LAWN AND LANDSCAPE LAWN AND LAWN

AIR QUALITY

WORKER PROTECTION

NOISE POLLUTION

MARKET SATURATION

POSTING

TRAINING

FULL SERVICE

THATCH BUILD-UPY

OSHA.

WATER CONSERVATION
EMPLOYEE RECRUITMENT

LIABILITY INSURANCE

EPA

CERTIFICATION

CLIPPINGS DISPOSAL

CONSOLIDATION

GROUNDWATER CONTAMINATION

ISSUES MANAGEMIENT EDITION

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Triumph gets rid of the toughe

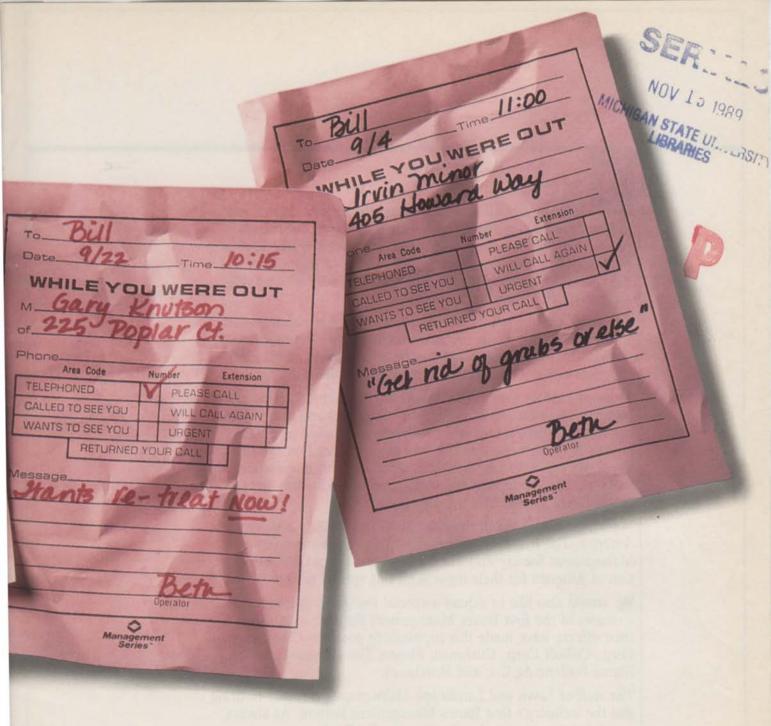
retreatments can drive even placing whatever insectithe best lawn care business right into the ground.

But you can reduce your callbacks—and increase

Constant callbacks and your profits - simply by recide you've been using with Triumph".

at controlling problem turf pests, including white grubs and mole crickets.

For example, in 10 years of Because no other insecti- university testing, Triumph cide is proven more effective has been shown to deliver



t turf pests, including these.

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

And, unlike other insecticides, Triumph consistently provides lasting control

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

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

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



ear Reader:

I remember 10 years ago when the chemical lawn care industry was taking the green industry by storm. New companies and branch offices were sprouting up everywhere. A company's growth was measured in the number of new customers they acquired each year; and, sadly enough, customer service and satisfaction were not terms often heard.

Ten years ago, we never thought about employee shortages, water conservation, posting or prenotification. Market saturation was used in the future tense, and no one ever thought about grass clippings when we spoke about disposal problems.

Today, these and many other issues have become focal points of interest. The way we, as individual companies and as an industry, manage these issues will determine our future success or failure. It is our hope that the information shared on the following pages will help you manage a more successful operation, and have a deeper understanding and appreciation for the unity of our industry as we enter the next decade.

We would like to thank the Associated Landscape Contractors of America, The Irrigation Association, The Professional Grounds Management Society and The Professional Lawn Care Association of America for their input with this special project.

We would also like to extend a special thanks to the following sponsors of the first Issues Management Edition, who, through their efforts, have made this supplement possible: Ciba-Geigy Corp.; CoRoN Corp.; Cushman; Elanco; The Grasshopper Co.; Rhone-Poulenc Ag Co.; and Shindaiwa.

The staff of Lawn and Landscape Maintenance is proud to bring you the industry's first Issues Management Edition. As always, we look forward to and welcome your feedback.

Sincerely,

Maureen Mertz Publisher

Lawn and Landscape Maintenance

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Issues Management

In the 1990's: Is Your Company Ready?

s the lawn and landscape maintenance industry prepares to usher in the 1990s, a slew of legislative and environmental issues will be first on its agenda.

With the mind-set of the fastgrowth period of the 1970s followed by the change in tactics, diversification of the 1980s, the 1990s will be a decade of shoring down on business techniques and dealing with a plethora of issues that can be overwhelming as well as costly.

When the average company's annual growth dropped from 30 percent in the industry's heyday to a more recent average of 10 percent

Top Issues Facing the Lawn and Landscape Maintenance Industry in the 1990s.

- Environmental and health concerns including: groundwater contamination transportation of hazardous wastes worker protection posting and prenotification integrated pest management
- Training and certification
- Heightened competition and market saturation
- Liability insurance
- Water conservation
- · Labor shortages and employee recruitment
- Pricing for profit
- Horticultural waste disposal
- Impact of an economic recession on a discretionary service
- Continued consolidation

to 15 percent, the industry buzz word became diversify. The broadening of service opportunities became a way for maintenance operators to provide more assistance to its customers.

As diversification will surely continue, operators will be faced with a growing number of regulations and legislative decrees, particularly in the environmental arena.

Despite increased regulation in these areas, industry experts agree that most lawn and landscape contractors are in a better position today to manage these issues than they were several years ago.

This year, the industry showed it's able to get its side of the story told as nearly every major negative news report was tempered with the industry's side of the story.

The most noticeable example followed the annual spring lawn maintenance scare when USA Today ran a point/counterpoint column with Jim Wilkinson, executive director of the Pesticide Public Policy Foundation, disputing claims from angry environmentalists.

This is substantially different than three to four years ago. Since then, the industry has swallowed a lot when it comes to regulations, but its substantially changed the way it operates now vs. 10 years ago - bringing professionalism to new heights.

'I think we're in a better position to manage these issues and get our story told," said Russ Frith, president of Lawn Doctor Inc., Matawan, N.J. "If we do our job, the concern over the environment is always there.'

As is prevalent in most service industries, the trials and tribulations of the lawn and landscape maintenance operator gave rise to industry leaders and consultants who not only came to the industry's defense, but who worked, and are working, for reasonable legislation and environmental controls.

On the business side of the industry, these same operators have taken the time to present an image to its customers. Operators can endlessly battle attempts at local, state and federal legislation, but unless

they practice what they preach, all the work will go for naught.

In an ever-critical society, image is now considered equal to content. More and more leaders in the lawn and landscape maintenance industry are using public relations and advertising mediums to improve the image of lawn maintenance.

In the field, sharp, clean uniforms are considered essential. All of this trickles down from the top, from a leader who is sensitive to the needs

of the industry.

Top operators today are always picking up signals from within the company, talking with all kinds of people, even in informal conversations, to get a sense of what's on people's minds, thus developing a richer idea of how their company is operating. Successful leaders in lawn and landscape maintenance, and in other industries, do not barricade themselves in their offices.

As the industry enters the 1990s, green industry operators will be faced with trying to successfully operate their businesses in an increasingly regulated market. There will be tougher testing procedures for applicators, licensing fees will be higher, recertification credits will be tougher and the disposal of horticultural wastes will be almost non-existent.

Probably more than any other issue, addressing environmental concerns will be a prerequisite to running a successful lawn and landscape maintenance business.

The Environmental Protection Agency, the Department of Transportation and the Occupational Safety and Health Administration will make their presence much stronger through increased requirements and regulations of pesticides and fertilizers, the transportation of hazardous wastes, worker protection and restrictions on certain power equipment tools because of noise pollution.

GROUNDWATER PROBLEMS. Environmental concerns such as groundwater contamination will play a much larger role in the

To date, many of the tests and



studies over groundwater contamination have focused on agriculture, leaving the lawn and landscape maintenance industry in the dark as to what degree the products they are using affect the groundwater. Some say none, while others are more skeptical.

Work continues to define the groundwater contamination problem and identify sources of contamination, but the EPA itself has admitted that groundwater contamination may be too costly to reverse.

Instead, it has decided to emphasize the prevention of pesticides and fertilizers from entering invaluable water supplies. Through education and training, it hopes to significantly reduce the chance of pesticides entering groundwater.

Last May, the EPA introduced its first extensive training package, "Protecting Groundwater: A Guide for the Pesticide User." Although it directly relates to agriculture more than lawn maintenance, many of the principles are applicable to the lawn maintenance applicator.

Such principles as properties of

pesticides and the soil, site conditions and management practices should all be emphasized. In addition, application methods, rates and timing, as well as preventive measures should all be included.

Until recently, there has been little interest and virtually no funding for research into the potential for contamination from pesticides and fertilizers used in the lawn maintenance industry. For that reason, little is known about the impact of pesticides and fertilizers used by commercial turf applicators, according to experts.

Slowly but surely, the industry is learning more about the ground-water problem as it relates to the green industry. And surprisingly or not, what is being learned is that fertilizers and pesticides used on lawns don't pose a risk to ground-water contamination.

Current research indicates the potential for turf fertilizers and pesticides to leach downward to groundwater or to runoff into storm drains or other non-target areas is quite low.

Research at Cornell University, Penn State University, The Ohio State University and the University of Rhode Island points out that leaching and runoff from turf is not a major concern, provided normal management practices are followed, moderate rates of fertilizer are used and pesticides are applied judiciously and according to label directions.

Evidence supporting this claim comes from the ground itself — turf is capable of using fertilizer and pesticide applications immediately, unlike other settings where the products may remain in unactive soil.

The thatch layer in turf is also capable of significantly reducing runoff potential.

Under extreme conditions, small amounts of fertilizers and pesticides do have the potential to find their way into groundwater. To prevent this, applications around wells with cracked casings, as well as applications over shallow, gravel packed wells should be avoided, according to Wilkinson.

(continued on next page)

Leaching and runoff from turf isn't a major concern if proper management practices are followed. Photo: Mickey Jones

Issues Management (continued from previous page)

Actions for limiting groundwater exposure: minimize or avoid the excessive use of nitrogen fertilizer in pesticides, especially when the turf is not actively growing; use slow-release forms of nitrogen fertilizer, particularly on sandy soils; avoid applications if there is an imminent threat of heavy rain; always follow pesticide label rate directions; calibrate equipment often; and make sure pesticides and fertilizers don't get left on impervious materials, such as driveways, sidewalks and streets.

POSTING & PRENOTIFICATION.
Certainly the most visible environmental issue of the last few years is posting and prenotification. Most states haven't faced regulation to the extent that operators in the state of New York have, but sooner or later applicators in all states will find themselves posting after an application or prenotifying their customers on a written or verbal basis.

To the credit of the green industry, applicators in many states are now actively participating in posting even before they're required to by law. Applicators aren't opposed to reasonable state mandated posting regulations, but when individual localities get involved, it's virtually impossible to abide by them.

With more than 188,000 localities

in the country, PLCAA, 3PF and other associations are actively fighting efforts by local councils to regulate the industry.

HORTICULTURAL WASTE DISPO-SAL. Another environmental concern, currently isolated in certain regions of the country, has the capability of devastating the mowing maintenance industry.

For mowers in Wisconsin, Illinois and New Jersey, to name a few, the question of whether horticultural wastes, including grass clippings, tree branches, leaves and thatch, can continue to be dumped in area landfills leaves contractors in a quandry.

If landfills won't accept the wastes and only so much can be composted — where does that leave the mowing/maintenance contractor?

"How do we get rid of it? Where do we take it," asked Chris Kujawa of Kujawa Enterprises, Cudahy, Wis. "Maybe they should open a special landfill. It can be treated chemically and when it breaks down we can try and reuse it."

The dumping of clippings is not only getting costly, but unavailable. Recycling centers, farms and other dump areas are turning mowing contractors away because the EPA considers the clippings to be hazar-

dous wastes full of pesticides and fertilizers, according to Sam Russo, president, Sam Russo Landscaping, Bayville, N.J.

The potential for the pesticides to run off and the stench from the clippings as they wait to be recycled have been further identified as problems.

Mulching mowers and mowers with side-valve chutes have been identified as temporary solutions to the problem, but more long-term solutions are needed for the survival of the industry.

INTEGRATED PEST MANAGE-MENT. Nearly every company is attempting to reduce its use of pesticides in one form or another, some choosing to spray on a curative rather than general broadcast preventive basis and others integrating true IPM practices.

Whether implemented in full or in part, IPM balances pertinent management practices to minimize, not eliminate, the need for traditional pesticides. IPM is most successful when implemented by managers who understand and control the fairly complex interaction among major management areas and who are able to monitor turf condition on a regular basis.

Management areas to be considered: Fertilization, irrigation, mowing, cultivar selection and pest control. Inputs in any one of these five areas act to reduce or create needs in the other four areas. For example, fertilization may reduce pest problems, while increasing the need for irrigation and mowing. Or proper cultivar selection can reduce pest problems, fertility and irrigation needs while having little or no effect on mowing requirements.

CHEMOPHOBIA. Because of the perceived risks of the use of liquid pesticides, many companies have in full or in part turned to products' granular counterparts.

Despite no inherent risk differences between the two, there has long been a customer and industry desire to use granular rather than liquid chemicals because of the perceived threat caused by liquids.

"The agri-business people are pretty good, but it's people out there who have nothing to do with the industry that are causing the problem," Kujawa said. "People are out there making rash statements, uniformed opinions, but they carry a lot of weight."

In actuality, many applicators carry both granular and liquid

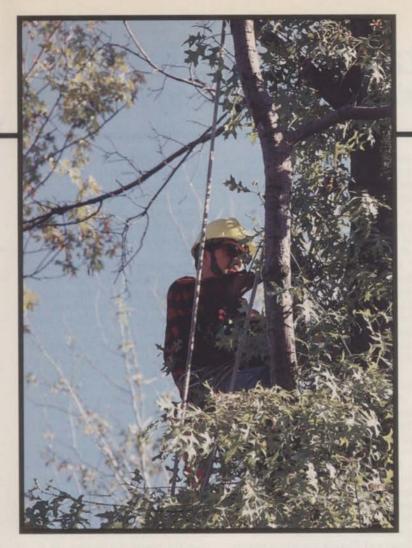
Professionals are in a better position today to

manage industry

issues. Photos:

Mickey Jones





chemicals with them. If the customer has stated no preference, then the applicator uses his judgment based on each individual situation, according to Rick Steinau, president of Greenlon Lawn Care Services, Cincinnati, Ohio. Slow-release materials are used much more extensively now than in the past.

WORKER PROTECTION. Worker protection standards are currently under development at the U.S. EPA, but it's not known what regulations lawn and landscape maintenance operators may or may not be required to comply with once standards are adopted.

Areas which many companies have already begun to incorporate into their programs include: providing for the daily cleaning of work clothing — workers shouldn't be allowed to take home or wear home pesticide contaminated clothing: providing workers with a clean place to change into work clothes as well as an area to wash up at the end of the day; and informing employees of the name and loca-

tion of a facility where emergency medical care is available.

"Your best mode of action as an employer is to be totally honest about the materials your employees use," Steinau said. "First of all, you're required by law to, but even if you weren't, honesty is still the best policy. Once your workers read the label on these chemicals, they're going to know what they're dealing with anyway."

CERTIFICATION AND TRAINING. These two areas continue to be hot topics in the lawn and landscape maintenance industry. National, state and regional conference and trade shows are making it possible for applicators to receive recertification credits.

Another option available to industry contractors is the Pesticide Compliance and Training Service, N. Kingstown, R.I. Partners Wilkinson and Richard Jalette initiated the correspondence training program because of an intense industry need due mainly to increased state regulation. Courses are available for both new hires and continuous training needs.

"We spend time seeing that our workers are trained and understand the process," Frith said. "You run into problems when people aren't trained."

Developing a pool of state certified workers not only would eliminate the fly-by-nighters, but would help elevate the market's ability to recruit and pay workers a decent wage.

Another issue lawn and landscape maintenance contractors must be prepared to face is the aging customer base. As the baby boomer generation grows up, the United States will be faced with the largest senior citizen population ever. And maintenance contractors will be challenged with customers on retirement level incomes.

Russo, who specializes in the care of retirement facilities, said he has already felt the pangs of reduced maintenance schedules. As retirees are forced to spend more on medical costs, retirement homes collecting maintenance fees are in turn forced to revise their budgets. Cuts, in many cases, first come from the landscape area.

"They've been cutting budgets for the last five or six years," Russo said. "It's hard to perform quality service when you're cutting 18 to 20 times instead of 25 times."

CONCLUSIONS. We've highlighted some significant issues which will impact the lawn and landscape maintenance industry in the coming decade.

These issues are sure to be addressed by state and national associations as legislation is enacted and changes are instituted.

To give you a jump on some of these issues, we've profiled 15 industry companies that have been actively involved with managing these issues pertinent to surviving in the lawn and landscape maintenance industry.

On the following pages, you'll receive a whole range of ideas, suggestions and even some solutions for managing key industry issues.

Environmental Industries

Gaining an Edge on Competition During Recessionary Times

nvironmental Industries' Bruce Wilson isn't afraid of pricing himself out of the market or being underpriced by smaller start-up operators.

As president of the environmental care division of Environmental Industries, Calabasas, Calif., Wilson oversees 15 branch offices in six states. The California company is generally considered the country's largest lawn and landscape maintenance business.

While pricing is not uniform throughout the 15 markets, Wilson said, the company's pricing is comparable with other quality opera-

tors in every market.

Because Environmental steers away from the residential market - less than 1 percent of its customers are individual homeowners and caters more to the commercial and industrial markets, pricing and customer retention are less of a problem, Wilson said.

We're just too big to be in the homeowner market," he said. "When you work there, everybody wants to deal with the owner. We can't do that.

In the commercial and indus-

managers who understand business, Wilson said, a good working relationship and consistency are created by working a long time with the same people. The company has adopted the philosophy of making "a little money for a lot of years.

Other areas the company limits business in are working for homeowner association boards "because the boards change every year or two and the work is too shortterm," and public works "because it's difficult to bid low and then maintain quality care.

'We just avoid work that is subject to fast turnover," Wilson said.

Maintaining field equipment accounts for about 5 percent of the division's costs, although the type of equipment used in each market varies significantly.

Because the price of land in California is so high, the amount of land individual companies own is small, leading to the use of mostly 36- and 48-inch walk-behinds for maintenance. Industrial sites in Texas and Florida are larger requiring the use of riding mowers. In desert areas, where bagging and

clipping is not as much of a concern, reel mowers are used.

High labor costs - speci-fically the Immigration Reform Act - have hit the company in the last few years. Complying to the immigration act has proven costly because of the volume of paperwork and processing it involves. In some

areas it has also drastically reduced the available labor force.

In addition to the immigration act cutting down on the pool of potential employees, so too has an increase in the service economy as a whole.

'Market by market the situation

is getting pretty bad, and its mainly because the service economy has grown so much," Wilson said. "We're having the most problems in areas where there are a lot of hotels and restaurants because they compete for the same labor force.

The country's aging and subsequent changing demographics are also hurting the service industries which have traditionally hired young men in their late teens and early 20s, Wilson said.

Unlike some of the restaurants and hotels, the lawn and landscape maintenance industry can't tap into the market of older workers. The work is too physically strenuous.

Right now the solution will be hiring more women, Wilson said. About 5 percent of Environmental's 1,300-member work force is made up of women.

The company hasn't passed on the effects of those increased labor costs in all its markets. Some cities, such as Denver and Houston, are in economically weaker conditions than the rest of the country. As a result, they couldn't sustain the same level of increases. The company would end up losing money and customers because it would end up pricing itself out of the market.

In the past few years, labor costs have risen about 15 percent to 20 percent, but the company has kept price increases to about 2 percent or 3 percent above the inflation

When prices cannot be raised to counter rising costs, Wilson said, it's time to improve management

'You just have to get sharper and manage better," he said. "You have to work at getting rid of inefficiencies. You're going to end up swallowing some costs, not everything

can be passed on."

One of the inefficiencies Wilson said he's identified, and the division needs to work on eliminating, is the overuse of string trimmers. When the company obtained the trimmers, employees started trimming around things that had never been trimmed around before.

One of Environmental's crews performing arbor care.



trial market you're dealing with business people. They understand you have to make money to stay in business. They also understand (price increases) because they face many of the same issues, from new regulations to limited labor force."

By dealing with professional

"It has become a real labor waste," he said. "We simply have people doing too much. They started trimming things customers never asked us to do. Now the customers just expect it."

Wilson said the company can't do without the trimmers completely, but employees definitely have to learn not to be so dependent on

them.

While most people consider the lawn and landscape maintenance industry to be a discretionary service easily hurt by a recession, Wilson said, he doesn't worry about losing customers during bad economical times.

Most of our customers lease their property," he said. "During a recession, the exterior image becomes even more important - an edge up on their competition. Some clients actually spend more during those times.

The problem during a recession comes when contractors start turning to maintenance work. That drives prices down because the

market is flooded.

We have to increase our sales efforts and spend a little more on marketing, but for the most part we don't suffer decreasing sales," he said. "Actually, it's just more annoving because there's more competition.

Both benefits and disadvantages come along with being a large company. The benefits include impressing clients with the clean, professional image of fully uniformed technicians and always having someone in the office to field calls instead of an answering

The disadvantages include being seen as a bigger target by agencies and boards that enforce industry

'We try to comply to all the regulations," Wilson said. "Many of the smaller operators can't afford to, but we're at a much bigger risk. If somebody's caught (by the regulators), it's usually a bigger company. They go after bigger targets so it makes more of an impact.'

Because of that, the company steers clear of using heavily regulated materials.

Although Environmental Industries hasn't faced any bagging and clipping regulations in the areas it works, Wilson said, he is looking forward to the day it does.

Catching clippings is both costly and unneccesary. They break down readily, do not contribute to thatch problems and return nutrients to the soil, according to studies Wilson has seen on the subject.

What Wilson would like to see is redesigned mowers made to disperse clippings more evenly instead of clumping. With current equipment, maintenance professionals don't have much of a choice. He said he believes that could lower mowing costs by as much as 20 percent.

You have to dump now," he said. "With equipment designed the way it is, with bagging attachments, it makes it hard not to catch. The clippings don't spread

out very well.

Maintenance customers will eventually have to return to accepting clipping dispersal instead of bagging. With fewer dump sites and the inevitable limitations on what and how much can be dumped, he said, there really is no other solution. The problem now is convincing customers that bagging is not a necessity.

When dumping regulations do go into effect, we won't be able to catch anymore," he said. "People will be forced to accept it. To me it's just a matter of reshaping the

way people think.'

One way the company is attempting to change its customers' thinking is through its company newsletter. But, Wilson said, about the only way people will listen is by talking about the increased costs of bagging and dumping.

Another industry concern often discussed, Wilson said, is water conservation. Although that's all it

seems to be - talk.

'It's sort of like the gas shortages of the '70s," he said. "Remember how they were saying by 1990 there wasn't going to be any gas left? But there always seems to be more coming from somewhere.

Company Name: Environmental Industries (Environmental Care Division).

Headquarters: Calabasas, Calif.

Branches: Orlando and Jacksonville, Fla.; Houston, Texas; Denver and Colorado Springs, Colo.; Phoenix, Ariz.; Las Vegas, Nev.; San Jose, Pleasanton, Sacramento, Los Angeles, Ventura, Riverside, Orange County, Palm Springs and San Diego, Calif.

Founded: 1949 as construction and nursery operation. In 1968, began lawn maintenance division.

Owner: Burton Sperber

Primary services: Mowing, aerating, pruning, fertilizing, chemical applications and changing flowers.

Number of employees: 1,300

1988 gross sales: \$38 million in exterior, \$4 million in interior and \$1.5 million in arborist.

Water conservation is the same way: Everyone talks about it, but it seems like no one really faces up

"It's something I worry about, but we've been hearing about for five years now and it doesn't seem like anything has changed yet," he

Tru Green Corp. Proactive Efforts Needed to Sway Unreasonable Legislation

ru Green Corporation, headquartered in Alpharetta, Ga., is the second largest lawn chemical company in the nation, behind ChemLawn Corp., Columbus, Ohio. It operates in 23 cities, mostly in the East and Midwest. Lately, however, operations have popped up in Colorado, Oklahoma and Texas. Waste Management is its parent company.

Founded in 1974 in the Detroit area, Tru Green now has 90 branch offices. Originating as a chemical lawn care company, it still provides professional lawn care, tree and shrub care, with a peak employee base of 3,000. In 1988 the company

grossed \$98 million.

As one of the top companies of its kind, its sheer size will force it to be a leader in the 1990s on all fronts.

Joe Winland, group vice president for Tru Green, considers the primary issues of the next decade to be regulation, legislation and related issues centering around the current and ongoing pesticide sensitivity issue.

"We have to be proactive in legislative and regulatory affairs. We want to be involved in modeling the regulations that govern our industry," Winland said. "We are also looking at alternatives to pesticides such as biological pest control and organic fertilizers."

This change, or transition, will be perhaps the cornerstone of the

'Research has intensified," he said, "not only at our own level but throughout the country, at universities and biological research companies."

Tru Green, as do most major companies, already voluntarily prenotifies concerned individuals. Though most large companies do (notify), a larger number of smaller companies don't at this point, Winland said.

In recent years, Tru Green has noticed a lot of fluctuation in the numbers of companies in the lawn and landscape maintenance industry. Winland predicted a continuance of the larger companies growing larger, but said he foresees a decline in regional companies.

"I think to grow any further is difficult, and many (regional companies) are becoming more willing to merge with larger companies in order to grow," Winland

While the industry has reached a certain level of saturation in certain market locations, the industry as a whole is "not quite saturated yet. Some areas in the large Midwest cities are maturing, but there is growth in other parts, just in population. The sunbelt continues to grow," he said.

A concern in the coming decade, as with all related service industries, is the shrinking employment base in which a competitive number of companies have to draw

This, said Winland, will require companies such as Tru Green to make adjustments, promote careerism and better career opportunities in general. "We want to be a premier employer.

Said Winland, "You want to create a job opportunity that demonstrates an ability to grow in an industry, and the industry must take on a more positive image, with benefits available, with competing industries. This needs to be upgraded!

Winland noted that "our world population is more concerned with the need to manage our green life - lawns, forests and green space. I think that our people are going to respond to that with some messages; do a better job protecting what green life we have and see that it is properly managed."

Another issue Winland sees as crucial in the 1990s centers around groundwater, "not only from the standpoint of availability, but quality of water," Winland said.

Professionalism in the industry will also need to be addressed. For instance, better training of applicators using methods that are 'environmentally conscientious,"

"We have to become more out front about the benefits of lawn care, rather than just doing our day to day work," Winland said. "I believe it is important to relate to the people that our industry is concerned about the environment, and doing a good job of protecting life."

mental care is a * growing maintenance area for many industry firms in addition to continued lawn spraying for residential and commercial customers.

Tree and orna-







Company Name: Tru Green Corp.

Headquarters: Alpharetta, Ga.

Branch offices: 90 branches in

23 states

Founded: 1974

Owner: Waste Management Inc.

Primary Services: Chemical lawn care, tree and shrub care and mowing in certain test areas

Employees: 3,000 during peak

season

1988 Gross Sales: \$98 million

Like other industries, Tru Green sees the electronic media as the most popular tool by far for the dissemination of information. "We see more interest in green life, and the media is more willing to put air time on to talk about it."

In the 1990s, the industry's challenge will be to get some of that air time.

Missy Holcomb is in charge of customer services at Tru Green. She said she believes that customer satisfaction should be an essential goal of every lawn and landscape maintenance firm.

To this end, Tru Green has in place an educational program for employees — including management level employees — which will make them more aware of the requirements for customer satisfaction.

"The idea is, do the right thing the first time." Dubbing the idea "DIRTFT" (do it right the first time), she adds an important clause, "every time. This is a thinking that we are developing."

Countless surveys over the last decade have shown that consumers are acutely aware of what they can and should expect from every service available to them. In the 1990s service companies will — if they want to be successful — react to that dramatically, as Tru Green seems interested in doing.

Don Karnes, vice president of operations at Tru Green, said that the challenge, too, for Tru Green is the simple fact that they are the second largest company of its kind, not the first.

He insists that the challenge can only be met, and accomplished through quality.

All Tru Green management recently attended the Phillip Crosby Quality College in Winter Park, Fla. There employees in management sharpened their own skills — just as workers in the field have been trained for their full service operation.

The Brickman Group Ltd. Juggling Business Prowess with Issues Management

he Brickman Group Ltd., Jenkinstown, Pa., is celebrating its 50th anniversary this year, and Bruce Hunt, the company's vice president, said Brickman's issues management strategy for the next decade will include 'client service - providing a package landscape design and maintenance" program.

Brickman, whose gross sales exceeded \$30 million in 1988, has a seasonal high of 1,000 employees in the summer. Branch offices are in Langhorn, Pa., Morristown, N.J., Laurel, Md., and St.

Louis, Mo.

Like so many larger companies, Brickman started as a one-man firm, launched by Theodore Brickman, Sr. His son, Dick, is now president of the company.

Current company services include design/build, maintenance, landscape architecture, installation services, horticultural maintenance and tree and turf care. While a half-century ago Theodore Brickman offered a modest menu of design and installation, now the firm is full service.

There are a host of issues looming over the coming decade, many borne out of the 1980s, others inherent to the industry and for all intents and purposes permanent.

Near the top of the list, said Hunt, is government pesticide regulation, Environment Protection Agency rules and an assortment of

legislation from a variety of sources that will continue to challenge the lawn and landscape maintenance industry.

Numerous employee mandates · now passed "will have a dramatic effect on our industry. We always have to deal with government intervention," he added.

The competition has also improved in recent years, say most in the

green industry.

Most companies are better today, because of survival. Because of the business climate, there is a need for better businessmen, Hunt said. "Those who don't (acquire better business skills) will not last. There is higher education today than 30 years ago. The landscaping of the last 10 to 15 years has set a standard that has caused the competition to get better.

These days, with a veritable explosion of information almost continually in a state of flux, clients are more demanding than ever. The environment is a top concern, as evidenced by the latest presidential race. This, too, said Hunt, will present a challenge to landscapers trying to successfully manage issues in the coming years.

Along with the tremendous informational impact of the electronic media, which it appears can only increase, image has become crucial to corporations. And landscaping will be a part of it. Now, it is not nearly enough just to keep a cor-

> porate headquarters neat.

'They (corporations are trying to provide an image," Hunt said. "Landscaping is part of a company image, whereas in the past it was something they just had to do.'

This new trend will challenge landscape companies in terms of creativity, coming up with effective

ideas and having the ability to physically present their landscape

images.

Brickman is considered the second largest landscaping firm in the country. Maintenance represents about 40 percent of the company's business. The rest is design, tree care of many types, as well as "hardscape," such as water features, pools and decks.

All this requires more expertise of the complexities, especially Hunt said, because "land is not as available as it once was, so landscaping is more compact." As the population increases, this challenge will certainly multiply in the next

Hunt believes training and certification will be a factor, too, as it is now. But he doesn't see it, along with the issue of noise pollution, as a "major factor," except in very

highly dense areas.

In spite of the immense difficulties in starting up a business these days (which could worsen if a recession comes), and the current economic woes in places such as Denver and other parts of America's Southwest, landscaping remains a relatively low capitalization business.

You can start off a company in the low thousands," Hunt said. "I've heard of a guy starting a business on a credit card. In part, this creates saturation. This business does not require a high level of education. It's not a complicated business, if you want to work.'

The key to successfully juggling business prowess with issues management, Hunt said, is knowing not only the quality and needs of the customers, but pricing.

Pricing reflects effort. If you don't know the costs and the cost controls, you don't know what to set the price on," Hunt said. "If you price your work on what others do, you better darn well know what your costs are. If you price your work at a thin margin, you don't have cash flow. All you need to do is land one bad job and you're out."

One unique feature of Brickman is that its profit centers produce

Brickman crews perform residential and commercial arbor care.





their own budgets.

"They physically do their own budgets, and they are accountable to themselves. It's decentralized, and each office has their own financial people," he said.

At Brickman, this strategy is more personal, based on trust in a society based on mistrust. As Hunt said, this gets the team "plugged

into participation.'

Hunt speaks of a "survival mentality" in the coming decade. This, he further explained, includes continued education, market penetration and looking at diversification, "going into other areas, geographical areas."

They do not plan to go into other cities necessarily, but will look into regions. "We will have smaller teams of sales people."

Hunt, like so many in the industry, laments the shortage of labor and technical people and supervisory personnel.

"There is a shortage of trained landscape supervisors and architects," he said. "We've seen the height of the baby boom, and the service industry is expanding. We are competing with a limited pool."

There is also a reduction in the number of potential employees coming out of farm backgrounds, which in the next decade will challenge the industry as much as anything else.

"People who grew up on the land are the traditional base supply of people in this industry." Hunt said. "That's all shrunk, that base with the work ethic which enjoys the outdoors."

The trick in the coming years will be to find what is left of these people (3 percent of America lives on farms), and train a more urban populous to develop an appreciation for this type of work.

"We've had a fair amount of luck recruiting out of the South," Hunt said, which is a hopeful sign. "In the North it's more difficult.

'I think the industry has improv-

Company Name: The Brickman Group Ltd.

Headquarters: Jenkinstown, Pa.

Branch offices: Langhorn, Pa.; Morristown, N.J.; Laurel, Md.; and St. Louis, Mo.

Founded: 1949.

Owner: The Brickman family.

Primary Services: Design/build, maintenance, landscape architecture, installation services; horticultural maintenance and tree and turf care.

Employees: 1,000 during peak season.

1988 Gross Sales: More than \$30 million.

ed over the past few years," Hunt said. "I see in it young aggressive trained entrepreneurs as well as in the state associations. I think the level of education has improved, and, too, the quality of the people in the business."

Does he feel prepared for the last decade of the 20th Century? "I feel prepared, but there are some things we need to continue to learn."

Lawn Doctor Inc.

Being Sensitive to the Needs of the Customers

awn Doctor, based in Matawan, N.J., is the largest franchise of its kind in the country. In 1988 the company grossed \$33.38 million.

In 25 years, since Anthony Giordonno and Robert Magda started the company, it has spread out 280 franchises in 27 states, with corporate branch offices in Dallas. It is a privately held corporation with 10 owners. At peak time, the com-

the best franchises succeed the same way the best independent businesses succeed: management makes people care.

Robert DeKraft and Michael Lancaster, owners of a Lawn Doctor franchise in Fairfax, Va., told *Inc.* that the success of their business is based on something they can't touch — customer satisfaction. Treating lawns and servicing the customer are equally important. household, its effects will be felt more in the 1990s as much in the lawn and landscape maintenance industry as any.

"As the socio-economic evolution of our society takes place, with the expansion of the dual income household, there is going to be a greater demand for services. The available free time to do things historically done by one member, can't be done," Frith said.

At the same time, the demand for more sophisticated services will increase.

Another pervasive issue will be the relationship with state and federal regulatory agencies.

"Our strategy is to make sure the regulatory agencies understand our business, and given this understanding, have reasonable prudence by all parties," he said. "I think we can have an environment that protects the health and well being of the public, and continue to provide good value to the homeowner. I see our responsibility as making sure they have all the information."

While Lawn Doctor started as a full service company, less mowing maintenance, it has evolved into doing mainly weeding and seeding application, and a menu of custom care services.

"They are all not needed at the same time," Frith said. "One season may require core aeration, or a stress season may require seeding. It depends, too, on the customer, the environment and the market. Certain insects are in one part of the country, and pose no problem in other parts."

Frith doesn't see posting and prenotification as a problem. Though Lawn Doctor is willing to prenotify people who have allergic reactions, he advises caution on the issue.

"There is very little evidence to support hypersensitivity. My position is if someone says that they are allergic and a doctor says so, we will be willing to prenotify those people," he said. "But blanket prenotification is an administrative nightmare, and raises costs drastically. It puts a lot of paper in



Treating lawns and servicing the customer are equally important for Lawn Doctor. pany employs 2,000 people.

Lawn Doctor was recently named by *Inc.* magazine as one of four runners-up to the best managed franchise in the United States. The article details what it takes to succeed with a franchise.

Although location, the ability to follow the franchisor's program and hard work are all necessary, The issues on the table for the coming decade, according to Lawn Doctor President Russell Frith, is simply keeping a keen eye on "being sensitive to the customer. The customer is more knowledgeable about services, and we must maintain our professional status."

If in the 1980s the hot topic was the advent of the dual income



Company Name: Lawn Doctor Inc.

Headquarters: Matawan, N.J.

Franchises: 280 in 27 states

Founded: 1964

Owner: Privately held corporation with 10 owners.

Primary services: Aeration, seeding, tree and shrub maintenance, weeding and a variety of customer care services.

Employees: 2,000 during peak season

1988 Gross Sales: \$33.38 million

the mail that people are not interested in."

Issues such as prenotification, pesticide use and regulation in the 1990s, will vary from state to state depending on the attitudes of the people and the legislators they elect. The challenge for these companies in the 1990s will be awareness of the prevailing moods in their areas, and educating the public and others involved on their position.

Said Frith: "We have to get all the facts and all the perspectives and data they need."

Hal Zeve is marketing director at Lawn Doctor. He sees the 1990s as a period where technology will play a big part in furthering the quality of services.

"New materials are being developed by chemical companies. The technology of seeding is more complex," he said.

As for equipment, Lawn Doctor has its own power seeder, which is not available on the regular market and probably won't ever be, he said.

"We use a power seeder. It is a three-piece (machine) that we manufactured ourselves," Zeve said. "It provides the best seeding bed, without ripping the lawn. It's in its second year. We have no plans to market it publicly."

Another more obvious key to growth in the 1990s for Lawn Doctor, he said, is "more franchises — that's the key to growth." It is no more difficult now, he said, than at any other time.

"There is a growing interest in lawn care, in the business, in the value of the service potential for establishing a business."

He also sees the new and ever-

growing amount of regulations on the industry as a constant challenge. In New York, for example, there are contracts. The notification regulations are most complete there, he said.

Is it a trend that could become national? "It may be the start of a trend. It certainly is a challenge."

Allen Keesen Landscape Inc. Riding Out a Recession With Full Service

rees and shrubs are "the first to go" in a recession, according to Eldon Dyk, vice president of Allen Keesen Landscape Inc., Denver, Colo. "Mowing, trimming, and edging are always needed," he explained, "but when the economy goes sour, customers cut out the extras - and tree and shrub maintenance is at the top of the list.'

With Denver's energy-based economy still reeling from low oil prices, Dyk has faced recession firsthand. "Normally we emphasize commercial and institutional design-build projects," he said, "but with construction activity about dead here, we've had to

make some decisions."

Some firms survive bad times through diversification. But at Allen Keesen Landscape, Dyk said, "we decided to cut back, rather than try to maintain a certain sales volume. That's meant taking less jobs and reducing our work force. But our strategy is to stick with what we do best, and not dilute our strength by going in new direc-

Retrenchment was difficult, since the company had been accustomed to rapid growth from its 1975 founding until the Denver recession hit a few years ago.
"It takes a whole different mind

set to operate in a no-growth

mode," explained Dyk, "since you've got to show customers options for saving, rather than spend-

Dyk said, however, that he believes his company's full-service approach has given it a competitive edge. "Since we do both landscape design and construction, that gives customers an advantage. In a recession, they want more bang for the buck. And dealing with one contractor lets them avoid the hassle, eliminate coordination and compatibility problems, receive prompt service and get consistent quality."

Most of the \$4 million annual volume performed by Allen Keesen Landscape is obtained by negotiation, rather than bidding. Competitive situations consider only price, Dyk said, "but negotiated contracts allow us to sell both price and quantity - the fact that we're the best, if not necessarily always the cheapest, and that buying quality now reduces costs later.

The challenge in obtaining negotiated work, however, "is the way you have to emphasize one-on-one salesmanship," Dyk added. "Customers' criteria are more subjective than in bidding situations, where you're competing on the basis of something measurable. So you really have to convince people on your service benefits.'

Another aspect of the company's full-service approach is also helping it ride out the recession. Seven years ago, according to Dyk, the firm realized "even though we did the design and construction, in the customers' minds the job wasn't finished. When the grounds didn't look new anymore, they would ask us to come back. So in 1982 - before the recession - the company got into maintenance work, which was really an inevitable follow through on our other services.

Now that design and construction work is down, Dyk said, "maintenance accounts with commercial and institutional customers are taking up some of the slack.' The company is staying out of resi-

Beacon Hill - a commercial property serviced by Allen Keesen.



dential markets, he added, "because homeowners always want more services than they're willing

to pay for.'

Full service landscaping has been a family tradition since A. Keesen & Sons was founded in 1929 by Anthony Keesen. Grandson Allen Keesen sold the company in 1972, and three years later established the present Allen Keesen Landscape Inc.

The original Keesen company was bought by a large multistate corporation that was more interested in competitively bid public works projects," Dyk said. "But Allen preferred the full service approach where he could get in on the design phase.

His new company started small, but the Keesen name had been around so long, Allen had plenty of customer contacts to get himself

off the ground."

The new Allen Keesen Landscape grew quickly. Instead of borrowing, the company financed expansion by limiting other expenses; for example, major equipment was rented rather than purchased. That pay-as-you-go approach has proven wise because, were the firm encumbered by debt, its survival in the present recession would be jeopardized.

Over the years, Allen Keesen has also expanded his business interests to include a branch company in San Antonio, Texas, which opened in 1984; and ownership of the Michael Todd Landscape Co. of Naples, Fla., which was established

earlier this year.

"When the local economy rebounds, we'll be ready to grow right along with it," Dyk said. He believes switching from retrenchment to a growth mode "will be easier than the other way around. We've been through the growth times before, so we'll rely on experience to see us through the transition."

In addition, Dyk suggested, the company's present decision not to diversify "will pay dividends when the economy turns around. We won't have any excess baggage to carry, and can concentrate all

our resources on our best market. And we'll avoid the identity problems that go with diversifica-

The recession also prompted a streamlining of the organization "whose benefits will carry over when things improve," he said. Under owner Allen Keesen there are vice presidents for maintenance (Dyk) and for design/construction, with crew supervisors answering to each. "In that way," Dyk pointed out, "our first-line managers are only two levels removed from the

Allen Keesen Landscape is also looking ahead to address what it sees as the industry's major issues in the next decade. Dyk said he believes "the number one problem we'll face in the 1990s is finding people to work in the field. The pool of young people is declining, and most of them don't want to mow lawns or bag clippings.

Dyk said the lawn and landscape maintenance industry "faces the same problem as McDonald's or

Burger King.

Our company has 35 maintenance and 20 construction employees in Denver, plus another 30 each in Texas and Florida. Since our main selling point is quality, we have to find superior people. Sometimes it's difficult."

There is a need to "do a better job of familiarizing colleges with career opportunities in our field," Dyk said. But beyond that, he admits "even though we know the problem, I don't think anybody knows the answer yet. All I do know is that the various industry associations need to sit down and discuss the issue."

As for the prospects of a nationwide recession in the near future, Dyk concedes he is not an economist.

But from the lessons of his own local economy, Dyk warned lawn and landscape firms to "be aware it could happen anytime. In Denver, the downturn was fairly sudden, and due to causes outside our control. Maybe you can't even be 'ready' for a recession, but you

Company Name: Allen Keesen Landscape Inc.

Headquarters: Denver, Colo.

Branch offices: San Antonio, Texas, and Naples, Fla.

Founded: 1975 (Formed after 1972 sale of A. Keesen & Sons. which was founded in 1929.)

Owners: Allen and Beverly Keesen

Primary Services: Commercial and institutional landscape design, construction and maintenance.

Number of Employees: 60 in Denver, 30 each in Texas and Florida.

1988 Gross Sales: \$4 million

should consider how your company policies might lessen or worsen the impact."

In the case of his own company, Dyk said "when recession hit, two things really helped us. First, our past financial practices didn't overburden the firm. But second, and perhaps most important, we had a strong feeling for who we were as a company - and that sense of identity enabled us to decide where we wanted to go."

Greenlon Lawn Care Services

A Dose of Worker Protection Provides Ample Returns

ick Steinau takes over as president of the Professional Lawn Care Association of America this month, so he's well aware the industry will probably face more regulation in the 1990s.

His advice: Stay ahead of the

"Most problems should never get to the point where they have to be legislated," said Steinau, owner of Greenlon Lawn Care Services, Cincinnati, Ohio. "Companies should just realize, 'Hey, we're in the lawn we care about them more than the average company, and that reduces our turnover."

This year, when Steinau couldn't find anyone who sold protective pants that met his workers' needs, he teamed up with a Cincinnati clothing firm and designed his own.

The result: a lightweight, \$35 pant made with artificial fibers that keep liquid pesticides from soaking through to an employee's skin. The garments also have elastic around the cuffs to keep work-

ers' shin areas covered.

"The pants are very, very light and feel like a regular cotton garment," he said. "Our guys just love 'em."

As an added bonus, workers can safely wash the garments free of chemicals by hosing them down and recycling the rinse water back into their trucks. By contrast, employees who wear regular cotton pants while applying chemicals run the risk

of transferring pesticides to other clothes if they wash them at home, Steinau said.

Since his employees clean their pants daily with a quick scrub down, Steinau only furnishes each worker with one pair, compared to the four or five cotton pants he used to issue (at a cost of about \$23 each).

"No matter how you look at it, our new pants are a good deal," Steinau said. "In the 1990s, worker protection will probably mandate more and more protective clothing, so we're just trying to take a more proactive approach."

The Dow Chemical Co., Midland, Mich., is currently testing the pants to determine whether they accumulate pesticide residue over time.

If they don't, Greenlon plans to market the garments nationally, possibly donating the profits to the PLCAA.

In addition to providing special pants, Greenlon also furnishes its workers with protective gloves. But since employees tend to contaminate their skin each time they remove the gloves, Greenlon also equips its truck with water and hand lotion.

The firm also supplies heavier gloves, face masks, eye protection and rubber aprons when workers fill their truck tanks up with concentrates each morning.

"The government doesn't require such precautions, but shame on anyone who doesn't take them," Steinau said.

Additionally, Greenlon voluntarily blood tests its personnel once a month when workers are out applying pesticides, which are more hazardous than fertilizers and herbicides.

Greenlon has a private lab come in and take blood samples at 7 a.m. — early enough so men don't miss time on the road. The lab charges \$13 per worker per test.

"There are no laws that require blood testing, but responsible companies have done it for years," Steinau said. "When it all shakes out, if you're going to be in this business, there's certain things that you must do for your employees, your customers or whomever else may be affected by the materials you use."

If a blood test turns up contamination, Steinau keeps the affected employee working around the office for two weeks, then re-tests the worker before returning him to the field.

To further protect its personnel, Greenlon also fully discloses any data its employees request about chemicals they work with.

"Your best mode of action as an employer is to be totally honest about the materials your employees use," Steinau said. "First of all, you're required by law to, but even if you weren't, honesty is still the best policy. Once your workers read the label on these chemicals,



Greenlon protects its workers beyond what's required by the government. care business and there are certain practices we just have to follow."

Greenlon, Lawn and Landscape Maintenance's 1987 professionalism award winner, already goes well beyond what the government mandates for worker protection. For example, federal law only requires firms to inform employees that they are using hazardous chemicals, and to train workers in the use of the materials.

But Greenlon does much more, providing employees with all forms of protective wear and periodically testing them for contamination.

"We definitely spend some extra dollars on worker protection, but it ultimately pays off," Steinau said. "If we provide a little more protection, our employees perceive that they're going to know what they're dealing with anyway."

Greenlon has also taken proactive steps toward the safe transportation of hazardous chemicals, another area legislators are likely to regulate in the 1990s. In 1989, many states enacted laws covering standards for such transportation, and Steinau expects more to follow.

In fact, he even helped the State of Ohio draft its new hazardous chemical transportation law, which took effect this summer.

But even before the law became official, Greenlon started complying with its provisions, placing warning placards on trucks and carrying manifests detailing which chemicals each truck carried.

Because their trucks frequently contain different material on different days, Greenlon workers make out their manifests using a grease pencil and slate, allowing for easy revisions.

For added safety, Greenlon also voluntarily places fire extinguishers and spill kits on each truck, and trains workers how to use them.

Looking to the 1990s, Steinau predicts legislators will mandate double-walled tanks and "a potpourri of placards" for trucks. But he thinks the industry will make an even bigger step toward safety by moving toward lower-volume

equipment.

"Many companies have gone to low-volume operations over the past few years, using a 250-gallon tank instead of a 1,000-gallon tank," Steinau said. "And devices for delivering the material have gotten much more sophisticated. I can literally see a time when people will operate from motorcycles instead of big trucks. Believe me, as soon as it comes to that, we'll be doing it, because it's much safer. If you have a spill, you'll only have a minor, minor spill."

Equipment manufacturers are introducing newer, more compact equipment and chemical companies are developing lower burn, lower LD-50 content concentrates that can be used with less water, he said. Steinau expects only one major change in sales techniques during the 1990s: legal restrictions on telemarketing.

"I think there has been some stated resistance from people on their right to privacy and their right not to be telemarketed," he said. "I think legislators will come in and say, for instance, that you can't use a demon-dialer or can't call a potential customer more than x number of times."

However, Steinau doesn't expect overall pricing methods to change much in the 1990s. Therefore, he's sticking with his current philosophy: do a quality job, charge a quality price and don't worry much about your competitors.

"I can't fault a small operator for pricing low to build a customer base, but ultimately that will fly back in his face," Steinau said. "He's going to reach a point where he starts charging what he thinks he's really worth, and then he'll go through customer attrition. He'll find his customer base is made up of price-conscious people instead of quality-conscious people."

Rather than trying to out-price the competition, Steinau recommended focusing on quality, even if you're serving a smaller customer pool. That way, when cut-rate operators come in, quality firms can defend their customer base by educating their clients.

"If a low-ball company comes in and offers to supposedly apply the same material you do at half-rate, you should tell your customers that that's just not possible, that they couldn't be pricing out that much lower than you," Steinau said.

He said firms should also advise their customers to check out lowball companies with the Better Business Bureau.

"Inevitably, a low-ball company is going to have a list of complaints against them," Steinau said. "When they come into a market, let's face it, they'll initially lose some customers. But the market will eventually bounce back."

Steinau believes the best way to increase profits in the 1990s will be diversification. His firm already offers seven services in addition to basic liquid and dry applications.

"Many companies are afraid to go back and knock on their customers doors for fear of over-saturating them with sales pitches," he said. "But customers are usually pleased that you took the time to tell them about your other services. If you have a customer who's satisfied with service No. 1, it's likely they'll allow you to provide service No. 2 or No. 3 or No. 4."

Company: Greenlon Lawn Care Services

Headquarters: Cincinnati, Ohio

Branch office: Dayton, Ohio

Founded: 1972

Owner: Rick Steinau (since 1974)

Primary Services: Liquid and dry applications, tree and shrub care, aeration, reseeding, renovation, termite and pest control and mole control.

Employees (year-round): 32 in lawn care, 12 in pest control.

1988 Gross Sales: \$2.6 million (for both lawn care and pest control).

R. B. Stout Co. Inc.

Staying One Step Ahead of the Competition

s long as there are suburbs, high school kids will be mowing the lawns. Most do it for spare change, but Rod Stout parlayed his teenage jobs into a career that's lasted more than 40 years.

"I was going to be a pharmacist, and mow lawns on the side to help pay for college," Stout recalled, "but after two years the lawn work was so hypothics and animals."

was so lucrative and enjoyable, I decided to quit school and go into the business full time."

Stout has never looked back, and enthusiastically admitted "it's been a fun life." The business he foundwas doing lawns as a business,"
Stout explained. "Starting a company was a new lawn service concept. But we were in the right place at the right time, and at one point controlled nearly 80 percent of the Akron market."

Primarily a residential landscaper at first, the company has seen many changes over the years. In the 1960s, when construction of the interstate highway system began, Stout branched into road landscaping.

"But highway projects had too much red tape," he said, "so we company works best in a 35-mile, rather than a 1,000-mile radius."

At present, about 70 percent of Stout's customers are commercial accounts, with the remainder being upscale residential clients. To service its customers, the company maintains four divisions:

Landscape construction, which accounts for 40 percent of Stout's volume. About half the division's projects involve design as well as construction, using the firm's own architects.

Maintenance, all performed on a contract basis. The division represents about 30 percent of the business.

Nursery and retail garden store, which bring in some 20 percent of overall company sales.

Spraying, the firm's newest venture, which accounts for 10 percent of Stout's total revenue.

"Each division has an autonomous manager and work force," said Stout, "because it's my philosophy to hire responsible people, give them professional development opportunities, pay them well—and leave results up to them." Managers receive base salaries of \$25,000 to \$35,000 per year, but various performance incentives allow "unlimited earning potential."

Stout sees his company role as two-phased. First, as others handle day-to-day management, he provides the overall direction and framework in which managers function. "But just as importantly," he added, "I'm the people-oriented person in the company. Every complaint or compliment goes directly to my desk because I personally handle customer service."

Meeting customer needs led to Stout's two most recent ventures. In 1978, the company added a retail garden store to the 155-acre nursery where much of its stock is grown. "The site is right on a main road in a very upscale area," he said, "so we thought a garden store would provide a public convenience."

Similarly, five years ago Stout established a lawn spraying service. Because the firm already performed this work on its regular con-



Customers are now viewing their homes as an investment and not just a place to live.

ed in 1948, R.B. Stout Co. of Akron, Ohio, today has more than 150 employees and enjoys annual sales of \$6 million.

While his success is partly due to "being tenacious and hiring good people," Stout conceded he was also lucky. "After World War II the rubber/tire factories kept right on going. Akron was booming, and all kinds of new housing was being built."

Though young people often did odd jobs for neighbors, ''nobody tried landscaping for public housing projects." Business boomed during the heydays of the 1970s and early 1980s, as Stout expanded into such far-flung markets as New York, Indianapolis and Washington, D.C.

However, when the Reagan administration cut back on housing programs, Stout pulled out as well. "Today we've drawn back exclusively to the Akron/Cleveland market and things have been great ever since," he said. "I think the

tracts, Stout explained, "starting a separate spraying divison enabled us to be more specialized, and really tailor our spraying to customers'

requirements."

Over 40 years, Stout has seen a shift in his customers' expectations. "People today," he suggested, "are more conscious about having well-landscaped lawns than when I first started in the business. They make it more of a priority, so they come up with the money to pay for it."

Stout credits the trend to high housing costs. Customers see their homes as investments, "and not just a place to live, like they did a generation ago. People who spend a half million dollars on a house, like many of my customers do today, want to protect their investments. And an attractive lawn gives you one of the best returns on your money."

Consequently, customers expect much more from their lawn and landscape service companies. "In 1948 all you had to know was how to push a lawn mower," Stout said, "but these days you're expected to be more knowledgeable so you can advise customers about horticul-

ture or agronomy."

Rising public expectations have, according to Stout, also impacted lawn and landscape firms in other basic ways. He remembers starting a business with less than \$1,000 invested, but "there aren't many high school or college kids who could come up the \$25,000 it takes

today."

In addition, lawn and landscape maintenance contractors must maintain more professional work forces. Stout predicted "we'll be using more computers, and need more technical training in the future. So for the 1990s, I think attracting and retaining good people — who can handle a more complex and more customeroriented environment — will be the key to survival, success and growth."

Stout estimated he has more than 300 competitors in the Akron/ Cleveland market, which can make personnel recruitment more of a challenge. "When I started, I had the field all to myself," he said, "but I don't think there's anything wrong with competition, either. I wouldn't say the market is saturated, because the growth in the number of companies here has taken place steadily over a 20-year period — and hasn't been a sudden spurt."

The market determines the number of firms, Stout said. "When times are good, companies enter the market," he continued, "and in bad times, some leave. So over the years, I've seen the market stay pretty much in equilibrium."

In recent years, Akron has seen the old-line automobile factories sell out to foreign interests and close their doors. But because Akron retains its industrial infrastructure and educated work force, the city's low land prices are drawing many small- to mediumsized firms.

"For every old-line company moving out, five more are taking their place," Stout said, "mostly relocations from big cities where rents are out of sight. So I've got more business than ever. And that also means five times as many corporate execs need their houses landscaped and maintained."

To grab his share of that business, Stout relies on two sales representatives, bid announcements in the Dodge Reports and local newspapers, plus "a lot of word of mouth." He strongly believes the company's experience and full-service capabilities give it a competitive edge.

For now, Stout is "excited about the future of the business." But with a son and son-in-law in the company, he also looks forward to "turning the reins over someday to capable young hands, and spending more time myself involved in the community. And I wouldn't mind sharpening my golf game, either."

On a personal level, Stout enjoys most the friendships he has made both among industry colleagues and his customers. "It just amazes me how customers get to know Company: R.B. Stout Co. Inc.

Headquarters: Akron, Ohio

Branches: None.

Founded: 1948

Owner: Rod Stout.

Primary services: Lawn and landscape maintenance, landscape construction, nursery and retail garden store and landscaping spray service.

Number of employees: 150. 1988 Gross Sales: \$6 million.

their landscaper more than any contractor," he said. "One guy puts in the foundation, another the walls and fixtures, and another the roof. But somehow the guy who puts the icing on the cake is the one customers become friends with."

Such customer rapport hasn't changed since Stout mowed neighborhood lawns as a high schooler more than 40 years ago. "Maybe the days when a kid could buy a used pickup truck and call himself a lawn service company are over," he said. "but at least the best thing about this industry, the chance to really serve people, has never changed."

Perma-Green Co.

Reducing Turnover Stabilizes Work Force

romoting people from within the company helps Perma-Green of Boise, Idaho, keep employee turnover under control.

Mike Spicer, president, said the company has what he considers good luck with turnover, keeping Perma-Green technicians an aver-

age of three years.

Perma-Green

in company ranks.

technicians have

the opportunity

to move up with-

Field technicians are scheduled 40 hours a week and generally work no weekends. Occasionally weekend work is necessary, but it was limited to just three Saturdays this year. Spicer said such a schedule is rare in the lawn maintenance industry.

"Having Saturdays off is impor-

three offers the next day, he said. In fact, the no-Saturday workweek was initiated in the Reno branch to help curb the faster turnover rate. Because of success there, it was instituted in the company's seven other offices.

Spicer, himself, started at Perma-Green as a field technician when the company was first formed in 1977. He became president in 1987 after the death of James Marria, the company's founder and president, in a plane crash returning from the annual Professional Lawn Care Association of America trade show. Spicer had been vice

president of operations.

Another incentive for employees is the knowledge that there's room to move up within the ranks. Starting as a field technician, the next step up is branch sales manager. After that a person can become an assistant branch manager before being promoted to branch manager.

"We want to move people up as fast as we can," he said. "For management and sales positions, we'd rather promote than hire from outside the company. If you look back, all of the branch managers started out as field technicians."

The down side is that there aren't enough positions for everyone to

be able to move up.

"Over the years, many people treat lawns and do applications. If they feel as though they're not moving up, they leave you and go on to other jobs," Spicer said.

One change Spicer has noticed as the company has grown and stabilized is the attitude of workers. With corporate maturity came a change in their work ethic.

"You just don't see people who are hard working and dedicated to the job," he said.

But he also conceded that the environment around the company has changed from young, bustling and growing to a more stabilized

atmosphere.

"Five to 10 years ago, we were a young growing company and there were probably a lot more opportunities for advancement," he said. "Now a lot of people may not stick around as long as it takes for the opportunities to become available."

À change he foresees for Perma-Green and the rest of the industry is more use of part-time employees working between 20 and 30 hours per week. He said this trend has mainly affected Perma-Green's marketing department, where people seem to want part-time employment.

"I'm really not sure what the reason is. I do know that a lot of people working for us in marketing are either in school or have another job," he said. "At first it was a problem because people were not fitting into our standard eight-hour shifts, but it isn't that hard to work around employees' schedules."

In the field, Perma-Green does use part-timers to help get through the peak season of June through August. However, Spicer said, the company's philosophy will remain with keeping full-time workers predominantly in the field.

Perma-Green hires about 40 seasonal workers each year. These are college students who work part time, mainly in the marketing department during the peak season. Some of the seasonals do go out in the field, being assigned to work with a senior technician.

The typical starting employee hasn't changed much in the company's 12-year history, Spicer said. They are mostly men around the age of 23. Starting pay is about \$6 to \$6.30 per hour, with experienced lawn maintenance workers starting a little higher.

About 30 percent have some type of college background, but not from any one particular field of study. Spicer said the area doesn't have a major college agriculture program to draw people from.

A labor law now in effect in



tant and we think it has helped lower our turnover a lot," he said.

An advantage to being a medium-sized company is that communication lines between management and workers are kept open. Even as president, Spicer said, he knows all 160 employees by their first names.

"It's something we're committed to and promote a lot," he said. "We want all employees to know it's there and that it works."

In addition, Spicer still travels to all the branches, and sometimes can be seen working on customers' lawns alongside his technicians.

The worst city for Perma-Green to retain employees is Reno, Nev. There the unemployment rate is low, and people know they can quit a job one day and have two or Washington and Nevada concerning employees' uniforms has prompted Perma-Green to implement the same measures in its other markets, said Gary Clayton, vice president of operations. The law states that employees shouldn't be required to buy anything unusual as part of their work uniform. The company is required to provide those items.

"It's basically saying that if a guy is supposed to wear a shirt and tie, that's fine he can provide that," he said. "But when you get into the shirts imprinted with the company logo, the company has to

supply that.

The company will use those guidelines in its other markets to

provide consistency.

Another area Perma-Green has delved into before being required by state legislation is random drug testing. That began this year, Clayton said. Between five and 10 employees per month are chosen randomly by a computer for testing.

"It's been accepted greatly by everyone as a whole," he said. "Everyone seems concerned with the company and promoting a drug-free image. There haven't

been any objections."

Another potential regulation, that would be more a nuisance than anything else, is from the federal Department of Transportation that would require all drivers of trucks carrying pesticides and chemicals be at least 21 years old.

"We really don't have technicians under 21, but it's just one more parameter," he said. "It's one more thing to make sure we cover

when we're hiring.'

While Perma-Green was originally founded as a maintenance company for established lawns, it has added tree care and aeration to its services through the years.

The latest addition to its services came this year when it began offering renovation work to its customers. The first renovation work actually began last year on a trial basis. Tree care and aeration also were both offered on a trial basis before they became regular services, Spicer said.

"We studied it and surveyed our customers to see if there was a need and whether there was an awareness of the service," he said. "Then we played with the pricing — doing some at reduced prices. If the response is good, then we implement it as a service the following year."

No matter how much the company changes, one thing will remain constant because of the geographic area: water limitations. Last year, Reno was under strict

water restrictions.

Because of limited rainfall in parts of Idaho and Oregon, much of the area's water supply comes from winter snowfall that is collected in reservoirs. When snowfall doesn't measure up, water restrictions are inevitable, Clayton said.

"Everyone around here monitors the snowfall in the winter to see how much water is going to be available the coming year," he said. "Below ground sprinkler systems are about as common as two car garages here. In the East and Midwest, they're not so common."

While Spicer realizes there are some advantages to being a true full service company, he said he doesn't see the company moving in that direction in the near future.

"I still feel there's a lot of growth to be seen in the lawn care area," he said. "When that starts stagnating, then we'll look seriously at expanding into other areas."

The industry isn't as wide open as it used to be, and the company now has a good number of competitors. New customers still exist, but getting them has proven to be more involved than it used to be.

"It's obvious when I drive through the areas there is a lot of potential for more work. You can tell just by looking which lawns are done by a service and which ones aren't," he said. "We have tapped that part of the market that readily wanted our services. Now we have to find marketing techniques and approaches to reach those who haven't had it professionally done before."

Perma-Green spends about \$600,000 a year on its marketing efforts. This includes telemarketing, television and direct-mail advertising and brochures.

"It pretty much all goes back to marketing and name recognition," he said. "We've gotten a fairly good foothold through marketing and time."

Spicer's not worried about falling behind the pack and losing business because the company's not adding services to keep up with the full service operators. He's not saying the company will never move into more services — just that it's not being seriously con-

sidered now.

"You always adjust to the need and market demands," he said. "One advantage we have is our size. It's an easy size to shift. We can have the vice president for operations and all the branch managers together in a day or two. All decisions about the future of the company can be made quickly."

Company Name: Perma-Green

Headquarters: Boise, Idaho

Branch Offices: Reno, Nev.; Tri Cities (Pasco, Richland, Kennewick), Washington; Spokane, Wash.; Nampa and Twin Falls, Idaho; Ogden and Salt Lake ity, Utah.

Founded: 1977

Owner: The estate of James Marria.

Primary services: Basic lawn care, aeration, tree care and renovation work.

Employees: 120 year-round, 40 seasonal

1988 Gross Sales: \$4.2 million

Understanding Turf Fertilizer Let "EMIL" Show the Way to Healthy Turf

ertilizers should be thought of as something essential and crucial for growing turfgrass, not as an option that will simply help grass grow better.

Fertilizers contain nitrogen, phosphorus and potassium - three nutrients essential for plant survival.

Applying fertilizers should be planned and methodical. Doug Masters, lawn service product manager, The Andersons, Maumee, Ohio, said he recommends fertilizing five times a year by using the "EMILplus-one" system. EMIL stands for Easter, Memorial Day, Independence Day and Labor Day. The fifth application should be made in late October or early November.

For cool-season grasses, Tom Turner, professor of agronomy at the University of Maryland, recommends three to five applications a year with about 75 percent of that being applied from Labor Day through early December.

The late-year applications are important for the enhancement of root systems and to ensure early

Three turfgrass specialists in the crop science department at North Carolina State University recently collected and published turfgrass fertilization guidelines.

For the Southern states - Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and Texas recommended amounts for Kentucky bluegrass ranged from two to six pounds of nitrogen per 1,000 square feet of turf. For St. Augustinegrass, the nitrogen range was two pounds to 8.5 pounds and for tall fescues the recommended amounts ranged from two pounds to six pounds.

Suggested applications for Northern states - Indiana, Maryland, Michigan, Minnesota, New York and Ohio - ranged from two to seven pounds for Kentucky bluegrass and two to four pounds for tall fescues.

The researchers warned the recommendations should be followed cautiously because application needs vary depending on climate, region and soil conditions.

Besides timely applications, Masters said, using a fertilizer with a good mix of nutrients is important for grass to flourish.

All fertilizers have a certain grade (or "NPK" number) clearly marked on their labels. This represents the guaranteed percentage of the primary nutrients found in that fertilizer. N stands for nitrogen, P stands for phosphorus and K stands for potassium. A grade of 18-24-12 signifies that the product is guaranteed to have 18 percent of its weight as nitrogen, 24 percent as phosphorus and 12 percent as potassium.

Choosing between a dry (granule), liquid, slow-release or fertilizer/pesticide combination is a matter of preference on the user's behalf and depends on what is desired of a fertilizer.

Those who choose dry blends do so many times because of environmental concerns raised over the use of chemicals. Granular forms are perceived as the safest form of fertilizer. A major advantage of liquids is that they can be mixed

with pesticides and applied at the same time creating a fertilizer/ pesticide combination.

Slow-release fertilizers, most often a granular, are preferred because the nutrients stay in the ground and last longer, which if used properly can mean fewer applications.

Liquid fertilizers aren't about to lose great amounts of their market share because of environmental concerns. However, more and more liquid applicators are beginning to carry some granulars for those customers who do express a concern about the use of chemicals, said David White, marketing director, CoRoN Corp., Souderton, Pa.

Liquids are more popular because they're easier to apply and more flexible than granulars, White said.

With liquids, you have more choice; you can buy two and mix them for your needs," he said. "With granulars, you're pretty locked in.

For best results, dry forms have to be blended well. Two methods are used for blending granular fer-

Ammoniation is a mixing of all nutrients at a temperature of about 215 degrees Fahrenheit. The nutrients are treated with ammonia or with solutions containing ammonia and other compounds of nitrogen. Moisture is then driven off by heat, and in the end, each grain contains a combination of all the nutrients.

Dry blending simply places all the nutrients together and stirs them. In this form, each individual nutrient does not lose its original identity, nor does it gain the others. For this type to be most effective, the different parts must be of the same size so one doesn't overpower another.

Control release products should provide even, consistent growth for up to 10 weeks. White said an ideal application is one pound nitrogen per 1,000 square feet of turf, totaling from three to 10 pounds annually

Because all fertilizers contain basically the same nutrients, they will obtain similar results if handled and applied correctly.

Applying fertilizers should be planned and methodical.



green-up in the spring.

If a first application is made too early, a good portion, if not all, of the product could run out before the grass starts coming out of its winter dormancy period.

Fall fertilization has become important too, said Paul Mengle, sales and marketing manager for Lebanon Total Turf Care, Lebanon, Pa. Just five to eight years ago fertilizing in the fall wasn't popular or considered acceptable.

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Aeration:

Developing Quality Turf Through Core Cultivation

he importance of aeration is sometimes overlooked, but over the past few years the technology of aeration has improved along with other aspects of the lawn and landscape maintenance industry.

Mike Saffel, a researcher with the Department of Crop and Soil Sciences at Michigan State University, predicts some big changes in the future of aeration equipment. "The biggest thing is making the coring machines faster, covering more area in less time," he said.

In response to this industry need, Michigan State is currently conducting a cultivation timing study, according to Saffel.

While the equipment used to aerate turf-grasses is evolving, the need for aeration hasn't changed. Most importantly, it relieves compaction, increases water retention and controls thatch.

Aeration benefits are generally thought to be noticeable only over the long run. However, the practice has both long- and short-term benefits. Im-

mediate benefits can be seen as core cultivation changes the physical and chemical properties in the thatch, enhancing moisture reten-

tion.

Over the long haul, core cultivation can substitute as a direct topdressing for the turf and continually assist in breaking down the thatch medium.

Timing is important in aeration, and if it's done when the conditions aren't right, the results can be harmful to the turf.

"We recommend aeration in the fall," said William Pound, a turfgrass extension specialist at The Ohio State University. Aeration can be done through late October, but in most areas shouldn't be done in the summer.

"If you aerate then (summer), and there is a hot spell, the turf dehydrates in the root system," Pound said. "There are really two times a year for this. You can aerate in March and April and then in the fall."

Lawn and landscape maintenance services often use aeration for thatch control. If a lawn is fertilized over a long period of time, thatch — an intermingling layer of living leaves, stems, roots and rhizomes — will develop. This is especially true in bluegrass.

There is not much microbial activity in thatch, but with aeration the removal of cores will bring up soil that is rich in thatch decom-

position bacteria.

Pound said aeration is done more today in turf maintenance than ever before. "You are constantly fighting compaction." And in this fight, there are several types of equipment used.

Drum type aerators are available with open spoon tines and closed, hollow tines. The open spoon tines don't take a uniformly circular core, but are easy to clean. Closed, hollow tines take a cleaner, circular core, but require more frequent

tine replacement.

Cam type aerators generally come with closed, hollow tines. They're not dependent on weight for penetration and usually offer the most uniform coring.

Once thatch reaches a thickness of 1/2 inch, it's time to start aerating. If the thatch is allowed to reach a depth of 3/4 inch, aeration won't be effective.

"Then (people) try to power rake it off. Once it is an inch thick, though, there is a lot of grass rooted in the thatch which is also pulling the grass, too."

Clarke Staples, marketing manager for Cushman, Lincoln, Neb., said he believes that the amount of soil removed per square foot is the most important point to consider

when aerating.

"Therefore, if you have a machine that pulls six cores per square foot, there is less soil replacement. It is less effective than one that does 36 holes per square foot," he said. "It also depends on the turf. On a golf green, 36 holes is standard, accepted, the criteria for

which everyone strives. If you are doing a home lawn, six would be the minimum."

The first week of August through the first week of October is "agronomically the best time of the year for the (turfgrass) plant. The weather is cooling off, the grass has had six months to grow with time to establish roots," Staples said.

"Another time to [aerate] is in the spring, because people want their lawns to look good and are frustrated with winter. We have as many in the spring as in the fall," he said, adding that aeration can be just as effective in the spring if done carefully — making sure there is enough moisture and fertilizer.

Adequate penetration is necessary to bring a significant amount of soil to the surface, but maintenance operators should avoid over

penetration.

"At maximum depth, the bottom can be a compaction zone. There are some pieces of coring equipment that go very deep; they can take a 12-inch core out," Saffel said. "The benefit of varying depth is to avoid the formation of compaction zones. If you use the same (depth), say three inches, over the years there will be compaction."

As aeration will always be an important part of turf maintenance, the technology of the equipment will constantly progress. Selling aeration services is not as difficult as many would believe, Staples said.

"It's easy. Everything to do with lawn surfaces is enhanced by aeration or core cultivation," he said. "If you do not do it, the ground becomes compacted, and whatever irrigation does not go into the ground

runs off into the street."

The best example for aeration, he said, is to look at a golf course green. "This is the best turf in the world, which needs to be aerated twice a year. It keeps the surface good, soft and playable." Staples said. "The roots go down deeper and the grass is stronger, so it can withstand the heat and drought. Aeration is the only process which will guarantee healthy turf in stressful times."



It's important to consider soil removed per square foot when aerating.

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Ornamental Herbicides

Timing of Preemergent Application Varies Geographically

rofessionals in the ornamental herbicide industry repeatedly stressed one point when using herbicides — read the label.

The label will indicate which

The label will indicate which weed species the herbicide is effective on, as well as whether desirable ornamental plants might be adversely affected by the chemicals.

William Eubank, president of



Preemergent applications should be timed about two weeks before germination.

GrowScape Consultants Inc., described a typical ornamental herbicide program consisting of three phases: preemergence herbicides, post-emergence herbicides and removing the weeds by hand.

Preemergence herbicides are applied uniformly to an area in a broadcast application before weeds germinate. They don't adversely affect established ornamentals, Eubank said.

Weed germination is temperaturedependent, causing application timing of preemergence herbicides to vary geographically. "Early spring (application) will provide the best control of summer weeds," Eubank said. Warmer climates require an application in the fall for winter annuals.

Generally, applications should be timed a couple weeks before germination is expected, said John Rupp, marketing associate at Elanco Specialty Products, Indianapolis, Ind. "It's better to be early than to be late;" he said. Applicators also have some leeway depending on the longevity of the herbicide.

Longevity of preemergence herbicides varies. It can be two to three or six to eight months, Rupp said.

Applications can be repeated, but caution should be used since repeated applications may cause problems with phytotoxicity, Eubank said. Phytotoxicity can occur if the herbicide accumulates in the plant. Leaves may twist, cup, drop or show mottling, or branches may die-back as a result of phytotoxicity. Herbicides should never be applied more than once every two or three months, according to Eubank.

Postemergence herbicides are applied after weeds appear. They may be applied in one of two ways — foliar (to the plant's surface) or broadcast — depending on the chemical's selectivity, its ability to kill weeds while leaving ornamentals unharmed.

The chemicals can be selective because of differing vascular or anatomical structures in plants. Most of the preemergents are for grassy weeds which are monocots, Eubank said. It's harder to find a good preemergent for broadleaf weeds, which are dicots, and even harder to find one effective on both grassy and broadleaf weeds.

Grassy weeds, such as crabgrass and bermudagrass, and broadleaf weeds, like spotted spurge, are the weeds herbicides are most commonly used on.

Nonselective postemergents require spot treatment, Rupp said. Both Rupp and Eubank warned that care must be taken not to touch any desirable green plant parts or bark, especially if it's young bark, when applying chemicals.

Newer postemergence herbicides are more selective. They are not dangerous in broadcast applications, Rupp said. They may be applied right over the tops of ornamentals.

Postemergents may kill on contact or be absorbed and translocated to the plant's roots. Contractors might want to add a surfactant to postemergent herbicides, Rupp said. That helps chemicals adhere to the leaves, obtaining better results at lower rates.

Never substitute any postemergence material intended for lawns in ornamental areas, Eubank warned. "That is just asking for trouble." He advised keeping turf chemicals a foot away from ornamental beds.

Some weeds are still a problem for chemicals, such as nutsedge. "To my knowledge, there is still nothing labeled for nutsedge in ornamental areas," said Richard Duble of Texas A&M University. "There are chemicals that control nutsedge in turf, for instance, but nothing that is safe for ornamen-

Preemergence herbicides are effective only on annual, not on perennial plants, Duble said. Preemergents can control some perennial weed seeds, but perennial weeds are better controlled by postemergents that are translocated to all parts of the plant.

Other variables to consider when using a herbicide, besides the target weed and the surrounding plants, are the weather and soil. Excessive heat may volatilize chemicals before they can become effective, Eubank said. Likewise, a lot of rainfall will affect the longevity of a herbicide.

Weather is also an important factor for preemergents that require irrigation, Rupp said. Most products will wait seven days for rainfall, although some manufacturers have developed products that will wait 21 days.

Varying soils also affect herbicide applications. Whether the area's soil has a sandy or a clay-like composition affects the amount of the herbicide needed, Young said. Not all products, however, require different rates for different soils. Always consult the label for such information.

In pricing the service to customers, Eubank recommended a time and materials approach, including measuring the beds, calculating the labor costs involved and adding incidental costs and the percentage of profit desired.

"You have to do some kind of measurement of bed area," he stressed, "or you won't even be close." Duble said contractors should also consider the cost of the herbicide and what it would have cost to hand weed the area.

"I was hesitant to try it at first. I thought, surely, there would be some injury to my flowers. But Surflan convinced me otherwise. It didn't harm them at all when we sprayed directly over

Surflan wasn't so gentle to the weeds. We used to have a real problem with crabgrass. We'd have to go in and pull them all by hand. It was so timeconsuming. I figured I was paying close to \$50 for each thousand square feet just for labor.

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"Are you kidding? Spray herbicide over the top of my flowers?



Riding Mowers

Maneuverability Key to High Profit Cutting

iding mowers, according to Ruthann Stucky, marketing director for The Grasshopper Co., Moundridge, Kan., provide "a lot less employee turnover."

And that's as good a reason as any for a lawn and landscape maintenance operator to purchase one, especially in a highly competitive labor market with low unemploy-

Traditionally, those who push ahead under the sun behind a walk behind mower are somewhat on the athletic side. "Riding mowers give you a wider selection of employees," she said.

But other than attracting employees, why buy a riding mower over a walk behind?

First of all, riding mowers are faster than walk behinds, and the sooner you finish a job, the sooner you can go to the next one.

Zen Kulpa, marketing director for Gravely International, Clemmons, N.C., said that when a maintenance operator shops for equipment such as mowers, thoughts should be on

> what the needs are and what function the unit will perform.

The rotary mower is vastly the most popular mower used by maintenance professionals, according to industry experts. A rotary riding mower has one to three blades, is the least expensive and is the easiest to maintain. Most companies offer

riding mowers with a zero turning radius, where the riding mower can turn within its own length, which is important in turf mainte-

The rotary mower holds the lion's share of the market basically because it produces an excellent quality and because the maintenance is significantly easier and less expensive than others,

Kulpa said.

He estimated that about 95 percent of the commercial mowing maintenance contractors use rotary riders, and that mowers with zero turning radius account for about 40 percent of the market.

There are other choices in riding mowers with each having a specialized use. Flail mowers, or hammerknife mowers, are generally used to knock down long strands of grass.

With these machines it's just cut and drop - often in fields. They are mainly used by school districts or municipalities which might be involved in roadside work. An important feature in this mower is that it doesn't throw objects out of the rotary. In a litigious society, this safety feature doesn't

Lawn and landscape maintenance companies that do a lot of specialty work on athletic fields usually choose a reel riding mower. These cylinder mowers offer a very fine cut.

Though flail mowers and reel mowers fill specific needs, they are also harder to maintain and need more service. This is because the components are more complicated than rotary mowers, Kulpa

While blades on the rotary mowers can be readily changed by the operator, changing reel blades is more involved and requires specialized equipment. Changing these blades on a regular basis could become a major expense, Kulpa said.

John Smith of Exmark Manufacturing, Beatrice, Neb., suggested the first thing anyone should look for in a riding mower is maneuverability. The more maneuverability one has, the more production.

To the commercial operator, time will be saved for other jobs. In addition, it's important to find a mower that can accomplish a zeroturn, as well as trim small areas, Smith said. Other things to pay close attention to include reliability and maintenance.

Generally in the lawn and landscape maintenance industry, people

are buying the three-wheeled riding mower. A four-wheeled mower with a 72-inch swath is generally used for 10-acre parcels and up.

Most maintenance operators who have jobs of two acres and up use a 36- or 48-inch walk behind, but 60-inch riding mowers are also common.

A current trend in landscape architecture lends intself to smaller areas with lots of trees and shrubs. For that market, an intermediate walk behind mower with an attachable two-wheeled sulky has been introduced. The sulky turns the walk behind into a riding mower

This mower is available with swaths ranging from 32 to 60 inches. Prices start just under \$2,000 and go up to \$4,000. These mowers are small and maneuverable, with most featuring zero turning capabi-

Stucky said that the zero turning radius mowers "are certainly coming into their own." She compared the current technology in mowing grass to comparing the technologies of the 1950s and the 1990s.

'Consequently, they have gotten a lot of attention. But its taken a while, because of the lever steering in the zero turning radius mowers. Now they see how easy it is, but previously there was some resistance," she said. "People are used to the steering wheel. But this, actually, is a more natural form of steering. You mow grass differently than you drive down the highway."

Also, with zero turning radius, you can tailor the machine to the terrain and adjust the speed. It helps, Stuckey said, by saving time, "because you can address more square footage and make quicker turns without slowing down. It will save as much as 50 percent over the traditional steering method. You don't have to slow down, you don't have to switch gears. It's one smooth operation with fast forward and reverse motion.'



Zero turning

market share.

radius mowers

are increasing in



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Turf Fungicides Taking Steps to Protect Turf From Invasion

robably the most significant trend in the turf fungicide industry is consumer awareness of the benefits of these products. Five years ago, agreed turf fungicide specialists, it was simply weed spraying control. Now, things are more complex.

Now, more companies are offering disease control in their services said Tom Vrabel, product development program coordinator for Chipco/Specialty Products, Rhone-Poulenc Co., Research Triangle Park, N.C. "Homeowners are

more aware.'



The time to control turf diseases varies from climate to climate.

As consumers gain more interest and become more involved with the health of their lawns, the need for fungicides has increased because more vigorous growth offers a greater potential for disease. This is particularly true with tall fescues, bluegrasses and bentgrasses.

The time to control turf diseases varies from climate to climate. In general, snow molds are best controlled in the fall while leaf diseases are best controlled earlier in the year. The blight diseases, necrotic ring spot and summer patch, are generally controlled in the summer, although some research is now pointing to the fall as a possible time to control the threatening diseases, Vrabel said.

An average lawn in the Midwest or East may need as many as three fungicide applications per season.

Because it is a soil borne disease. pythium is often considered the hardest disease to control. The disease pathogen can be present in turf, but not seen before it takes over the entire turf. The disease is most common to bentgrasses.

Operators aren't completely vulnerable to an outbreak of pythium. Since the disease generally prefers certain climate conditions, an operator can predict an outbreak by following a simple equation: Add the area temperature and the relative humidity together. If the number is more than 150, conditions are good for a pythium outbreak, Vrabel said.

If such conditions are present, preventive control should begin immediately because once the disease is spotted, it can wipe out the

turf over night.

The majority of fungicides now on the market are liquid products designed for broad-spectrum control. Since most fungicides act as protectants rather than curative products, fungicides are generally sprayed on leaf tissues to protect them from becoming diseases, according to Vrabel.

Fungicides are also available as wettable powders and water dispersable granulars in addition to the variety of liquids on the market.

As demand increases, fungicide manufacturers have made their products more appealing, with more options than before.

Bill Shane, a turfgrass pathologist at The Ohio State University, said he has noticed some interesting new developments in

fungicides.

There's one (fungicide) called flutolanil. That one looks like a good one on brown patch," he said. 'It's active against rhizoctonia. That's a tough disease to control. It looks like it may get labeled for use next season.

Another promising fungicide in development is tebucanazol from Mobay Co. Shane said it seems to have good activity against a broad range of patch diseases. This product, too, is still in the experimental stage, but is close to release for commercial use.

The big thrust in research right now is to come up with compounds for patch diseases. "These are the biggest headaches," said Shane. 'We know now that they are a complex of diseases.'

The job now is to find out which compounds are effective. According to Shane, there are currently four compounds thought to be effective on patch diseases, "but we are still figuring out which is best. We're getting conflicting claims by manufacturers and a few disgruntled customers.'

Another area of study is figuring out the proper timing for these compounds. As research continues, the chemicals used, and possibly the timing, can change.

When choosing a fungicide you want something that will reduce the number of trips to the customer; a broad-spectrum fungicide with fairly long residual control.

A disease control program is probably the hardest sell for maintenance operators because one year diseases may be running rampant, while the next they may be non-existent. By the time customers start complaining about disease problems, the turf is already damaged.

Maintenance operators have the best chance of selling a disease control program after a year of

disease infestation.

The cost of the program doesn't come cheap either. Fungicide prices are generally more appreciable than a broadleaf weed control product for several reasons. Manufacturers often incur a higher cost to produce the product and applicators are required to use larger amounts of fungicides.



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able disease control that eliminates customer complaints and costly call-backs. Best of all, by upgrading your service with CHIPCO* 26019, you keep your current customers satisfied and build additional business through word-of-mouth. Add CHIPCO* brand 26019 fungicide to your spray schedule today, and you may just have to make room for a new truck in your fleet.



26019 FLO

Landscape Trimmers Commercial Acceptance Sparks Increased Sales

hen the Weed Eater was introduced in 1972, the product caught on quickly with the general public. People, particularly homeowners, were enchanted with this simple and affordable machine that did away with tedious hand clipping around trees, walls, fences and other tight spots.

The term weed eater has since been popularized, and weed eaters or string trimmers are now produced by more than a dozen firms.

In many areas, homeowners remain the primary market for trimmers, but lawn and landscape maintenance professionals have embraced the products as well. During the past five years alone, the commercial trimmer market

> has doubled in size, with annual sales nearing two million units.

"They're growing at the rate the landscaper force is growing," explained Bill Chambers, vice president marketing for HMC/ The Green Machine, Long Beach, Calif. "So

we're looking at somewhere in the 12 percent to 15 percent growth range for commercial trimmer sales.

The perceived tendency for string trimmers to last only one season prompts some contractors to buy only basic models. However, Walt Galer, technical services, Shindaiwa Inc., Tulawatin, Ore., said no product engineered for longer life should last for only one year.

Buying from a servicing dealer is crucial," he said. For example, Shindaiwa has a toll-free line direct to the factory. All dealers are also required to attend company schools and be recertified annually for its 'Sudden Service' designation.'

Product life can be shortened by rough handling, especially by throwing trimmers in the backs of trucks. The air filter is the critical difference for prolonging the life of a trimmer, Galer said. If dirt gets into the engine, it hurts the rings and pistons and can ultimately do other kinds of damage.

Galer recommended that maintenance operators look for trimmers with metal gears and a solid rather than flexible drive shaft.

In addition, professionals need a good carburetor. Galer recommended slide-valve carburetors because, though more expensive, they work well at all cutting speeds. Butterfly valves, on the other hand, work best only when the engine is going all out.

Contractors should purchase models with a straight rather than a curved shaft, according to Bert Thompson, director of marketing for The Toro Co., Minneapolis, Minn. A centrifugal clutch for easier starting and drive system protection, as well as a primer for easier starts are also recommended.

Robin Pendergrast, spokesman for Snapper Power Equipment, Mc-Donough, Ga., advised contractors to look for other useful features in a commercial trimmer:

· Handlebars should be fully adjustable for better control, provide a nonslip grip and be antivibration mounted for operator comfort.

 The cutting head should be heavy duty, while a manual (rather than automatic) line feed allows more trouble-free operation under severe conditions.

 The debris guard over the cutting line should be made of steel, rather than plastic, to give adequate operator protection.

· An electronic ignition assures a consistent spark for easier starting, and a diaphragm carburetor allows the engine to operate at maximum power through all cutting angles.

Though features differ, trimmers designed for commercial use do not vary greatly in size. All offer heavyduty construction. The chief distinction among commercial trimmers can be found in varying engine horsepowers and cubic capacities.

Some manufacturers are currently developing accessories and upgrades to basic models now on the market rather than trying to come out with innovative trimmers,

Chambers said. Examples include attachments which convert standard units into edgers or blowers.

Some customers, however, have been slow to accept this development. Because the engine undergoes more uses in multi-use trimmers, some contractors think the lifetime of the equipment will be

Manufacturers are also investigating a niche for an electronic trimmer. Though trimmers have evolved into gas-powered units (to eliminate any encumbering power cord), pending state and local environmental and anti-noise legislation in some states may someday force trimmers back to their original electronic mode.

According to Galer, Shindaiwa is introducing a new approach to metal cutting blades that will enable small- and medium-sized units to do the work of large units, more safely.

Another trend in string trimmers involves a fixed cutting head with manual line feed, Galer said. Not only do fixed manual heads cost less initially, but they're more reliable and give the operator more

Whatever unit is selected, both manufacturers and maintenance operators agree that certain rules apply for all trimming operations:

· Before trimming, clear the area of loose objects. In the path of a high velocity line, any debris can become a dangerous projectile. Make sure the unit's debris guard is securely attached and that safety goggles are worn.

 Maintain a firm, two-handed grip on the trimmer, and keep the shoulder harness securely fastened.

 When trimming around vulnerable young trees or easily damaged structures, use the shortest line length and reduce operating speed to a middle range. Commercial trimmers allow operators to adjust line length and cutting speed to suit each job and to avoid clogging and extend wear.



Differences in commercial trimmers are found in varying engine horsepowers and cubic capacities.

SHINDAIWATEARS THE COMPETITION APART.

Among commercial trimmers, three names dominate the turf. With Shindaiwa, Echo and Green Machine sharing 3/3 of the market.

So, who makes the best trimmer? We do. We proved it. We matched our new Shindaiwa T-27 against the comparable Echo 2501 and the Green Machine 3000 M. We took them apart.

Shindaiwa And tore them apart in the process.

A TWO STROKE OF GENIUS.

Our 2-cycle engine delivers more power with less weight than either Green Machine or Echo. Quite a feat, considering we sacrifice nothing in quality along the way. Chrome plated cylinders, 2-ring pistons and electronic ignition are standard. The result is a pro machine with the power to work harder. And last longer.

NO BAD VIBES.

Shindaiwa trimmers have the finest antivibration design in the industry. We pioneered anti-vibe design. Every unit is engineered around the concept of lowest possible vibration to reduce user fatigue. Even our harness is made to absorb vibration. Our T-27 represents our second generation of superior anti-vibe design.

Shindaiwa T-27 Shaft

GET SHAFTED BY SHINDAIWA.

Our shaft is 7MM diameter and splined at both ends for easy maintenance. It's also relieved at the engine end for absorbing greater torsional loading. Compare that to Echo's smaller 6MM flex cable. It's the same thing we use on our smallest homeowner flex shaft unit.

LIGHT IN WEIGHT. BUT NO LIGHTWEIGHT.

Special alloys make our units strong, easy to handle and extremely light weight. But our T-27 still delivers greater horsepower than either Echo or Green Machine.

SHINDAIWA KNOWS HOW TO COOL IT ...

Our flywheel has a larger fin area than either Echo's or Green Machine's. So it delivers excellent cooling under high heat, high load conditions.

... BUT WE CAN ALSO TAKE THE HEAT.

Shindaiwa's large insulator block allows for a cooler carburetor temperature and less chance of vapor lock.
Others are puny in comparison.

SHINDAIWA COMES THROUGH IN THE CLUTCH.

Greater horsepower requires
a larger clutch. Our two-shoe
bonded clutch is larger
than either Green
Machine's or Echo's.

T-27 Clutch
So it has greater contact area.
That results in longer life and

I hat results in longer life an smoother, positive engagement.

COME TO GRIPS WITH A SHINDAIWA.

Our T-27 features a suspended front handle grip made of double-density rubber. Compare that to either Green Machine's J-loop handle made of less durable open cell foam or Echo's one-piece grip of hard plastic. You can feel the difference all over your body.

A PROFESSIONAL APPROACH TO CARBURETORS.

An efficient metal slide-valve TK carburetor allows our T-27 to cut in all directions and deliver precise fuel/air metering throughout the mid RPM ranges where pro trimmers frequently work. It's the same type of carb found on high perform-

ance motorcycles. Echo and Green Machine, on the other hand,

offer plastic rotary-valve carburetors designed for

homeowner

Shindaiwa

T-27 Carbureton

NOW, HERE'S THE BEST PART:

trimmers.

Every Shindaiwa trimmer is backed by a 7-day money back guarantee. If, after one full week, you're not convinced that our T-27 is the best trimmer you've ever used, we'll buy it back. No questions asked. You can't lose.

READ ALL ABOUT IT.

Send for free literature that tells our comparison story in full detail.

And discover Shindaiwa superiority part by part.

You'll never be torn between trimmers again.

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Evergreen Lawn Sprinklers Reclamation Top Water Savings Issue

repare now for lawn and landscape irrigation in the year

"This industry must harness the realities and know where we are today so that we can keep turning things green tomorrow," said Michael Pike, president of Evergreen Lawn Sprinklers Inc., Phoenix,

"It's an issue focusing on the reclaiming of water," he said. "It's a big issue. As a whole, the structuring of irrigation design will come out of the village effect: living, shopping, working in one area. Reclaiming water in that village is the wave of the future.

Pike says some states are in the process of building ponds in order to have water for irrigation. Water treatment plants will be constructed to filter used water which will replace the fresh pond water. This 'recycled" water will be used for

Evergreen installed an irrigation system at the Princess Hotel, Scottsdale, in 1987 and at Valvista Lakes, Gilbert, in 1984. The Valvista Lake project is still under development. 'We designed both areas with reclamation in mind using PVC pipe for irrigation purposes.

State and federal guidelines have already set parameters on the use

of domestic water for irrigation.

"But the restrictions are such that we can design around the criteria," Pike said. "You must design irrigation projects with an eye on the future. Build in your options. It's less costly.

Pike said technology has pushed irrigation systems to the forefront

in the last 20 years.

They're designing lower precipitation sprinkling heads and more efficient pumps at variable speeds. It is a cost savings for us, to be sure," he said.

In the long run, he said, it always comes down to dollars and cents. "Irrigation jobs must be preplumbed and set for reclaimed

A company which takes on a complex irrigation project is out of sync with reality if it doesn't consider the reclaimed water issue.

You just don't redesign an irrigation system every two or three years," he said. "It's a permanent installation. Once the system is installed, you don't tear it out in a few years and adapt it to reclaimed water from a treatment plant.

'We have an obligation to our customers to look ahead. It's their investment. And a big investment for us as well.'

Pike said the tail end of the

1980s has set the premise for the future. "There will be limited water supplies to pull from. If you don't look ahead, the bottom falls out of the bottom line.

The bottom line is profit and in today's market, "pricing for profit is non-existent," he said.

'It's unfortunate. This is a highly sophisticated, highly competitive industry," Pike said. "You've got to be more of a businessman than a good ol' boy. There will always be the good of boy syndrome, but these dinosaurs will die off. If you don't have all your ducks in order, you're going to get bitten.'

Being bitten means writing off a bad debt, a nightmare in the hundreds of thousands of dollars, in

some cases.

You can't be a good ol' boy these days and operate on a profitable basis. It makes for restless sleep patterns," Pike said. "You win a bid. Then you get the job done to everyone's satisfaction. Finally, you hope the invoice gets paid.

Pike said a reputable irrigation firm won't just plunge into a project and should learn from others' mistakes. A client and the financial statements from the client's company may look strong at the time of a bid, but a job can go downhill quickly.

Pike cited a case involving a friend. "There was a savings and loan in Texas that backed an irrigation project. Everything looked solid at the time of the bid. Halfway through the installation, the savings and loan went broke and the contractor lost out. He went

"It's not a success story, but it does show that nothing is a sure thing. You can see a strong operation on paper, but in reality, you have to conduct an intensive investigation in order to prevent a write-off.

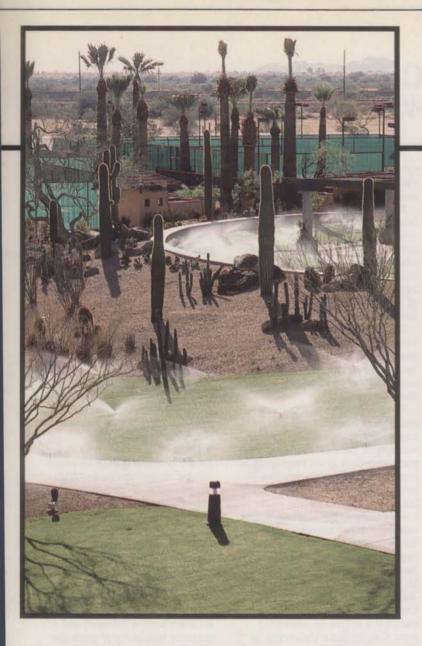
There are fast-pay and interest laws, but some clients find ways around sending in the final check within the agreed time period.

Another side of the irrigation business entering sophistication is the employee pool.

designs must be made with an eye to the future.

Irrigation system





"Money doesn't keep people anymore. There's something above and beyond that now. Employees have to feel good about themselves and about their jobs," Pike said.

If the lawn and landscape industry can't keep employees over a long term, "there will never be any formidable professionals in the industry. You need quality employees. You can't be tied up training personnel constantly. It isn't costeffective."

Pike said you have to keep work out in front of your employees. "Give them responsibility."

Four of the employees at Evergreen Lawn Sprinkers have been with the firm 10 years or more, eight for eight years or more and 20 for more than five years.

'The green industry is growing very fast, we have a solid company. We have the resources to back up our success," Pike said.
"You're only as good as your
resources which are the workers.
Any company with a solid employee roster will successfully progress to the year 2000 and beyond."

From 1978 to 1980, Pike shared an office with a plumbing contractor. Pike had worked on the plumbing for swimming pool installations and was also a part-time landscaper before going into business, specializing in irrigation.

In 1978 he had six employees. By 1980, he had eight and grossed an estimated \$200,000 annually.

There isn't the availability of water in Arizona as there is in most other states. And in Phoenix, also known as the "Valley of the Sun," water had to be used "conservatively with an eye on future demands and requirements," Pike said.

Company Name: Evergreen Lawn Sprinklers Inc.

Headquarters: Phoenix, Arizona

Branch Offices: None

Founded: 1978

Owners: Michael C. Pike, president; Jana Judd, vice president; and Linda Pike, secretary.

Primary Services: Irrigation

Number of employees: 90

1988 gross sales: \$3.6 million

In 1983, Evergreen Lawn Sprinklers moved from the plumber's office to a rural area of Phoenix in what is known as nursery row.

"We converted a house into office space. And we grew a few trees out back like eucalyptus and acacia. Trees out here must be drought-resistant because of the lack of rainfall. It's a good sideline," he said.

Today, Evergreen has a staff of 90 during the peak season and grosses \$3.6 million annually.

The company has earned several awards for its irrigation projects, as well. Among them are Valvista Lakes, receiving an award in 1986; Red Lion's La Posada Resort Hotel, Paradise Valley in 1987; and in 1988, the Scottsdale Princess Resort Hotel.

Pro Grass Inc.

Employee Training Builds Winning Team Performance

t the core of the steady growth of Pro Grass Inc. since its founding 11 years ago is the homegrown approach to human resource development and a continuing environmental consciousness.

"We've grown this company by way of letting people work and expand their areas of responsibility," explained Paul Bizon, president and co-founder of the lawn and landscaping firm serving parts of Oregon, Washington and California. "Without them growing the business the way they did, we wouldn't be where we are today."



Pro Grass, headquartered in Wilsonville, Ore., south of Portland, has grown from a 100 customer lawn care operation in 1978 to a multiservice company with six branches, 10,000 customers and annual sales nearing \$4 million.

The company's philosophy — creating a management atmosphere that rewards creativity and responsibility — is "a big portion" of its success and way of doing busi-

ness," said Bizon, a landscape architect graduate of Portland Community College.

He began offering lawn and landscape maintenance services after his sod customers kept asking him how to take care of the turf after the sale. He attributes most of his knowledge of the rapidly growing green industry to "the school of hard knocks — working with landscapers in the sod industry."

Bizon's belief that "people will be creative if you let them" has been confirmed, but "at the time it looked very risky. We brought in some awfully good people and let them be creative."

Every employee at Pro Grass — except for computer and accounting personnel — has started by working in the field. This management approach gives employees incentive to be creative, take on more responsibility and stay with the company.

For example, Bizon recalled, the company didn't have a marketing director until a field technician one day suggested, "I think I can sell more in a marketing position and be worth more to the company." Today, the former technician, Ken Christopherson, who holds a bachelor's degree in marketing from Oregon State University, is director of marketing.

Pro Grass is finding that economic success can be a double-edged sword. Actually, the robust economic health of the Northwest has created labor shortages — particularly for Pro Grass, which, like the Marines, is looking for a few good people.

"It's (human resource management) going to continue to be our strong point. And it will be one of the most severe problems — finding and keeping those employees that will take us to the next horizon," Bizon said.

For Pro Grass, it seems, the next horizon is already in view — Integrated Pest Management. This approach to the care of lawns, trees, shrubs and ornamentals emphasizes:

 Observation and analysis of landscape conditions. Finding out whether the root of a landscape problem is cultural and therefore can be solved without chemicals.

 Discovering and testing and using safer and often more effective materials, sometimes organic rather than man-made chemicals to address pest problems.

• Using, for example, 10 ounces of targeted purpose chemical rather than 10 gallons in a broad appli-

cation.

"We are no longer spraying and hanging invoices. We spend a lot of time with the landscape, and to do that we had to bring people on line," Bizon said. "The day of [just] putting down weed control and fertilizer is going by the wayside. The consumer wants more.

The area Bizon refers to — the Pacific Northwest with its fertile valleys, rugged coasts and high mountains — is considered to be one of the most beautiful and environmentally conscious regions in the country. Bizon calls Eugene, Ore., "the environmental nest egg of the world."

Bizon and the company's training and technical information coordinator, Steven Varga, point out the company embraces environmental activism (unless extreme) and government regulation of pesticide use. The area has produced many national leaders on the environment and, Bizon said, they have takn on pesticide issues relating to the forest industry.

In Oregon and Washington, the company's primary service area, technicians are required to have a license. Through seminars and study aids, Pro Grass helps its technicians prepare for and pass the 300 to 400 question Commercial Pesticide Applicator Test.

Depending on background, some employees may only need six hours of study while others may have to take the test several times. California law requires only that a key person at each branch pass the test, Varga said. At Pro Grass, however, training is weekly and continuing.

Varga, who has a bachelor's degree in ornamental horticulture from Colorado State University, has developed virtually all of the educational and training materials and plans to compile this information into a manual. Weekly quizzes are provided by Pesticide Compliance and Training Services, North Kingston, R.I.

Time invested in training pays many dividends, according to Pro

Grass executives.

"It makes us more attractive,"
Varga said referring to the favorable impact of the training program on employee recruiting.
"They feel more self-confident and self-assured. It makes us a more professional company too."

The extensive training program also enables the company to train employees faster, Varga said. Employees view being safe and professional in a very "personal" way.

"We don't want to apply materials in an improper manner and want to make better judgments in the field," he said about the pride in the work ethic at Pro Grass.

Prospective employees range in age from 18 to 45 with education levels varying from high school to master's degrees. Most don't know much about horticulture, and Varga intends to find out why more horticulture graduates aren't attracted to the lawn and landscape industry. Varga, who started working at Oregon's largest nursery, believes the industry needs to create more awareness of the opportunity for career employment.

Pro Grass favors reasonable government regulation of pesticide use, and Varga pointed out the need for "more stringent licensing

of private applicators."

"We welcome regulation," he said. "Some unreputable companies hurt the industry's image by not complying with regulations."

Pro Grass supports the concept of more training, licensing and safer application of materials.

"My most important concern is material safety," Varga said. The company continually searches for safer materials and better methods of application while trying to get away from the use of chemicals from the carbamate and organophosphate families. Varga explained that these chemical families are cholinesterase inhibitors. Build up of these chemicals can cause an imbalance in the nervous system. Technicians undergo blood tests three times a year, though he points out, "there's never been a problem."

Target of the company's material search is natural, organically based chemicals, such as pyrenone, extracts from African chrysanthemums and ballicus thuringiensis, an extract from microorganisms which primarily kill catepillar-type

insects

Eighteen months ago, Varga said, Pro Grass began using an insecticidal soap made by Safer Inc. to amplify the effect of other materials to control pests. The soap is derived from plant and animal fat. The company uses a greater variety of materials for specific purposes and limits blanket applications of chemicals.

To make the IPM program work, technicians must have good observation and analysis techniques.

IPM is difficult to implement," Varga said, because it relies on inspection, preplanning and good product formulation and takes a lot of time.

"A person has to inspect the landscape, diagnose the problem and then either treat with a specific insecticide or fungicide or provide a cultural solution," he said. Cultural solutions include watering, mowing, aeration, proper planting, pruning and plant and lawn location. Aeration, for example, is a natural way to control thatch, increase root development and improve drainage.

Pro Grass plans to begin more extensive marketing of its IPM program soon. The company has also begun publishing a quarterly newsletter with information useful to both consumers and employees.

"One of the biggest questions (from customers) is 'Why didn't you spray all the plants?"' Varga said. His reply is, "We don't do that. We first inspect all the plants, find out if there is an insect problem and if so, we'll spray."

"Taking care of pests and doing

Company Name: Pro Grass Inc.

Headquarters: Wilsonville, Ore.

Branch offices: Seattle (2); Portland (2); Eugene, Ore.; and Concord, Calif.

Founded: 1978

Owner: Paul M. Bizon, president and co-founder.

Primary services: Lawn care, aeration, tree and shrub care and ornamental weed control (including bark-bed weed control).

Number of employees: 90 to 100 year-round

1988 gross sales: \$3.7 million.

things that are sound for the environment," according to Bizon are compatible. "Our employees are very environmentally conscious," he emphasized.

The only secret to success in the lawn and landscape maintenance industry of the 1990s, Bizon said, is "hard work and doing what you

know is right."

Pro Grass continues to strive to operate efficiently and effectively so the consumer can afford the growing need for lawn and land-scape maintenance services. For example, Bizon points to his company's pioneering on-line customer service center serving six branches in three states.

Reflecting on the growth of Pro Grass, Bizon concluded, "We didn't have a grand plan. We had a philosophy. My most important job is to make people's jobs fulfilling for them and make them happy in the work place."

Ruppert Landscape Co.

Scholarships Squeeze Labor Out of Tight Market

ith a strategy for recruiting employees as well as training and education programs in tow, Craig Ruppert feels a company can grow despite a tight labor market.

Ruppert is president of Ruppert Landscape Co. in Ashton, Md., where unemployment has not been a problem in the last three years.

Forced to look elsewhere for employees, Ruppert's personnel manager travels to Ohio, Pennsylvania and West Virginia once a month in search of recruits.

"We're willing to relocate employees coming from depressed areas. Until the new workers are established, we'll put a deposit down on an apartment where two to four men may live for three or four months until they find a place of their own. Then they are on their own," he said.

Ruppert's employee coordinator also spends time at colleges and high schools looking for students coming out of horticulture programs.

The company offers a reimbursement study program in horticulture through the University of Maryland for employee hopefuls. "We believe in encouraging education. It builds a solid base of loyal employees," Ruppert said. "If a student gets a grade of B or better, we pay for the course."

Ruppert Landscape has also set up a scholarship program at the local community college for students specifically interested in horticulture. "It's a \$500 scholarship. We find it a good approach to recruiting personnel, especially at the management level."

A cooperative work/study program at the university level gives Ruppert another pool from which

to gather employees.

"It's on-the-job training. We'll schedule a student to work in one of three areas: landscape crewman, landscape estimator or in the landscape management department," he said.

"That one student will experience three important aspects of the business. He finds out what he likes and we discover his strengths," he added.

Ruppert is affliated with the Maryland Nurseryman's Association which trains and tests employees for certification in horticulture. State-sponsored pest control applicators do the same to certify pest control applicators at Ruppert's.

"Our employees are responsible for our success. If you want to grow and be successful you have to put a lot of effort in seeking and recruiting employees. The degree to which you do that and the end result depends on how effective you are at finding good workers. It's not easy, but it can be done," he said.

And Ruppert Landscape Co. is proof positive that hard work and initiative result in success.

Craig Ruppert owned a pickup truck 18 years ago and worked part time at residential mowing. His headquarters were in his father's garage in Chevy Chase. That first year, 1971, young Ruppert grossed \$800

In 1972, his brother, Chris, became the comany's first full-time employee. Together they grossed

By 1977, the company moved to Silver Spring, Md., from dad's garage. "The emphasis then was on commercial landscape installation,"

Ruppert crews pruning ornamental beds.



Ruppert said. "Landscape installation was becoming more important and the market was opening up in the District of Columbia. So we expanded."

By 1978, the firm experienced a 120 percent growth and by 1980, gross annual sales were \$440,000.

The company also purchased new headquarters in Ashton, Md. It's a 10-acre estate owned by Washington Senators' baseball great Sam Rice. It was also one of the largest chicken farms on the East Coast. When the estate fell into disrepair, Ruppert's bought it and remodeled the house into offices.

In 1981, Ruppert Landscape Co. was comprised of five departments and 25 employees. In 1987, there were more than 100 employees, nine departments and annual gross

earnings of \$5 million.

And the company continues to win awards since first entering a competition in 1983. Among the awards are those for Blair Complex, in 1984; Wetlands Planning at Baltimore Harbor in 1985, in which employees used a boat to plant trees and clean debris; Pennsylvania Avenue maintenance in 1988; and the Canadian Chancelory in 1989.

In 1987, the ratio of installation to maintenance was 60 percent to 40 percent, which is about where

it stands today.

Currently, the firm has more than 200 employees with 1988 gross annual sales of \$9 million and

growing.

Other training includes a Ruppert-sponsored field day with seminars and competitions. "For example, we'll show the workers how to properly plant a tree and then have a tree-planting contest. We'll have seminars and additional programs, as well, to improve technical and managerial skills. Then we party. We have fun and the outcome is team building. It's a great concept."

Ruppert still isn't content with all the employee training programs he has instituted. He's gone that extra mile it takes to be successful even breaking the language barrier.

"We started a language training

program where our English-speaking workers learn Spanish and our Latino employees learn English. Our personnel director is bilingual," Ruppert said.

Ruppert admitted that keeping good workers is a struggle and a

challenge.

"If you make the effort, you'll get results. You learn as you go along. It isn't a sure thing. Nothing is. You must teach, show and develop employees. You must begin with orientation. Let prospective employees see the facilities, the equipment, understand company policy and meet the family — the employees they'll be working with. It's all part of the ongoing process to find and keep good workers."

Management level training programs are also high on Ruppert's list. He offers organized management training programs where management level personnel attend a 12-day training program with an

outside consulting firm.

"We give the same approach to management as we do our field personnel," he said. "It is a uniform training program. We have to be on the same wave length with all our employees. Each person has to be tuned into the other so that they will make correct decisions and know when a job must get done."

Ruppert also promotes and emphasizes training for specialty staff members such as mechanics, accountants and personnel workers. "We send them to classes and seminars geared to their fields. If they go, we pay for it."

And, Ruppert added, "you can't talk about training unless you talk about communications. If you don't communicate with your employees, how can they communicate with

each other?"

Ruppert holds a series of meetings which keep all employees in touch with what is going on in the

company.

There are weekly sessions with all field supervisors and their branch personnel. Every department head holds a weekly conference. This includes shop personnel and the sales department. Top Company Name: Ruppert Landscape Co.

Headquarters: Ashton, Md.

Branches: Chantilly, Va.

Founded: 1972

Officers: Craig A. Ruppert, president; Christopher A. Ruppert, vice president; and Christopher E. Davitt, vice president.

Primary Services: Landscape installation, landscape management, irrigation services, enhancement.

Number of employees: 210

1988 Gross Sales: \$9 million

management also holds a meeting once a week to discuss company business

"It all boils down to communications," Ruppert said. "The average person will attend three routine weekly meetings. And minutes are taken at all the sessions, as well."

Ruppert says weekly meetings reduce turnover and develop a solid employee base. "It also improves customer satisfaction, not to mention the bottom line."

Ruppert's philosophy keeps the company going strong. He believes people coming into the Ruppert organization are the future of the company.

Lied's Nursery Co. Growth Potential Limitless in Landscaper's Domain

ied's Nursery Co., head-quartered in Sussex, Wis., was founded in 1946 by Delmar Lied - a man who used his business intuition and his own talent to please people.

Forty-three years later, with a peak employment base of 300 people, Lied's covers Wisconsin, parts of Illinois and other areas of the Midwest. The company's 1988 gross sales exceeded \$10 million.

Though Tom Lied, the company's president, said they weren't striving to become the largest, they're now considered the top company of their kind.

The original business was landscape maintenance and residential contracting. Now Lied offers large landscape planning services, landscape architecture services, landscape design, a modest retail center and about 300 acres of

They believe the future of their company and those similar is through controlling and taking care of clients' external environments, which includes not only "soft-scape" (greenspace) but "hard-scape," which includes anything exterior that doesn't grow.

Again, as with other companies, Lied's suffers from the industrywide labor shortage. The challenge is to be unique, inventive and competitive. 'It will become more difficult and competitive," Lied said. "We will have to find labor and maintain it.'

Lied's plans to appeal to the satisfaction potential employees derive from the industry.

We plan to position ourselves in competition with other industries. In fact, our 12th Annual Crystal Ball Committee Meeting will give us some answers," Lied said. "For four days we will brainstorm what can the industry do to prepare to attract people it needs to face this high competition. We plan on meeting the problem headon. There is a problem, and the best minds in the industry will sit

As with any service industry, getting the employees is only half the battle. Keeping employees and successfully managing the company is another story. Pricing for profit and knowing your numbers are crucial, Lied said.

Those companies who don't know how to manage for profit will fail. You have to convince yourself you are worth the profit," he said. "I think the biggest fear in our industry is the lack of conviction that they are worth profit. One is entitled to profit for work and investment."

But Lied sees a trend. "Some people entering the industry have been warned by educators that success and failure depends not only on technical ability, but also business knowledge," he said.
"Landscape firms fail because they have no business acumen, just technical ability. A businessminded person plans for the future, and knows where's he's going. It's not just love of landscaping. If it is, you will see increasing problems."

Lied questions the idea of universal market saturation. "There is no saturation existing in any part of the U.S. that I know of (except for) economic sections of the country built around energy. They are in real trouble.'

The industry, he said, is experiencing phenomenal growth. "It hasn't even begun to grow to its maturity. If you accept that everything outside the door of a house is the domain of the landscape contractor, then the potential for growth is limitless."

In the 1990s, he said, landscaping is not just gardening - it is both softscape and hardscape. The consumer demand is for full service.

In the residential environments we have two family incomes, and people in that house have no time to (landscape). They want someone to design, maintain, build and care for plants, inside plants as well, Lied said. "This industry has always looked good to me. The limits are our own blinders."

As far as the much discussed lack of employees, Lied said, the employees are there, companies are looking in the wrong places. There are just as many manually oriented people now than ever, but attracting them to the lawn and landscape maintenance industry is more difficult.

'You can go to a four-year institution looking for labor and you are fooling yourself," Lied said. "You look where people have manual inclinations - technical

Lied's exerting company expertise in the vast landscape market.





Company Name: Lied's Nursery Co.

Headquarters: Sussex, Wis.

Branch offices: Neenah, Wis.

Founded: 1946.

Owner: The Lied family.

Primary Services: Landscape maintenance, residential contracting, landscape architecture, retail center and a 300-acre nursery.

Employees: 300 during peak season.

1988 Gross Sales: More than \$10 million.

schools and high schools that have manual education. We need teens that are excited by accomplishment."

If there are not enough young people to go around, "you have to look for another group of people — females or older, retired people. You have to change around scheduling to provide opportunities for those who want to work."

To Lied, the next decade promises to be an "exciting period of time. The whole thing is looking ahead."

Rob Lied, Tom Lied's son and secretary/treasurer of Lied's Nursery, said mechanization is needed by both Lieds and other companies who plan to accommodate future growth. This is the result of the overall labor shortage, and the unwillingness of people to do this type of work for what were once traditionally acceptable wages.

Mechanization, he said, is directly tied to the labor problem.

"Traditionally you could hire somebody that could function and we could make a profit. Now the market demands labor rates that are difficult. I think we will be more flexible," he said. "There is no more luxury in saying to employees, 'Here are the rules and if you're late two times, you flunk."

Lied said the company still isn't quite clear how they plan to approach the need for mechanization in the face labor shortages. They will try to deal with both problems at once — attracting new labor pools, retirees and part-timers and also looking at various machines on the market that could accomplish the tasks of non-existent employees.

"We are now doing the planning for next year, and working on a strategy for the next five years," he

Bartlett Tree Co.

Integrating IPM Practices into its Tree Care Program

eadquartered in Stamford, Conn., Bartlett Tree Co. has been in business since 1907, beginning as a one-man tree care firm. Now 82 years later there are branch offices coast to coast, with 60 locations.

Still family owned, the current president is Robert Bartlett Jr., though his father Robert Bartlett Sr., is chairman of the board.

From tree care, circa turn-of-thecentury, the company now offers preventive tree care with little emphasis on removal of trees. The trol of pests, thus reducing chemicals in the environment.

"It should have been used long before. But chemicals are real easy to do," he said. "We have cut chemical use now by 75 to 90 percent. We started converting five years ago, and it will be complete in two years. It takes a lot of training of your people, a knowledge of horticulture.

This will undoubtedly continue to be a major industry trend, Dages said, as Bartlett too will continue toward the trend of reducing

> pesticide and chemical usage.

Though the greenhouse effect has become a common term among non-experts, it's a real concern in urban areas where, Dages said, trees work 10 times as hard as those in rural or rain forest areas combating the effects

of ozone depletion.

"As the pollution damages the ozone layer coming from the city, trees in the city do much more work," he said.

Bartlett is a strong advocate of planting as many trees as possible in urban areas. One group working toward this end is Releaf Project, a Washington, D.C., group which is trying to educate people on the value of planting trees. This type of activity, Dages said, will result in more work in the industry.

As far as legislative issues, there are ordinances across the country protecting trees. "Lots of places can't cut down trees without a permit," he said.

And like its turf maintenance counterparts, a shrinking labor force will continue to present problems in the next decade.

"Continuing to lure manpower to do this work is a great challenge," Dages said. "Fewer and fewer young people want to go into this work, and the younger population is declining. We share in that decline. Yet there is more call for tree care, and less people to do it.

"They are lured away by higher paying fields, like computers. Our field, though not highly paid, is satisfying if you like it. There is a lot of physical stamina to deal with." he said.

The median age for this kind of tree work is 30, and the minimum age is 18.

While the insurance crisis made headlines through the 1980s, Dages said, "it's past us now. We had it three or four years ago. It's not a crisis now."

The inherent risk of this work is perhaps offset by a growing concern and fondness for trees, and the fact that they are not indestructable. This is evident in the media, and will continue into the 1990s, along with other environmental issues.

"Trees make the news every once in a while," Dages said. "There was the famous Treaty Tree in Texas, which someone tried to kill with a herbicide. They wanted to string 'em up on that tree. We helped save it. It's still alive."

In spite of the growing awareness of trees and the importance of their care, the technology of taking care of trees has remained much the same.

"We can't drive a hydraulic unit into someone's backyard. So that means climbing trees the old-fashioned way, with a rope and a saddle, same as for decades," Dages said.

Yet research is constant, and Bartlett contributes with its labs, researching continuing disease problems, such as Dutch Elm, Gypsy Moth and others.

"A lot of the research is databased, and the government does a lot of research." But in a world in constant travel, "new things are always coming from other countries," he said.

This will be an added challenge

for the coming years.

"The maple leaf trees in Vermont are in danger now because of a lit-



Bartlett continues to educate clients on tree and plant health. Photos: Donald Booth strong suit for Bartlett is the beautification and health of trees, including ornamental trees, pruning, cabling, fertilization, insect control, transplanting, installing lightening protection systems (especially on golf courses and campuses) and chemical applications, which they are now steering away from.

Bartlett grossed \$52 million in 1988. The company employs 1,500 people at its seasonal peak sometimes topping 1,600.

Walter Dages, public relations director for Bartlett, said most of the company's activity is up and down the Eastern seaboard, from Boston to Virginia and Washington.

The firm also offers public utility line clearance, which requires public bidding, an area of the business which increases every year.

An important issue in the coming decade, according to Dages, is integrated pest management, in which biological and chemical solutions are integrated in the con-



Company Name: Bartlett Tree Co.

Headquarters: Stamford, Conn.

Branch offices: 60 coast to coast.

Founded: 1907.

Owner: The Bartlett family.

Primary Services: Maintaining tree health including pruning, cabling, fertilization, insect control, transplanting and installing lightening protection systems.

Employees: 1,500 during peak season.

1988 Gross Sales: \$52 million.

tle insect, one-sixteenth of an inch, coming from California, and before that from Asia," Dages said. "For some reason it attacks pear trees on the coast and (in Vermont) maple trees. Dutch elm disease is still with us, and on the West Coast oaks are endangered by fungus."

As a new decade dawns, "new things are popping up, and we will need answers," he added.

One challenge in the coming decade will be selling services. In Bartlett's utility line service, "we're going to have to think of a more concentrated effort on lower bidding on pricing. The bids with this work are controlled by financial departments of power companies. They take the lowest bidder, regardless of work quality," Dages said.

While lowering bids, Dages said, the company can't lower wages at the same time; creating a dilemma for tree companies.

In providing tree care, the problems might not be so great.

"We will promote more awareness of the benefits of trees, not only the aesthetic benefits, but the health benefits," Dages said. "Studies have shown that people seem to be less tense when they are around trees, whether in the city or the country. It's simply more relaxing. Also, there are the benefits of trees filtering out pollutants and noise. Noise bothers you."

But how to sell these services? Television is out, Dages said, because it is too costly "for this industry. The profit margins are not great enough. Some use radio, but it doesn't target the audience we are after, except mostly FM stations that have a classical format. But even those do not give great results"

What does give results in mar-

keting these services, and has for a long time, is direct mail.

"We will have more direct mail in the 1990s," Dages said. "Companies like Bartlett get 30 percent to 40 percent of the customers from referral. A study recently found that this is still true. It is the best form of advertising, and the cheapest."

As for the greenhouse effect, which worries the people at Bartlett, they will work closely with the National Arborist Association which serves as a lobbyist group that deals with this crucial issue.

"They do a lot of lobbying. The ozone in the atmosphere is very harmful."

All American Turf Beauty Meeting Industry Regulation With Optimism

s applicators, "we haven't been asked to do anything crazy," said Daryle Johnson of All American Turf Beauty, Van Meter, Iowa

> In fact, rules pertaining to groundwater contamination, posting and prenotification may have the advantage of "making people do things better," he said.

Recently, talk about a groundwater crisis has lawn and landscape maintenance professionals, as well as university researchers

customers.

With additional services under his control, "it's easier to get results with the rest of the lawn service," he said. Johnson now continues to adapt to legislative forces that seek to balance the effects of chemicals in the environment.

Two years ago, Iowa passed a groundwater act which was supposedly a model for the whole country, according to Johnson. It deals with many things in addition to lawns and landscapes, including

agricultural interests, wells and their registration, storage tanks and land-

Most of the rules center around the certification of people applying the chemicals and the registration of the chemicals being used, he

The difference between the effects of chemi-

cals on groundwater in the lawn and landscape maintenance industry and the effects in agriculture should be noted, according to Johnson. In many respects they cannot be lumped together.

Turf conditions often make it safer for chemical applications. "We can make four or five applications a year," Johnson said. "It is safer if the applications are smaller and spaced.

Many of the pesticides used in lawn maintenance are insoluble, meaning they don't leach into the

One of the largest services in lawn maintenance is a preemergent treatment to control crabgrass, Johnson said. Those chemicals have to be insoluble or they would leach below a level where they would effectively control crabgrass.

Sod and turf hold chemicals much better than soil, Johnson continued. In addition, newer chemicals have been tested extensively. They have a shorter residual, which means they degrade much faster.

Lawn maintenance professionals also have the option of using slow-release nitrogens. These methods could be used in agriculture, but they are more expensive and are probably not considered cost-effective on a larger scale, he said.

There is research being done to find less controversial methods of doing the same jobs. Much of this kind of research, however, is geared toward the agricultural industry.

Proposed rules to interpret 1987 posting and prenotification legislation are still awaiting a hearing in Iowa. An economic impact study and other analysis delayed scheduled hearings, but officials hope to have things settled by next

"The biggest impact (of these regulations) is that it's going to cost us more money," Johnson said.

How much more money depends on individual companies because without regulations, companies differ in their certification and regulation practices.

According to Johnson, the philosophy at All American Turf Beauty is "to provide the best possible service, treat the customers honestly and charge them for it.'

Part of this "best possible service" is the time spent training personnel. At All American Turf Beauty, "we don't have as much turnover with applicators," he said. As a result, the applicators Johnson does employ are better trained.

"We have always certified all of our applicators," he said, which will reduce the effects of new regulations for his company. Many companies choose only to certify a supervisor. These companies will now have to spend money to certify more people.

They will also need more money per certification. Prior to the legislation, it cost \$10 for a three-year certification. Now there is an option, Johnson said. An applicator must take a test and for \$75 can



and the government scrambling to

learn more about the long-term ef-

fects of fertilizers and pesticides on

states with posting and prenotifica-

The effects of new regulations,

manifested primarily in more time

vary from industry to industry and

from company to company. Some,

like Johnson, are able to adapt to

Johnson worked with chemicals

founding All American Turf Beauty

and fertilizers for 17 years before

in 1976. In 1983, Johnson's com-

pany was listed as number 323 in

Inc. magazine's listing of compan-

Originally a chemical lawn ser-

ing and aeration to better serve his

ies that had grown most rapidly

vice company, Johnson diversi-

fied over the years, adding seed-

over the past five years.

the changes with optimism.

groundwater supplies. Likewise,

tion requirements for chemical

lawn treatments are growing in

and higher cost considerations,

number and spreading West.

All American Turf Beauty technicians are certified applicators.

become certified for three years or for \$30 can become certified for one year.

In addition to certifying his applicators, Johnson's business instincts have told him to always use the best chemical programs, never sacrificing quality for price. Yet even Johnson will be unable to avoid a significant increase in the cost of chemicals because of costs being set by government regulations for the registration of chemi-

It used to cost a minimum of \$25 for the registration of a pesticide, Johnson said. The minimum is now \$250, but fees can reach as much as \$3,000 depending on the volume to be registered. A company pesticide license also varies by volume, starting at \$50.

In Iowa, funds from the increased rates for certification and registration have been used to develop Leopold Center at Iowa State University which is doing research in the area of "sustainable agriculture" - farming methods that sustain the productivity of land and the purity of groundwater with a minimum of chemicals.

The problem with some of these methods is that they have more to do with economics than anything else. Take crop rotation, for instance, Johnson said. "The average farmer is not willing to do

It is agricultural chemicals that suffer the most criticism, Johnson said. "We have a paper here that has been fighting agricultural chemicals for years. They have made the perceptions worse than reality.

And people then transfer these fears to lawn chemicals, he said. They are unaware that there are reasons why the industries are very different.

It's hard to make generalizations about the danger of chemicals to groundwater for either industry, Johnson stressed.

We need to look at the use of chemicals and nitrogen on lawns and turf and see if there is really any problem," Johnson said. Recently there has been research done in this area but, so far, little evidence of lawn chemicals in groundwater has been found.

Though Johnson finds criticism of the lawn maintenance industry can be constructive, he said, he feels there is too much attention about possible negative effects of chemicals resulting in damage to the industry. There have been many recent articles that exaggerate these effects, frightening lawn maintenance cus-

For that reason it is important for those in the lawn maintenance industry to respond to criticism directed at their practices.

As with any criticism, simply responding in a responsible manner can be the most important step. One way for individuals to do this is by writing letters to publications to ensure that the industry's side is also represented. "We have been successful in doing that in the past," Johnson said.

Professionals should have contact with legislators. Keeping them informed can be very important in the process of negotiating regulations for the industry, Johnson said.

The Professional Lawn Care Assocation of America has held a legislative night at its last two conferences, he said, where lawn maintenance professionals are encouraged to visit and talk with legislators. The association also encourages individuals to get acquainted with their own legislators, since state regulations differ so widely.

We also testify at the hearings for proposed legislation, on the safety of lawn care and why not to over regulate it," he said.

Some regulation has its advantages, Johnson said. One of these, he said, is that it relieves the people who are worried about issues such as the environment.

And with posting, there's the advantage of "having a nice lawn with your name right on it. People who see it might want the same thing," he said.

Perhaps more importantly, the regulations do not seem unreasonable to Johnson. There are things they could ask us to do that would be "crazy", he said, such as prenotifying surrounding homeowners.

'It would mean getting a hold of three or four people every time you treated a lawn. That would just be a nightmare," he said.

Until the true effects of chemicals on our environment are known, it will be hard to judge the rules and regulations which are trying to protect the environment. In the meantime, an attitude like Johnson's - doing your best and attempting to weigh the best interests of everyone - is a constructive approach.

Company Name: All American Turf Beauty

Headquarters: Van Meter, Iowa

Branch offices: Ames, Iowa; Waterloo, Iowa: and Cedar Rapids, Iowa

Founded: 1976

Primary owner/stockholder: Daryle Johnson

Primary services: chemical lawn care, aeration, seeding, and selling turf products (fertilizers and chemicals) as a manufacturers' representative.

Number of employees: 32 to 33 year-round, 40 during peak season.

1988 gross sales: \$1.4 million

Lancaster Landscapes

Aggressive Recruiting Snares Employees From Competitive Market

onsumer education regarding pesticides and fertilizers is imperative to a successful landscape maintenance operation.

"You have to use common sense," said Brent Mayberry, vice president of Lancaster Landscapes Înc., Alexandria, Va. "You must be as cautious as possible when it comes to fertilizers and pesticides. Allay a customer's fears about applications.

Provide them with technical information, as well. The educational process with clients must be ongoing. As soon as there are any signals for concern, then find another alternative for that client's problem and keep the contract."

Mayberry said Lancaster Landscapes maintains its chemicals on an as-needed basis, mostly for safeidential) lawn care, but went commercial because no one in the Washington, D.C., area was doing it. We saw a market and aimed for it," Mayberry said. "We had a couple of pickup trucks and expanded from there because of customer demand for our services."

In 1965, gross annual sales were \$1 million. Today, with 500 employees during peak periods and a fleet of 65 plus vehicles, Lancaster grosses in excess of \$12 million a

As a full service landscape contractor, the necessity of pleasing clients doesn't end with Lancaster's commercial customers. This firm must also keep the U.S. government happy.

For the last six years, Lancaster has won the contract to oversee

maintenance.

In addition to the awards the company has received for its work at Arlington National Cemetery, Lancaster Landscapes has received awards for its work at Leisure World, Silver Spring, Md., a planned retirement community; the Shrine of the Immaculate Conception and Washington Harbor, both in the District of Columbia.

In order to locate workers who ultimately help win awards for the company, Mayberry said, the firm runs an active and aggressive recruiting program both externally and in-house.

Mayberry said Lancaster's recruiting program is set up to attract both laborers and management personnel. By advertising in national trade magazines and through networking, Lancaster hopes to obtain the cream of the crop, something which doesn't come easy locally.

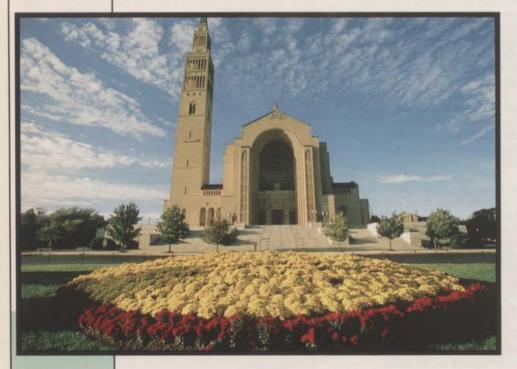
When there is a labor shortage during periods of low unemployment, the firm places ads in newspapers with circulation in small towns as well as in metropolitan areas. Those responding to the ads give Lancaster a pool from which to draw personnel, either for current openings or for future require-

"We have an in-house recruiting program for employees," he said. We also give our staff as much responsibility as possible, because it's important to keep everyone challenged!

Lancaster instills in its staff employees the need and importance of bringing in new employ-

"The competition in D.C. is unbelievable. The multitudes of businesses can get anyone they want to do landscaping," Mayberry said. "But when you have a company that works as a whole, as a business within a business, with goals and incentives for employees, it shows in their work and you're bound to get the contracts others are after.

At Lancaster, employees are the number one asset. Tools are second, Mayberry said.



A Lancaster-landscaped property - the Shrine of the Immaculate Conception in the District of Columbia.

ty purposes. The firm's business clientele don't always require pesticide applications.

Lancaster Landscapes has made a quantum leap from its meager beginnings in 1965 when six employees were needed to handle the commercial contract work

"We originally specialized in (res-

landscaping at Arlington National Cemetery. The 612-acre site on the Potomoc River requires 65 employees year-round. The company has received more than one award from the Associated Landscape Contractors of America for its work at the national site. The work includes re-establishing turf, fertilizing, pest control and tree



To keep employees cognizant of industry trends and technical advancements, employees — including the eight mechanics and two assistants — attend seminars during the slower winter months.

With a fleet full of road service trucks, blowers, sweepers, mowers, vacuums, tractors, grading equipment and aerial bucket trucks, the mechanics "must be kept up-todate on how to maintain these assets."

Area managers who oversee the foremen conduct ongoing training and operating procedure programs with employees, Mayberry said. "We also conduct monthly inhouse safety programs to help prevent liability problems and to keep the men informed about the equipment."

Continous training and employee education are two ingredients for success, according to Mayberry. "If the employees feel good about themselves, they'll feel good about the company, and it shows in their work."

And if the result of that work is a picture perfect landscape, the company keeps the contract.

'That's the bottom line," he said.

'Without good workers, you lose business."

Mayberry said there is an abundance of business out there.

"Consumer demand for full service landscape contractors has just scratched the surface," he said. "It's one-stop shopping. Let the contractor do it all. A commercial client or homeowner doesn't want to be an arbitrator on his own property. He wants to pay a monthly check and have a good-looking product from a landscape contractor."

Commercial property managers are learning first impressions of a business are just as important to a successful operation as are the personnel who run the company, Mayberry said.

"Because of a smart marketing department and a background of award-winning contracts, commercial property managers and owners take notice," he said. "Contracting for a full-service landscape company makes the property attractive to employees and visitors. It also increases the value of that property."

Mayberry said customers in the Washington, D.C./Baltimore area are just one example of the increasing demand for full ser-

"The people are very educated and (recognize) the overall quality of landscaping has increased over the last two years," he said. "If you don't provide top service, there are a half dozen others to take over."

Landscape maintenance across the country will boom in the 1990s, Mayberry said. "We're years away from seeing a saturation in the full service market. We're entering a golden age. With a strong marketing department, consumer education and confident employees, you can only suc-

Mayberry said it only takes a few businesses in a single area to start a trend. The shabby-looking land Company Name: Lancaster Landscapes Inc.

Headquarters: Alexandria, Va.

Branches: Olney, Beltsville and Potomoc, Md.; and Washington, D.C.

Founded: 1965

Officers: Edward Lancaster, president; Brent Mayberry, vice president; Mattie Sowers, secretary/treasurer; and Clarence Peterson, chief financial officer.

Primary Services: Full service landscaping, ground maintenance, hydroseeding, installation and design.

Number of Employees: More than 500

1988 Gross Sales: More than \$12 million

scape stands out.

"No one wants to be the target of negativity," he said. "That's when you go after the property and sign the owner to a landscape contract. With other businesses in the area looking picturesque, that one hold-out will bow under peer pressure from neighboring companies. It works.

SUPPLEMENT TO LAWN AND LANDSCAPE MAINTENANCE.
NOVEMBER, 1989

MAINTENANCE

4012 Bridge Ave. Cleveland, Ohio 44113