd like to be a hugger, or help some other way, contact your nearest Special Olympics office. Or see your Dow rep for lists of Special Olympics officials in your state, and ways you can support the year-round program in your area.

The Partnership makes it possible. Dow's contribution, in the name of the lawn care industry, is made possible by a program called The Partnership, Dow's commitment to you.

The Partnership brings together all the things Dow offers you. It includes not only the products you use, but many other pluses: industry-leading research and development, training for your technicians, business management seminars, legislative lobbying and assistance at national, state and local levels, and industry-wide public relations programs.

Dow's underwriting of industry support for the 1989 International Winter Special Olympics is one way of encouraging others to become involved in worthwhile local activities.

"Let me win, but if I cannot win, let me be brave in the attempt."
—*Special Olympics credo*

thePartnership
DOW'S COMMITMENT TO YOU

Circle No. 142 on Reader Inquiry Card

Irrigation company offering computerized designs

By James E. Guyette
Managing Editor

AURORA, COLO.—LCOs and mowing/management contractors can enter the irrigation installation business by using computerized designs tailor made for each property.

Computer assisted drawings, called CADs, are used by Eight Days a Week of Aurora, Colo., to custom fit an irrigation system to each client's yard.

The company also supplies the needed materials and training that permits the local contractor to complete the job without having to hire a designer or outside help.

The system makes it more economical for green industry business owners to become irrigation contractors, according to Charles B. Murphy, president of Eight Days a Week.

"We're taking most of the fixed costs out of it," says Murphy, adding that successful firms are encouraged to consider branching out into irrigation. "We're actively looking for dealers throughout the country right now."

Eight Days a Week has been researching the concept for more than three years. "The heart of the system is a computer generated design that analyzes each property individually and designs the most efficient irrigation system possible," says Murphy.

"The computer will then list all the materials needed for the system and will recommend the proper controller setting to keep the turf green with minumum water usage," he adds.

The computer program and installation methods were formulated in part by Larry Keesen, president of the American Society of Irrigation Consultants and a member of the board of directors of the Irrigation Association.

"This software will provide quality control and uniformity of design, taking into account the latest technology of irrigation," Keesen says.

The computerized design considers such factors as soil type and water intake rates, the slope of the land and obstructions on the property, types of trees and shrubs, the amount of sun and shade, wind speed and direction, plus local water pressure rates.

The computer determines placement of the sprinkler heads and makes sure that all the variables fall into place, says Dave Kostic, design engineer. "We have a uniformity check on it."

The local contractor prepares a map of the site and sends it to to Eight Days a Week along with other details—plus a Polaroid picture of the area, Kostic explains.

The finished design is then installed by the local contractor, who has been trained by the Eight Days a Week staff.

"I think they offer one of the most exciting dealerships in the business," says Joe Sweeney, president of Corporate Care in Kansas City, Mo. "What they have structured is a very practical industry for a business to expand into."

Sweeney has invested in the venture, and he figures that a 35 percent profit is not out of reach. He says it's the most profitable division at his full-service firm.

The concept is "one of the hottest" ideas to hit the green industry, and it comes "at a very fair price," he says.

Sweeney is particularly pleased with the quality of the staff at Eight Days a Week. "They make us look good, and that makes everybody look good—I'm most impressed."

The emphasis on quality is important to Sweeney. He observes that he's picked up a number of new accounts because they were displeased with a botched irrigation system installed by somebody else.

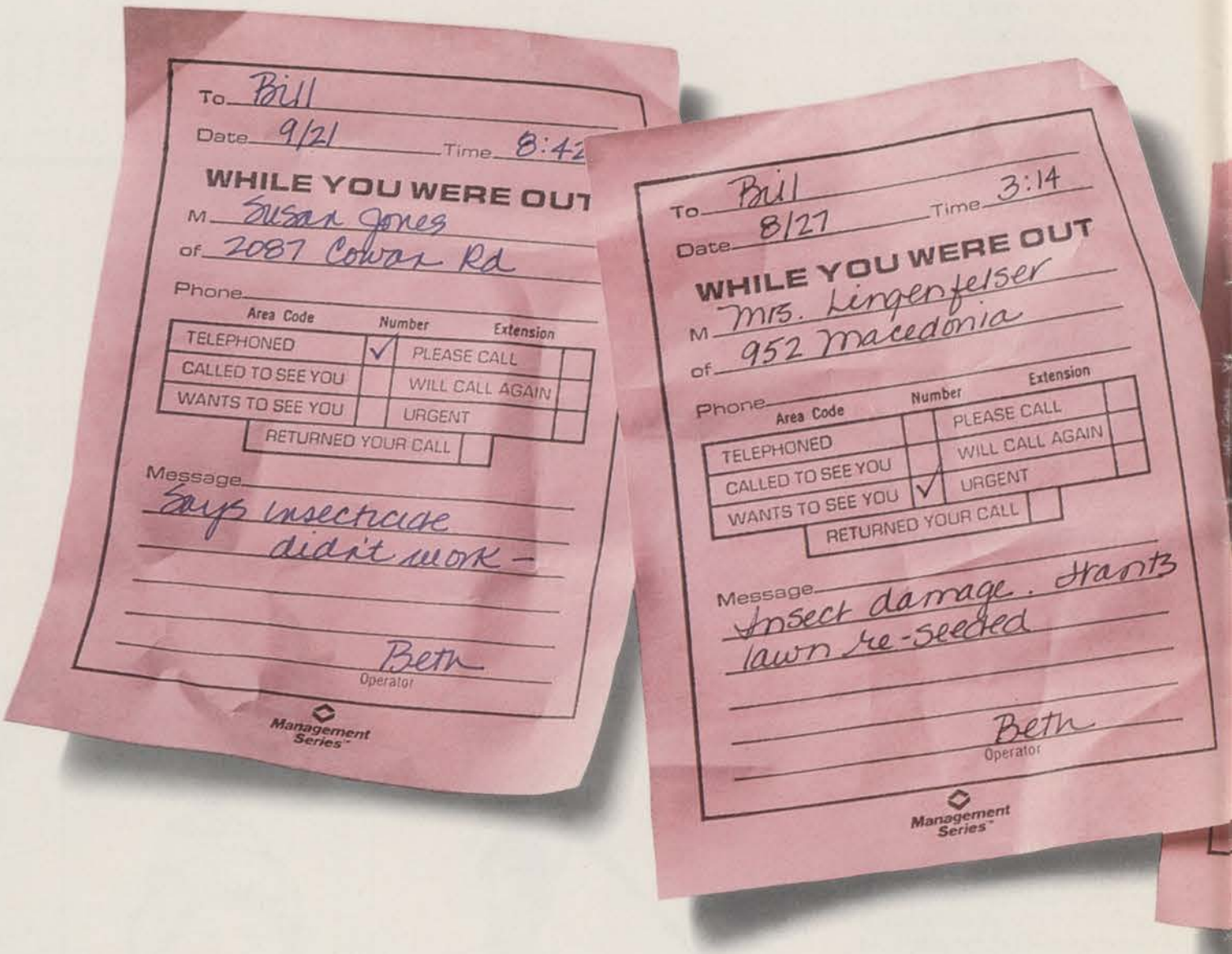
Kostic reports that business increased during the recent drought. "We've been very busy," he says.

"We had one guy from Omaha send in five designs in one day," Kostic notes. "And that's right in the middle of it."

Verlin Jansen of Mid-States Irrigation in Gothenburg, Neb., also reports that he is "super busy," according to Kostic.

Now is a good time to market irrigation systems, Kostic points out. "We can show people how to save money with an automatic system."

Keesen agrees that there



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Eight Days: Sweeney (left) thinks the plan is exciting and hot; Murphy's pleased with the lower installation costs.

are plenty of selling points. "These include substantial reductions in water bills and healthier grass," he says. "A well-functioning system can reduce the need for herbicide applications, will improve the health and appearance of grass and other plant materials, and will lessen fertilization requirements."

The nationwide drought can serve as a selling point for property owners concerned with the environment.

"Let me give you an example of potential water savings," says Keesen. "According to Denver Water Board statistics for 1986, the total landscape water consumption for residential customers (within their service area) was 14,655,272,000 gallons. If these residential customers had an Eight Days a Week irrigation system, you could expect to see a potential water savings of 20 percent and possibly much more."

That savings would add up to 3 billion gallons a year and 30 billion gallons over a decade, Keesen says.

Eight Days a Week is an independent operating subsidiary of Valmont Industries, Inc., of Valley, Neb. Valmont is the leading maker of mechanized agricultural irrigation systems in the world, according to Murphy. **LCI**

Pesticide coalition works with regulators

By Elliot Maras
Editor

CINCINNATI—Pesticide regulations in Ohio are being developed with input from LCOs and other pesticide users, thanks to the existence of a well organized industry coalition.

The Ohio Department of Agriculture recently withdrew a set of rules industry representatives felt were unenforceable and overly restrictive. The department has been discussing proposed regulations for the past year with both the Ohio Pesticide Applicators for Responsible Regulations and environmentalist groups.

Jim Betts, a former state legislator who serves as OPARR's executive director, gave a talk on the group's activities at the Ohio Turfgrass Conference in Cincinnati.

"Another proposal will be forthcoming from the department," Betts said in recounting a recent meeting between department officials and OPARR.

OPARR had objected to the second draft of regulations after supporting the first draft. Environmentalist groups had objected to the first draft. "Environmental groups in Ohio have become more and more active," he noted.

OPARR objected to the following regulations:

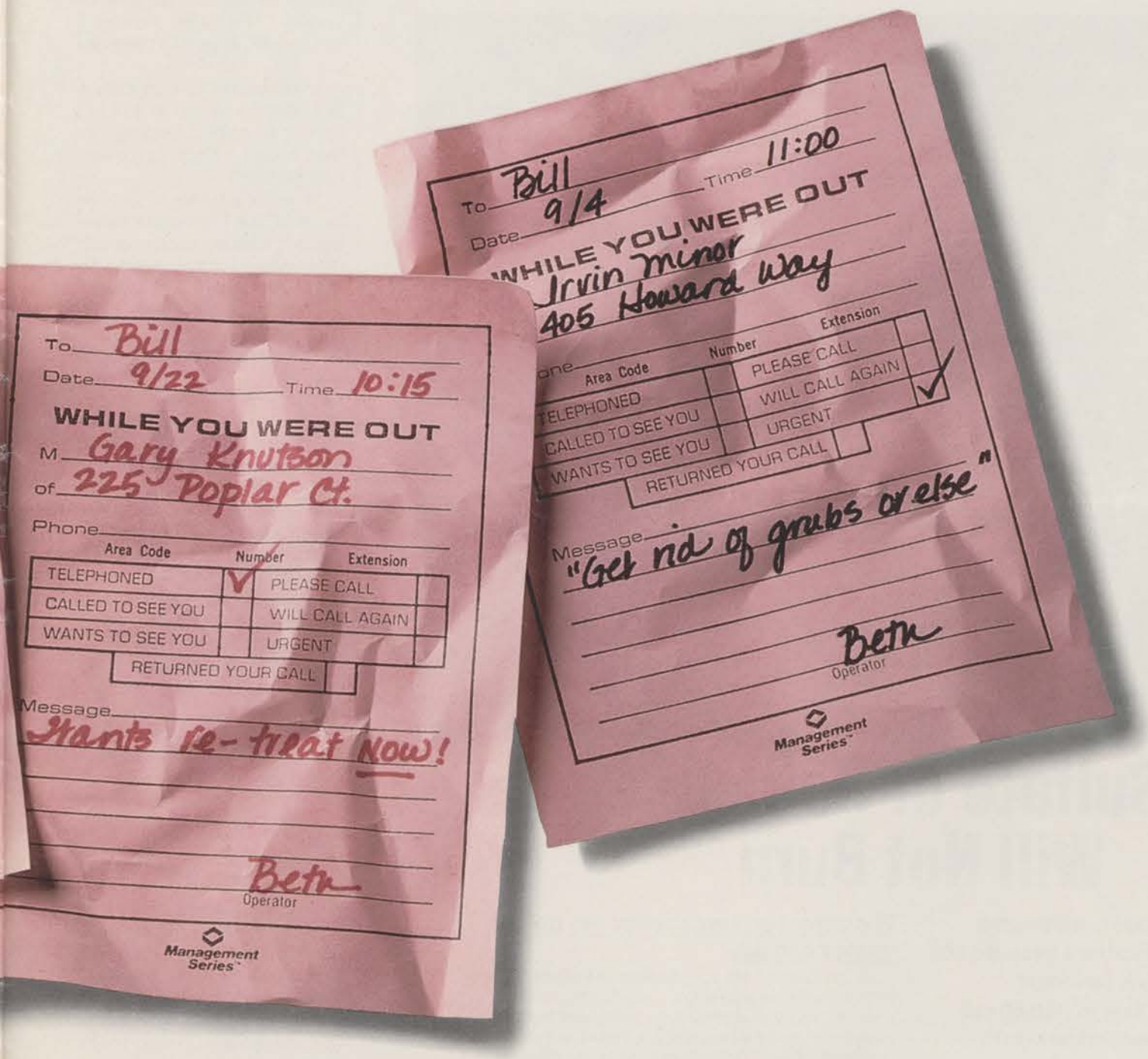
- **Pre-notification**—The draft called for four-hour pre-notification to a "responsible person" at the property and to abutting property owners.

OPARR supported the original draft, which required pre-notification for those customers and abutting property owners who requested it in writing.

The revised draft also entitled anyone who works or lives on a commercial property, or who works or lives on an abutting property to a commercial property where pesticides are applied, to request pre-notification.

On lawns designated as "public," a "responsible person" on all abutting properties would have to be notified four hours in advance of applications. **LCI**

Betts: Taking active role.



st turf pests, including these.

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Circle No. 105 on Reader Inquiry Card

High-production mowing nets cash via foreclosures

By James E. Guyette
Managing Editor

High-production mowing/management contractors can gain additional revenue by tending repossessed properties.

Ann Witzig, owner of Witzig's Lawn Service in Tremont, Ill., built her business following massive layoffs at the area's largest employer in nearby Peoria.

At its peak the operation mowed about 360 lawns a week—and all of them were at vacant, foreclosed houses waiting to be sold.

The company grossed $50,000 annually, which was enough to pay for all the equipment in one year. It also allowed her sons to go to college.

Witzig and her husband Jerry, who has a full-time job in addition to helping Ann, believe that contractors can benefit when hard times hit a community.

"Just go to the loan companies and bid yourself," Jerry explains.

When a lending institution forecloses on a house, the property must still be kept in good shape, Jerry notes. "They have to have them saleable."

Contractors can offer their services to savings and loans, banks, and the U.S. Dept. of Housing and Urban Development.

"We bid them to the property manager," Jerry says. "We deal with one man."

The Witzigs sometimes buy HUD homes to fix up and sell, and that is how Ann began the business about five years ago.

"Our boys started it," Ann explains. Jerry adds that "the guy we bought from was the (HUD) manager and he needed someone to start mowing" the other properties up for sale.

They started small, using trim mowers. Ann and Jerry became more involved as the business boomed and the sons looked toward college.

"Over a two-year period we got up to mowing 360 a week," Jerry recalls.

And Ann and Jerry did most of it themselves!

When they started the fee was $8 a yard. That soon climbed to $12.

They made money by doing the jobs *fast*.

"Speed was the only way we could do it," Jerry points out.

"We did a yard every ten minutes," Ann says. "He and I can do a normal little yard in five minutes."

Ann reports that the most fateful moment in the business came when they bought a zero-turn radius Grazer mower.

"I can do 30 to 40 (yards) a day by myself," Ann declares. "Zero-turning radius is the key if you're in a hurry."

Ann moves quickly, taking about three minutes to use a string trimmer around the hard-to-reach areas. The rest is done by fast mower maneuvering. "With that Grazer I can be off the yard in ten minutes."

(Ann plans to purchase a Walker zero-turn radius mower to take advantage of that brand's clipping collection system.)

It takes a while to get the hang of the lever-style steering, but a little experience can do wonders toward beefing up the mowing speed. "The more you use it the braver you get," Ann laughs.

They tended properties all over town. "We went everywhere," Jerry says.

The speed factor was increased on some fenced-in properties by simply removing any barrier, he explains. "We just took the fence down because nobody lived there. When they'd sell it we'd put the fence back up."

Business has slacked off some since the big Peoria plant called back a lot of its workers, and Ann and Jerry are seeking to expand into offering fuller service. They were checking out the possibilities at the Landscape Expo in Nashville, Tenn.

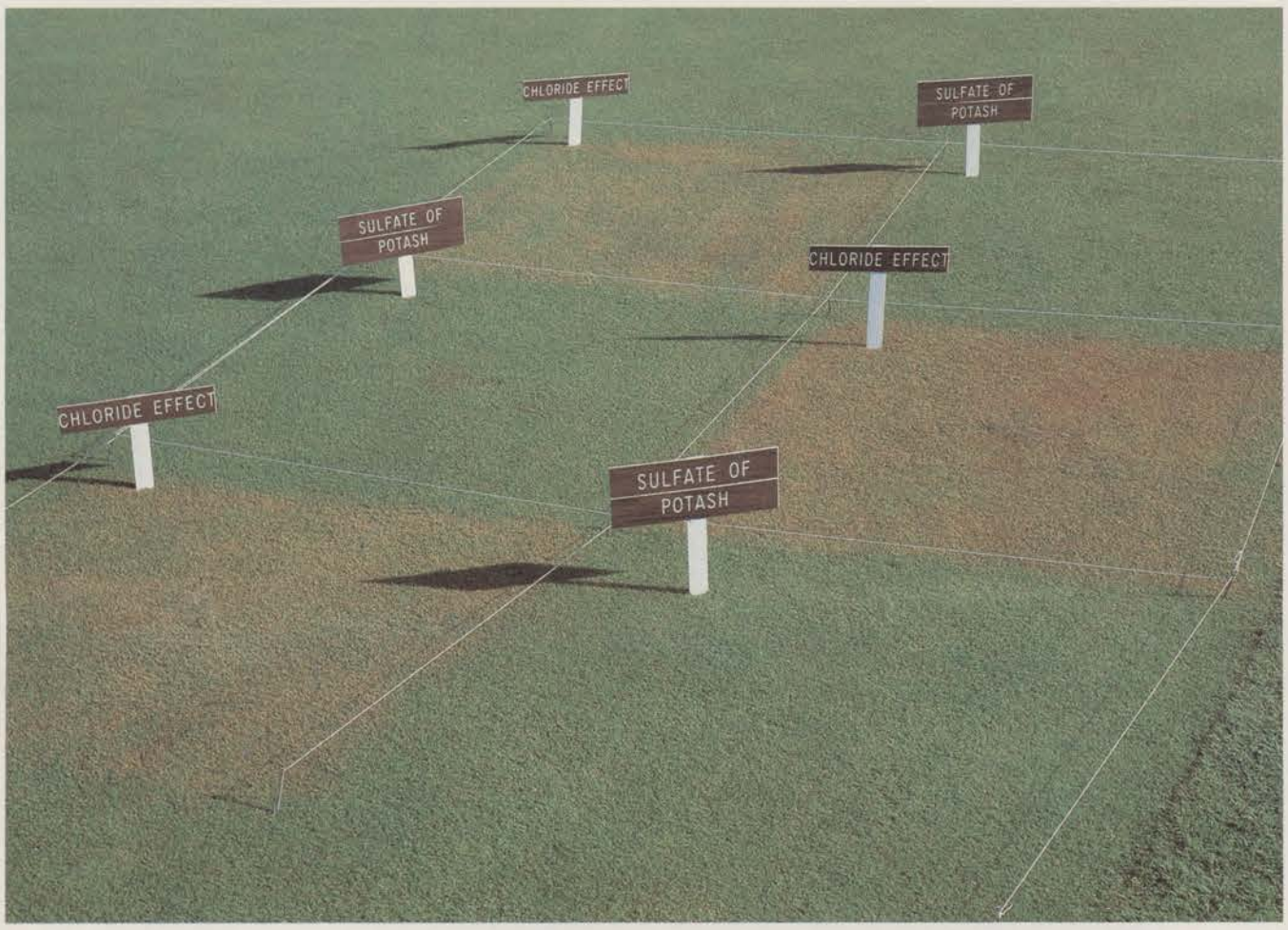
"We want to see what the expense would be," Ann ponders. "We'd like to do it all. We'd like to go in and aerate—do whatever needs to be done."

Ann is confident after experiencing the windfall gained by fast mowing: "I'm convinced that if we do it right we can double that money. It's like being a funeral director—there's always going to be grass."

Ann is proud of her horticultural skills, which she has honed at home and on the job.

She'd like to pass on some

Jerry: Bid with bankers.



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Circle No. 114 on Reader Inquiry Card

Ann: Foreclosures mean cash.

of her talent and perfectionism to her customers. "I want their yards to look like my yard." **LCI**

Get a head start on insect pests in lawns

TAMPA, FLA.—The best way to control a lawn insect pest is to nip it in the bud. That is, initiate the control program before the pest has a chance to damage the lawn.

Doing that requires monitoring for pests early in the season.

Monitoring and controlling turf insect pests were discussed by Will Hudson, Ph.D., an extension entomologist at the University of Georgia. He spoke at the Florida Turfgrass Association conference in Tampa.

The best way to monitor is to flush a two-square-foot area of the turf with soapy water, Hudson says. Most of the insects will come to the surface.

Baits, liquids and granules are available for control of insect pests. Hudson says the baits are the most sensitive to environmental stresses, requiring two straight nights without rain for optimal results.

Concerning the biological controls which have received attention in trade journals, Hudson says these are not practical at the present time. He says they have given inconsistent results in trials at universities.

Research on a nematode from Uraguay is promising, he says, but not on a small scale for residential lawns.

The most important pest in Florida, mole crickets, are difficult to control and do a lot of damage. The nymphs that are present through the fall do the most feeding (damage).

If controls are applied in May or June, the LCO should beware that the adults will have already laid eggs, which hatch after a month or longer, he says. **LCI**

Hudson: Start early.

Tips for accurate spraying offered

COLUMBUS, OHIO—Accurate spraying translates to more economic use of pesticides. A sprayer that doesn't apply pesticides accurately could spray too much pesticide and damage non-target plants, or spray too little and not control target pests.

The following tips on improving sprayer accuracy were recently released by Erdal Ozkan, agricultural engineer at Ohio State University:

- Use clean water. This keeps the nozzles from being clogged with pollutants.
- Check the spray nozzles periodically for clogging. How the chemical is deposited in the turf can be as important as the amount applied.
- Watch for unsprayed areas. Misaligned nozzles, using nozzle tips with different spray angles on the boom, clogged nozzles and uneven boom height are the most common causes of non-uniform spray patterns.
- Never use a pin, knife or any other metal object to unclog nozzles. This could change the nozzle's spray pattern or flow rate.
- Move the sprayer at a uniform speed. Hurrying the speed can cut the application rate.
- Carry extra nozzles, washers and other spare parts to repair simple problems quickly in the field.

Ozkan recommends completely recalibrating sprayers at least once a year. All this requires is a measuring tape, a watch with a second hand and a measuring jar marked in ounces. **LCI**

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Circle No. 101 on Reader Inquiry Card

New ways to seek workers; how to prepare them

By Elliot Maras
Editor

ATLANTIC CITY—The labor shortage that has accompanied the upswing in the nation's economy has made finding and keeping help harder than ever.

Not only are workers harder to find, the quality of the unskilled help that is available has dropped, notes Fred Diegtel, vice president of Lawn Doctor, Inc.

Because of this problem, Lawn Doctor has sponsored special sessions on finding and orienting new employees.

"We have to get aggressive, we can't wait for people to come to us anymore," said Ewald Alstadt, field service representative. He noted that fast food companies in New York are paying $6.50 to start and busing people to work for free.

By being aggressive, Alstadt means LCOs should go out and recruit workers at other retail and service establishments. "Make it part of your daily routine to talk to prospective candidates, and don't be afraid to talk to them on the spot," he said.

He was referring to nurseries, carry-out stores, supermarkets, gas stations, home improvement stores, discount department stores and shopping malls. "Don't be afraid to get out and talk to them," he said. "You don't have to interrupt them. Just be sure the boss isn't around."

Jones: Explain everything.

Alstadt said in talking to people at these sorts of businesses, "I found quite a few people that were interested" in talking with Lawn Doctor.

LCOs should also send job descriptions to state employment bureaus, senior citizen organizations, and community organizations like the Elks. They should also place notices on bulletin boards.

"More and more retired people are looking for incomes," Alstadt said. He said they often work harder than young people and ask more questions, which is good.

"You may have to provide a more flexible schedule" for retirees, he noted.

As for the community organizations, Alstadt noted, "There is some communication within the offices among the people that go in there." He added that it's important to keep in touch periodically.

How to orient

Once the new employee is hired, it's important that he be oriented in a structured manner. Dave Jones, director of training, outlined some steps.

On the first day of employment, show the new hiree where everything is and introduce him to everyone. As far as the paperwork goes, "Just get it out of the way," Jones said.

He acknowledged that paperwork is taking more time these days. Employers must now have naturalization or citizenship documentation on all employees hired since 1986, for example.

Be sure to explain everything about the job to the employee, then give him a chance to ask questions. "Make them know what their part is," he said.

Specific skills training comes next. Skills include engine starting, calibration, servicing calls, paperwork needed for service calls, equipment maintenance, machine trouble shooting, telephone skills, weed control, aeration, etc.

Jones discourages sole reliance on instructional tapes.

Once the employee has been trained in a particular skill, the employer should ask him or her what they learned.

The second day should consist of hands-on demonstrations. Then have the employee do the task under supervision. "Let them use the bag of fertilizer... run the truck," he said.

Remember, Jones said, people have different learning styles and they learn at different speeds. "Make sure you know what people are capable of," he said. **LCI**

Alstadt: Be aggressive.

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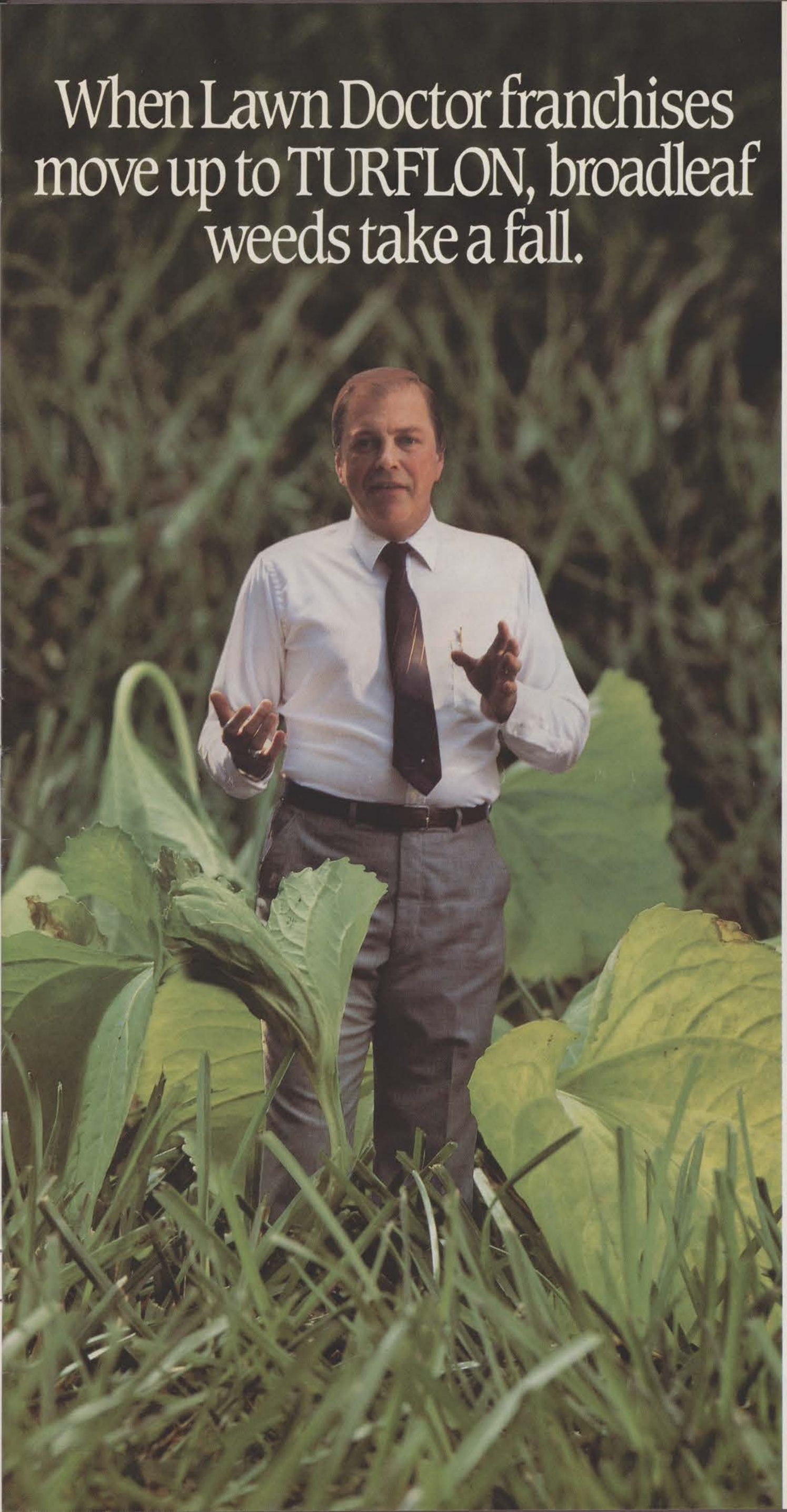
When Lawn Doctor franchises move up to TURFLON, broadleaf weeds take a fall.



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Lawn Doctor,
Matawan, NJ

If "easy" weeds were the only ones cropping up in customers' lawns, 2,4-D would handle the job. But that's not the case. You need a tough product to keep tough weeds down. Maybe that's why you should move up to TURFLON* herbicide.

The real problem with lawn care.

"Weed control is the most important problem," explains Russ Frith. And as president of one of the nation's most successful lawn care franchisers, he ought to know. In explaining how TURFLON has worked for Lawn Doctor, Russ says, "It does a better job on the tough to control weeds."

Prove it for yourself.

How do franchisers who use it justify broadcast spraying TURFLON at about $9.50 per acre? "Reduced callbacks," Russ says. He adds that independent Lawn Doctor operators select their own products. Most are skeptical of TURFLON until they prove for themselves that it does a better job of controlling tough weeds. "Many who use it full service started with spot (spraying)."

Finally, Russ says one word describes the experience Lawn Doctor franchises have had using TURFLON: "Excellent."

Isn't it time you moved up to a better herbicide for better weed control? Call us to find out more. 1-800-373-4DOW (4369).

Move up to TURFLON

DOW*

*Trademark of The Dow Chemical Company

Circle No. 108 on Reader Inquiry Card

8004

Inefficiencies rampant in mowing/management

NASHVILLE, TENN.—Most landscape crews are operating at 68 percent of optimum productivity, primarily because they use the wrong equipment.

"The problem is, we're not getting what we're paying for, and it's not their (the crew's) fault," says Phil Christian, a business consultant to the landscape industry.

The problem most managers make is they assume all of their crew members are as knowledgeable as they, the managers, are. Christian spoke on why landscape managers fail at the recent Landscape Exposition in Nashville.

Christian bases his observations about operating inefficiencies on a survey he did of 12 mowing/management firms in different geographic regions. Among his findings:

- 75 percent of the crews were too large for the jobs they were doing. In many cases, a three-to-five-man crew was doing the job of a two-to-three-man crew.
- 70 percent were using the wrong equipment. Some were using a front deck mower where they should have been using a larger mower.
- 70 percent were operating equipment incorrectly.
- 50 percent of the mowing crews were mowing incorrectly.

"One reason we neglect production as managers is we think that they already know how to do it," Christian says.

Christian: Crews need production goals; managers must influence thinking, not just results.

Mowing/management crews, unlike chemical lawn care crews, are not given specific production goals, Christian says. Mowing/management crews should be told how long each job should take them to do. "We have to run our business by the numbers," he says.

Once the crews are given a production goal, they will quickly inform management of whatever problems exist with the equipment, or if they think different equipment is necessary.

One purpose this will serve is to keep the crew from falling into the "hard work trap"—the assumption that hard work always yields optimum productivity. The job card and time sheet are important tools.

Christian says the most experienced, capable mower should be given the largest machine to work with. "The one goal of the 'big dog' is to reduce the amount of work for everybody else," he says.

Use ear protectors

The incorrect use of the backpack blower is a common problem. "If you don't wear ear protection, there's no way you can stand the noise," he says.

Forgetting the water cooler is another common problem. Coolers should be sent out to the crew on the hour. Workers will work at optimum capacity no more than four hours without proper hydration, Christian says.

And no one should be removing weeds by hand these days.

Once productivity is improved, everyone on the crew should be commended. Christian says this will generate a lot of enthusiasm.

It is important that the crewmembers realize that efficiency has a direct bearing on profitablity. "When we focus only on results and don't influence thinking, we're not managing," he says.

Be prepared

Christian says managers should have an emergency action plan, a high productivity plan—for unforeseen problems on the job-site. Emergency situations caused by things like weather changes and employee absences arise every three to four weeks, he says.

These plans should only be implemented when necessary, however. It will otherwise create negative attitudes.

Noting that chemical lawn care is the most efficiently-run business within the landscape industry, Christian says: "Your goal should be to move your maintenance business as close as you can to the lawn care business." LCI

Sabre *Poa trivialis* isn't just a good shade grass. It's the best.

Years ago fine fescue was considered the best performer in damp shade.

That changed with the appearance of *Poa annua*-free Sabre *Poa trivialis* and a 1979 shade tolerance trial at Ohio State University.

In that test Sabre was top-rated for shade tolerance when compared to 39 mixtures, blends and monostands of fine fescue, ryegrass, Kentucky bluegrass and tall fescue.

An excerpt from trial data said: "Sabre, which had the highest overall seasonal ratings, maintained the most consistent quality throughout the season."

Due to its special qualities Sabre should be sown only in damp shade. For this purpose it may be mixed with fine fescue, turf-type ryegrass or Kentucky bluegrass.

Normal cutting height is 1-1/2 inches, but on winter putting greens in the Southern U.S., it has proven its ability to thrive when cut at 3/16th.

One of the first domestic varieties to be registered with the U.S. Plant Variety Protection Office, Sabre is both disease-resistant and hardy.

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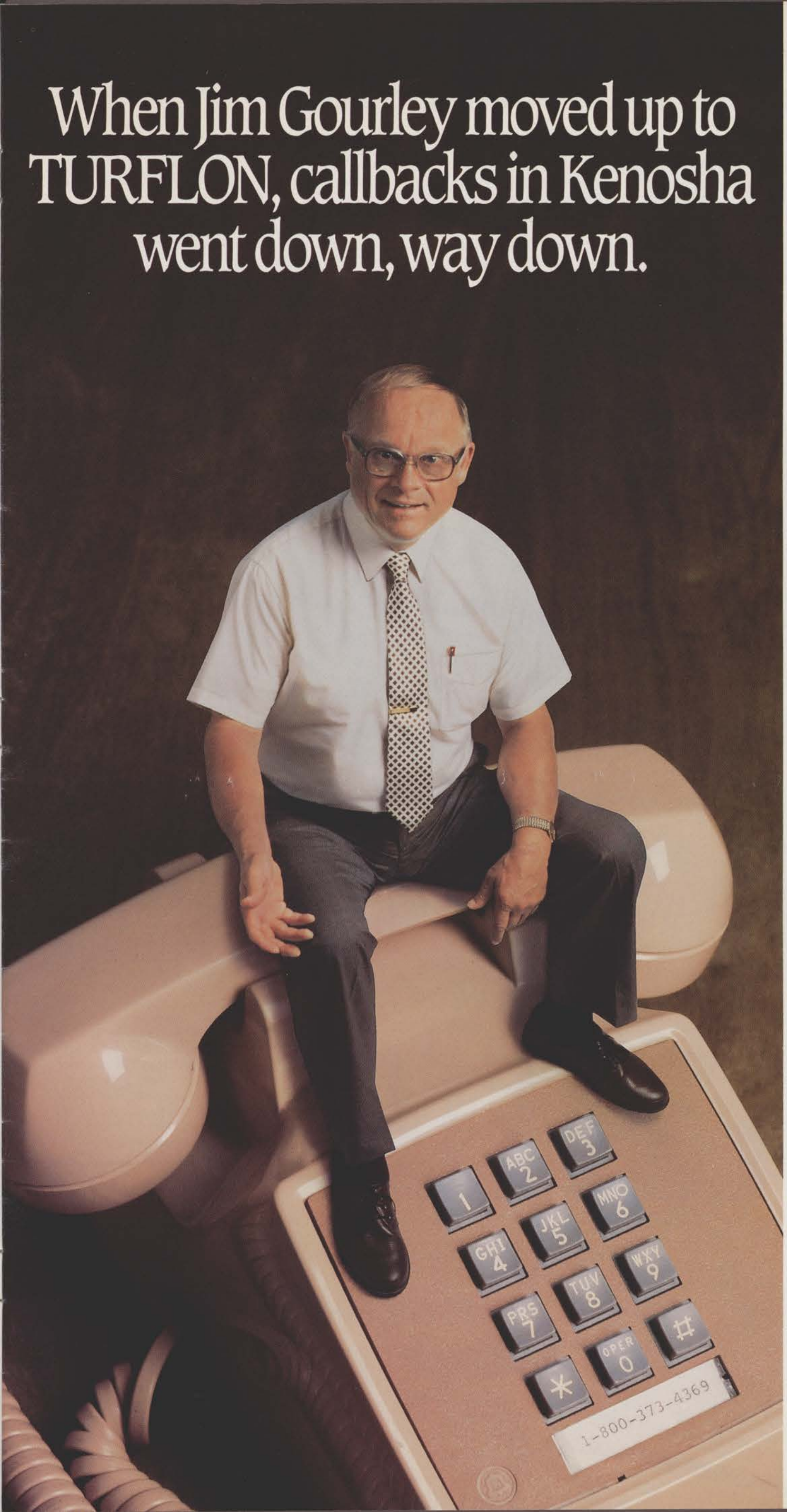
Circle No. 119 on Reader Inquiry Card

When Jim Gourley moved up to TURFLON, callbacks in Kenosha went down, way down.



"Our resprays have decreased by almost 50%."–

Jim Gourley, owner
Lawn Masters,
Kenosha, WI

If you're like most LCOs using standard three-way herbicides, there are days when you wish the phone wouldn't ring again. Callbacks and cancellations can really get you down. Well, maybe it's time you moved up to TURFLON* herbicide.

One good reason to switch.

"We switched to TURFLON because we were having too many resprays," explains Jim Gourley. And after 22 years in the business, he's happy with the results: "Our records show that we do have much better weed control and many fewer resprays this year than we've ever had."

You'll save money in the long run.

"Yes, we pay more for TURFLON," Jim says. "But when I figure how much it costs us per respray, it's saving us lots of money. And that justifies the extra cost."

Jim adds that there's another reason he can't afford to make too many callbacks. "When you have to go out and do a respray, you're taking a chance on losing that customer."

Isn't it time you moved up to a better herbicide for better weed control? Call us to find out more. 1-800-373-4DOW (4369).

Move up to TURFLON

DOW

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Circle No. 110 on Reader Inquiry Card

8005

Translating budget to an operating plan

The operating plan details the specific actions taken to accomplish the financial goals spelled out in the company's annual budget.

It includes the number of customers, number of employees, amount and type of vehicles to be used, equipment needed to maintain vehicles, the number of leads generated, and a detailed list of materials to be used.

Let's examine these items one at a time:

Customers—You will detail the number of accounts that should be serviced each month. You will need to know the number of production service days expected for each month.

Employees—The objective is to keep your operating payroll costs at their lowest level and still be able to deliver the needed services.

When you are completing this part of the operating plan, be sure to allow adequate time for training employees. Bringing employees into the company early will allow for better training before the busy season begins.

Employees are better able to reach higher productivity when they are trained earlier.

Vehicles—Determining your vehicle needs by month will enable you to know when you might need an additional vehicle. This advanced planning should give you the advanced lead time necessary to arrange financing and dealer ordering coordination.

Equipment—You also want to determine if you have adequate equipment available each month to service your customers. You should determine the adequacy of spares, and additional crew requirements for 1989 compared to 1988.

Being on top in this area will enable you to make the equipment buys when distributors are offering financial incentives to early decision makers.

Leads—Indicate on your operating plan the amount of leads you expect to generate as a result of your advertising plan. Be sure to take this information into account when you determine your manpower requirements.

Acres serviced—For determining the number of acres serviced, multiply the number of customers times the average size lawn for each customer type. If you are using a computer for your record keeping on your accounts, this information should be readily available. Manual accounting systems will need to develop tracking systems that will provide this data to the planning process.

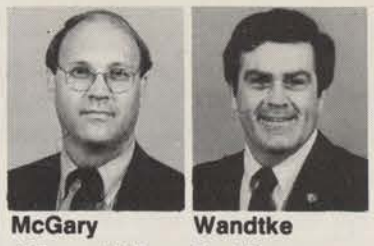
Materials—The specific rate of materials you intend to put down during the year should be specified per month. This is your opportunity to determine the total expected chemical cost to service one acre or 1,000 square feet of property for a year.

Material use—This section will summarize the total amount of each material that is expected to be used each month. This will provide you the necessary information to buy the material as needed.

In addition, this is the start of the information you will need to control your inventory use in accordance with your plan for each month.

The operating plan provides a company a detailed road map of the various actions it will need to undertake to accomplish the financial budget during the year. This plan, in addition to being a summary of the expected performance during the year, should become a flexible budget with actual data inserted as the year unfolds.

Items that vary in the operating plan may have an adverse impact on your annual plan, but they will not be evident until the third or fourth quarter of the year. LCI



McGary Wandtke

About the Authors
Rudd McGary and Ed Wandtke are senior partners with All Green Management Associates, Columbus, Ohio.

Turf-Seed's
CITATION II
contains naturally pest resistant endophyte
. . . a fungus that occurs within plant tissue between the cells.

New turf breeding discovery proves resistance to bill bugs, sod webworm, and other pests without harmful chemicals!

Left, insect damage in perennial ryegrass. Right, endophytic ryegrass resists insect pests.

CITATION II Turf-Type Perennial Ryegrass

is well known for its rapid establishment, fine texture, dark green color, improved mowability and drought tolerance, both in a monostand or as part of CBS II blend. But, the REAL plus is Citation II's high endophyte level (over 80%) that make it naturally resistant to leaf eating insects.

This plus results in savings . . . in chemical costs to maintenance people and less exposure to insecticides for applicators, homeowners, golfers and picnickers.

Citation II is not only an investment in finer turf, but it's a savings account for turf managers . . . and our delicate planet.

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Black lines are endophyte mycelium in leaf tissue.

Magnified endophyte in seed.

Qualified turf grass associations can earn cash for turf research by saving Citation II Oregon certified blue tags. Call us or write for details.

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Circle No. 141 on Reader Inquiry Card

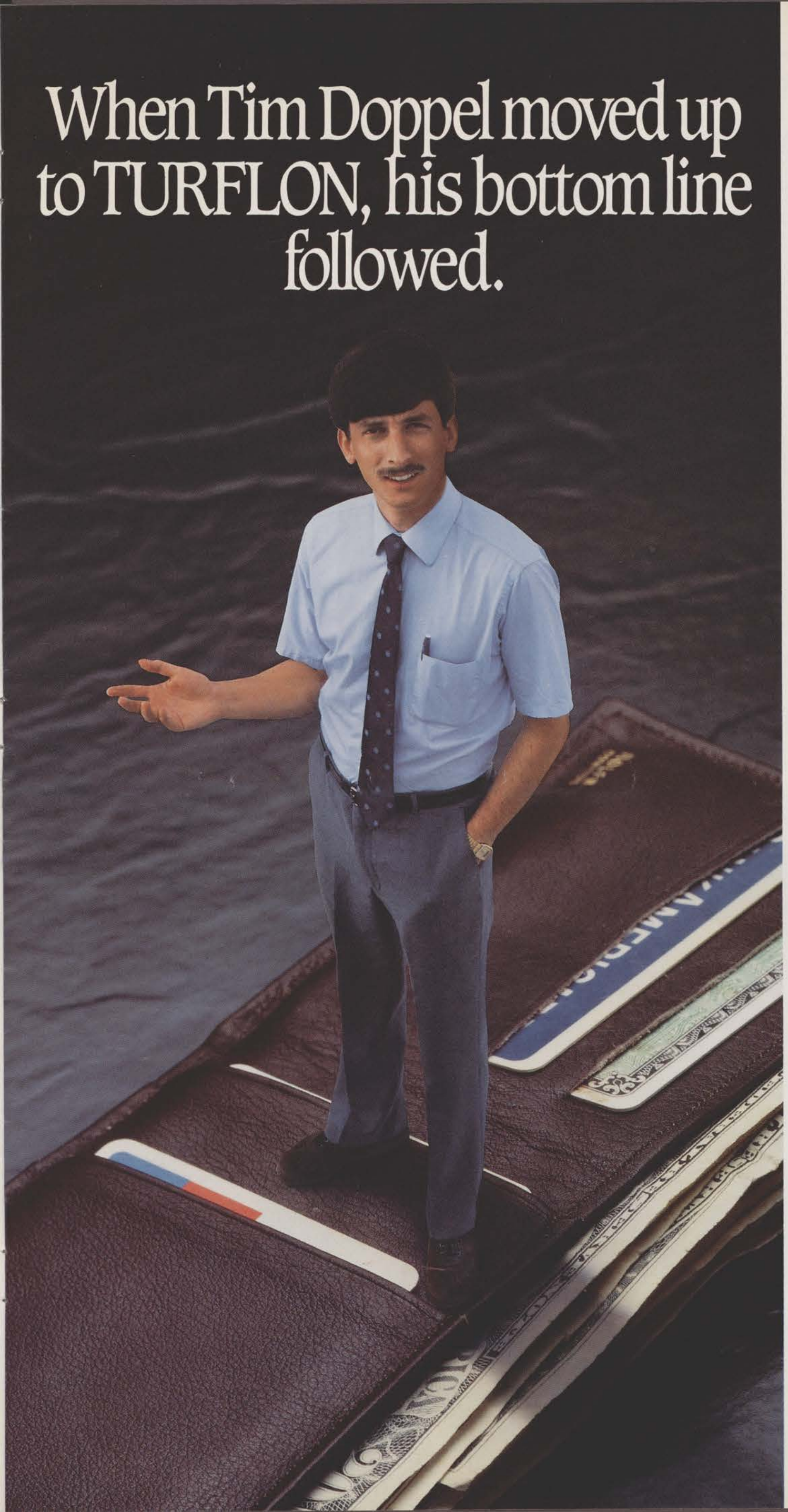
Nu Mexsahara seed yield in good shape

CORRECTION—Turf experts report that the seed yield for Nu Mexsahara bermudagrass is successful, contrary to what was previously reported in LAWN CARE INDUSTRY. The grass, developed at New Mexico State University, will be exclusively marketed by Farmer's Marketing Corp. in Phoenix, Ariz.

International Seeds, Inc. in Halsey, Ore. is working on a clover groundcover developed at the university.

LAWN CARE INDUSTRY regrets the errors. LCI

When Tim Doppel moved up to TURFLON, his bottom line followed.



"The first year we used TURFLON, we realized a $1,200 savings on service call costs."–

Tim Doppel, president
Atwood Lawncare, Inc.
Sterling Heights, MI

Keeping a lid on expenses becomes more and more important as your business continues to grow. Do things right, and profits will rise while the cost of servicing each new customer falls. If that's the kind of lawn care firm you want to run, maybe it's time you moved up to TURFLON* herbicide.

When more is less.

"Even though the product costs more, I still end up saving money by using TURFLON," explains Tim Doppel. And he has three years' worth of documented results to prove it pays to broadcast spray TURFLON at about $9.50 per acre. "The first and foremost advantage of using TURFLON is its effectiveness. It works."

Reducing callbacks and cancellations is the key.

"The first year we used TURFLON, we had a 20 percent reduction in callbacks and that has held steady over the years," Tim says. "We've also seen an increase in customer retention in the three years we've been using TURFLON."

And using TURFLON has one more advantage, Tim adds. It's the reason he's been able to reduce callbacks and cancellations: "My customers are happier."

Isn't it time you moved up to a better herbicide for better weed control? Call us to find out more. 1-800-373-4DOW (4369).

Move up to TURFLON

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Circle No. 112 on Reader Inquiry Card

8006

Learn business skills or hire outside help to survive

Kruger: Join associations.

By James E. Guyette
Managing Editor

How many times have you heard about people who have studied horticulture and know everything there is to know about plants—yet their attempts to build a successful business end in bankruptcy?

Chances are these owners lacked the required business skills. You can remedy that situation by seeking additional education or hiring others who already have that knowledge.

"In our industry most people don't come from a business background, they come from a technical background," reports Melanie Reinhold Sawka, president of Reinhold Landscape in Flat Rock, Mich.

"It's OK to be able to identify insects. . .but if you can't keep your bottom line straight you're not going to be around long," points out Frank Reardon, one of two partners at North Country Landscaping in South Burlington, Vt.

"An awful lot of people do excellent work but they're business failures," notes Ron Kujawa, president of KEI Enterprises, Cudahy, Wis.

"We do lose a lot of landscape talent because they're not good business people."

The solution: Hit the books. Or else recruit an employee who has.

"Education is the key to survival," Kujawa maintains. "You have to keep abreast of what's going on."

What types of classes are available? Courses can be taken through colleges and trade associations. In addition to technical information, business-oriented subjects can include anything from accounting to zoology.

A random check of offerings by trade associations includes seminars entitled: *Projecting a Positive and Professional Image; Avoiding Common Legal Disputes in Your Lawn Care Business; So You Want To Be in the Tree Business? What a Computer Can Do For You; Wage-Hour Seminar; Advertising: Planning For Growth; Planning for the Future; Dealing With Unemployment Tax; Sales Techniques; Motivation For Managers and Employees; Better Management Through Customer Communication; Tax Reform—Will You Pay More? Writing and Evaluating Direct Mail Copy; Beefing Up Sales in Old and New Areas; Reducing Your Workload Through Delegation; Risk Management: A New Part of Your Business Survival Plan; Increasing Customer Retention Through Effective Communication; Training Lawn Care Employees; Countering Media Bias Against the Lawn Care Industry; Personal Financial Planning;* and *Stress Management on the Job.*

"Every year we're attending different seminars," reports Craig A. Ruppert of Ruppert Landscape Co., Inc., in Ashton, Md. He's taken courses in a number of subjects, including a Dale Carnegie management class.

(The late Dale Carnegie, a noted motivational speaker and author, founded an educational service that offers training courses to companies and individuals.)

"I've never stopped learning," says Clarence Davids, Sr., president of Clarence Davids & Sons, Inc., Blue Island, Ill.

Davids never finished high school, but he has taken numerous classes through top universities and trade association programs. Topics include finance, dealing with cash-flow problems, negotiating with customers, tax laws and time management, plus Dale Carnegie.

Davids has even taught college courses, and once ran a

Davids: Hit the books!

You never know what's hit you when you see patch disease. It could be Fusarium blight. Or necrotic ring spot. Or summer patch. Or take-all patch. Or spring dead spot. Or any combination.

They all look very similar on turf. Only with a microscope can you tell them apart. So guessing which one's causing your patch disease still leaves your turf open to the other four.

That's why complete coverage pays. And only Rubigan is labeled to prevent and treat all five of these pathogens that cause patch disease.

Not to mention dollar spot, snow mold, copper spot, red thread and stripe smut. And this spring is an excellent time to begin your preventive program.

Why take chances controlling only part of the patch disease problem? Span the spectrum with Rubigan. See your Elanco distributor. Or call toll-free: **1-800-352-6776.**

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Rubigan® — (fenarimol, Elanco)

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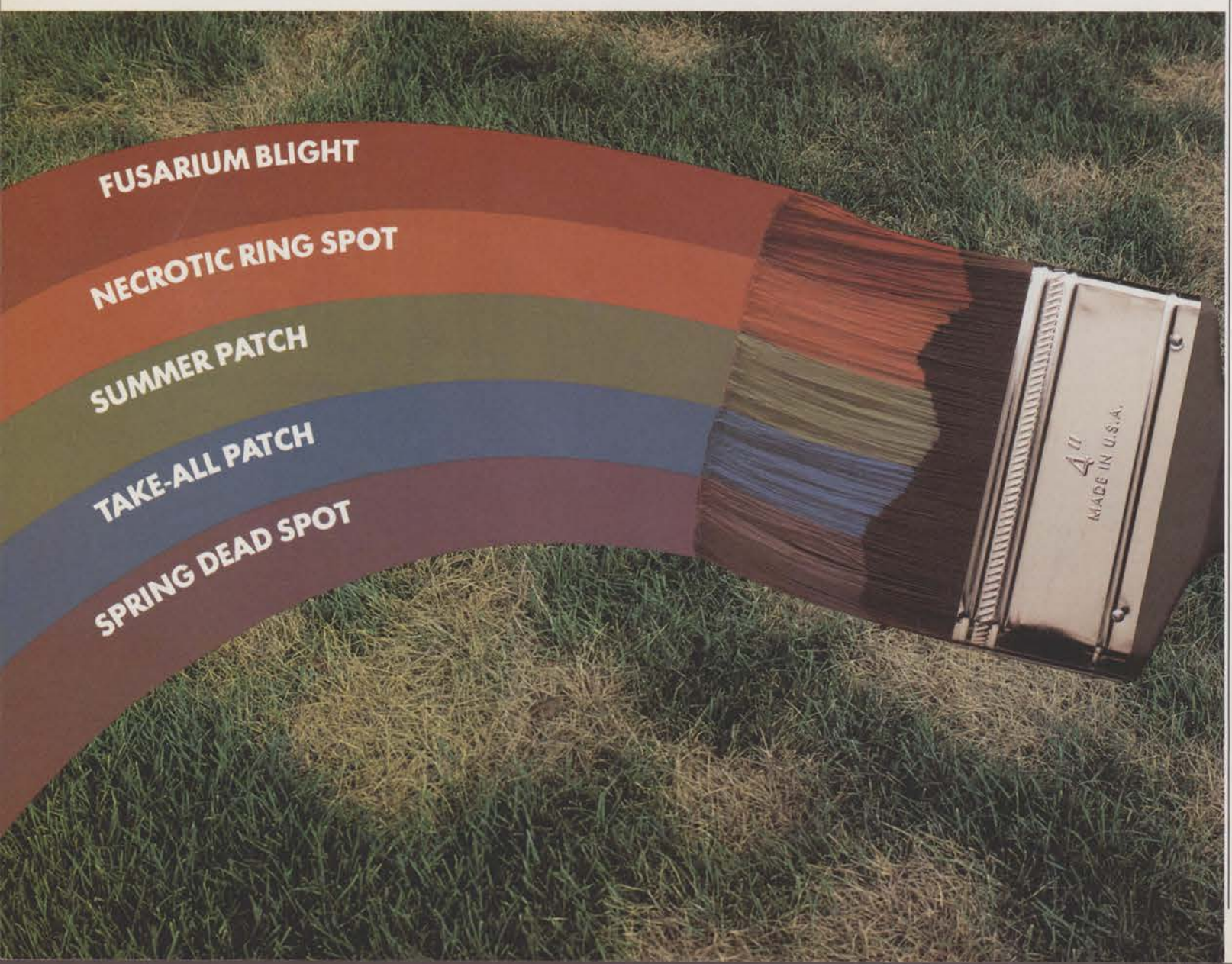
Only Rubigan® spans the patch disease spectrum.



Ruppert: Attend seminars.

state vocational school, where he taught landscape design, horticulture and landscape management.

"I just traveled all over the United States (studying)," he explains. "I never allowed my lack of education to be used as a crutch."

Davids' message to others who never finished school? "That won't hold you back."

Davids was able to take time away from his business to become involved in associations, education and community affairs (he once ran for mayor of his town) because "I hired good people—people I can trust. Don't try to do it all yourself."

Sawka at Reinhold Landscape notes that "most of my experience came through hands-on knowledge and seminars." These included programs like the ones listed above, particularly those sponsored by the Associated Landscape Contractors of America. She also took management courses at a local business college.

In addition, Sawka recommends the ALCA booklet, *The Changing, Challenging Role of the Chief Executive Officer*. "I think that is an excellent tool."

Sawka has a degree in ornamental horticulture, but says if she had to do it over again, "I probably would have emphasized business classes instead of ornamental classes."

David W. Kruger has a degree in horticulture, and he has also studied business management and marketing. The skills he learned helped his South Coast Environments, Long Beach, Calif., make more than $1.2 million in sales last year.

"Get involved in the industry associations," says Kruger, "and talk to people who've been successful."

Sawka: Study business.

Valuable assistance can be provided by consultants, say a number of successful business owners.

Consultants are particularly helpful when the owner is faced with a problem that he or she lacks experience in handling—business skills, for example.

"It's too competitive out there to be running around and not acting efficiently," observes Linda J. Novy, president of Gardeners' Guild, Inc., in San Rafael, Calif. "Everything has to have a cost-benefit analysis."

She made "a sizeable investment" in hiring consultants for business advice, and Novy believes it was money well-spent.

It's hard to get a clear picture of how efficient a company is operating when you are too involved with the day-to-day activities, she says.

"You're not really able to step outside your operation and look down at it."

Joe Skelton had no doubt that outside business advice was needed when he and partner Bill Killmer were founding Lifescapes, Inc., in his Atlanta apartment.

"I knew that there was an awful lot that I didn't know about running a business," says Skelton.

He did not have a handle on such subjects as accounting and tax laws.

"I was a practicing landscape architect. I was not a businessman."

Skelton enlisted the aid of his father, Ritchie, who is administrative vice president at Lied's in Sussex, Wis. (And who formerly had his own firm in Youngstown, Ohio.)

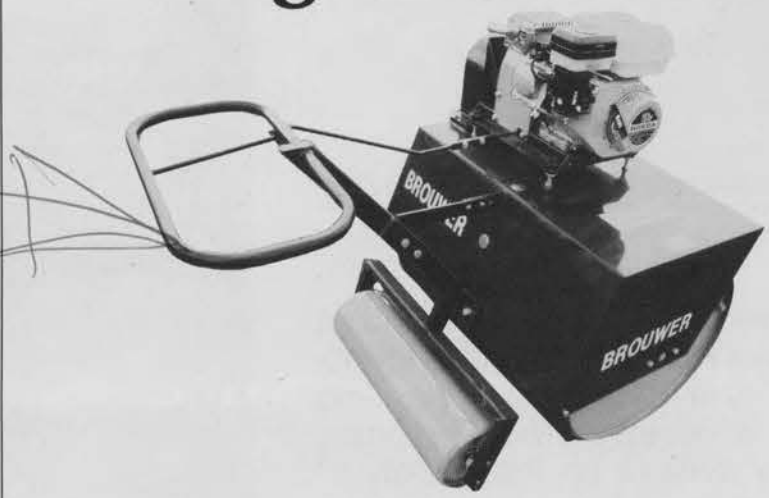
He also got help from an accountant, banker, lawyer and insurance agent.

A lot the advice was free, because people such as a bankers or insurance agents are likely to get increased business if they give their clients proper help that allows them to grow.

Joe Skelton says other contractors should tap that available information to help avoid problems such as tax audits and the like. **LCI**

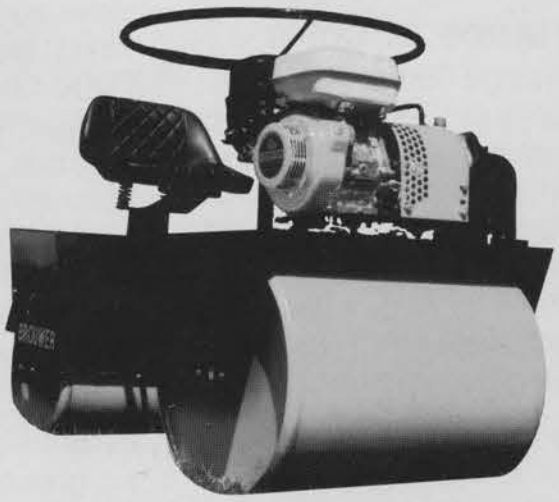
Novy: Seek outside help.

Brouwer 130, 224, 235, big numbers in turf rolling.



TR130, the walkbehind model that is ideal for smaller areas. Its compact size and maneuverability let you into those confined areas, between buildings and around obstacles
- **5 H.P. Honda engine**
- **Hydrostatic transmission**
- **Large rear support roller**
- **Special rounded edge roller to prevent turf damage**

TR224, is the ideal rider model when access may be a problem, its 32 inch width allows it to roll almost anywhere
- **5 H.P. Honda engine**
- **Proven single lever clutchless F-N-R transmission**
- **24 inch rolling width**
- **Lever assisted steering for exceptional maneuverability**



TR235, for those heavy duty "larger area" rolling jobs this rider model features a extra large steering wheel for driver comfort, easy operation and less fatigue
- **8 H.P. Honda engine**
- **Heavy duty hydrostatic transmission**
- **Dual fill/drain plugs in each roller**
- **Rounded edge rollers to prevent turf damage**

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New amine-compatible iron greens up turf in less than 48 hours.

Prosperity resolution for 1989: Use FëRROMEC® AC (amine-compatible) in your lawn-care program. Green up your world and green up your wallet ... get a Roll-X™ Measuring Wheel in the bargain.

Everett Mealman, President
PBI/Gordon Corporation

Ferromec liquid sprayable iron can produce a deep, vibrant, emerald-green color in ornamental turfgrass very, very rapidly . . . and very, very economically. In most instances, it can achieve this miracle in less than 48 hours, at a cost of about $1.70 for a 6,000 sq. ft. lawn.

. . . But, wait! That's only part of the good news about Ferromec. Equally important is the fact that Ferromec does not produce a lot of rapid top growth that requires hours of expensive, unwanted time on the business end of a mowing machine, plus exposure to disease that so often results from abnormal growth caused by using excessive amounts of expensive nitrogen out of season to generate the green color of the grass.

And there's still more good news!

Nitrogen will eventually produce a green color, but excess nitrogen plus turfgrass equals hay. Obviously, Ferromec is a better way!

Ferromec AC can be tank mixed with any TRIMEC® Herbicide formulation, so it gets a free ride. And guess what else. The Ferromec actually speeds up the activity of the Trimec!

Indeed Ferromec is unique. There's absolutely nothing like it on the market.

No wonder literally thousands of lawn-care operators, landscape managers and golf-course superintendents are now using Ferromec in their turf-care programs.

The importance of color

Perhaps George Toma best summarized the case for Ferromec when he said, "We spend untold time and effort preparing the playing field of the Super Bowl so the turf will hold up under the battering it takes . . . But do you know what it is we hear about? We hear about that beautiful green color we get from Ferromec!"

Color is so important! You give a homeowner a brilliant green lawn, and give it to him fast, and you've got a happy customer who will recommend you to his friends.

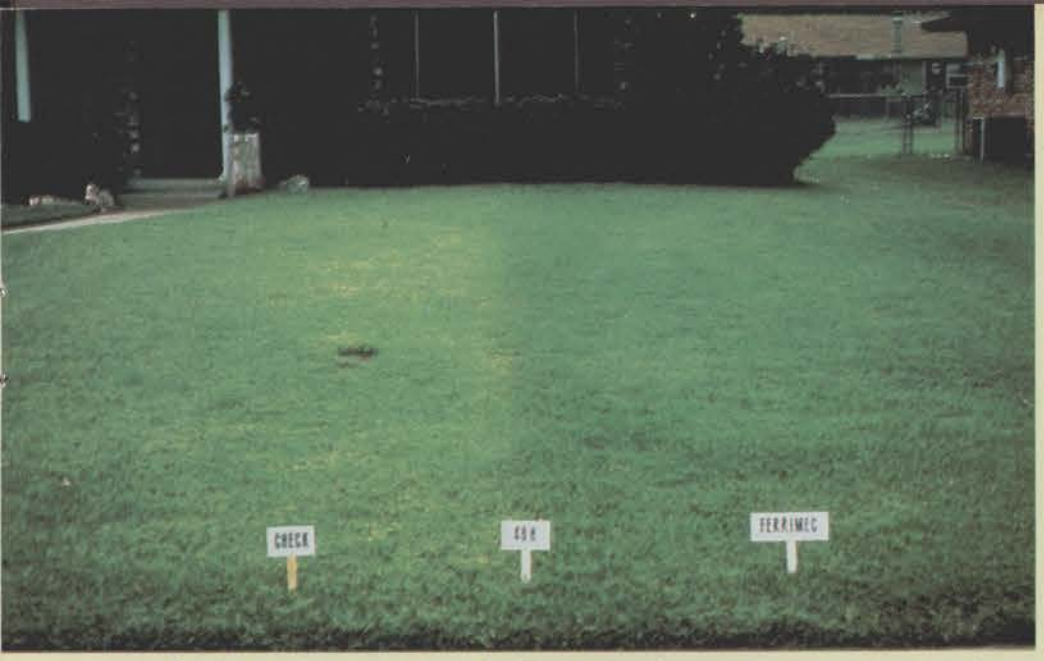
Surely you'll want to try some Ferromec in 1989. To help you make that decision, we're offering you a chance to order a $60 value Roll-X™ Measuring Wheel for only $20 when you buy five gallons of Ferromec AC. (You'll need an extra wheel to measure all the new lawns you'll be invited to bid on when your customers tell their friends about your work.)

Meantime, you might like to review some of the facts about iron, which will help you understand how Ferromec works, and why no other company can offer you a product like our patented Ferromec sprayable iron.

Facts about iron that turf professionals need to remember.

First: Iron is essential for the synthesis of chlorophyl. No iron . . . no green.

Second: In most instances where ornamental turf is being grown there is not enough naturally occurring iron in a useable ferrous state to produce a vibrant green color. Accordingly, a chelated iron can be added to the soil.



St. Augustine grass lawn in Texas showing the darker color (right) produced by Ferromec Liquid Iron applied in early September at 8 oz./1,000 sq. ft. The green-up became visible within 2 hours and the darker color persisted until dormancy, a couple of months later, according to Wallace Menn of Bryan, Texas, a turfgrass specialist who conducted the test.

Half of this green at Hodge Park Golf Course in Kansas City was sprayed with Ferromec and, within 24 hours, the color change was dramatic. Under normal growing conditions, visual response usually occurs between 8 and 48 hours after application. Ferromec is also effective on trees, shrubs and herbaceous plantings.

Third: Chelated iron is primarily absorbed through the roots rather than by foliar activity. To get enough chelated iron into the grass through the roots to produce the desired color rapidly, it is necessary to speed up the growth by using nitrogen. This will eventually cause the grass to green up. But it will also bring on excessive growth that will cause unwanted mowing and exposure to disease.

FëRROMEC is different

Ferromec, on the other hand, is unique; and it works in a totally different way.

Ferromec is a patented process that involves bonding a ferrous iron molecule to a urea molecule. When sprayed on turf, Ferromec is ingested almost immediately via foliar intake at the point where chlorophyl is formed. Once inside the plant, the iron-urea molecular bond breaks apart because the plant has such a ravenous appetite for nitrogen.

The result is that the iron molecule in Ferromec goes to work almost immediately to create chlorophyl and, depending on the condition of the turf and the weather, green-up occurs any time within 8 to 48 hours *. . . without causing excessive growth.*

Special formulations for special problems

Iron is a micronutrient essential for all plants, but the amount required can vary dramatically, depending on the kind of fertilizer used and the composition of the soil. Sometimes zinc and/or manganese are also required, so we have developed special formulations to cover such specific needs. For information relevant to your own situation, call us.

Call Toll-free 1-800-821-7925
In Missouri, 1-800-892-7281
Ask for Sales Service Department.

1988 Super Bowl playing field at the Jack Murphy Stadium in San Diego received three applications of FERROMEC Liquid Iron along with Gordon's BOV-A-MURA® Organic Activator. Internationally known NFL turf consultant George Toma (right), pictured with son Chip, says the playing surface was sparsely covered with dormant Bermuda, including many areas of bare ground, and was seeded with turf-type ryegrass only 25 days prior to the game. "We couldn't have made it," says Toma, "without the root-building strength of BOV-A-MURA and the color enhancement of FERROMEC."

Measuring Wheel 2/3 Off When You Buy Ferromec®

To receive via UPS your $60 value Roll-X™ Measuring Wheel with collapsible handle for only $20, send this coupon to PBI/Gordon Corporation with proof of purchase (a copy of invoice or sales ticket) showing you have purchased five gallons or more of Ferromec AC Liquid Iron between November 1, 1988 and October 31, 1989, when offer ends. Limit one per customer.

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AMINE-COMPATIBLE LIQUID IRON

712-1088

Circle No. 133 on Reader Inquiry Card

HI TECH

from Page 1

Operators monitor a set of phone lines that automatically dial numbers. When a voice answers one of the lines, the other lines stop dialing and the operator takes the call.

The customer's account flashes before the operator on the computer screen, enabling the proper questions to be asked.

When the conversation is over, the new information is logged in the customer's account and the computer continues dialing.

The phone numbers, questions to be asked and information to be logged are all part of the program that is "fed" into the computer.

No time is wasted listening to ringing lines, wrong numbers, disconnects, and answering machines.

For busy signals, the system automatically calls back in a few minutes. If the phone rings several times with no answer or if an answering machine answers, it calls back later. For disconnects, the number is thrown out of the system.

The operator not only saves time not listening to non-connections, but in not filling out paperwork on non-connections. For the operator, the system is much less tedious than manual telemarketing.

LCOs can either purchase the "demon dialer" computer themselves and train their own operators, or hire a telemarketing service that uses such a system. Most, to date, prefer the latter.

Voice Link

Most LCOs at present are serviced by Voice Link, a system manufactured by Digital Systems International, Inc. of Redmond, Wash.

Most of the actual lawn care telemarketing using the Voice Link system is handled by TeleMark, Inc. of Wilsonville, Ore., a telemarketing company.

TeleMark operators are trained in lawn care. This includes instruction on advantages of lime, and differences between overseeding, slice seeding and hydroseeding.

TeleMark charges $35 per hour, certainly more than standard telemarketing firms. But more, useful connections are made per hour. "The price per connect is less than in another telemarketing operation," says R. Patrick Hanlin, TeleMark president.

LCOs presently comprise a quarter of TeleMark's customers. Those that were interviewed by LAWN CARE INDUSTRY were pleased.

"We were real pleased," says Jerry Faulring, president of Gaithersburg, Md.-based Hydro Lawn, Inc. Faulring used TeleMark to pitch new services to existing customers this past season.

The greatest benefit as far as Faulring is concerned is the high level of customer contact. "We thought it was extremely productive to the extent that we made verbal contact with the customer base," he says.

Faulring says many customers voiced concerns that he otherwise wouldn't have heard. As a result, cancellations were reduced.

Faulring says he could not have otherwise made verbal contact with as many customers for twice the cost.

Hydro Lawn does not use telemarketing to generate new leads. "They tend not to stay with you very long," Faulring says.

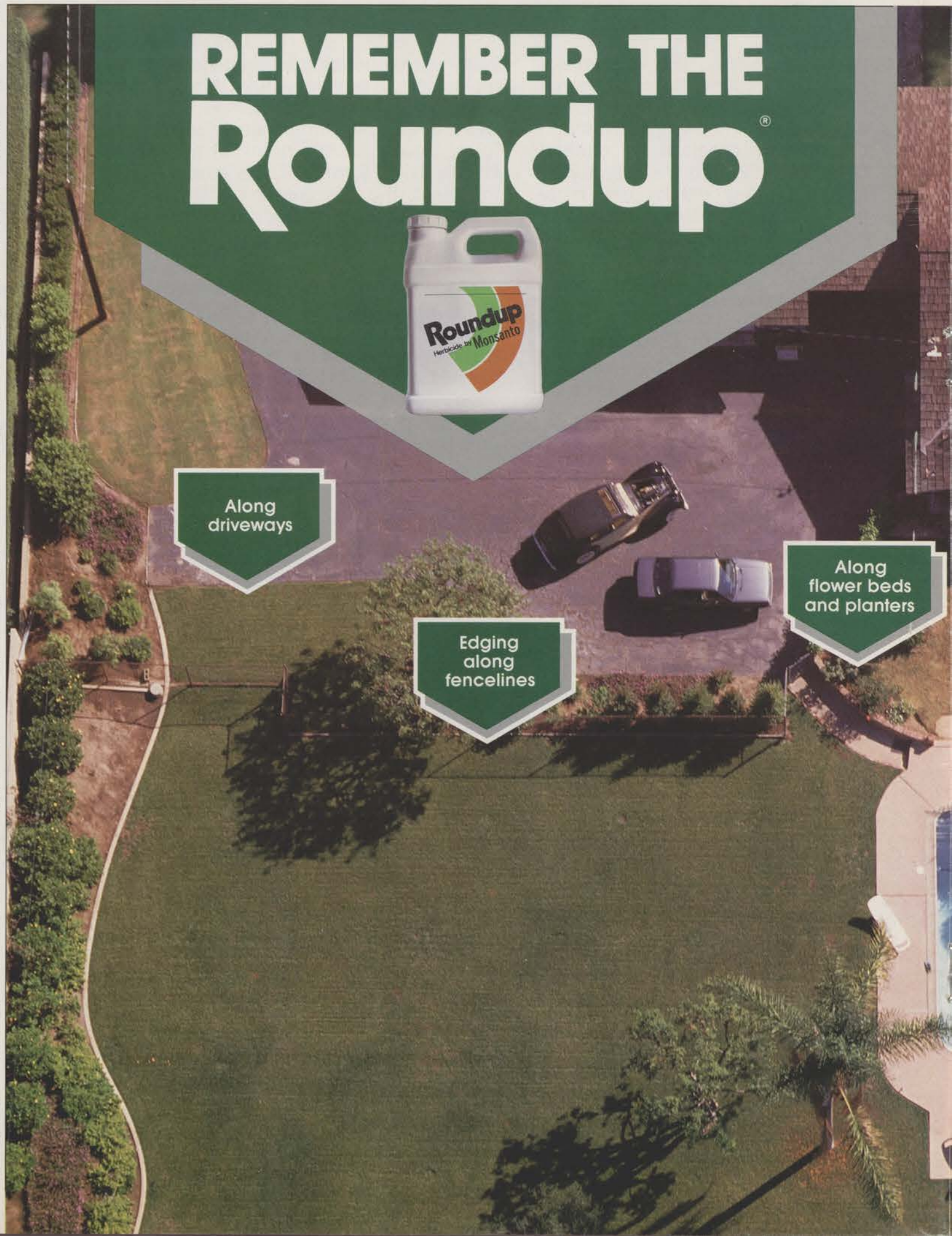
Calling all customers—A TeleMark operator reviews a customer's lawn care options on the video display terminal.

Pro Grass, Inc. of Wilsonville, Ore. is another satisfied customer. Paul Bizon, president, likes being able to see one-day updates on telemarketing activity.

Pro Grass uses TeleMark for generating new leads and selling new services to existing customers. This year, he will also use the service to collect overdue accounts.

Bizon, who previously employed a staff of 35 callers, says the total cost using TeleMark is comparable, but the results TeleMark brings are far superior. He agrees with Faulring that the program enables him to reduce cancellations.

The trained TeleMark staff



is also important to Bizon. "It's hard to find a telemarketing company that knows a specific industry, such as lawn care," he says.

In-house operating

Perma Green Lawn Co. of Boise, Idaho has the Voice Link system in-house and trains its own operators. The software is provided by Voice Link as part of a lease arrangement, says Gary Clayton, vice president of operations. Perma Green programs the computer to target certain demographic and geographic markets.

"When you have a multi-branch operation, it's all centralized," Clayton says. "It gives us a little more uniformity." Perma Green uses the system for generating new leads and for selling new services to existing customers.

'When you have a multi-branch operation, it's all centralized. It gives us a little more uniformity.'—Gary Clayton

Another "demon dialer" type system is being marketed to the industry by Americalist, a division of Haines, Inc., N. Canton, Ohio, which provides customized mailing lists.

John Watts, eastern regional manager for Americalist, says the computer-controlled telemarketing program was added in the last year. "An automatic dialer can triple that (customer) connect time, just by bringing your labor cost way down," he says.

Watts says Americalist presently services two large lawn care companies in the Midwest.

Marty Erbaugh, president of Akron, Ohio-based Erbaugh Corp., is considering both the TeleMark and Americalist programs, as well as purchasing the harware and training his own operators. He wants a "demon dialer" to generate new leads, sell new services to existing customers, and possibly pre-notify customers of applications, should that need arise.

"It's a really powerful tool," he says. "I'm pretty enthusiastic about it."

The "demon dialer" is one of the newer technologies in the relatively young industry of telemarketing, says Phil Sandilands, a telecommunications engineer at Ambassador College in Pasadena, Calif.

Sandilands warns prospective telemarketing clients to have vendors demonstrate their wares in person and to talk to existing clients before making an investment. "There's too much new stuff coming out now to take anything hook, line and sinker," he says. **LCI**

SALES

from Page 1

branches in St. Louis, Mo. and Indianapolis, which were sold at the end of 1987 to a competitor in those markets—Dayton, Ohio-based Leisure Lawn, Inc.

Perf-A-Lawn will continue to expand in its profitable markets, Wheeler says. "We would like to open up some in the less-than-50,000 metropolitan areas," he says. "These markets are not as concentrated with competition."

Perf-A-Lawn has already purchased a competitor with about 600 lawn care customers in Nashville. Wheeler says he is presently considering acquisitions in all of his existing markets.

There are no plans to purchase mowing/management firms, however. "I would rather go out and build it from within," he says.

Wheeler plans to add tree/shrub and commercial maintenance services in all the branches. At present, only the Dayton operation offers all of these services. "All the branches will do everything," he says.

The mowing and cleanup services are offered to commercial accounts only.

Orkin expands

The Perf-A-Lawn branches are among several recent Orkin acquisitions.

Orkin, a division of Atlanta-based Rollins, Inc., also bought a Perf-A-Lawn franchise (not a branch) in Ft. Lauderdale, Fla., and Vita-Lawn, Inc. of Taylor, Mich.

The acquired facilities will be kept, operating under the Orkin name, says Gordon Crenshaw, vice president of Orkin Lawn Care, except for the Vita-Lawn facility, which will be incorporated into an existing Orkin branch.

Among the Perf-A-Lawn purchases, Orkin competed in all of the markets except for Cincinnati.

Vita-Lawn did about $500 million in annual revenue, he says. **LCI**

'I would rather go out and build it from within.'—Jim Wheeler

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Circle No. 129 on Reader Inquiry Card

Keep tabs on fluids and fuels for smoother running

By James E. Guyette
Managing Editor

Using the proper fuels and fluids can go a long way toward avoiding equipment breakdowns, according to Larry Roome, consumer product service administrator at John Deere & Co.

A desire to seek a "bargain," or simple neglect, often results in damage due to using the wrong material in the wrong machine, says Roome, who conducted a fact-filled equipment maintenance seminar at the Ohio Turfgrass Conference and Show in Cincinnati.

The Queen City convention delegates got some season-suited advice as Roome discussed the use of antifreeze—particularly as it applies to diesels.

"You can wind up with some major engine failures in diesel products," warns Roome. "Liquid-cooled diesel products can require different antifreeze."

Check the manual to be sure, but diesels may need a low silicon antifreeze, which differs from the common variety.

When using antifreeze in gas engines, avoid the temptation to seek so-called extra protection by beefing up the water/antifreeze ratios. "You can get yourself in trouble if you go beyond a 50-50 mix." he says.

"You also want to take a look at your hoses. The best way to check your hoses is to grab a hold of them and give them a squeeze." Beware if it feels "soft and spongy when compared to a new hose."

When it comes to powering your piece of equipment, "There's no way that you should use a fuel with alcohol in it."

It is particularly damaging to 2-cycle engines.

Ask your favorite local fuel dealer to discuss the gas mixes, but you can also do a little test of your own, says Roome.

Take a glass and fill one-third of it with water. Add gas. The water and gas will separate, and if there's alcohol in there it will raise the water line.

"Our first choice is unleaded gasoline," says Roome, adding that John Deere products made since 1963 can use the unleaded variety.

He stresses that you should not shift back and forth between leaded and unleaded fuels.

When preparing equipment for the winter or a similar lengthy layoff, avoid letting fuel sit in the carburetor. A damaging film, called varnish, is formed by gas evaporation.

"It is extremely important to avoid varnish buildup," he points out, noting that addition of a gas stabilizer product can help solve this problem.

Fuel conditioners are also available for diesels, which can be plagued by jelling and clogs during the winter, according to Gordon Halverson, a John Deere service training instructor.

During cold weather work, a "seasonal blend" of diesel fuel should be used. Discuss this with your favorite fuel merchant.

Roome reports that filling your diesel tank at the end of the work day can help reduce

Roome: Avoid bargain hunting.

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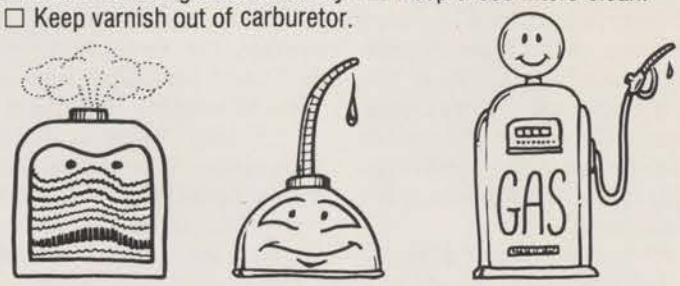
- ☐ Use the correct antifreeze . . .
- ☐ . . . In the correct amounts.
- ☐ Avoid gas with alcohol in it.
- ☐ Use unleaded gas consistently.
- ☐ Keep varnish out of carburetor.
- ☐ Use seasonal diesel fuel.
- ☐ Buy the best oil . . .
- ☐ . . . With the correct specs.
- ☐ Keep those filters clean.



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the buildup of crippling water condensation.

"Make sure the filters are good," Roome cautions. "The most important thing in a diesel engine is keeping the fuel clean."

That same advice goes for regular engines. "Don't buy an inferior quality oil filter. You get what you pay for when you buy oil filters."

It's a bad idea to go bargain hunting when purchasing oil. "The most important thing is to use a good quality oil that meets the minimum specifications" in the manual.

If you seek to save money by buying an off-brand, "We really don't know what's in that oil," he says.

"John Deere's position is that it's OK to use synthetic oils," Roome notes, but they have to be high quality. Again, check with your trusted fuel dealer.

When it comes to hydrostatic variable drive transmissions, "Don't go screwing around with your hydrostatic oils," Roome stresses. "Use what's recommended."

An oil that works perfectly in one tranny might cause instant death to another.

Keep changing the filter. "You have to make sure your hydrostatic oil stays clean. A little contamination goes a long way."

Roome concludes by issuing two additional cautions: Always keep the mower chute deflectors intact: "You may think you're smart enough not to put your hand in there, but it prevents objects being hurled at bystanders."

And, whenever you work on a mower, always be certain that all the brakes are locked in place.

Forming a good working relationship with your favorite local equipment dealer can be helpful when questions arise over the products. Ask your dealer's advice when there are any concerns over maintenance or repairs. Read the manual, too. **LCI**

LCOs have options with right-to-know law

CINCINNATI—Businesses working with potentially hazardous chemicals must create a safe working environment by federal law. How they do this, however, is largely up to them.

Mary Matlotke, a safety consultant to small businesses, says LCOs have a lot of leeway in complying with the federal worker right to know law which became effective this past fall. She spoke on the law at the Ohio Turfgrass Conference in Cincinnati.

"What you're going to do to create a safe environment has to be (determined) by you," she says. Malotke is president of Tencon, Inc., of Milford, Ohio, a consulting firm.

The federal right to know law is actually the Hazard Communication Standard for non-manufacturing employees, mandated by the Occupational Safety and Health Administration.

The most specific provisions of this law, Malotke says, are that employees know how to read chemical labels, how to read Material Safety Data Sheets (MSDS sheets, which employers must gather from suppliers on all potentially hazardous materials), know where the MSDS sheets are kept, know safe handling methods, and know what to do in case of emergency.

Lack of a written employee safety plan is the most commonly cited OSHA violation, Malotke says.

Others, in order of frequency, are: 2) No employee information or training program; 3) No MSDS sheets; 4) Incorrect or incomplete hazard labeling of in-plant containers; 5) No label identification for in-plant containers; 6) MSDS sheets not maintained and accessible to employees; 7) No inventory of hazardous chemicals in written program; 8) No exposure limit information on MSDS sheets for chemical mixtures; 9) Health hazards of chemicals not contained in MSDS sheets; 10) No written chemical hazard determination.

Malotke suggests complying with the inventory requirement by grouping the chemicals according to the following characteristics:

- **Flammables**—Chemicals that burn or explode. Malotke notes that petroleum-based pesticides are flammable, as are welding gases used in equipment repair.
- **Irritants/corrosives**—Chemicals that damage eyes and skin. These include bleach, battery acid, toilet cleanser and insecticides.
- **Reactives**—Chemicals that combine with other chemicals and generate heat, pressure or fumes. Not many are used in lawn care.
- **Safe materials**—

See **RIGHTS** Page 43

Malotke: Keep it in writing.

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Circle No. 138 on Reader Inquiry Card

Water is biggest factor in turf care, consultant says

NOTE THE BENEFITS OF FAST RELEASE NITROGEN

Spaulding: Water counts.

By Elliot Maras
Editor

LONG BEACH, CALIF.— When Stanley Spaulding digs into his many years of experience for tips on keeping soil healthy for turf, one theme keeps coming up—water.

"Water is the most critical practice in the propogation of a new lawn," Spaulding says. And of an old lawn too.

Spaulding, a retired, Santa Ana-based landscape management consultant, spoke on cultural practices for healthy turf at the Landscape Industry Show in Long Beach sponsored by the California Landscape Contractors Association.

Of all cultural practices, Spaulding says watering does the most to make the turf lush, green and pest resistant. Knowing how much water to apply requires ongoing testing of evapotranspiration rates.

Today, turfgrass managers have more tools available than ever for measuring moisture levels. The tensiometer is a handy device that measures soil moisture that is becoming more popular.

Electronic water sensors are presently being introduced to the market. "We're going to see a lot more of that, an automatic control without the installation of instruments," Spaulding says.

In California, there is a service called CIMUS that lists recommended watering rates to utilities and water districts. The rates, based on evapotranspiration readings at weather stations, are determined by a computer.

Eventually, Spaulding says the recommendations could be published in the daily newspaper.

Uneven distribution of water causes patterns of brown grass. The remedy is in the irrigation system.

Role of nutrition

Turf can be watered (and mowed) less frequently if nutrients are supplied in moderation. Spaulding firmly supports fertilization that enables moderate turf growth.

He advocates soluble, fast-release fertilizers since they enable the contractor to change nutrient amounts as needed. "With slow-release fertilizers, you can't control nutrition," he says. Unpredictable temperatures and rainfall are controlling factors.

Spaulding suggests one pound of nitrogen per thousand square feet per month. "I feel that six pounds a year is a minimum program for a respectable lawn," he says. "Even with cool-season grasses, we should apply more nitrogen during the cold months than in the warm weather."

In Southern California, iron is particularly important since the soil is alkaline. He warns, however, that it must be kept away from pavement, on which it leaves an orange stain.

Spaulding is skeptical about the value of mixing extra organic matter into the soil. He says the advantage to the turf is temporary.

Aeration is one of the most valuable techniques for enhancing soil, he says.

Coring for aeration, in effect, is topdressing by deposition of plugs on the turf. Plugs are broken and spread by mower. Lawns on hard soil or with deep thatch can be aerated monthly in seasons of rapid growth.

Grass selection

Contractors will be able to minimize watering as improved turf varieties are introduced. Spaulding notes that tall fescue has become popular in Southern California since it requires less frequent watering. He notes, however, that the species is prone to dry spots, though less so than Kentucky bluegrass and perennial ryegrass.

If a customer wishes to switch to tall fescue from a warm season grass, such as bermudagrass, Spaulding recommends the following:

Let the bermudagrass grow high, then apply Roundup. When the grass turns brown, mow it. Then, in August or September, plant the tall fescue. If bermudagrass returns the following summer, spray it

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'Roots grow in the presence of oxygen. When water saturates the soil, root growth stops.'—Spaulding

with Turflon or Tupersan.

One mixture that has proven beneficial is ryegrass and Kentucky bluegrass. Since the latter is sensitive to changes in moisture, the ryegrass, at 25 percent, protects against Fusarium blight. "That sod will be more disease resistant than 100 percent bluegrass."

Ryegrass is, however, susceptible to billbug larvae, which feed on its roots when grass is stressed by heat and drought.

Fixing low spots

Turfgrass managers working on projects with shallow soil face a difficult task, Spaulding says. Such soil tends to get hard shortly after being watered. "Roots grow in the presence of oxygen," he says, "When water saturates the soil, root growth stops."

Low spots need to be covered with soil from other parts of the property, providing new low spots aren't created as a result.

The best solution to low spots, Spaulding says, is drainage. Pipes should be installed two feet deep.

Fixing rough spots

For large areas of turf with unsightly, rough surfaces, Spaulding recommends topdressing. "A topdressing program will smooth it out, so we don't have kids spraining ankles."

Besides smoothing out the surface, topdressing serves to dilute the organic deposition in the turf. **LCI**

Dow seminars postponed, to be reset

MIDLAND, MICH.—Four business management seminars for East Coast LCOs, originally announced by the Dow Chemical Co. in February have been postponed.

They are: Feb. 13, Rochester, N.Y.; Feb. 15, Boston; Feb. 20, Washington, D.C.; and Feb. 21, Philadelphia.

The one-day programs featuring consultants Rudd McGary and Ed Wandtke will be rescheduled for fall, 1989. The programs provide information on customer retention and attraction, advertising, long-term profitability, and handling complaints.

New dates will be announced. **LCI**

Leeway exists for watering-in insecticide

KANSAS CITY, MO.—Does it matter how precise your timing is when watering-in an insecticide application? Tests conducted by Ciba-Geigy on Triumph insecticide indicate little difference between immediate and delayed irrigation.

Plots comparing the effects of delayed, immediate, and no irrigation on grub control were conducted in Mississippi, California and Nebraska. Two pounds a.i. (active ingredient) of Triumph were applied per acre.

The research was explained by Janet Moore, Ph.D., a Ciba Geigy staff entomologist at the recent Professional Lawn Care Association of Mid-America Conference in Kansas City.

In the first few days in the California tests, no differences were observed between immediate and delayed irrigation, Moore says.

In Missippi, Moore says the normal drop-off in control was gradual in the plots that were irrigated immediately. The plots that had the irrigation delayed showed more dramatic shifts in control.

"It appears that if you wait a while, you're still going to get quite a bit of Triumph down where the grubs are," Moore says.

"Every time it rains, it releases a little more of the compound," she says. However, "If you don't irrigate at all, you'll still get control."

The grubs feed at the surface of the turf when the turf is at optimum condition. This is the best time to make chemical applications.

During drought conditions, Moore says the grubs will be much deeper below the surface. In this case, irrigation prior to applications should improve chemical activity by luring the grubs to the chemical

Moore also discussed effects of thatch on grub control. **LCI**

Moore: LCOs have leeway.

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Circle No. 140 on Reader Inquiry Card

A comprehensive approach to weed management

By William M. Lewis

Strategies for the prevention and/or control of weeds include the selective use of herbicides, along with management practices to establish and maintain a healthy, dense, vigorous turf for recreation use and/or aesthetic enjoyment.

Proper management practices include adequate fertilization and watering, correct mowing height, cultivar selection etc. Herbicides are only one part of a total turf management program.

Weed encroachment is the result and not the primary cause of poor turf. Weeds often invade turf injured by insects, diseases, excessive wear, soil compaction, or misuse of fertilizers or pesticides.

Prostrate knotweed has a competitive edge in compacted soils because it can persist and spread under conditions of low oxygen potential. Annual bluegrass can survive under shallow rooting conditions.

Light, frequent rains during the hot weather of the summer, which may be stressful to the turfgrass, tend to encourage the growth of crabgrass, goosegrass, and annual lespedeza.

Dandelion and buckhorn plantain are frequently found in thin, poorly maintained turf.

Once a weed problem has developed, the cause(s) should be determined and management practices should be modified to minimize the reinvasion of the weed.

Turfgrass selection

Selection of a turfgrass species and cultivar should be based on its adaptation to the local environment and its intended use. Blends or mixtures of cultivars or species should be considered whenever possible to insure good performance over a wide range of conditions and to provide effective competition to weed species.

Use of improved, adapted, turf-type grasses, free of objectionable weed and crop content, is one of the best preventative strategies. In addition, the selection of a cultivar with improved disease or insect tolerance helps to contribute to a more competitive turf.

Cool-season grasses (bentgrass, bluegrass, fescue, ryegrass) are best established in the late summer or early fall whereas warm-season grasses (bermudagrass, centipedegrass, St. Augustinegrass, zoysiagrass) are best planted in late spring or early summer.

Seeding a turfgrass species at its optimum rate will contribute to fewer weed problems during the establishment phase. The planting of vigorous seed, sod, sprigs, or plugs that are weed free is fundamental to proper establishment and future weed management strategies.

Site preparation

Proper site preparation can help prevent the development of future problems. Good soil and surface drainage aid in reducing weed problems.

Wise tree removal can reduce shade and tree root competition, thus contributing to a more vigorous turf.

Fertilizer and lime are best incorporated into the soil. The types and amounts should be determined from a soil test.

Soil amendments should be evenly spread and thoroughly incorporated to be most effective and to eliminate a future non-uniform appearance of the turf.

This aids a more vigorous competitive turf and one more capable of surviving stress conditions that may contribute to weed encroachment.

Fertilization

Fertilization practices affect invasion of weeds into the turf. Low levels of nitrogen contribute to broadleaf weed populations.

White clover and other legumes are more prevalent with decreased nitrogen levels.

Nutrient imbalance may also hasten weed invasion. For example, annual bluegrass populations increase with high phosphorus levels. This emphasizes that weeds are better able to compete in poor fertilized turf than in properly fertilized turf that has greater density, vigor, and competitiveness.

Fertilizer programs should meet the nutritional needs of the turf without promoting excessive growth. Specific nutrient needs are best determined with a soil test.

Avoid fertilizing cool-season grasses with high rates of nitrogen in late spring and summer to prevent injury from environmental stress and pests. These grasses are best fertilized during the cooler portions of the year, especially in the fall.

Fertilization of warm-season grasses during late spring or early summer encourages healthy dense turf that can withstand weed encroachment. A high rate of nitrogen applied in late summer or fall can make warm-season grasses more susceptible to cold injury.

Extra potassium on warm-season grasses in late summer is needed to help improve winter hardiness. Thin areas in dormant warm-season turfgasses are quickly invaded by winter annual grass and broadleaf weeds.

Watering practices

Too little or too much water and too frequent or too infrequent irrigation can favor growth and development of weed species. Water should be applied infrequently but deeply.

Light, frequent watering encourages a shallow turfgrass root system, decrease in turf vigor and density, compaction from traffic, and susceptibility of the turf to environmental stress.

This all leads to weed seed germination, growth and survival of adapted species.

Deep, infrequent watering encourages plants to develop an extensive root system making the grass more competitive and capable of enduring environmental stresses.

Irrigation schedules should attempt to minimize the time in which the foliage remains moist. Early morning has proven to be the most effective and efficient time to water.

If rain does not fall soon after applying a preemergence herbicide, irrigation should be applied to move the herbicide off the foliage to the soil and thatch where the weed seeds will germinate.

Mowing frequency

Mowing frequency and cutting at the optimum height for a particular species causes less depletion of food reserves, hence allowing the turf to be more vigorous. As a general rule, no more than 30 to 40 percent of the leaf area should be removed at any one clipping.

Mowing at the optimum height also shades out seedlings of certain weed species.

About the Author
William M. Lewis, Ph.D., is a crop science specialist at North Carolina State University in Raleigh.

Continued close mowing results in shallow and reduced turfgrass root systems, and an invasion of such weeds as annual bluegrass, crabgrass, and prostrate spurge.

Turf with shallow root systems may be more subject to additional injury from preemergence herbicides.

Turf cultivation

Heavy soils compact readily under traffic resulting in poor air, water, and nutrient penetration.

Turfs grown in compacted soils are less vigorous because of reduced root growth and are more vulnerable to weed invasion, such as by prostrate knotweed. For this reason, play or traffic should be discouraged when soils are wet.

Turf managers, especially of athletic fields, should avoid irrigating the playing field a day or two before a scheduled event.

Turf cultivation (coring) practiced immediately prior to or when weather conditions are suitable for active growth of a turf, helps alleviate compaction, allows better exchange of oxygen by the roots, accelerates drying of per-

See **WEEDS** Page 34

Table 1.

Annual Grassy Weed Control Ratings For Turf Herbicides

Herbicide	Crabgrass	Goosegrass	Annual Bluegrass
Benefin	G	F	G
Bensulide	G-E	F	G
DCPA	G	F	G
Napropamide	G	G	G
Oryzalin	E	G	G
Oxadiazon	G	G	G
Pendimethalin	G-E	F-G	G
Siduron	G	G	NR

Weed control effectiveness: E = excellent (90-100%), G = good (80-90%), F = fair (70-80%), P = poor (70%), NR = not registered.

Table 2. **Tolerance Of Established Cool-Season Turfgrasses To Preemergence Herbicides For Control Of Annual Weedy Grasses**

Herbicide	Kentucky Bluegrass	Tall Fescue	Fine Fescue	Perennial Ryegrass
Benefin	T	T	M	T
Benefin + oryzalin	NR	T	NR	NR
Benefin + trifluralin	T	T	M	T
Bensulide	T	T	T	T
DCPA	T	T	M	T
Napropamide	NR	T	T	NR
Oryzalin	NR	T	NR	NR
Oxadiazon	T	T	NR	T
Pendimethalin	T	T	T	T
Siduron	T	T	T	T

T = tolerant, when used properly according to the label; M = marginally tolerant, may cause injury or thinning of the turf; NR = not registered. Apply to only established grasses. Only bensulide, DCPA, and oxadiazon may be applied in the spring to grasses seeded the previous fall. Siduron may be applied when seeding tolerant grasses.

Table 3. **Tolerance Of Established Warm-Season Turfgrasses To Preemergence Herbicides For Control Of Annual Weedy Grasses**

Herbicide	Bahiagrass	Bermudagrass	Centipedegrass	St. Augustinegrass	Zoysiagrass
Benefin	T	T	T	T	T
Benefin + oryzalin	T	T	T	T	T
Benefin + trifluralin	T	T	T	T	T
Bensulide	T	T	T	T	T
DCPA	T	T	T	T	T
Napropamide	T	T	T	T	NR
Oryzalin	T	T	T	T	T
Oxadiazon	NR	T	NR	T	T
Pendimethalin	T	T	T	NR	T
Siduron	NR	NR	NR	T	T
Simazine and Atrazine	NR	T	T		T

T = tolerant, when used properly according to the label; M = marginally tolerant, may cause injury or thinning of the turf; NR = not registered for use on this turfgrass.

Planning your spring nitrogen program

CONSIDER SOURCES, COSTS, CUSTOMER NEEDS

By Anthony J. Koski

As the spring season approaches, LC0s' attention will turn from equipment rebuilding, snow removal and tax return preparation to customer recruiting, preemergent herbicides and fertilizer application.

For years, spring has traditionally been viewed, by customers and LC0s alike, as an optimal time to apply nitrogen to turf.

In recent years, however, the concept of late-season (fall) fertilization (LSF) has been enthusiastically embraced by the lawn care industry where cool-season turfgrass species are grown.

Typical questions

Because LSF allows spring green-up to occur without the stimulus of an early spring nitrogen application, more questions are being raised about the use of nitrogen during the spring period.

Some typical questions regarding spring nitrogen fertilization include the following:

- Are spring applications necessary, especially if LSF is being used?
- Which sources best satisfy the needs of the grass?
- Which sources best satisfy the expectations of the customer?
- What about relative cost of various sources?
- What about fertilizer/pesticide combinations?

Spring nitrogen applications are always required to maintain adequate quality on medium- to high-quality turf areas. The questions of which source to use, how much to apply, and when to apply it can only be answered by examining specific situations.

For example, if LSF has been properly initiated the previous season, spring applications can be delayed until mid to late May (will vary with location) because nitrogen applied the previous fall will promote adequate greening when conditions during late March and April favor the green-up process.

Following this LSF-induced green-up, however, more nitrogen must be applied to retain adequate spring color and to maintain quality into the summer period.

Conversely, those who do not practice LSF generally must make earlier applications in the spring in order to promote an acceptable (to the customer) rate and level of spring greening.

Follow-up needed

A follow-up application in late spring will also be needed to maintain an adequate quality level into the summer period. The difference between the two scenarios is that when LSF is not practiced (or properly implemented), two early season applications must be made to provide satisfactory greening.

Problems do arise

Some obvious problems can arise here with those new customers acquired during the winter or early spring. In order to assure customer satisfaction, an early spring application should be made to promote spring green-up.

If a company utilizes LSF, special provisions must be made in spring scheduling to accomodate the need for an early application on the lawns of new customers. Such improvisation will generally be easier for the smaller companies to accomplish.

Further complications may result if that new customer did have late-season applications the previous year.

An early spring application to a turf that has had nitrogen applied the previous year may result in rapid, lush springtime growth—exactly what the late-season fertilization concept is supposed to avoid!

Minimize shooot growth

Whichever fertilization technique is used, LSF or spring fertilization, the goal should always be to minimize springtime shoot growth while maximizing the rate and level of green-up.

The result will be a healthier, more stress-tolerant turf that will both satisfy the customer and present fewer problems for the LCO later in the season.

The best source

The turfgrass plant doesn't care where it gets its nitrogen from, or for that matter, how much it gets. How much of any applied nitrogen that is accessible to the plant at any one time should always be of major concern to the turfgrass manager, but especially so during the spring and summer.

While urea is an ideal source for late season fertilization, a couple of one pound of nitrogen per 1,000 square feet applications made with urea during the spring will promote excessive shoot growth and prove detrimental to the root-

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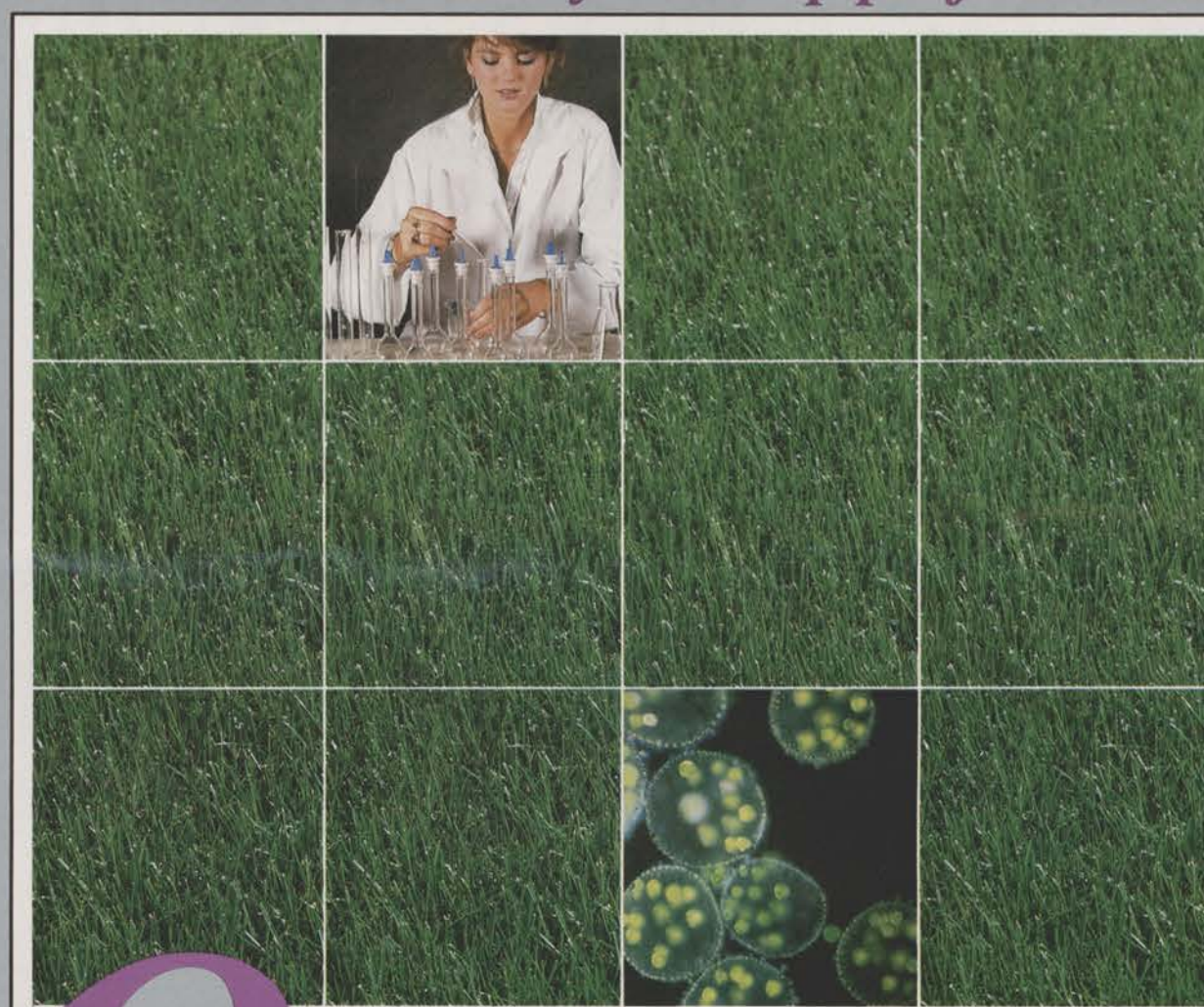

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ing ability and overall health of the turfgrass plant.

Urea, ammonium sulfate, or other quick-release fertilizers would be ideal nitrogen sources for spring use if they could be applied at rates of 0.1 to 0.3 lbs. per 1,000 square feet every two or three weeks.

The luxury of being able to spoon feed turf in this manner is generally reserved for golf course superintendents, and is not practical or even possible in the majority of lawn care situations.

Instead, LCOs must rely on the various nitrogen release characteristics of the slowly-available nitrogen fertilizers to accomplish this spoon feeding.

Such sources would include those dependent on microbial activity to release their nitrogen (ureaform process products and natural organic fertilizers); sources of soluble nitrogen which are coated to delay nitrogen release (sulfur-coated urea and plastic-coated urea); and organic sources of low water solubility that release nitrogen through slow dissolution of the fertilizer particle (IBDU).

Used by themselves, those fertilizers dependent on microbial activity to release nitrogen may not perform satisfactorily when applied early in the spring or when unusually cool conditions prevail throughout the spring.

Consider dryness

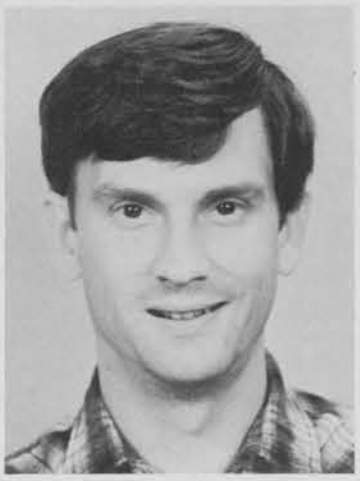
Extremely dry conditions may also diminish the performance of ureaform-type and natural organic fertilizers.

The reason is that the microbes responsible for causing nitrogen release from these fertilizers require relatively warm, moist soil conditions to become active.

These sources would be ideal for late spring or summer use, when soils have warmed and sufficient soil moisture is available.

The coated-urea products and IBDU are less dependent on stimulation of microbial activity by warm soil temperatures to release their nitrogen, but still rely on adequate soil moisture for optimal performance. Thus, these nitrogen sources would be more useful under cool, moist spring conditions.

Under dry conditions, IBDU will generally be less effective than sulfur-coated urea. Most commercially-available SCUs have seven-day dissolution rates of 20 to 35 percent, an indicator of the approximate percentage of applied nitrogen that will become available to the turfgrass within a week of fertilizer application.



About the Author
Anthony J. Koski, Ph.D., is assistant turfgrass professor at Colorado State University.

In reality, the actual percentage of nitrogen available during that first seven days will be somewhat less, since the seven-day dissolution test is performed under ideal (high temperature and moisture) lab conditions.

Effect of custom mixes

Many LCOs use custom-mixed fertilizers which possess a lower percentage of quickly-available nitrogen (to provide a rapid, short-term greening response) and a greater percentage of more slowly-available nitrogen which will provide long-term feeding without the promotion of excessive shoot growth.

Regional conditions will determine what ratio of quick- to slow-release nitrogen must be used, the most important probably being the rate of soil warming and precipitation.

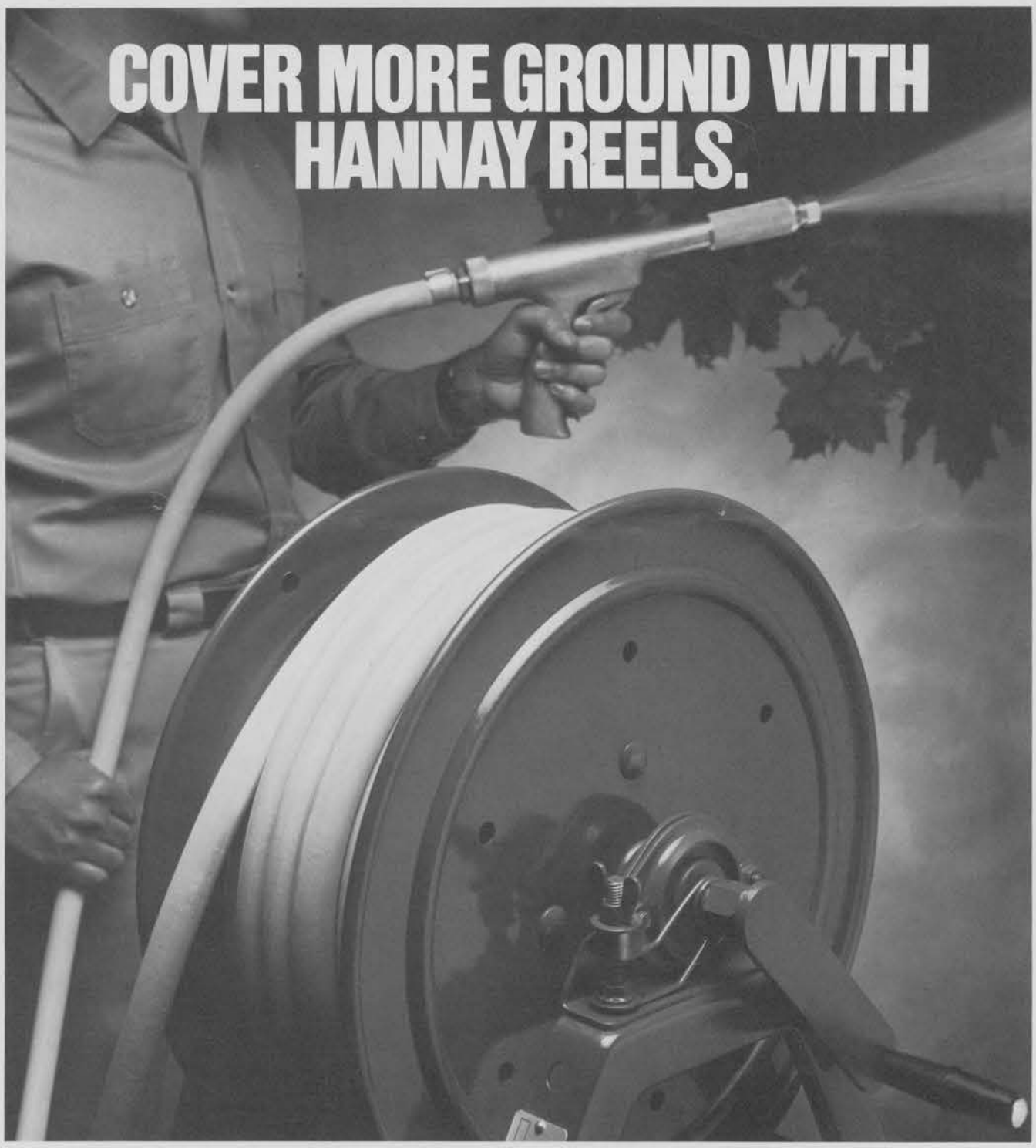
In general, no more than one pound per 1,000 square feet should be applied at one time. One or even two pounds applied under cool, dry conditions with a UF-type or natural organic fertilizer will likely provide poor response and result in an unhappy customer.

On the other hand, by applying one pound of nitrogen using urea during a warm, moist spring, the excessive shoot growth (mow, mow, mow!) and short residual activity may also displease the customer and also result in unhealthy grass.

It is important that the LCO find a happy medium between these two scenarios, both to please the customer and to enahance the health of the grass. Such know-how is derived from experience, observation, study, experimentation, and by learning from peers in the industry.

Pleasing the customer

There are still probably a few customers around who feel that they are not getting their money's worth unless they have to mow their lawn every three or four days during the spring. However, the majority of the people will be happiest when their lawn greens up as quickly as the neighbor's does, without requiring frequent mowing.



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If an LCO can find the right fertilizer to please this second type of customer, that LCO will also make the grass happy.

When using those fertilizers which are especially dependent on adequate moisture to make nitrogen available to the grass, it's important that the LCO convey this information to the homeowner.

Because most LCOs rarely have the ability (or time) to control the irrigation at home sites, an unusually dry spring could result in delayed green-up on lawns where moisture-sensitive nitrogen sources are used, and the customer is not instructed (or is unwilling) to irrigate.

It is easier to convince people living in the more arid regions of the country to irrigate, simply because they are accustomed to the practice and because many of them have automatic, in-ground irrigation systems.

It will be more difficult to persuade those living in the East and Midwest to do the same, since they are used to Mother Nature performing this important function during the spring.

Since many homeowners tend to evaluate their own lawn's performance (and thus the performance of the LCO) against the quality of neighboring lawns, it is important that the LCO be able to explain why all lawns do not green up identically, even if the lawns are cared for by the same company.

One reason is detailed above in the discussion of soil moisture effects on nitrogen release.

Differences might also be soil-related: pH, drainage, organic matter composition, or availability of other nutrients. A thatchy lawn will probably green up more slowly than a non-thatchy lawn.

In addition, some grass species (tall fescue) will green up more slowly than others (perennial ryegrass, Kentucky bluegrass). In fact, substantial differences in spring green-up rate exist among cultivars of Kentucky bluegrass.

For example, Banff, Challenger, Huntsville, and Nassau green up well during the spring, while the cultivars Baron and Midnight possess only moderate spring green-up rates.

What about cost?

It is certainly true that the slow release sources are more expensive (on a per pound basis) than the quick release sources. Although one could potentially save a lot of money by using only the less expensive fertilizers, the LCO should figure in other cost factors when deciding on which source(s) to use in a fertilizer program.

Such factors would include: uniformity of turfgrass response, length of residual response, burn potential, and effects on mowing requirement (especially if the LCO also performs mowing).

Depending on your individual approach to fertilization, you may have to push the grass into green-up with early applications of some quickly available nitrogen source.

Poor fertilizer performance might result in the costly callback, or perhaps even in the loss of a customer.

Fertilizer/pesticide mixtures

It is becoming more common for LCOs to use fertilizer/pesticide combinations. During the spring, the use of combinations with preemergence herbicides are most common.

The use of such weed and feed combinations are popular because it reduces by one the number of trips that must be made over the lawn by the applicator.

The results gained by the proper use of these combinations are generally quite good. However, a poor performance by either the fertilizer or preemergent product can result, however, if consideration is not given to the fact that one cannot change the application rate of one component without having a corresponding effect on the other component.

For example, by decreasing the product use rate (as given on the label) in an effort to reduce the chance of nitrogen-induced shoot growth, poor weed control may result because the preemergent application rate has also been decreased.

Similarly, by increasing the nitrogen application rate (or by making multiple applications) to promote quicker spring green-up, one may overapply the herbicide, perhaps to the point that damage is caused to the turf.

Thus, careful consideration should be given before altering the suggested product application rates of weed and feed type products.

Some nitrogen must be provided to cool-season turfs during the spring.

The questions of what kind, when, and how much can only be answered by considering the fertility history of specific lawns, climatic and soil conditions, and expectations of the customers.

They can also be answered by asking how the requirements of both the turf and the customer can be met within the context of efficient and cost-effective programming.

Depending on your individual approach to fertilization (or when in the year you get that new customer), you may have to push the grass into green-up with early applications of some quickly-available nitrogen source. **LCI**

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WEEDS

from Page 30

sistently wet soils, aids in water penetration, and improves turfgrass response to nutrients.

It is generally recommended that applications of preemergence herbicides be delayed until after core aerification, slicing, or spiking. Such turf cultivation can disrupt the herbicide barrier allowing weeds to emerge.

Thatch containment

Thatch is a layer of dead and living stems and roots situated above the soil surface. Thatch can reduce the penetration of air, water and nutrients, reduce the tolerance of turf to stress conditions, and increase insect and disease problems.

Excessive thatch may increase potential root injury to certain turfgrasses from preemergence herbicides. Also, persistence of preemergence herbicides may be reduced.

Thick thatch in turf encourages high populations of shallow-rooted weeds, such as crabgrass and goosegrass.

Soil aeration (coring) and verticutting (power raking) are effective means of controlling thatch buildup. Vertical mowing may be used to remove thatch. Turfs should be dethatched at a time when the turf can quickly recover.

Light, repeated verticutting is preferred when thatch is excessive.

Using pre-emergents

Most annual weedy grasses can be controlled with preemergence herbicides. Ratings for turf herbicides and their control of crabgrass, goosegrass, and annual bluegrass based upon our experience are given in Table 1.

Trade names for the common names of herbicides listed include: benefin (Balan), benefin + oryzalin (XL), benefin + oryzalin (Team), bensulide (Betasan, Bensumec, Lescosan, PreSan, Roysan), DCPA (Dacthal), napropamide (Devrinol), oryzalin (Surflan), oxadiazon (Ronstar), pendimethalin (Halts, Weedgrass Control, Pre-M), and siduron (Tupersan).

Siduron may be applied for selective control at the time of seeding tolerant cool-season grasses and sprigging zoysia.

The application of preemergence herbicides in the spring on bluegrass, tall fescue, or mixtures of both seeded the previous fall is limited to a few products; benefin (Balan DF) bensulide, DCPA, and oxadiazon.

In southern regions, split applications, 6 to 8 weeks apart, at minimum label rate or one-half the maximum label rate applied at each date have been shown to extend crabgrass control and improve goosegrass control. **LCI**

LCOs are Special Olympics sponsors

JACKSONVILLE, FLA.— Jerry Williams, general manager of Mandarin Service, Inc., can attest to the satisfaction of being a Special Olympics volunteer. He's an LCO who happens to have a mentally retarded child.

Williams and several other north Florida LCOs have become involved in Special Olympics activities. They refereed a soccer event for 100 Special Olympians last spring. In December, they prepared and served food for athletes and coaches during a county meet.

"And we'll be at the next Special Olympics event," Williams says, noting that more and more LCOs are getting involved all the time. "There's a great satisfaction in seeing the happiness of the Special Olympics athletes. If they win, you win, too."

Williams' two-year-old son, Michael, was born with Down's Syndrome.

He was more than happy to get involved after a $125,000 contribution was made to the Special Olympics by the Professional Lawn Care Association of America. LCOs were encouraged to get involved at local and state levels.

The PLCAA contribution was underwritten by the Dow Chemical Co.

Local associations can donate money to programs, provide volunteer support like Williams and his colleagues, or adopt a Special Olympics team.

"It's time for the industry to do more than make money," says Larry Speer, business manager for the Dow Chemical Co.

"It's time to give something back to your community." **LCI**

Go!: LCOs cheer on athletes.

Salsco releases new dual purpose machine

Salsco, Inc. in Cheshire, Conn. is introducing the new 380 4-Wheel Drive Seeder Dethatcher.

In its seeder mode, with the hopper connected, the 380 is capable of seeding 22,500 square feet per hour.

One lever is needed to lower the cutters, set cutter depth, activate the cutters and deposit the seed.

The quick-disconnect hopper can be removed to form a dethatcher.

The tough machine sells at an affordable price, according to the company. **LCI**

Circle No. 149 on service card.

Breathe easier with new Neoterik filter system

The WM2 personal facepiece, made by Neoterik Health Technologies, Inc., Woodsboro, Md., uses a patented Mulchi combination filtration system to clear air of particulates, odors and vapors.

The device is generally effective against all the contaminants listed in the Environmental Protection Agency's Standard Pollution Index, according to the company.

An optional battery kit allows the mask to be converted into a powered unit. **LCI**

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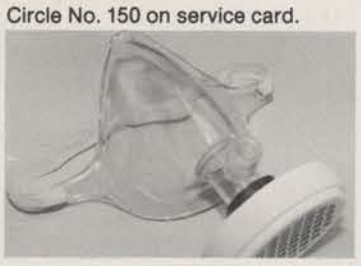


Self-propelled mower has 5-hp; 1 gallon tank

The 21-inch self-propelled Ariens LM21sc commercial mower has a 5 hp Briggs & Stratton engine and a 1-gallon gas tank that allows four hours of mowing between refills.

The Bagger-Vac collection system vacuums up 2 1/4 bushels of clippings, leaves and other debris.

It can bag grass, side discharge, mulch, vacuum and dethatch.

Other LM21sc features include a differential for easier turning and to prevent downhill runaway, wider wheels for less tracking, 6-position adjustable cutting height, bushings and bearings for easy rolling and less axle wear, and cobalite exhaust valves, according to the company.

Ariens, Brillion, Wis., has a 1-year limited warranty for commercial use. **LCI**

Circle No. 151 on service card.

Riverdale Weed Killer is a 3-way post-emergent

Par 3 Weed Killer, new from the Riverdale Chemical Co., Glenwood, Ill., is a three-way post-emergent selective broadleaf herbicide containing the amines of MCPA, mecoprop and dichlorprop.

The product can be used on cool season, and some warm season, grasses.

It controls dandelions, chickweed, plantain, oxalis, spurge and other types of broadleaf weeds, according to the company. **LCI**

Circle No. 152 on service card.

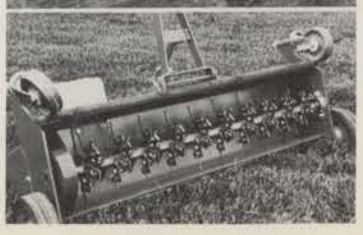
Thatcher thatches at regular mowing speed

The Model 600 H-D Thatcher from E-Z Rake, Inc., Lebanon, Ind., has specially designed high-speed tines that allow thatching at regular mowing speed.

Powered by a Briggs and Stratton engine, the thatcher is 38 inches wide.

Depth control is adjustable, and the lever is located for operator convenience. **LCI**

Circle No. 153 on service card.



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Eickhorst: Will it work?

MOWERS

from Page 1

All 40 of the 21-inch mowers used by his firm are either Sensation or Bob-Cat rear-discharge mowers.

This type of machine is easier to maneuver, DuBoise feels.

Taking part in an informal LAWN CARE INDUSTRY survey, DuBoise says he likes the idea of having a larger rear-discharge machine.

"I'd be interested in seeing it."

At Prolawn/Proscape in Cincinnati, the crews use 21-inch, self-propelled, rear-discharge Toros. "I can get it into tighter areas than I can a side-discharge," reports President Bart Sheeler.

He appreciates the self-propelled feature. "It costs an extra 100 to 150 bucks, but there's less wear and tear on the employee," Sheeler says. "We get that back in increased employee morale."

The motorized machine means that "our employee doesn't have to have the handle up by his hips—he's not trudging along pushing it."

Rick Patton, president of Rick's Lawn Service in Zionsville, Ind., is interested in the concept of having a large rear-discharge mower. "I think it's something that has some definite possibilities."

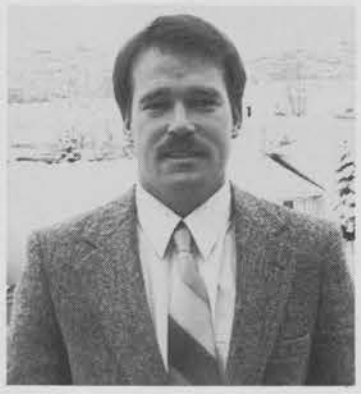
Patton points out that such a unit would eliminate the problem of debating which direction is best to aim the clippings as they blast out from a side-discharge chute.

"Sometimes it's impossible—you have to pick this bed or that bed to shoot them at."

Patton explains that the direction problem is particularly annoying after a rainfall dampens the grass. "When it's wet it sticks to buildings."

At Bones Snowplowing and Lawn Care in Racine, Wis., President Jim Eickhorst reports that such a mower "would be interesting to take a look at. I'm sure we'd have applications where that would be handy."

Patton: Likes the idea.



Day: Sightlines aid vision.

However, Eickhorst has some concerns over the design: "That sounds good on the drawing table. . .How good does it really work?"

He previously used a 21-inch rear-discharge mower. "It always seemed to suck up the clippings really well. I used it in the fall to pick up leaves."

However, the consumer machine he had could not hold up under professional mowing conditions. "It was rear-discharge and it worked fine, but the piece of equipment wasn't commercial," Eickhorst recalls.

Also, Eickhorst says he usually needs a side-discharge chute to blast his clippings over a large area—how could a rear-discharge mower accomplish that feat?

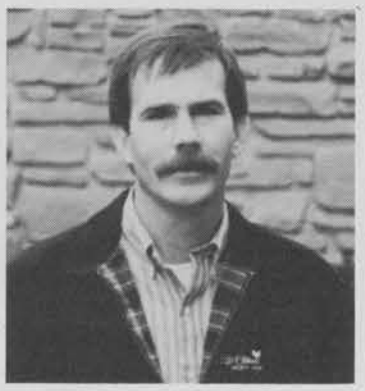
"They're going to have to make the handlebars longer," he speculates. Otherwise, either the clippings or the bag will be in the operator's face.

And with the type of properties Eickhorst tends, he can't afford to collect all the clippings. It is best to just disperse them. "If we had to bag all of our places we'd lose money every year."

In some areas, that's not much of a problem because the clients demand bagging anyway.

"I'd say 98 percent of California is caught," observes DuBoise at Mission Landscape. "Most of the (housing and apartment) projects require it. They just don't want to see any clippings."

"Out here very few people actually catch with walk-behind mowers," says Consultant Steven J. Day of Wheat Ridge, Colo., which is in the Denver area. "There are some sections of town where people use catchers."



Johnson: Chute shoots debris.

A clever rear-discharge design could reduce damage to trees and other obstacles through better sightlines for the mower operator, Day suggests.

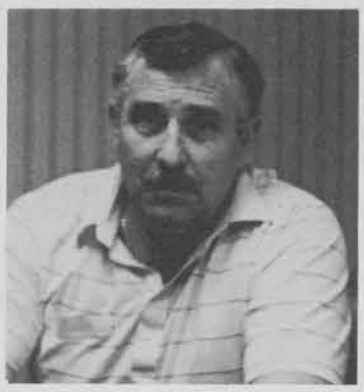
"I think that could really work if the bag was something within the wheelbase, and it had a relatively low profile," Day opines, adding that the low-profile catcher should not come in contact with the operator's feet.

Also, Day comments that engine exhaust systems shouldn't point directly out the sides—he's seen plant damage caused by heavy fumes!

(An exhaust pointed toward the front seems to work best, he says. If it were directed toward the rear it would blow into the operator's face.)

A safety factor also comes into play when discussing chute direction.

"If you're mowing around people you don't want things coming out the side," says Ken Raney, advertising manager at Excel Industries, Inc. His company's line of riders features rear-discharge.



DuBoise: Rear bagging best.

At Las Colinas Landscape Services, Inc. in Dallas, Texas, 21-inch rear-discharge Sensation mowers are used in crowded areas or wherever there is a risk of objects being thrown out of a side-mounted chute.

"One time we hit a four-inch brass pop-up," recalls Stan Johnson, vice president and director of landscape operations. The flying irrigation head broke the windshield of a car 50 to 75 feet away.

Alternatives to side-discharge mowers have long been of interest to Consultant Christian.

"I've been preaching this for ten years," he says. "It would be a boon to the industry. It would increase production, and it would make better-looking lawns."

Christian believes that the windrows (heaps) of grass created by machines now on the market can be avoided, plus the chute would no longer dictate the mowing pattern.

And because side-discharge mowers fling unwanted seeds into undesirable areas, "It would substantially reduce weeds in beds."

Chuteless mulching mowers are on the market, but industry experts complain that the quality of cut is lacking. Christian thinks more design work is needed to perfect the device.

LESCO, Inc. is coming out with a new 52-inch zero-turn radius rider that features rear-discharge. A 36-incher is expected later.

Rear discharge units tend to be easier to maneuver under several circumstances, including getting the devices on and off of trailers, says Jeff Mack, vice president of equipment sales. "We think that's the direction the industry is heading."

The company is also looking into applying that concept to larger walk-behinds, but Mack says that at the moment, "We are just investigating it."

It's a similar story at Lawn-Boy, where Product Manager Richard A. Heismann reports that they are "investigating" a rear-discharge midsized walk-behind.

However, Heismann says that if Lawn-Boy were to market such a machine "the bag would fit within the wheelbase" to mow tight areas. **LCI**

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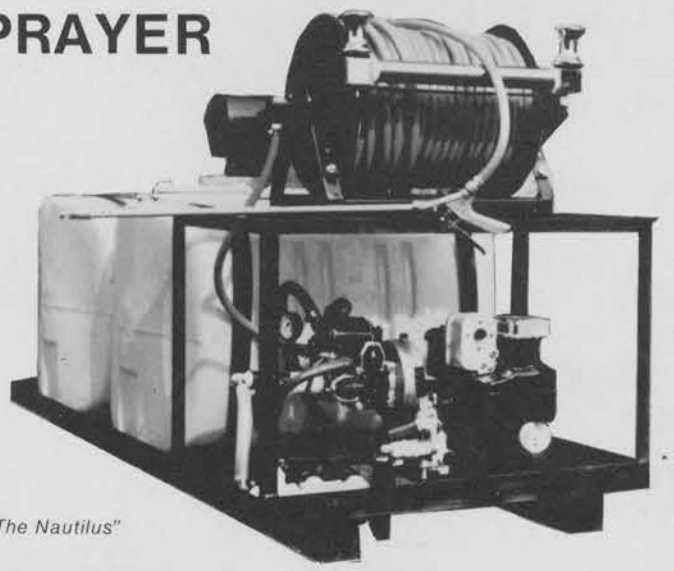

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Tru Green plowing snow in Midwest

ATLANTA, GA.—Tru Green trucks are plowing snow in the upper Midwest this year, making it the first major chemical lawn care firm to enter the snow removal business.

Branches in Grand Rapids, Mich., Lansing, Mich., South Bend, Ind., and Kalamazoo, Mich. billed about $40,000 in snow removal in December, says Don Karnes, senior vice president. He says the Michigan branches are doing it on a test basis for the company.

"We don't know much about snow plowing," he says. "We're learning as we go. It certainly could add to the bottom line."

Among that which needs to be learned is what equipment repairs will cost, Karnes says, and how much damage the snow plowing might inflict on properties.

About 10 old lawn care trucks have been equipped with recently-purchased plows.

The snow removal is being offered as part of a full landscape maintenance package to both existing customers and non-customers. Karnes notes that many new customers have opted for just the snow plowing for the time being.

The four branches are among those Tru Green branches that provide landscape maintenance in addition to chemical lawn care. Tru Green has been testing maintenance. LCI

PBI/Gordon will market Break-Thru

KANSAS CITY, MO.—PBI/Gordon Corp. has become exclusive marketer of Break-Thru Herbicide, the non-phenoxy broadleaf weed killer developed by The Andersons of Maumee, Ohio. Break-Thru's active ingredient is chlorflurenol.

As an introductory promotion, a 32-ounce container is being "piggy backed" to a 12-ounce sample of Banvel 4S for tank-mix targeted to the control of broadleaf weeds in 2,4-D-sensitive sourthern grasses.

Break-Thru is available through distributors handling PBI's Trimec herbicides. Further information is available by writing to PBI/Gordon, P.O. Box 4090, Kansas City, MO 64101. Phone: 800-821-7925 (800-892-7291 in Missouri). LCI

REGS

from Page 1

Signs would have to be posted 48 hours in advance on multi-family properties and all public and recreational grounds. Signs would have to be 8 ½ by 11 inches, have 2 ½-inch black letters noting the date of treatment, the materials applied, and name of a company contact. The signs must be posted at points of common access.

"They (the proposed regulations) have been a good compromise," says Murray McKay, director of the pesticide control division for the Department of Agriculture.

Brad Booth, president of York, Maine-based Lawn Medic of Seacoast, Inc., says the proposed size of the signs is ludicrous. "We do multi-dwellings," he says. LCI

HAYES

from Page 1

ventures."

Hayes was not available for comment.

There will be no operational changes at Tru Green, Seegers says. He says 1988 was a "difficult but profitable" year for lawn care.

Slocum will divide his time between Oak Brook, Ill., Waste's headquarters, and Atlanta.

Slocum, a 16 ½-year veteran at Waste, was in charge of several activities in the company's North America operations: recycling, public relations, vehicle maintenance, personnel, sales and marketing.

Waste's service operations include portable toilets, trailer rentals, and temporary fencing.

"I'm excited about it," Slocum says of his new responsibility. "I think it's a rapidly growing business."

Hayes succeeded Howard Evers, who resigned in early 1988. Both Hayes and Evers were among Tru Green's founders, and both remain in a consulting capacity. LCI

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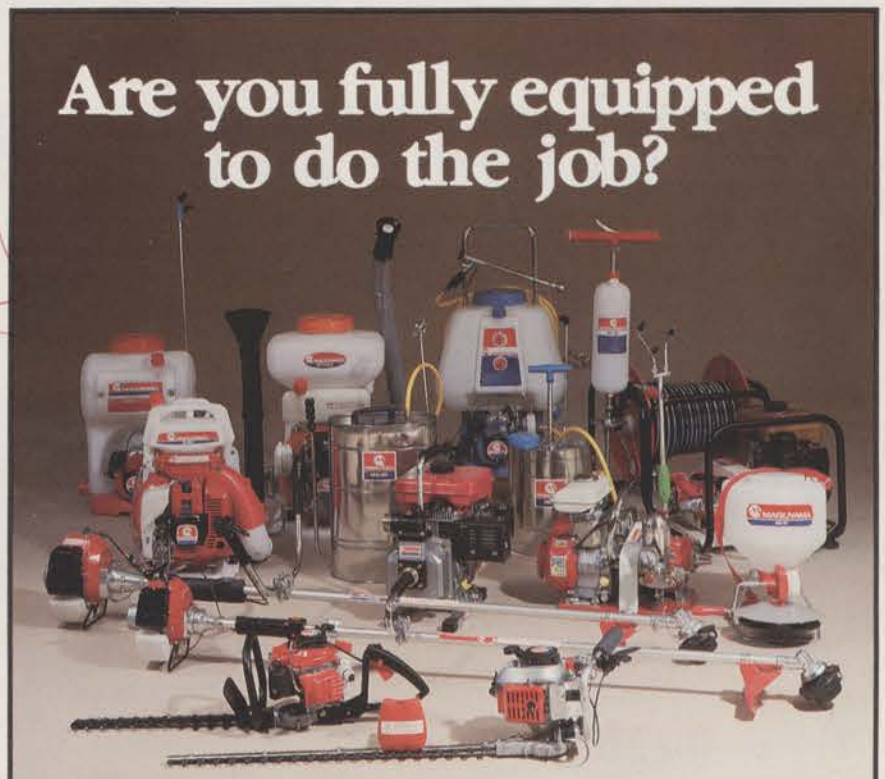

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How to reduce the cost of weed control today, tomorrow and beyond:

George Toma, Kansas City's own world-class groundskeeper, insists that most of us already know everything it takes not only to reduce the cost of herbicide but at the same time to improve the overall quality of the turfgrass. He contends that we simply need to keep reminding ourselves of those things we already know. In this edited version of a recent visit with him, he reviews those basic reminders.

Everett Mealman, President
PBI/Gordon Corporation

Mealman: George, we hear reports from time to time that you say the best way to reduce the cost of weed control is to stop using herbicide.

Toma: Yes, I've said that. But it's like the duffer who, after a bad round, said he was going to quit playing golf — not immediately, of course, but gradually over the next 20 years.

Mealman: You think a groundskeeper can gradually break the habit of using a herbicide to control weeds?

Toma: Yes, providing he can also break his turfgrass from the habit of associating with weeds.

Mealman: In other words, a herbicide program that is so good it eventually kicks out all the weeds, and a grass-growing program so good that the weeds can't get back in.

Toma: You've got it! At the Truman Sports Complex we're almost doing that right now. Today, we use no broadcast pre-emerge or post-emerge on the ornamental turf and landscaped islands around either stadium. All we use is some TRIMEC® Plus to spot treat for an occasional broadleaf or grassy weed.

Mealman: But, George, is this a realistic goal for a commercial lawn and landscape management company?

Toma: Absolutely! Of course, irrigation is a must, and you have to be involved in the sodding and seeding and fertilizing.

Mealman: What is the program?

Toma: Program isn't the right word. It's following through on the three

The Super TRIMEC treated turf on the perimeters of Arrowhead Stadium at the Truman Sports Complex is so immaculate that many visitors actually get down and feel it to find out for sure if it's real. George Toma tells Everett Mealman that the day he doesn't get a charge out of running his fingers through immaculate turf will be the day he hangs it up as a groundskeeper.

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basic fundamentals of cleaning up; keeping up; and building up.

Mealman: Can you enlarge on that?

Toma: Early spring is an excellent time to clean up . . . to clean out every weed, down to the very last root hair, so the turfgrass has a chance to thicken up. Whenever I am cleaning up some turf, I use Super TRIMEC® turf herbicide. I've never found a herbicide that does such a thorough job and yet requires such a small amount.

A big part of keeping up involves the green color you want in the spring and summer, and I always caution against using nitrogen during the growing season. Too much nitrogen in the spring and summer will result in too much top growth that weakens the roots and invites disease. To get color in the late spring and summer, I use Ferromec® Liquid Iron. Every year when they televise the Super Bowl, the announcers always rave about the beautiful color . . . that's no accident . . . that's Ferromec!

The time to build up is in the fall. That's when I pour on the fertilizer — and, if I reseed, I spray on Bov-A-Mura® (Natural Organic Activator). It does an excellent job of helping new seeds build strong roots . . . and I always use it whenever I lay new sod.

Dr. Jan Van Diepen shows a printout of a radioisotope tracer study to Everett Mealman and George Toma. The purpose of such studies is to determine the smallest possible amount of the strongest possible chemical formulation that can translocate to the root system of a weed and result in total control. Toma says, "We constantly test herbicides, and nothing is as efficient as Super TRIMEC."

Facts turf pros should know about Super TRIMEC

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Net worth statement, ratios gauge firm's strength

The relationship between assets and liabilities is fundamental to any company's financial health. A net worth statement comparing the two for a given period of time give some reflection of that health.

Assets and liabilities should be classified as current, intermediate and fixed.

Current assets typically are converted into cash within one business year. They include cash, receivables and inventory of supplies held for sale, as well as marketable securities and life insurance.

Certain assets which may not be quickly converted into cash, such as contracts in force, may also be included in the current asset category.

Intermediate assets are usually converted into cash (or have useful lives) within one to eight years, and consist of resources primarily used to support business operations. These include such items as autos and trucks, equipment, as well as investments and securities that are not readily marketable.

These assets are distinguished from those classified as fixed because they typically have shorter, useful lives.

Fixed assets are permanent in nature and consist primarily of land and buildings. Since many lawn care firms operate out of the home, the homestead and its furnishings may need to be segregated from the total business assets and listed separately in the fixed asset category.

NET WORTH STATEMENT

Date: January 1, 1988

ASSETS		LIABILITIES	
Current:		Current:	
Cash on deposit	$ 2,000	Notes Payable	$ 1,000
Accounts Receivable	1,400	Accounts Payable	270
Contracts In force (within next 12 mo.)	_____	Current portion of Intermediate Term Debt	7,340
Materials salable (within next 12 mo.)	_____	Current portion of Long Term Debt	1,763
Marketable Stocks, Bonds and securities	_____	Rent, Taxes due	_____
Net Cash Surrender Value of Life Ins.	600	Interest due	7,141
Supplies	5,300	Operating Loan(s) due within next 12 months	_____
Other	_____	Other Debt due within next 12 months	_____
Total Current Assests	$ 9,300	Total Current Liab.	$ 17,514
Intermediate:		Intermediate:	
Autos & Trucks	$ 6,000	Notes Payable (over 1 year but under 8 years, less current portion	$ 8,430
Tractors	_____	Other	_____
Mowing and other lawn care equipment	29,870	Other	_____
Pruning and spraying equipment	_____	Other	_____
Total Intermediate Term Assests	$ 35,870	Total Intermediate Term Liabilities	$ 8,430
Fixed:		Long Term:	
Land	$ 6,000	Notes Payable over 8 years less current portion	$ 27,964
Buildings (business)	28,970		
Improvements	_____		
Total Fixed Assets	$ 34,970	Total Long Term	$ 27,964
Total Assets	$ 80,140	Total Liabilities	$ 53,898
		Net Worth	$ 26,242
		Total Liabilities and Net Worth	$ 80,140
Contingent Liabilities:		Notes:	

Liabilities

Liabilities are classified according to when they are due. Current liabilities are those debts which are due on demand or within the operating year—normally a 12-month period.

These include notes, accounts payable (open and installment), rent, taxes and interest due, loans against the cash value of life insurance (if listed as a current asset), plus that portion of intermediate and long-term debt due within the next 12 months.

If contracts in force were included on the asset side of the balance sheet, then the cost of fulfilling these contracts should be shown as a liability.

R.K. Reynolds W.R. Luckham

About the Authors
R.K. Reynolds and W.R. Luckham are associate professor emeritus and extension marketing specialist, respectively, in the Department of Agricultural Economics at Virginia Tech.

Intermediate liabilities normally have terms of more than 12 months but less than eight years, and include non-real estate notes and contracts written for the purpose of meeting other than seasonal needs.

Principal payments on intermediate debts such as facility improvements and equipment purchases beyond those which come due within the coming year fall within this category.

Long term liabilities are those which, because of their indirect nature, indefinite amount, or uncertain existence, are not reflected as (but could become) direct liabilities.

Some of the more common contingent liabilities are accommodation endorsements, guarantees of the obligations of others, notes or accounts receivable discounted with recourse, liabilities under lease, probable liabilities and pending lawsuits.

Net worth

Net worth, or owner's eq-

See **RATIOS** Page 43

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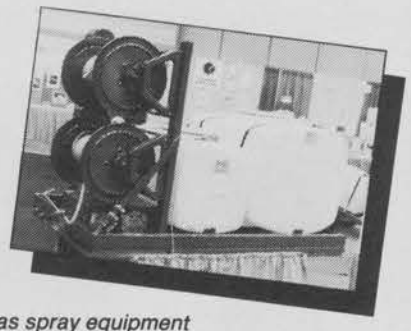

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113	128	143	158	173	188	203	218	233	248	263	278	293	308	323	338	353
114	129	144	159	174	189	204	219	234	249	264	279	294	309	324	339	354
115	130	145	160	175	190	205	220	235	250	265	280	295	310	325	340	355

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GET MORE FACTS

RATIOS

from Page 40

uity, represents the value of the assets remaining after all debts and other liabilities are paid, and provides information for testing the solvency and liquidity of the business and, when used in conjunction with the operating or profit-and-loss statement, can be used to evaluate operating efficiency and the overall profitability of the business.

The net worth and operating statements, when accompanied by physical data, provide the basis for in-depth analysis of the business.

Financial analysis is usually facilitated by studying selected business ratios which help to reveal trends within the business, often before they become readily apparent.

Ratios

Ratios measure the relationship between two or more financial items or categories, and are used to provide readily comparable indicators of performance.

They do not identify problems, but merely indicate where problems exist. For ease of interpretation, these ratios are often grouped into four major categories: liquidity, solvency, profitability and efficiency.

Liquidity—This refers to the ability to provide enough cash out of current assets, and on short notice, to meet immediate needs for servicing debt.

The ratio of current assets to current liabilities demonstrates the ability to pay off liabilities as they come due. Typically, a ratio of two to one is preferred (two dollars of assets for every dollar of liability).

Example: Current Assets / Current Liabilities
$ 9,300 / $ 17,514 = 0.53 to 1

On the day of the statement, the business has only 53 cents of cash on hand for every dollar of debt that the business must pay during the coming period. Thus, the business must either have time to earn the money to pay its debts, or rely on owners' equity or incur additional debt. Debt structure and the timing of the payments is crucial to survival.

The quick liquidity ratio is liquid assets such as cash on hand, savings accounts and accounts receivable, marketable securities and cash value of life insurance all divided by current liabilities. It measures the ability to meet current obligations on short notice without seriously affecting the operation of the business.

Typically, a ratio of one to one, a dollar of quick assets for every dollar of current debt, is preferred.

Example: Current Assets — Supplies / Current Liabilities
$ 4,000 / $17,514 = 0.23 to 1

On the day of the statement, the business has only 23 cents of cash or near cash items on hand for every dollar of debt that the business must pay during the coming period.

On Jan. 1, the typical lawn care company would not be expecting significant income for at least three to five months. Unless debt payments are scheduled for late in the year, the cash on hand (or in the bank or in other liquid form) should be much stronger.

Solvency—This refers to the ability of the business to pay its obligations when due. This is a longer term measure.

The leverage ratio, debt divided by net worth, relates total debt to net worth and reflects financial strength. A high ratio means that the creditors have more at stake (and may exercise control) than do the owners.

Young and very aggressive firms tend to be highly leveraged.

This works well as long as the firm is able to earn a higher rate of return on the borrowed capital than the cost of that capital. Equity is rapidly lost in unfavorable times.

Example: Total Liabilities / Net Worth
$ 53,898 / $ 26,242 = 2.05 to 1

On the day of the statement, the business has $2.05 of debt for every dollar of net worth.

Since the owner's invested funds (net worth) serve as a guarantee to cover the liquidation of creditor liabilities, it is evident that the smaller the net worth and the larger the liabilities, the less security the creditors normally possess.

When analyzing this ratio, the structure of the debt and the age of the business must be analyzed in conjunction with its ability to generate cash and its profitability.

The current debt-to-worth ratio compares current liabilities to net worth rather than to current assets as in the current ratio.

Example: Current Liabilities / Net Worth
$ 17,514 / $ 26,242 = 0.67 to 1

On the day of the statement, the creditors of the business have 67 cents of debt for every dollar of owner's equity or net worth.

This ratio recognizes that the ability to pay current debt may depend upon equity in the business or by borrowing upon the equity (refinancing).

If the net worth is high relative to current debt, the business may be in a secure financial position even though its current ratio is less than desired.

Profitability—Profitability ratios are based on data from the operating statement.

Efficiency—Efficiency ratios measure the efficiency with which the company uses its resources.

One of these, the inventory-to-working-capital ratio, shows the amount of net working capital (current assets minus current liabilities) that is tied up in inventories (beginning inventory plus ending inventory divided by two) and is a measure of operating capital efficiency.

On the day of the statement, the business has no working capital (in fact it is negative).

This may be interpreted as saying 54 percent of the working capital is tied up in inventory, or that inventories are turned into working capital about 1.9 times per year.

Too high a ratio reduces the manager's flexibility in running the business because too much capital is tied up in inventory, while too low a ratio probably means an inefficient use of operating capital since it may be idle cash.

When interpreting ratios, one should not pay undue attention to any one ratio independent of the others. **LCI**

R.K. Reynolds **W.R. Luckham**

About the Authors

R.K. Reynolds and W.R. Luckham are associate professor emeritus and extension marketing specialist, respectively, in the Department of Agricultural Economics at Virginia Tech.

JERSEY

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regulations in other states, Gray urged them to become involved with industry organizations and to voice their opinions.

Several inactive LCOs in New Jersey were caught by surprise. "They were totally unaware that there would be changes," Gray recounted.

"I got a couple who called me—who said they didn't go to any hearings—and *now* they're complaining," she said.

Orrok said Garden State LCOs had plenty of opportunities to make their concerns known. "We went to public hearings and got hundreds and hundreds of comments."

That exchange of information made for a better law. "This is a pretty good compromise considering what could have come down the road," Orrok said. "The regulatory process is very flexible." **LCI**

RIGHTS

from Page 27

Chemicals that are not dangerous to the average worker during an 8-hour day, 40-hour week.

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Community plowing aids citizens, plower

JAMES E. GUYETTE
MANAGING EDITOR

A community snow removal program is benefitting its citizens—as well as the landscape contractor hired to do the plowing.

Mayfield Village, Ohio is located east of Cleveland on the edge of the "snow belt." The area gets more than 50 inches of snow per season.

The village's program, now in its second year, is designed to prevent heart attacks suffered by older citizens who attempt to shovel their driveways.

"It was developed by Fred Carmen, our mayor," reports Gus V. Amendola, the service director.

(Leave it to Fred to be on the ball: Not only is his big brother Eric the famous Rock Star, but I went to high school with Fred and I always figured he was a sharp guy.)

The program is open to citizens aged 55 and over.

The resident pays $55 a year, while the village picks up the other half of the $110 fee.

Once a homeowner pays, he or she is entitled to the service for the entire season (Nov. 1 to April 1), or as Gus puts it: "From the time the snow falls until it stops—and that's the way it should be."

Plowing begins when the snow exceeds two inches.

During heavy snows additional plows are required, with a maximum of two a day.

The contractor with the winning bid was Corradetti Landscaping and Snow Plowing in Chesterland.

Bernard Corradetti, the president, figures that he can get by with 22 plows a year per customer, allowing himself a $5 fee for each driveway.

At this writing there were 377 customers signed up through the village, plus Bernard has some private jobs. "I was surprised by all the calls I got," Bernard says.

He's using five drivers and five trucks, and he is confident that his bid was a wise move. "If anything I'll make a living—and that's what counts."

Bernard hopes that, come spring, satisfied plowing customers will sign on with his full-service landscaping firm.

Already there has been a positive story on the operation in a local newspaper.

He's been in business for about half a decade, and "it's been growing every year."

Both Gus and Bernard say that a similar community plowing program can work in other areas of the country.

Close communication between the contractor and local government is essential.

The plower has to make sure he or she gets the job done, or else be prepared for irate phone calls and negative publicity.

"The contractor last year was kind of hit or miss," Gus recalls. He lost the account.

(Gus says that Bernard has more equipment and more knowledge than last year's ill-fated plower.)

The question of double-sized driveways has to be addressed, as does the method used for deciding snow depth.

In Mayfield that's determined by measuring a cold car roof. That ensures that the results aren't tainted by warm turf. "You can't get out with a ruler on someone's front yard," Gus explains.

Double driveways are priced as a single.

Each customer's drive is marked by green stakes. Bernard notifies the police when he begins plowing.

Village authorities stress that speed in getting the driveways cleared is a top priority.

It apparently does not have to be a precision job, but Corradetti crews are not permitted to pile snow where it can block other cars.

The jobs are supposed to be done by 7 a.m., but Bernard says that can be difficult during heavy snows.

Heavy snowfall also requires that Bernard's crews retrace their routes.

That second plowing run should be done by 7 p.m.

For Bernard, the threat of vehicle breakdowns always looms.

However, he reports that he's gotten about a dozen calls praising his service.

During one snow he got seven complaints, but Bernard feels that is a pretty good record when dealing with 377 clients.

James E. Guyette

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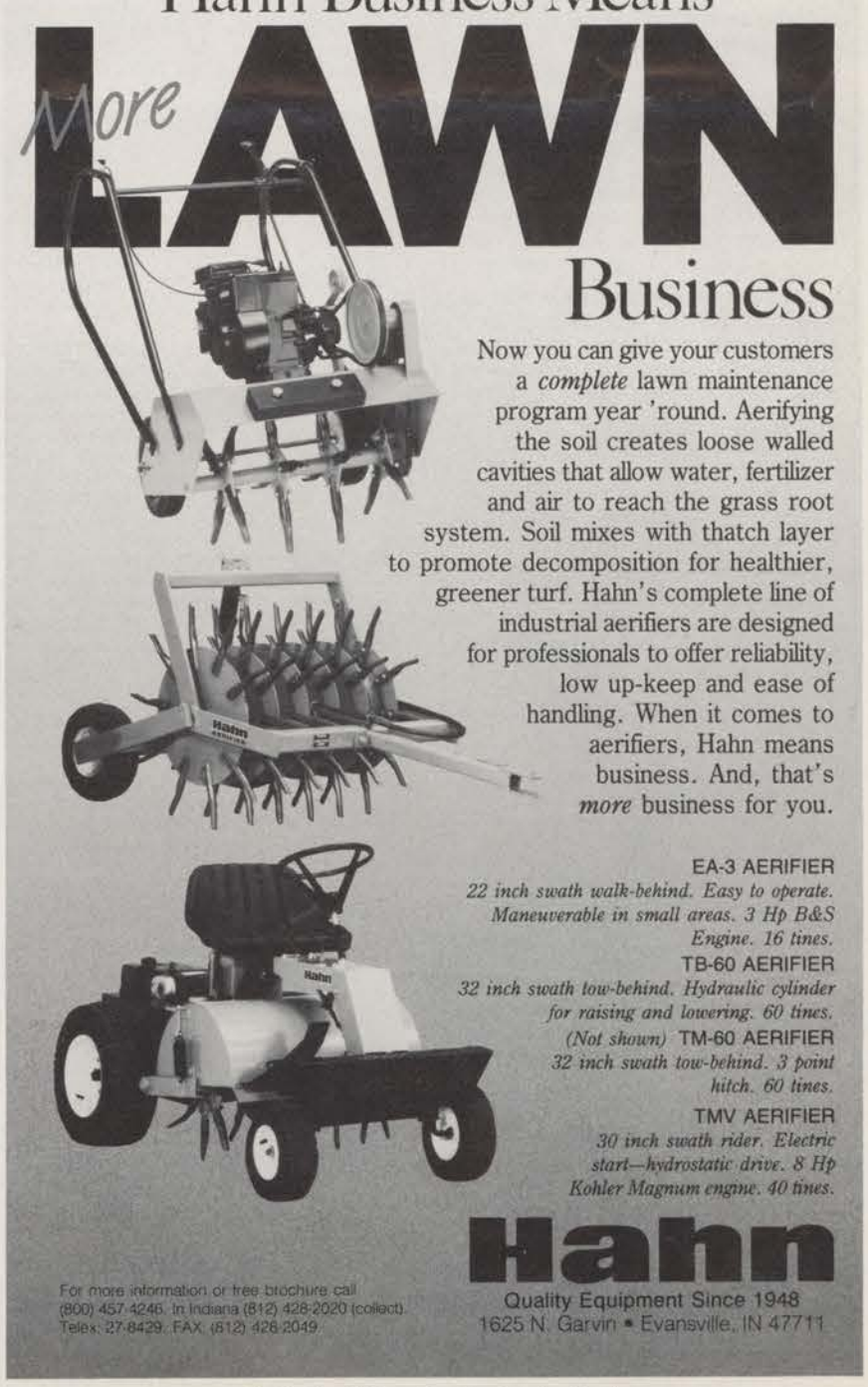

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