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Lawn & Landscape

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Cover Illustration

by Mark Harvey,
Cleveland, Ohio

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White Paper

This in-depth look at the labor shortage facing the lawn and landscape industry examines the dynamics of employing a Hispanic workforce. W1



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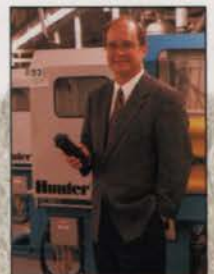
Landscape contractors have found a niche market cleaning up their customers' landscapes by using edging and border products.

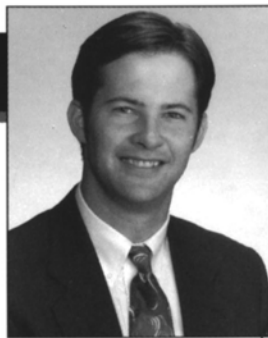
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Bob West
Editor

G

row, grow, grow – that's all this industry has done of late, and 1999 has been no different from the last five or six years.

Our most recent independently conducted research found that *Lawn & Landscape* readers grew by an average of 19.7 percent in 1998 and expect 1999 to result in an additional 19.5 percent growth. In addition, contractors whose business grew this year outnumbered those whose business didn't grow almost 7-to-1. And, as our third annual State of the Industry Report illustrates (page 81), this growth has been enjoyed across all segments of the market.

This is not to say, however, that all is well in Landscapeland. The labor shortage continues to frustrate contractors and restrict their annual growth by upwards of 10 percent. In addition, while the pace of industry consolidation has slowed since this time last year, the fact of the matter is that TruGreen-ChemLawn and LandCare USA changed the nature of the landscape industry forever.

Being a locally owned company used to be a given in this industry – now it is a marketing strategy. But regardless of how contractors market their businesses and regardless of the approaches they employ to recruit employees, the primary challenge facing contractors in the coming years will be the commitment they make to improving their business management skills.

For many contractors, answering the phones, fueling the trucks and collecting the checks has constituted business management in the past. That will not be the case in the future, which is exactly why now is the time for contractors to improve.

Many contractors would disregard the notion that now is the time for improvement, however. "Business is great right now and I've got more work than I can handle. Why do I need to become a better manager now?"

The fact that business is great is exactly the reason why now is the time to improve. Now is when managers can afford to spend time improving their management skills. If your business can't be run successfully without all of your time being spent running it, then that's the first thing to focus on improving.

But for managers who wait until this economy turns south – and it will turn at some point – then the time it takes for you to improve as a business manager from that point on is going to be time that your business falls behind the competition.

In the days when selling landscape services isn't as simple as it is today, companies that adhere to sound management practices – cost management, customer service measurement, route development – will continue to grow and enjoy profitability.

Now is the time to prepare for those days.

Bob West

"There is no such thing as chance or accident. The words merely signify our ignorance of some real and immediate cause." – Adam Clarke

Lawn & Landscape

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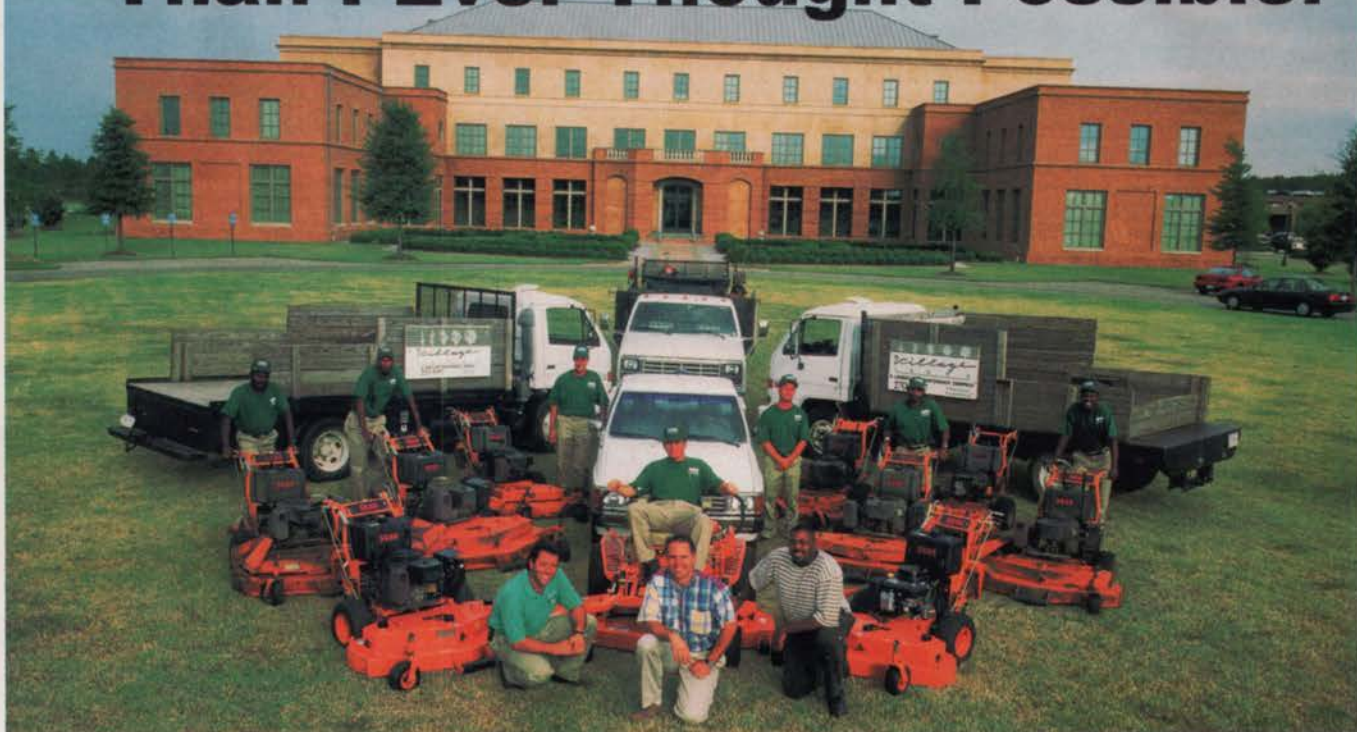
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Next Year
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Week of the Month: 1st, 2nd, 3rd, 4th, Last

Month of the year: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Buttons: Mark All Days, Unmark All Weeks, Unmark All Months, Save, Cancel Changes

Route Sheet

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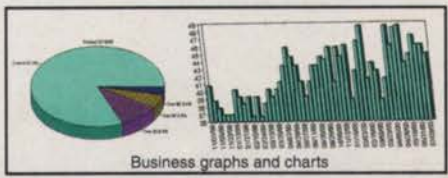
ESTIMATE NO.	3.99	3.99	0.19	116.00
EST. TIME	0.29	116.00	116.00	0.17
ACT. TIME	0.29	116.00	116.00	0.17
ACT. TIME	0.11	116.00	116.00	0.26
ACT. TIME	0.01	116.00	116.00	0.22
ACT. TIME	0.19	116.00	116.00	0.20
ACT. TIME	0.09	116.00	116.00	0.16
ACT. TIME	0.29	116.00	116.00	0.16
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ACT. TIME	34.12	0.99	1075.00	1.67

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Job No.	Y/N	Customer Name
1 2-4	Y	MO INSTITUTE FOR INDE
1 2-10	Y	MO INSTITUTE FOR INDE
1 76-1	N	FENN RUTH
1 76-13	N	FENN RUTH
1 20-1	N	ENGLANDER'S
1 20-3	N	ENGLANDER'S
1 92-1	N	MAIN EQUITY
1 92-2	N	MAIN EQUITY
1 92-15	N	MAIN EQUITY
1 41-1	N	PANTELY EUOENA

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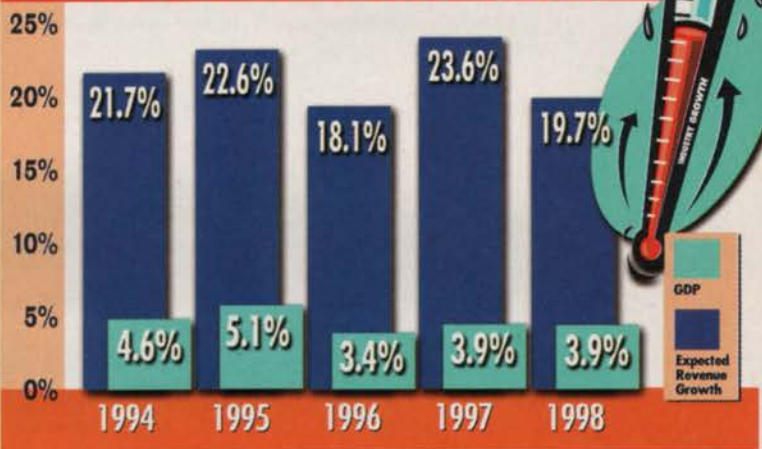
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USE READER SERVICE #12

INDUSTRY BESTS ECONOMY

The industry's growth run of the last five years has been widely talked about, but how many people realize just how significant this growth has been? The gross domestic product (GDP), which is the actual historical growth of the nation's economy, has averaged 4.2 percent annually over the last five years.

This number pales in comparison to the growth enjoyed by contractors who anticipate added sales in upcoming years. These growing contractors have grown at an average of 21.1 percent over the same five-year period.

MONITORING GROWTH



(Source: The Dismal Scientist)

WIDESPREAD FIRE ANT CONTROL

PARSIPPANY, N.J. – The Texas Agricultural Extension Service and Green Grass (a landscape maintenance company) are in a joint effort to implement a program to control the spread of fire ants.

Steve Goodson, owner of Green Grass, said that his residential clients could benefit if they could utilize a new program.

"All of my customers are on the same program," Goodson remarked. "If we see fire ants in any one of those visits, we treat for them."

According to American Cyanamid, entomologists and pest control specialists agree that a community-wide effort to control the wide spread southern pest works better than individual lawn treatments. Some neighborhoods have turned these efforts into fire ant "block parties."

"We think you'll need to treat less frequently if you take the block party approach," explained Mike Merchant, extension urban entomologist, Dallas, Texas. "We emphasize treating on a dry

day in the spring and fall with a broadcast bait product. Ants ingest the bait, take it back to the colony and feed it to the queen.

Once she

dies, the colony perishes. If all homes within a subdivision are treated at once, ants can't move next door and take up residence."

FIRM OFFERS MARKETING SERVICES

CAMPBELL, CA – A marketing firm, GreenAdvice, has formed to specialize in the ornamental, turfgrass, consumer and specialty agriculture industries.

The lead principals at GreenAdvice are Mark Broxon, formerly a general manager with the Scotts Co.; Bob Holmgren, an independent marketing consultant for the consumer lawn and garden industry and Steve Stebbins, an executive recruiter and information services specialist.

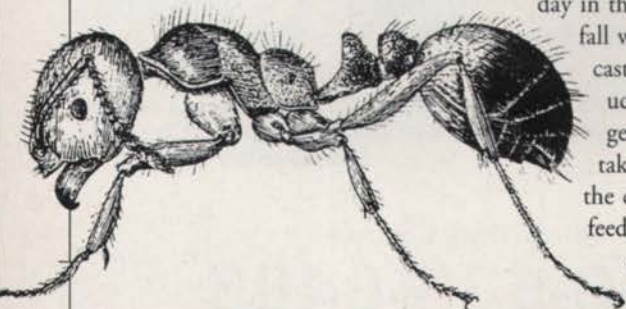
GreenAdvice is a turn-key marketing service firm. Typical projects undertaken by the company include business plan preparation, market research, acquisition search and analysis, new product introductions, positioning and branding.

"Our mission at GreenAdvice is to provide specialized project manage-

ment expertise, market information and general marketing services to the industry," Holmgren said. "Further, we have the ability to quickly identify a client's needs, develop a detailed action plan and then execute that plan in a very cost efficient manner."

Typical projects undertaken by GreenAdvice include business plan preparation, market research, acquisition search and analysis, new product introductions, positioning and branding.

(continued on page 10)



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(continued from page 6)

TRUGREEN-LANDCARE ANNOUNCES CHANGES

MEMPHIS, TN – TruGreen-ChemLawn announced that Paul Anderegg has been named president of TruGreen LandCare, the companies new commercial landscape operation.

Anderegg has been overseeing all of the landscape field operations for the company since its inception in February 1998.

TruGreen LandCare also announced four additional acquisitions totalling \$5 million in sales.

(continued on page 12)

ASSOCIATION NEWS

Clayton Hannon, executive director of the **Oregon Association of Nurserymen** since 1988, announced his retirement effective at the end of 1999. A successor to Hannon has not yet been named.

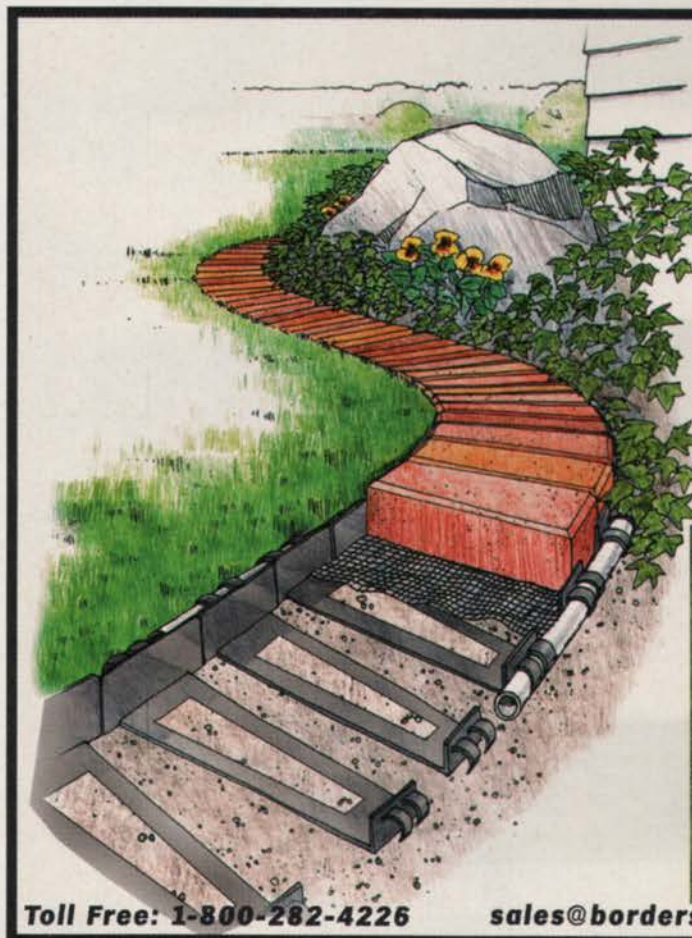
The Associated Landscape Contractors of America Education Foundation has reached a benchmark goal of \$513,000 one year earlier than planned. Its board determined there will be seven scholarships in 1999.

The Professional Lawn Care Association of America announced its key speakers for the Green Industry Expo: Stephen Douglas – "Managing Your Stress," Monroe Porter – "How to Find, Motivate and Retain Employees," Charles Vander Kooi – "Overhead Allo-

cation," James Beard – "Turf Trends in the 21st Century" and Roger Crawford – "Playing to Win."

The International Society of Arboriculture announced the availability of ANSI A300 – Part 2 The Tree Fertilization Standard. This standard is the second in a continuing series of standards for tree care practices. The standard retails for \$20 or \$15 for ISA members. To order, call 888/ISA-TREE.

The governing board of **Responsible Industry for a Sound Environment (RISE)** elected officers for the year 2000: Keelan Pulliam, Zeneca, chairman and reelected to the Board for another three-year term; Jim Champion, Riverdale, past chairman; Lauren Treu, Uniroyal, vice chairman and reelected for another three-year term; and Bevan Gates, Van Waters & Rogers, treasurer. New members are Terry Higgins, Olympic Horticultural Products and Tom Wright, B&G Chemical Co.



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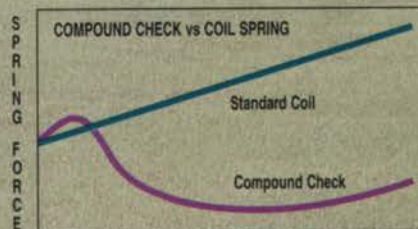


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MARKET TRENDS

(continued from page 10)

NEW FRANCHISE OPPORTUNITIES ABOUND

PHOENIX, AZ – Abundant Landscape Franchising, Phoenix, Ariz., a company that offers a wide variety of services, including landscaping, irrigation systems, water features, etc., has announced plans to franchise its Abundant Landscape Design centers.

Dale Shipp, president, said phase one of the franchise development plan will include Arizona, New Mexico and Texas.

"We are basically cloning our current business," Shipp commented. "If the franchisee follows what we have been do-

ing then he or she should have a successful business."

The developers of the popular Christmas Décor franchise system have introduced Nite Time Décor, a landscape lighting franchise system.

"Customers like to do business with contractors they already trust," explained Curtis Hogan, executive vice president. "This program will be targeted at the average consumer and will offer them more than the standard run-way lighting."

Hogan said Nite Time Décor franchisees will benefit from the organization's three-day technical training, marketing and business management education, design tips

(continued on page 18)

CALENDAR

To ensure that your meeting date is published, send an announcement at least 10 to 12 weeks in advance to *Lawn & Landscape*, 4012 Bridge Ave., Cleveland, OH 44113.

OCT. 19-20 The Western Nursery & Garden Expo, Las Vegas. Contact: 800/517-0391.

OCT. 25-28 Kentucky Turfgrass Conference and Trade Show, Covington, Ky. Contact: 606/623-6130.

OCT. 27-30 California Landscape Contractors Association Annual Convention, New Orleans. Contact: 800/448-2522.

OCT. 28 Sixth Annual Southeast Texas Grounds Maintenance Conference, Conroe, Texas. Contact: 409/539-7822.

OCT. 29-31 New Jersey Shade Tree Federation's Annual Meeting and Tree Expo, Cherry Hill, N.J. Contact: 732/246-3210.

NOV. 3-5 ERNA's Expo Fall '99, Atlantic City, N.J. Contact: 800/376-2463.

NOV. 7-9 The International Irrigation

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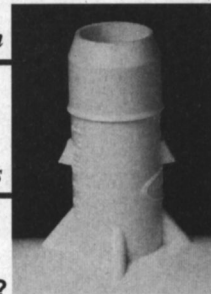
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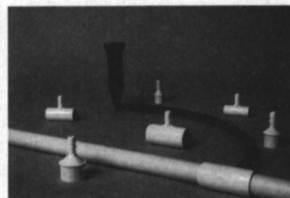
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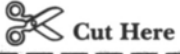
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NOV. 9-11 The New York State Turfgrass Association, Syracuse, N.Y. Contact: 800/873-8873.

NOV. 13-16 The Green Industry Expo, Baltimore. Contact: 770/973-2019.

NOV. 16 The National Arbor Day Foundation Building With Trees, Philadelphia and New York, Contact: 402/474-5655.

NOV. 18 MAGIC Recertification Seminar, Kansas City, Mo. Contact: 816/561-5323.

DEC. 6-9 Ohio Turfgrass Foundation

Conference & Show, Columbus, Ohio. Contact: 740/452-4541.

DEC. 6-9 Irrigation Association of New Jersey Turfgrass Expo, Atlantic City, N.J. Contact: 973/379-1100.

DEC. 7-9 Georgia Turfgrass Association's 30th Annual Conference and Trade Show, Atlanta. Contact: 770/975-4123.

DEC. 8-9 Rocky Mountain Regional Turfgrass Conference & Trade Show, Denver. Contact: 303/770-2220.

DEC. 9-10 Dr. Alex Shigo's Tree Chemistry: Chemistry of Fertilizer and Pesticide Applications, Portsmouth, N.H. Contact: 603/436-4804.

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JAN. 4-5 Ontario Turfgrass Symposium Show, Toronto. Contact: 519/767-5000.

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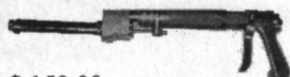
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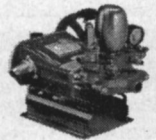
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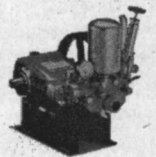
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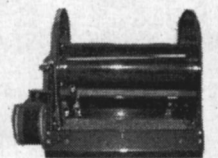
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USE READER SERVICE #19

MARKET TRENDS

(continued from page 12)

and product accessibility.

"Because of the volume we plan on dealing in, we will keep substantial inventories for our franchisees to access," Hogan said.

Blake Smith, president of Nite Time Décor and Christmas Décor, said contractors who understand the challenges of landscape lighting enjoy high profit margins.

Smith said initial plans were to sell the first 10 franchises by the middle of September and then work with this group for two months to perfect the system before selling additional franchises.

For information on Nite Time Décor, call 877/552-4242.



PEOPLE

Rich Kalik was named national accounts manager for American Cyanamid's Turf & Ornamental Group and **Kyle Miller** was named senior technical specialist for American Cyanamid.

Hunter named **Tom De Cavalcanti** district sales manager for southeastern Florida, Puerto Rico and the Caribbean.

Eco Soil Systems/Turf Partners appointed **Thomas Vrabel** as bioherbicides product manager and technical services director.

Briggs and Stratton named **Douglas Glass** engineering manager for its International Operations Division.

David Teuschler was named assistant production manager for Valley Crest Tree Co.

Storm Industries added new sales team for Buckner By Storm: **Don Thompson** is director of sales, **Jerry Zella** is western regional sales manager, **John DuBose** is central regional sales manager, **Vahan Bagdasarian** is international sales manager and **Paul de Rham** represents Buckner By Storm in Europe.

Thomas Tootle joined Irritrol Systems as district sales manager for the Southeast United States and Florida panhandle.

Ingersoll-Rand Co. announced the election of **Herbert Henkel** as president and chief operating officer. In addition to his new position, Henkel has been elected to the company's board of directors.



David Teuschler



Tom DeCavalcanti

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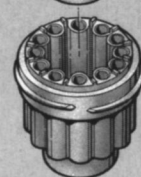
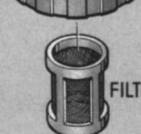
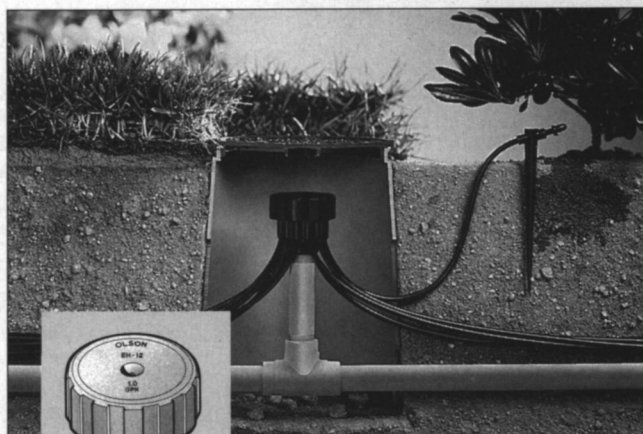
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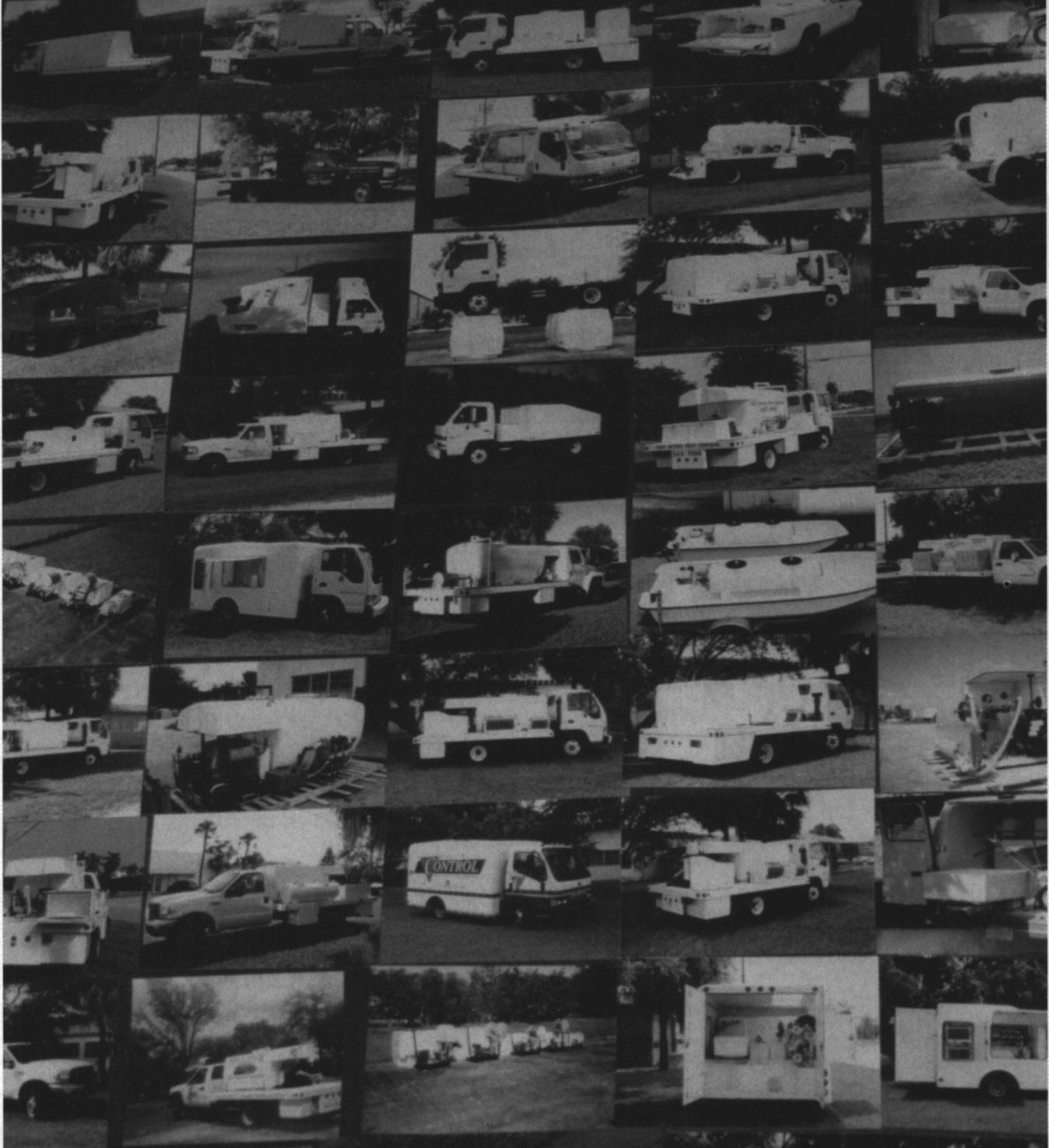
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▼ DOW ON THE DEFENSIVE

AVON, COLO. – SEPT. 9 was the day when specialty pesticide manufacturers realized the frightening reality of the Food Quality Protection Act and one manufacturer was forced to call for help from its products' end users.

This was the day when Dow AgroSciences, Indianapolis, Ind., announced the results of the Environmental Protection Agency's preliminary reassessment of chlorpyrifos, the active ingredient in its popular insecticide

(continued on page 22)

DowAgroScience's Response to the EPA

Following are excerpts of Dow AgroSciences' response to the U.S. Environmental Protection Agency's preliminary risk assessment of chlorpyrifos, the active ingredient in its insecticide Dursban.

"The EPA's preliminary risk assessment for chlorpyrifos contains numerous errors and omissions of fact and is premised on fundamental errors of science and law. These errors include use of highly unorthodox and largely unsupported science policy decisions that reject the use of or failure to consider reliable and available data."

Dursban. Chlorpyrifos was re-evaluated during the EPA's examination of all organo-phosphate products.

The EPA proposal included significant reductions

in the acceptable exposure levels for chlorpyrifos, thereby threatening currently approved uses for the product such as applications to turf by lawn care operators.

Even before the release of this reassessment, the first significant reassessment for the lawn care industry, pesticide manufacturers have openly criticized the EPA due



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BREAKING NEWS

(continued from page 20)

to what they believe is the Agency's non-scientific approach to reevaluating these products. The jeopardy now facing Dursban only enflamed this criticism.

"This is complete madness," asserted Tim Maniscalco, manager for government and public affairs for Dow AgroSciences. "The EPA doesn't have a good handle on how to assess non-food uses of these products."

In the reassessment of chlorpyrifos, Maniscalco explained that the EPA disregarded research Dow AgroSciences conducted involving approximately 10 humans in favor of its own re-

search involving three dogs.

As a result, Dow AgroSciences may be forced to remove all lawn care uses from the Dursban label in order to continue selling the product into the much larger agricultural market if the EPA won't alter its reassessment.

CALL TO ARMS. The EPA is scheduled to react to Dow AgroSciences' response to the preliminary reassessment in the first week of October, at which time the Agency will release its proposal for Dursban's re-registration and begin a 90-day public comment period. A final ruling on the product could come as early as July 2000.

Maniscalco and Dan Bouck, communications manager for the Dow AgroSciences, emphasized the importance of lawn care operators expressing their support for Dursban to the EPA via letters or the Internet.

"What users of the product need to do is tell the EPA why they use Dursban," noted Bouck. "The EPA needs to see the benefits of this product."

"The EPA reassessment procedure categorizes risk only and doesn't account at all for a product's benefits," noted Maniscalco. "Not measuring the benefits of a product makes revoking tolerances much easier for the EPA."

While this issues involves one product from one manufacturer, Bouck warned lawn care operators and other manufacturers to prepare for similar battles over other products in the coming years.

"This is not just Dow AgroSciences vs. the EPA or environmentalists vs. industry," observed Bouck. "This reassessment represents an indictment of the specialty pesticide industry."

"This industry needs to realize this is going to be a way of life for the next five to 10 years, and we need to pay attention every time a product important to us goes through reassessment," agreed Maniscalco. — *Bob West* **LL**

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White Paper



Managing
Immigrant
Labor

Welcome

Dear Green Industry Professional,

CHARLES DICKENS once wrote, "It was the best of times, it was the worst of times." Although I'm sure the professional landscape industry of the late 1990s wasn't what Dickens had in mind when he penned that phrase, it certainly applies to our industry today in some ways.

By and large, the industry has never been stronger or healthier as contractors continue to report annual sales growth in excess of 20 percent, more homeowners are buying professional lawn care and landscape services, and the industry as a whole continues to professionalize itself and the way it conducts its business.



At the same time, identifying and hiring qualified labor has never been so difficult, and contractors find themselves continually frustrated as they are forced to turn away work that they don't have the personnel to handle.

This problem has been alleviated to some degree in recent years through the commitment of equipment manufacturers such as Husqvarna Forest & Garden to produce equipment that delivers increased productivity to contractors and their employees who use these tools. But improved equipment alone cannot solve this problem, so contractors have been forced to

seek out additional solutions.

One such solution, and it has become increasingly popular in the last 10 years, is the use of immigrant labor. While this has proved a very popular and effective answer to many companies' hiring problems, employing immigrants also presents its own series of challenges for the contractor.

At Husqvarna, we believe that through nurturing our customers we will be their number one choice. We nurture our customers in many ways, including helping to bring to light important issues that affect their businesses. For that reason, we have worked with *Lawn & Landscape* magazine to produce industry roundtables each of the last three years that have given us the opportunity to spend 2½ days exploring issues of critical importance with contractors from around the country. This year, that discussion focused on the challenges of immigrant labor – an issue so critical to contractors' success that we've used the information shared during this roundtable to produce this document.

While we don't believe all of the answers to the questions you may have about employing immigrants will be answered here, we do hope this document will answer many of those questions and help you to become more productive and more profitable businesses.

Best regards,

A handwritten signature in black ink that reads "Dave Zerfoss".

Dave Zerfoss, President
Husqvarna Forest & Garden

IT'S NO SECRET what challenges lawn care and landscape businesses today more than anything else – the lack of labor. The national unemployment level has fallen as low as 4.2 percent, meaning there are fewer available employees today than there have been in years. (By contrast, the national unemployment level in 1993 averaged 6.9 percent.) A 1998 survey conducted for *Lawn & Landscape* magazine found that 33.7 percent of its readers listed the lack of qualified labor as the number one limitation on their businesses' growth.

Of course, it's not a coincidence that this labor shortage is occurring at a time when contractors are most in need of employees as the thriving economy of the last few years gobbled up the unemployed while simultaneously creating increased demand for contractors' services. But being forced to turn away work frustrates any contractor, and there seem to be few long-term solutions available that will free up contractors' businesses up to grow as rapidly as the market will allow them to.

One solution that has yielded positive results to contractors has been the employment of immigrant labor, primarily Hispanic in descent. A 1998 *Lawn & Landscape* survey found that 55.4 percent of its readers employ some Hispanic employees and, in fact, 60.6 percent of these companies said Hispanic employees comprise more than half of their workforce.

While employing Hispanic individuals has provided tremendous results for many contractors and has become a more popular option in more parts of the country as the Hispanic population grows in different cities, additional management challenges go along with employing a multi-cultural workforce. For example, how important is it that all employees speak English? If a contractor hires an employee that doesn't speak English, who will communicate with him or her from the company? How much responsibility does the contractor assume for finding housing and/or transportation for immigrant employees?

These issues rarely confronted contractors outside of immigrant-heavy areas such as Florida, Texas, Arizona and Southern California, but contractors in Cleveland, Chicago, Boston and Portland are finding new, Hispanic populations in their areas and are looking to capitalize on these individuals' capabilities.

A hindrance to the industry's ability to develop solutions to the labor shortage has been the lack of a unifying pres-

Ir

Around the Table

THIS WHITE PAPER is a result of the third industry roundtable hosted by Husqvarna Forest & Garden Company, Charlotte, N.C., and *Lawn & Landscape* magazine. The event took place over two-and-a-half days in March and featured representatives of 17 leading landscape companies. The event was moderated by Jack Mattingly, an industry consultant with Mattingly & Associates, Atlanta, Ga. Participating contractors were:

- Joe Aurilio, human resources manager, Mariani Landscape, Lake Bluff, Ill.
- Bruce Bachand, vice president, Carol King Landscape Maintenance, Orlando, Fla.
- Bruce Birdsong, president, Precision Landscape Management, Farmers Branch, Texas
- Terry Culver, director of operations, ILT Vignocchi, Wauconda, Ill.
- John DeBell, president, Clippers, Chantilly, Va.
- Terry Feldhaus, human resources manager, Chapel Valley, Woodbine, Md.
- Tim Jackson, Davey Tree, Kent, Ohio
- Joe Janssen, president, Stiles Landscape Service Co., Pompano Beach, Fla.
- Pete Haran, vice president, Lipinski Landscape Services, Mt. Laurel, N.J.
- Michael Hoogenakker, president, Showcase Landscape, Minneapolis, Minn.
- Ron Kujawa, president, Kujawa Enterprises, Cudahy, Wis.
- Ricardo Leal, vice president, Villa & Sons, Miami, Fla.
- Tim Lynott, branch manager, Chapel Valley, Woodbine, Md.
- Chuy Medrano, co-owner, CoCal Landscape Services, Denver, Colo.
- Rick Randall, president, Randall & Blake, Littleton, Colo.
- Rick Rosenzweig, vice president, Northwest Landscape Industries, Portland, Ore.
- David Snodgrass, president, Dennis 7 Dees' Landscaping, Portland, Ore.
- Maria Threadgill, operations manager, James River Grounds Management, Glen Allen, Va.

try roundtable, the third of its kind sponsored by Husqvarna, gave contractors the opportunity to share problems and solutions with each other while also talking with the director of the Immigration and Naturalization Services' operations in North Carolina.

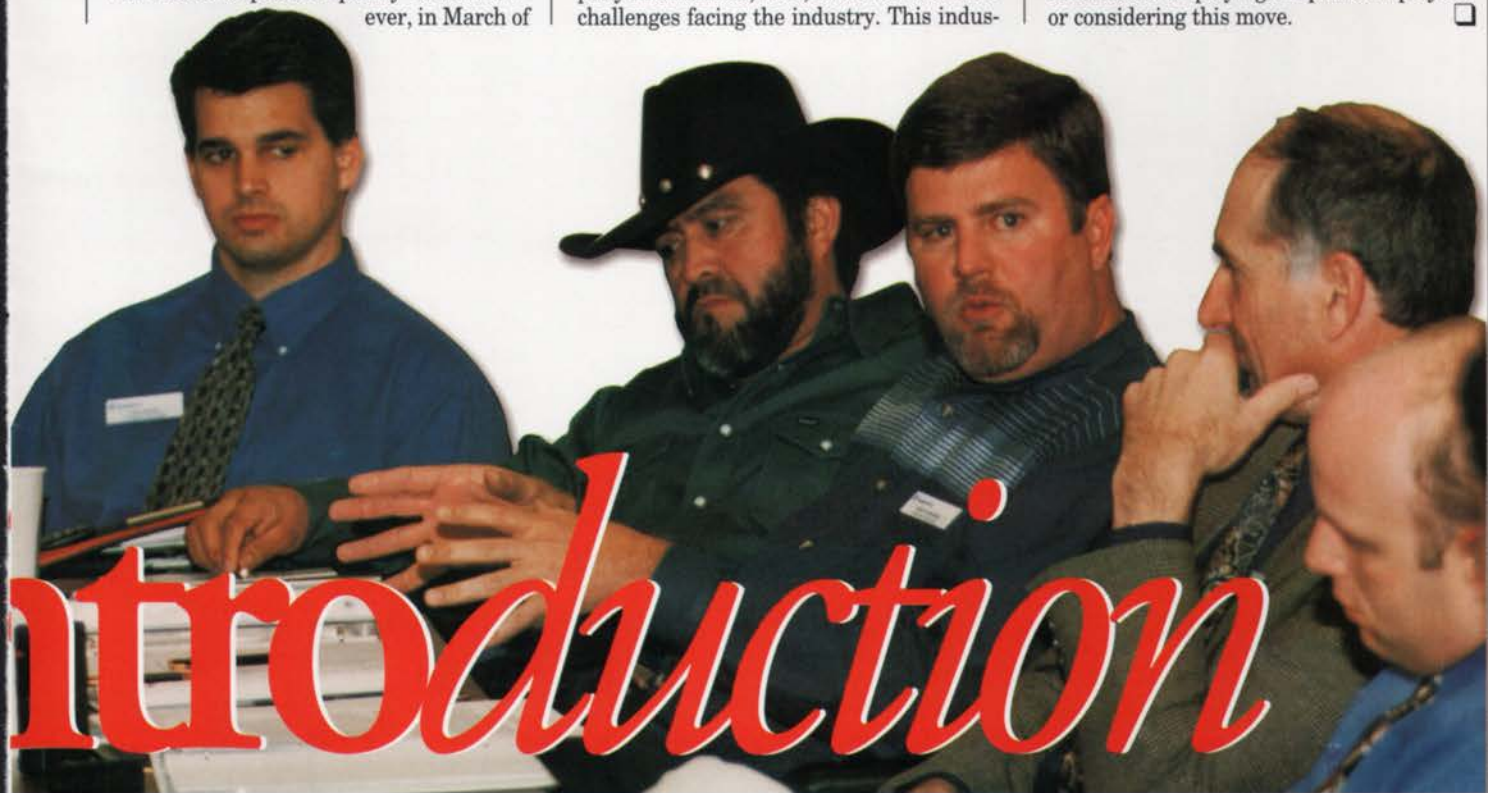
"There are two issues here to deal with: the issue of finding an adequate supply of labor and the issue of hiring illegal aliens," observed Joe Janssen, president, Stiles Landscape Service Co., Pompano Beach, Fla. "This problem is going to require the involvement of all of the large companies and organizations in this industry. Together, we can do something, but the government has to be made more sensitive to our needs, and that's a major problem right now."

As a by-product of the roundtable, *Lawn & Landscape* and various industry associations surveyed contractors nationwide in order to acquire data that would provide a more comprehensive statistical picture of the industry's labor situation. (Summary results of this survey are presented on pages 4-6.) This information will be used to help industry groups convince key legislative personnel – on both the state and federal levels – that this industry is a valuable part of the American economy and that without necessary changes to current legislation the growth pace of contractors' businesses is significantly slowed.

At the same time, information from the roundtable is presented here to assist those contractors employing Hispanic employees or considering this move. □

ence within the industry that collectively represents landscape and lawn care contractors nationwide to analyze the problem, examine potential solutions and move forward with ideas to provide quality labor. However, in March of

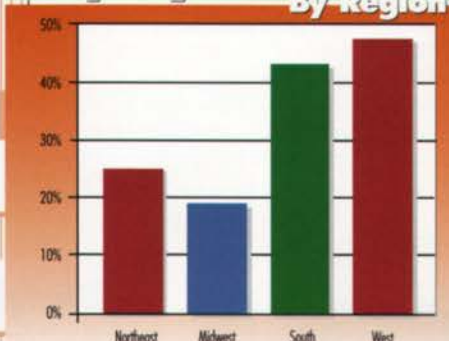
this year, representatives from 17 leading landscape companies across the country came together at the North American headquarters of Husqvarna Forest & Garden Company in Charlotte, N.C., to discuss the labor challenges facing the industry. This indus-



The first industry wide labor survey indicates the impact of the labor shortage on contractors' businesses.

IN RECENT YEARS, few issues have challenged lawn care and landscape contractors' businesses more than the shortage of quality labor. A survey conducted by *Lawn & Landscape* highlighted the labor crisis facing the lawn and landscape industry. Downward pressure on prices, the rising level of education and career expectations within the youngest sectors of the American workforce, and the restrictions and regulations placed on hiring legal aliens (most commonly Hispanics from Central and Latin America) by government agencies have combined to severely limit the pool of workers available to lawn and landscape contractors.

Percent Hispanic Employees By-Region



Contractors in the South appear hardest hit by the labor shortage—on average firms in this area report being understaffed by more than 12 percent. These respondents also report having “lost” the most revenues in 1998 due to inadequate staffing, predicting they would have been able to increase sales by almost 15 percent had they had access to a sufficient labor pool. Overall, Midwestern firms report being the least affected by the shortage of qualified workers, reporting a labor shortage of just 7 percent and average lost 1998 revenues of 8.5 percent.

Despite looking for opportunities to broaden their migrant worker

base, only 11.2 percent of firms currently participate in the U.S. government's H2B program, which offers temporary work visas for legal immigrants (see article on page 7). While a number of respondents were not aware of the program and its details, others cited the difficulties, expense, and time involved in participation as deterrents.

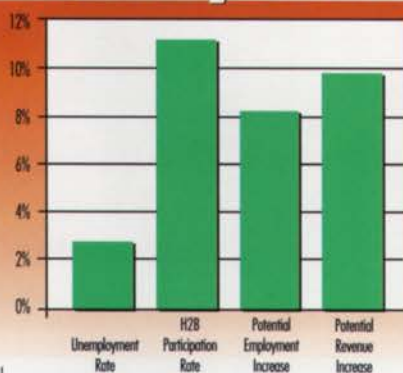
THE CURRENT LABOR POOL. Hispanics in general make up more than one-third of the employees of our survey respondents. Lawn and landscape contractors report particularly high concentrations of Hispanic employees in the West and South, where Hispanic populations are largest. Although Mexican Americans and aliens make up the bulk of Hispanic employees in the lawn and landscape industry (more than one-third of our respondents report employing workers of Mexican descent), contractors also employ many individuals of Salvadorian, Puerto Rican and Guatemalan descent, among others. In addition to Hispanics, lawn and landscape professionals report employing immigrants from Japan, Portugal, Cambodia and the Middle East. Contractors also employ many individuals of European and African American descent.

While many firms would not be able to maintain their current level of business activity without employing individuals from Mexico and other Latin nations, the increasingly service-oriented nature of the lawn and landscape industry creates challenges for these often non-English speaking individuals to successfully service their employers' accounts. In addition, legal aliens often have difficulty obtaining a valid driver's license.

Employers, for their part, complain that the employment of aliens is subject to needlessly frustrating and time-consuming legal and regulatory intricacies. Other challenges include high turnover among immigrant employees, which leaves contractors with

Labor Crisis S

Summary Chart



little choice but to pay overtime to cover their service obligations, thus reducing profits and limiting the wages that contractors can pay field personnel. Some lawn and landscape professionals also complain about having to compete against firms that knowingly use illegal aliens and can undercut those with above-the-board employment practices.

The government's H2B program is cited as a partial solution by some, although many familiar with the program complain that it is too expensive and that the process for participation is too slow and difficult. Other solutions include expanded use of high school and college students for seasonal work and the development of in-house programs to teach English, driving and job skills. Some employers even offer aliens residences to encourage their return the next season.

THE IMPACT. While contractors remain frustrated with the obstacle the labor shortage creates for their own individual growth, because of the size of the lawn and landscape industry and the strength of burgeoning demand for such services, the shortage also has a significant impact on employment and economic growth locally and nationwide. Just based on the strength of the market for lawn and landscaping services and even given the current constrained labor supply, lawn and landscape contractors expect to increase

employment at an average annual rate of 9.5 percent through 2004, with employment levels accelerating over the period from 2002-2004. However, survey respondents report they would be able to increase their employment today by 9.1 percent on average if they had an unlimited supply of qualified employees. The total effect would be the employment of an additional 2,300 persons just among the approximately 300 firms surveyed here. On a regional basis, respondents in the South and Midwest noted the most growth potential (and thus missed opportunities) from staffing issues.

Given the number of firms involved in the lawn and landscaping industry – more than 70,000 – the aggregate effect of the labor shortage in the lawn and landscape industry on the greater economy is potentially enormous. Financially, and by potential employment, the effect of a limited labor supply is the most striking in the West North Central subregion, an area with a very small but expanding demand base. The more temperate regions, where year-round demand for landscaping and lawn maintenance provides great opportunity for growth, are also severely affected by the labor shortage. In the healthy markets of the West South Central states, for instance, respondents report they would have been able to increase 1998 revenues by more than 15 percent if they had had adequate staffing.

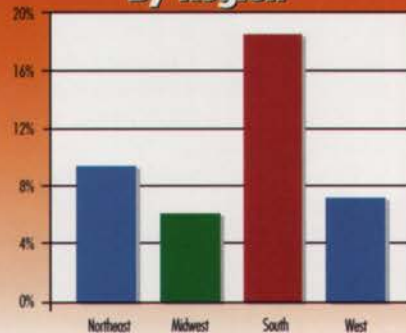
In aggregate, the availability of a qualified, unlimited labor pool would have raised respondents' 1998 revenues by an average of 10.8 percent, resulting in an additional \$145 million in sales **among our 300 survey respondents alone.** Only 14 percent of respondents stated that having a much larger supply of workers would not have increased their revenues.

REGIONAL TRENDS. While lawn and landscape contractors across all four major regions expressed frustration regarding the inadequate labor supply, the severity and impact of the crisis is felt differently in each area. Varying unemployment levels, different rates of market growth, the average size of regional participants, the presence of state employment programs and the availability of migrant and other low-wage labor pools are just a few of the factors accounting for such differences.

NORTHEAST

Employment – Survey respondents in the Northeast region have fewer employees per establishment than the average participant to this survey. Firms in the Middle Atlantic (New Jersey, New York, Pennsylvania) reported they could employ 11 percent more

H2B Participation Rate By-Region



and New Englanders (Maine, New Hampshire, Connecticut, Massachusetts, Rhode Island, Vermont) were prepared to employ an additional 3.9 percent. Respondents in the New England states reported healthy rates of expected employment growth over the next five years, indicating their confidence in the overall growth of this regional market. Lawn and landscape professionals in the Middle Atlantic market, on the other hand, expect below average employment growth over the same time period (relative to other survey participants).

H2B Participation – Despite a need for more employees, the rate of H2B participation in the Middle Atlantic subregion – which is just 6.5 percent – is among the lowest in the country. Conversely, participation among New England respondents is fairly high relative to other subregions at 14.3 percent.

Revenues – Both New England and Middle Atlantic respondents reported average revenues of \$3.2 million, considerably lower than the \$4.5 million average revenue per establishment of all survey respondents. The effects on 1998 revenues had there been an unlimited labor supply differ significantly

Survey

between subregions based on the severity of the labor pinch in each. New England firms predict on average that their 1998 revenues would have been 5.3 percent higher if fully staffed, while Middle Atlantic contractors report they would have been able to boost sales by 13 percent had they had access to an adequate labor supply.

MIDWEST

Employment – With an average of more than 130 employees per company, Midwestern survey respondents are on average considerably larger than companies in the other three regions. Given an unlimited labor supply, West North Central firms (Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, Missouri) would each employ four more people on average – an increase of more than 22 percent. East North Central (Illinois, Michigan, Ohio, Wisconsin, Indiana) respondents, who are more fully staffed, would employ an additional 10 individuals to increase employment by 6.6 percent.

As it is, firms in both Midwestern subregions expect to increase employment by more than a 9 percent average annual rate through 2004, with accelerating employment rates in the 2002-2004 period.

H2B Participation – An overwhelming number of lawn and landscape contractors in the Midwest don't participate in the H2B program. Less than 8 percent of East North Central respondents participate, and less than 6 percent of West North Central firms use the H2B program.

Revenues – East North Central firms are particularly large, with average revenues of \$8.1 million. Respondents in this healthy regional market predict they would have had a fairly modest increase in 1998 revenues of 8 percent given an unlimited labor pool. In contrast, the West North Central subregion is represented by firms that, on average, have revenues of \$942,000, which closely mirrors estimates for industry averages. These companies feel particularly restrained by the poor supply of laborers, reporting the potential to have increased 1998 revenues by almost 30 percent if fully staffed, which reinforces the effect this labor shortage is having on the industry as a whole.

SOUTH

Employment – Survey respondents in the Southern region are on average the smallest of all respondents in number of employees. Among the three Southern subregions, firms in the South Atlantic (Delaware, Florida,

Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia) are the largest, averaging more than 57 employees per establishment, while the smaller firms of the East South Central (Alabama, Kentucky, Mississippi, Tennessee) and West South Central (Arkansas, Louisiana, Texas, Oklahoma) subregions employ on average 43 and 46 employees, respectively. Participants in all three areas would employ significantly more individuals if they were available, increasing current average employment by 11.4 percent in South Atlantic states, 13.5 percent in East South Central states and 15.1 percent in West South Central states. Even given the current labor situation, contractors in the South Atlantic and East South Central subregions expect to increase employment by more than 11 percent per year on average through 2004, with increases topping 14 percent in the 2002-2004 period. Firms in the West South Central subregion have a more reserved outlook, predicting annual average employment increases of less than 9 percent over the next five years.

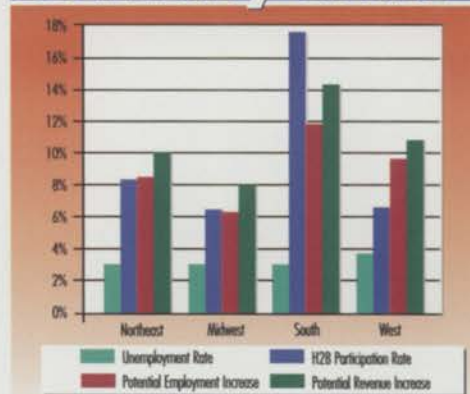
H2B Participation – Participation in the H2B program varies substantially among the Southern subregions. Lawn and landscape contractors in the East South Central have the lowest rate at 8.3 percent, while 13.2 percent of respondents in the South Atlantic region take part. Firms in the West South Central subregion report the greatest participation rate among all of the U.S. subregions, with almost one-third of respondents participating in the program.

Revenues – Average revenues also vary significantly between the Southern subregions, with firms in the South Atlantic reporting the highest revenues and those in the East South Central the lowest. All participants from the Southern region are optimistic about their ability to increase revenues given an adequate labor pool, with firms in the South Atlantic reporting increases over 1998 revenues of 13.6 percent, and respondents in the East South Central and West South Central subregions reporting potential revenues increases of about 18 percent if fully staffed.

WEST

Employment – Survey respondents in the Western region have the second highest average number of employees per establishment (behind the Midwest). This is due to

Summary Chart



the particularly large size of participants from the Mountain states (Utah, New Mexico, Idaho, Nevada, Wyoming, Montana, Arizona, Colorado), which average more than 127 employees per establishment. The firms of the Pacific subregion (Alaska, Hawaii, California, Oregon, Washington) average 87 employees. Lawn and landscape contractors in both subregions would employ more individuals given an unlimited labor supply, with respondents in the Mountain states predicting they could employ an additional 13.4 percent, and those in the Pacific states reporting employment potential for 6.7 percent more. Participants in both subregions report among the lowest rates of average annual expected employment growth (7.8 percent each) over the next five years compared with the average of all respondents.

H2B Participation – None of the contractors surveyed in the Pacific subregion participate in the H2B program, despite chronic understaffing and its negative effect on revenues. Participation among firms in the Mountain region, on the other hand, is one of the highest in the country at 15.8 percent.

Revenues – Respondents from the Mountain subregion have the second highest average revenues at \$6.2 million, behind only the East North Central subregion. Firms in the Pacific states, by contrast, have average revenues of \$4.4 million. The Western subregions vary dramatically in their predicted revenue increases over 1998 levels had they had an unlimited labor supply, reflecting the magnitude of the labor shortage in each. Firms in the Mountain states report the potential to increase revenues by 16 percent on average if fully staffed, while Pacific contractors report being able to boost sales by 6.8 percent with an adequate labor supply.

By Bob West

Two programs exist enabling contractors to hire immigrant labor they know is legal.

H2B & JEVVP

LEGALLY EMPLOYING IMMIGRANTS is possible, and the federal government is even willing to help companies do so. In recent years, the government has developed two programs through which contractors can obtain immigrant employees that are known to carry the necessary paperwork to legally work in this country.

The H2B and Joint Employment Verification Program are federal programs that verify immigrants' legal status as employees before they enter the country or before they begin employment, respectively.

Pat Walters, director of investigations for the U.S. Immigration & Naturalization Service in Charlotte, N.C., explained that the H2B program is a classification of immigrants that gives these individuals temporary authorization to work or receive training in the United States. The work to be done can-

not be agricultural work (those immigrants are classified H2A) and the work has to be temporary or of a seasonal nature.

According to a nationwide survey conducted by *Lawn & Landscape* magazine, 11.2 percent of the industry currently participates in the H2B program. Participation was highest in the South at 18.0 percent, followed by 8.9 percent in the Northeast, 7.2 percent in the Midwest and 7.1 percent in the West. While some companies credit their ability to grow to the H2B program, others remain openly critical of the bureaucratic challenges applying for employees presents.

H2B employees come into the country only after a company files a petition with its local INS office to receive H2B employees. Such a petition can only be approved if the petitioning company demonstrates that it cannot hire U.S. citizens to fill its vacancies. "We were required to place a help wanted ad in the local newspaper for three consecutive days and show an insufficient response to the ads before we could apply for H2B workers," noted Pete Haran, vice president, Lipinski Landscape Contractors, Mount Laurel, N.J. Other contractors reported similar pre-application requirements.

According to contractors who have employed immigrant labor through the H2B program, once the INS approves the company's application for the work visas, the company generally needs to enlist the services of a recruiter to bring the employees to the United States. The employer also agrees to pay these individuals' transportation costs to and from their home.



Three companies represented at the third annual Landscape Contractor Roundtable, sponsored by Husqvarna Forest & Garden Co., Charlotte, N.C., and *Lawn & Landscape* magazine, used the H2B program to obtain employees in 1999.

These companies paid the recruiting firm between \$200 and \$1,000 per employee with one company hiring as many as 60 employees through the program. The typical wage paid to these employees ranges from \$6.25 an hour to \$7.05 an hour.

In addition, companies are required to find housing for their H2B employees, although the employees pay for it.

"We view the housing requirement as a positive because most Hispanic employees don't have a driver's license and we would have to provide them transportation to and from work," pointed out Maria Threadgill, operations manager, James River Grounds Management, Glen Allen, Va. "Now, we own

Pete Haran (below) criticized the time required for H2B approval with Joe Aurilio (opposite page, left) said improving the H2B program is the industry's best solution. Photos: Bill Webster & Environmental Care



housing within walking distance of our office that we rent to our H2B employees."

Other contractors hiring immigrant labor have also acquired or built housing near their office and they charge the employees rent to live in these fully furnished properties via a payroll deduction.

"There are a couple of companies providing H2B recruitment services, but contractors should check them out carefully before contracting with one because there are also some companies looking to take advantage of the situation we're in," noted Bruce Birdsong, president, Precision Landscape, Farmers Branch, Texas.

"H2B allows for a maximum of 10 months employment before the employee has to leave the country, but we've had about 80 percent of our H2B employees return for employment again the next year," noted Haran.



Threadgill also reported that some of James River's H2B employees have worked for the company for more than one year through the program since employers are allowed to request that the visas be granted to specific individuals at the time of application.

"Another problem is that companies have to continually apply for H2B workers because the employees are only granted temporary legal alien status," added Haran. "We just have to accept the fact that we will constantly be training new immigrant employees if we want to use this program."

"But this program still doesn't solve the problem for employers who are not located in seasonal markets," pointed out David Snodgrass, president, Dennis' 7 Dees Landscaping, Portland, Ore.

"The labor problem in the snow belt is significantly different than the problem in the southern parts of the country," agreed Ron Kujawa, president, Kujawa Enterprises, Cudahy, Wis. "As an industry, we need to get the government to understand the uniqueness of this problem for our industry and get them to react."

"We were raided by the INS in the spring of 1998, which is why we participate in the H2B program now," noted Lipinski. "But there are still problems with this program, such as the 120-day required filing time. We have to be able to anticipate our labor needs so far ahead of when we actually need the employees that anticipating the exact needs and then getting the necessary state and federal approval in time to get the employees by when you want them to work is difficult."

"In 1998, we applied to receive 75 workers on Jan. 15 and we got approval for them on Sept. 15, which was obviously too late," Haran continued. "This year, we applied for employees on Nov. 15 and received approval on March 6. From there, working with the INS to actually get the employees to our office takes an additional 30 to 60 days."

While the bureaucratic red tape and costs associated with the H2B program frustrate contractors partaking in the program, they are quick to point out that there isn't any better alternative.

"Once you get raided, you'll want this type of verification too because losing 30 to 50 percent of your employees on one day really hurts," Haran declared. "I hated losing employees that were good employees but were illegal immigrants, but I would also love to have a raid where we don't lose anyone."

JEVP PROGRAM. The JEVP differs from H2B in that JEVP is still in the pilot testing phase with only a handful of companies currently participating.

The concept behind the program is that employers can submit a prospective employee's identification number to the government via a computer system so the government can authenticate that individual's identity and legal U.S. citizen status before the individual is hired.

"JEVP does verify that employees are legal ahead of time, but the program is voluntary and it costs us about \$1.09 more per hour for an employee than our competitors pay because of the way the employees are classified by the government and because there are fewer legal employees to hire than there are illegal employees to hire," noted Joe Aurilio, human resources manager, Mariani Landscape, Lake Bluff, Ill. "And what happens if the industry finds out that there aren't enough legal employees to hire? Any company that takes itself out of the JEVP sends a clear signal to the INS that it either thinks it has problems with some of its current employees or it wants a way to hire more employees."

"But we got involved in the program because we had thought we were do-

ing everything correctly and we found out during a raid that about 60 percent of our employees were illegal aliens," Aurilio recalled. "It's a real game of Russian roulette."

Aurilio explained that all of the company's employees at the time it entered the JEVP were grandfathered in and not submitted to

"Here, the Mexican labor force is the only nationality willing to work accordingly, diligently and effectively for wages the market will bare." – Texas

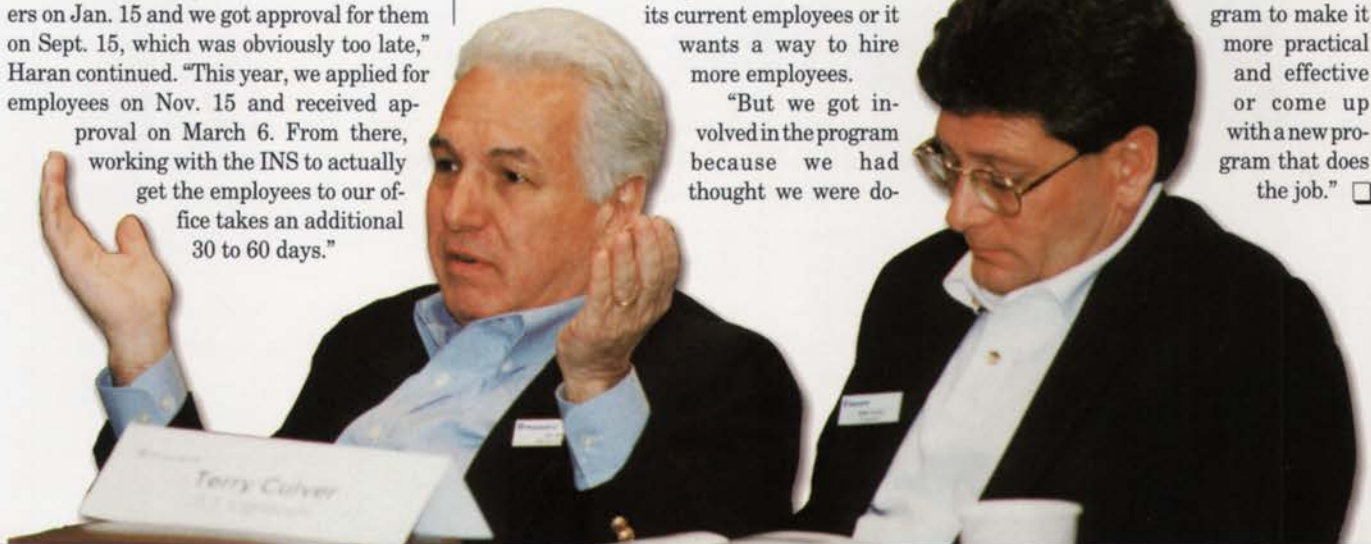
verification, but every potential new employee from that day forth had to be verified as a legal U.S. resident.

"And the INS can still audit us to make sure we are submitting the names of everyone who we actually hire," Aurilio added.

"This type of verification program is the last thing we would want for our business because we need the Hispanic workforce to survive," admitted another contractor. "These people are our best laborers, so we should focus our efforts on developing legislation that will allow us to have an adequate supply of a legal workforce."

"I would guess that despite our best efforts at only hiring legal employees, about 10 percent of our workforce is still illegal," related another contractor.

"One way or another, the government is going to be invasive into our businesses," asserted Aurilio. "We have to revise the current H2B program to make it more practical and effective or come up with a new program that does the job." □



Terry Feldhaus
(opposite page, right)
examined examples of
authentic and forged
green cards with Pat
Walters of the INS.
Photos: Bill Webster &
Roger Mastroianni

FACT: The Hispanic population within the United States is currently estimated at 10 to 11 percent of the total population and is expected to soon double.
FACT: Current estimates place the number of illegal immigrants living within the United States between 4 and 7 million.

FACT: Only 171,154 illegal immigrants were removed from the United States in 1998.

FACT: The national unemployment level in the United States was 6.9 percent for 1993 and 4.2 percent in mid-1999.

Landscape contractors have a problem, and it promises to get worse.

Business is good, but contractors can't find people to do the work. Wages have increased in recent years, but not dramatically as contractors' attempts to raise prices are regularly rebuffed by the marketplace. Contractors nationwide complain about unwillingness on the part of most American citizens to perform landscape construction or maintenance work for the wages the contractors are able to pay.

As a result, contractors have embraced the ever-growing Hispanic population that not only diligently and capably performs the necessary



World

fieldwork but also becomes frustrated when they can't work at more than 40 hours.

The problem contractors then run into is the fact that many Hispanic employees are in the United States as illegal immigrants, a constant focus of the U.S. Immigration & Naturalization Services operations. As INS officers work to remove illegal immigrants from

the country and the federal government limits the number of immigrants allowed to obtain the necessary documents to secure employment in the U.S., contractors see what may be their last hope to continue growing their businesses disappearing without any replacement options.

Attendees at the third annual Landscape Contractor Roundtable, sponsored by Husqvarna Forest & Garden Co., Charlotte, N.C., and *Lawn & Landscape* magazine were greeted with sobering information from Pat Walters, director of investigations for the

Checking the Card

A BAD GREEN CARD is still good enough to get hired, and illegal immigrants know this.

In fact, battling green card counterfeiters constantly challenges the U.S. Department of Immigration and Naturalization Services and forces the government agency to periodically redesign the card and incorporate new security features.

Pat Walters, director of investigations for the INS in Charlotte, N.C., offered contractors some helpful hints for examining the validity of a green card presented by a potential employee:

- Valid green cards should include a photograph beneath the lamination covering the card. A photo on top of the lamination is a sign of an invalid card.
- None of the letters on the card should

appear broken. The card should appear professionally printed.

- The seal on the card should be an image of an eagle clutching arrows in its talons, not some indistinguishable shape.
- The newest green cards (in use since January 1998) incorporate a hologram of the Statue of Liberty on the front and images of state flags and past U.S. presidents on the back.

By Bob West

Working with INS

INS office in Charlotte.

"The INS is not the avenue by which your problems will be solved," affirmed Walters. "The fact of the matter is that a lot of times you hire people that you think are legal – they may even think they are legal – and then the INS comes along and you lose those employees.

"We understand that with unemployment so low there isn't a sufficient employee pool for employers to draw labor from," Walters recognized. "And, as long as the disparity in the standard of living exists between the United States and Mexico, people are going to come here to work, and no one can blame them for that. But, you have to understand that from my per-

Contractors can limit their liability by hiring all employees correctly.



spective, that's oftentimes a violation of the law. That's simply the nature of the beast we're dealing with."

BY THE BOOK. The legal responsibilities of companies that hire immigrant employees are fairly simple and straightforward. Since 1986, the federal government has required that companies fill out an I-9 form for any employee they hire – immigrant or not. (I-9 forms aren't required for employees hired before 1986, but companies are required to keep I-9 forms on file for three years after an employee's employment ends.)

The I-9 form indicates that the employer has requested the appropriate documents from the new employee to verify that the employee is a legal resident of the United States. In the case of an immigrant, this document is generally a green card, which is officially known as an alien registration receipt card. The green card itself is a convenient substitute for the actual work visa, which is more cumbersome to carry around. Once the employee has filled out a portion of the I-9 and has shown the employer the

appropriate documents then the employer signs the form and the employee is hired.

This system is hardly foolproof, however, because employers generally have no way of verifying the authenticity of the document given to them by the prospective employee.

"The best defense against fines is preparing the I-9 forms correctly because employers are not expected to know the difference between counterfeit and good cards," related Walters. "That's why employers who complete the I-9 forms for illegal employees will lose the employees if they are inspected by the INS but the company won't be fined. To be fined, INS has to conclude that the employer knowingly hired illegal employees."

A MISSING LINK. What frustrates contractors the most, however, is that the INS doesn't make its verifications services avail-

When the INS Calls

THE IDEA OF HAVING the U.S. Department of Immigration and Naturalization Services show up at the office first thing Monday morning is probably enough to ruin more than a few nights of sleep for many contractors.

Pat Walters, director of investigations for the INS in Charlotte, N.C., explained that the INS typically gives employers three days advance notice before coming out and conducting an inspection.

"We try to schedule the appointment on a good day for the employer, and we'll usually send one agent out to do the inspection," Walters expected. "The employer has to have all employees' I-9 forms there, although how they're organized or filed doesn't matter."

Walters said the INS will verify that I-9 forms are present for all employees by checking the forms against an employee payroll list or getting a copy of the company's unemployment insurance tax report that is filed with the state. He also pointed out that a company could be fined for improperly filling out the I-9 forms even if all of its employees were natural born U.S. citizens.

"The agent may not even look at all of the I-9 forms if there are too many employees, but that is rare," Walters noted. "The agent will check the part of the I-9 form where a box is checked signifying the employee as either a U.S. citizen or an alien. One of those boxes has to be checked, and then the agent will examine the form to make sure the employer physically inspected the document provided by the employee to verify his or her status as a citizen or alien, which is indicated by the presence of the employer's signature.

"Also, the agent will check the date on the I-9 form to make sure the form was filled out within three days of the employee's start date," Walters added.

Finally, the agent will make a list of some or all of the employees' names and the social security number or alien number from the I-9 form and run this against the government's files to make sure the correct person is listed on each I-9 form, according to Walters.

"If the inspection finds the company only employs legal aliens, then we'll send a letter letting the company know this," commented Walters. "Sometimes we'll have to send a letter telling the employer to either re-verify the status of certain employees or immediately terminate some employees. The worst case scenario is that we show up with a warrant and take the illegal workers."

Walters emphasized, however, that while the INS does not have the goal of putting companies out of business, companies that don't cooperate with the investigation might only make things worse on themselves.

"The law gives the INS the right to inspect I-9 forms without a subpoena, so companies should cooperate with us," Walters noted. "If companies are uncooperative with us then we will get a warrant and take as many of their employees as possible at the worst possible time for that company.

"I can't overemphasize that the proper completion of the I-9 forms is the best way for an employer to protect itself, even though this won't necessarily protect a company from losing any employees," Walters stressed.

able to employers before they hire an employee so the problem of hiring illegal immigrants can be avoided. After all, if contractors aren't expected to know how to screen authentic documents from forged documents, isn't the government essentially ensuring that illegal immigrants will be unknowingly hired, investigated and deported?

"The missing link here is that employers cannot go to the INS to get any background information before we hire someone even though the INS can do this internally," lamented Steve Hoogenakker, president, Showcase Landscape, Minneapolis, Minn.

"The system is actually set up for us as employers to be raided because we can only go so far in our due diligence of verification," agreed David Snodgrass, president, Dennis' 7 Dees Landscaping, Portland, Ore.

"Yes, it would be better for everybody if the INS could verify employees' eligibility for work before they are hired, but the INS is precluded from doing this by privacy laws," noted Walters, adding that the INS employs eight agents to manage this issue for the entire state of North Carolina. "We also don't have the time or the personnel to do this for every immigrant that applies for a job." □

"Looking at the next working generation approaching us, I don't think we grasp the magnitude of the problem approaching this labor-intensive industry." – Tennessee

By Bob West

Hiring immigrant labor often represents the beginning of the challenges.

THE SCENE IS ONE that many contractors dream of today—a bus pulls up in front of their office and dozens of able-bodied individuals climb off ready and eager for their first day of work. And these aren't just the run-of-the-mill employees. No, these are diligent individuals who come from an agricultural background and who value a solid work ethic and the earning potential this job represents enough that they become upset when they can't work 50 hours a week.

Obviously, such a situation is unlikely to occur as often as contractors would like, but if this magical busload were to arrive, the mere presence alone of the new employees wouldn't necessarily solve all of a contractor's problems, especially if these new employees were immigrants. In fact, the challenges associated with managing a multi-cultural workforce might not always be anticipated by a contractor, but they are significant.

¿HABLAS INGLÉS? The most obvious challenge related to hiring immigrant employees is the language barrier and maintaining effective communication among crews and with customers. Most companies hiring non-English speaking employees offer them some opportunities and/or incentives to learn the English language. The opportunities range from paying a tutor to offer regular English classes at the office to identifying educational opportunities for employees at local schools or community colleges. Incentives include bonuses delivered upon successful completion of an English course, pay raises and opportunities for promotions.

"A crew that doesn't speak English

Successfully Managing the Hispanic Workforce



Contractors recommend employers make an effort to find out how well Hispanic employees can communicate in English since new employees may be hesitant to speak English because they are fearful of making a mistake. Photo: Environmental Care

turns our customers off," according to Ron Kujawa, president, Kujawa Enterprises, Cudahy, Wis. "We make sure there is always at least one person on each job that speaks English. That was a big learning curve for us because we never realized how much onsite communication goes on with the customer.

"Customer communication was second nature for the English-speaking employees, so they weren't necessarily reporting it all back to us," Kujawa continued. "Now, our employees that don't speak English carry a card that explains this so they can present it to any customers who approach them."

An asset for CoCal Landscape Services, Denver, Colo., is that Jesus "Chuy" Medrano, one of its partners, is Mexican, and he started out in the industry as an entry-level laborer.

"Every one of our Hispanic foremen takes English classes over the winter, and there are no ifs, and's or but's about it," emphasized Medrano. "The company pays for half of the cost and the employee pays for the other half. Now, we have Hispanic foremen communicating with our clients.

"Most of our employees are Mexican, with a few Colombians and a few Guatemalans," Medrano commented. "I try to use myself as an example for them to learn from so they can see what is possible if they are willing to learn English and keep working hard."

Rick Randall, president, Randall & Blake, Littleton, Colo., adding that aiding non-English speaking employees' efforts to learn the language has benefited the organization as well. "We also make sure at least one member of each crew speaks English,

Joe Janssen (right) explained how regular roundtable meetings with immigrant employees have led to the development of an employee-friendly workplace. Photos: Roger Mastroianni & Bill Webster



"Getting key people to speak Spanish is important so the employees see our commitment to them and that we work to mix our cultures, but the reality is that these employees are working in an English-speaking society with English-speaking customers and they need to be able to speak English," asserted David Snodgrass, president, Dennis' 7 Dees Landscaping, Portland, Ore. "Learning to speak English is the key to moving up in our company, and when we can create a culture in our company that changes the Hispanic employee's view of the job to more of a long-term focus is when we'll really begin to tap the potential of this workforce."

Snodgrass said a key to his company's recent growth has been the rise of Hispanic employees into foreman and crew leader positions.

"Half of our foremen and most of our crew leaders are Hispanic," he said. "We have developed a culture within our organization that delivers the family emphasis that is so important to Hispanic employees, and, as a result, we have Hispanic employees who have been with us for three or four years and

who are learning because they want to learn. That is an attitude change, and that gives us a real competitive advantage.

"Now, we have potential Hispanic employees knocking on our doors looking for work because they've heard what a good place Dennis' 7 Dees is for Hispanic employees," Snodgrass continued. "I don't want the short-term employee that refuses to speak

English and is always being trained and leaving. Addressing the needs of the long-term employee is the secret."

INTERNAL UNITED NATIONS. Another challenge can be managing the effects of international politics between employees.

"We have found that certain Hispanic groups do not want to work with other Hispanic groups, particularly based on the country they are from," observed Randall. "We don't generally know where a new employee is from, and we're not allowed to ask before we hire them for discriminatory purposes, so we end up with problems occurring once the employees start work."

"You can't always force some cultures to work together because of the political and social situations in their home countries, and employers have to recognize that fact and accept it," recommended Medrano.

"We have found that Mexicans like working together with people from other cultures, Guatemalans don't care who they work with and Haitians don't like to mix in with other groups," added Joe Janssen, president, Stiles Landscape Service Co., Pompano Beach, Fla.

"We had a problem arise when we had a Puerto Rican crew chief supervising a crew of Mexicans, but the problem for us was that we didn't really know the nationalities of the



"Our area is ripe for a small or medium-sized company to grow, but we can't find good people to train and grow with us. It's very frustrating."

— Florida

and we teach English to the Spanish-speaking employees. If the employees learn enough English to handle basic conversation, they get a 50-cent raise."

In the interim, as Hispanic employees improve their English skills, contractors who have been down this road strongly recommend that key personnel within the organization learn to speak Spanish.



different people ahead of time and we couldn't ask the employees where they were from for fear of discrimination claims," recalled Kujawa.

Other contractors have noted alien employees of different cultures getting along well in their organization, but these employers stress that extra efforts are necessary to ensure any immigrant employee's happiness.

"Something that has benefited us has been getting our immigrant employees together and having a roundtable with them and key managers," noted Janssen. "As employers, we need to find out what these employees need from us, just like we would do with any other employee. Some real eye opening information comes out of those sessions."

"We ran into similar problems with our Hispanic employees, so we set up a Hispanic advisory committee that meets monthly," remarked Joe Aurilio, human resources manager, Mariani Landscape, Lake Bluff, Ill. "We target key personnel from different cultures and different parts of the company and we bring them together in a very informal environment to find out what their concerns are. This forum also lets us teach them about empowerment and the politics of inclusion so they feel a part of a larger team."

"Learning about the cultural barriers and differences is important because what's important to us as American-born employers may not be important

to Hispanic-born employees," continued Aurilio. "We make sure these meetings are held regularly with one of our managers in charge of the committee and making sure that we always "do something" as a result of the meetings."

"In Miami, we have Hispanic employees from a range of countries, with most being Mexican," noted Ricardo Leal, vice president, Villa & Sons, Miami, Fla. "Everyone seems to work pretty well together, and some groups just spend more time together during breaks."

"We have to convince these employees that they are part of a team that shares a mission and goals," noted Terri Feldhaus, Chapel Valley Landscape, Woodbine, Md. "We created a Hispanic task force in the company to create natural leaders and empower them with the responsibility to recruit within their own neighborhoods because they know what quality of workers they want on their staffs."

"We also offer re-

cruit- ing incentives, and the fact that they are asked to be responsible for something as important as recruiting for the company brings these employees pride," Feldhaus continued. "Our Hispanic employees have done an excellent job bringing in qualified employees as well as helping us develop ads targeted to the Hispanic community."

MAKING THE COMMITMENT. Employees who feel their employer truly cares about them as people tend to be more loyal and effective employees. Obviously, the employee-employer relationship can be particularly important to employees struggling to



speaking the same language most of their coworkers and customers speak.

One commonality among many companies who have developed long-term relationships with their Hispanic employees has been their hiring of a bilingual individual to serve as a liaison between the management and the Hispanic employees.

"Having a liaison person helps communication a great deal," observed Feldhaus. "This person can be a real help in day-to-day communication but also in dealing with conflict and mediation, which is where communication problems can really arise."

Feldhaus pointed out that contractors who don't employ such a person are putting their non-English speaking employees at a significant disadvantage compared to other employees.

"Think about how difficult explaining health care benefits is to English-speaking employees. Now, imagine trying to explain these issues to people who don't speak English," she noted.

"We've come a long way since we hired a bilingual human resources person and a bilingual receptionist," commented Randall

MOVING ON UP. A frequent complaint about Hispanics employees is reluctance on their part to pursue positions of greater responsibility, even within a crew.

Challenges with the language and a fear of the unknown are commonly cited prob-

"I have not been able to find English-speaking immigrants with valid driver's licenses. The last Mexicans I hired were prevented from driving our trucks by our insurance company." — Michigan

lems employers run into when trying to promote some Hispanic crew members to foreman or supervisor positions.

"How do we get the Hispanic workforce to want to move up and be interested in operat-



Incentives used by contractors to encourage non-English speaking employees to learn to speak the language include paying for English classes, pay raises, promotions and having English-speaking employees also learn to speak Spanish in order to improve communication and illustrate to all employees the company's commitment to them. Photo: Roger Mastroianni

ing more equipment and driving trucks?" wondered Randall.

"Money can be part of the answer," responded Birdsong.

"Developing a training program tied to the employees' compensation can help," agreed Jack Mattingly, industry consultant, Mattingly & Associates, Atlanta, Ga. "Just make sure it can be quantitative or measurable."

Cultural awareness matters again when developing these compensation programs.

"You have to remember that Hispanic employees may not even have a savings account, so they're interested in receiving cash more so than benefits or a 401(k)," related Feldhaus.

"We pay out a bonus based on actual costs vs. estimated costs over the course of a year, and we pay it out in March to get the employees to come back each year," added Randall.

"A lot of Hispanic employees fear sound-

ing different or funny when they speak English, so they don't want to work in a position that requires talking to customers," observed Feldhaus. "The same is true with becoming certified by taking written tests — they fear failing. This fear has to be overcome before these employees will really start to speak English."

"I could read and write English when I came to the U.S., but I was afraid to speak it," recalled Medrano. "Employers need to ask employees how much education they've received so we know what they can do."

"Plus, you have to accept the fact that there will likely be more Indians than there are chiefs," Feldhaus continued.

"Being able to identify the right employees to promote is the problem," remarked Tim Jackson, The Davey Tree Expert Company, Kent, Ohio. "You would think that the most skilled or hardest working person would be the person

to promote, but that is typically not the case. In fact, these are often the people not to promote. They work so hard because this work is what they enjoy and they don't want to be responsible for other people."

When companies identify and target the right Hispanic employees for promotion, the effects among the ranks of Hispanic employees can be powerful.

"Getting this upward movement with Hispanic employees creates momentum and convinces other Hispanic employees that they can be promoted and work as foremen or supervisors as well," added Snodgrass.

Snodgrass has observed other cultural differences that employers need to consider when promoting Hispanic employees.

"Hispanic employees won't criticize their fellow workers, particularly Hispanic coworkers, because they value loyalty so much," he noted. "Once some of these employees have been with us for more than a couple of years, however, they feel comfortable relating constructive criticism for issues such as safety on the job and proper performance." □

By Bob West

The chances of contractors receiving help from Washington, D.C., in dealing with the labor shortage are slim.



ANLA's Bryce Quick

A TREMENDOUS NUMBER of thoughts and ideas were shared at the third annual Landscape Contractor Roundtable, sponsored by Husqvarna Forest & Garden, Charlotte, N.C.

One idea, however, kept coming up time and time again, and that idea was that the lawn and landscape industry will never realize its ultimate goal of influencing federal legislators to allow more immigrant laborers to cross the United States' borders until these legislators are shown the size and significance of this industry.

"The government doesn't realize how large of an industry the landscape industry really is," stressed Joe Aurilio, human resources manager, Mariani Landscape, Lake Bluff, Ill. "Until this industry is able to bring all of the large companies and key associations together to work

with one collective voice, we won't make any progress getting the laws changed so we can get the employees we need."

Unfortunately, Bryce Quick, senior director of legislative affairs for the American Nursery & Landscape Association, Washington, D.C., agreed with this sentiment, although he remains optimistic that gains made in the agricultural industry could spill over into benefits for the landscape industry as well.

"As we discuss the H2A guestworker program for the agricultural and nursery industry, we're also discussing the H2B guestworker program for landscape contractors," noted Quick, adding that approximately 450 agricultural groups have joined the coalition supporting H2A. "But ANLA and ALCA are the lone voices, and the landscape industry will need to build a larger coalition so that when the H2A proposal starts to move through Congress we can attach H2B to that proposal." □

For the immediate future, Quick is hopeful that the nursery industry's H2A proposal to expand the number of visas offered to immigrants for this work and to give immigrants an adjustment in their citizenship status from a legal immigrant to a U.S. citizen after five consecutive years of employment in the agricultural industry will be signed into law this year.

"The problem with improving the H2B program is that the government doesn't think the labor challenge facing contractors is a crisis for their businesses yet," Quick added. "Instead, H2B is always under attack from immigration control activists. In fact, 5,000 H2B visas were eliminated last year because they weren't being used."

Quick said approximately 16,000 of the 63,000 H2B visas made available by the government were used in 1998, but that use has skyrocketed this year as more businesses have become aware of the program.

"The hotel and fishing industries have started using the H2B program as well, and as the labor market remains tight and the Social Security Administration continues to work with Immigration & Naturalization Services, we expect even more companies to go after those H2B visas," he explained.

The recent double-team effort of the SSA and INS that Quick referred to has led the government to explore using the SSA's computer system to require employers to actually validate an employee's citizenship before that person begins employment by verifying his or her social security number.

Making matters even more difficult for contractors is that the high-tech industry is also busy lobbying politicians for improvements to its guestworker bill, H1B, and that industry has a great deal more financial resources to employ.

"We, as the lawn and landscape industry, need to convince Congress that we need legal workers," encouraged Quick. "We need to show them that otherwise productivity will drop without this labor." □

Legislative Update

Due to the select details used to authenticate green cards, employers are not expected to be able to identify false ones. Images: INS



THE MOST COMMON immigration document president in connection with employment verification procedures is the Resident Alien Card, commonly called a "green card." The term green card is a generic term because the Alien Registration Receipt Card (the formal name for the green card) has not been green since the late 1950s. This document is evidence that an alien is residing lawfully in the United States.

Unfortunately, the green card is also widely counterfeited for use by undocumented aliens in obtaining employment.

How can an employer distinguish between a genuine and counterfeit card? According to the U.S. Immigration and Naturalization Services, here are some things to look for when examining a Resident Alien Card. It should be noted that this information is not all inclusive, nor does it

mean that any one thing standing by itself means that a document is fraudulent.

- The printing at the top of the card on the photo side should be crisp and clear with no broken or smudged letters.
- The two small lines above and below the words "U.S. Department of Justice-Immigration and Naturalization Service" should be evenly spaced and unbroken.
- The photo is an integral part of the document—it should not be raised nor should it appear to have been cut out and glued on to the document.
- The blue round background seal of the Department of Justice should be of excellent

Contractors can avoid accidentally hiring illegal aliens by knowing some keys to identifying fake green cards.

Working with Immigration

quality, i.e. the eagle, the lettering around the seal and the rope on the outer edge of the seal should all be clear and crisp. These details should not look like they were hand drawn.

- The colors on the reverse side of the card should change gradually from pink to blue.

- In addition, please see the specific information about each document that is contained in the pamphlet.

The employer is responsible for examining any acceptable documents presented by an employee as evidence of employment eligibility. The documents must appear to be genuine and relate to the individual presenting them.

"Pink" I-551 Resident Alien Card (bearer may live and work in the United States)
FRONT:

- Pink background (blue header bar)
- Blue I.N.S. seal overlaps photo area
- Repeating "I-551" becomes visible when card is tilted under normal light

BACK:

- Color gradually changes from pink to blue with map of United States in white
- Three lines of machine readable printing at bottom on white background
- "White" I-551 Resident Alien Card (bearer may live and work in the United States)

FRONT:

- White background (blue header bar)
- Salmon lines cover the photo in an unbroken pattern
- Printing detail in eagle is excellent

BACK:

- Pale green background
- Map of United States in white
- Three lines of machine readable codes

Come Together

Making the conscious effort to work with immigrant employees to provide a work environment considerate of their individual needs can go a long way in determining a company's success tapping into this workforce.

Stiles Landscape Service, Pompano Beach, Fla., instituted bi-yearly roundtable meetings with its immigrant employees, 70 percent of which are Haitian. "We get more participation from these employees with each roundtable," noted Joe Janssen, president.

Key issues that have arisen during the discussions have centered on the employees' compensation, although Janssen cautioned that employees are typically cautious about speaking their honest opinions at the first few meetings.

"The most important issue to our employees is having the opportunity to work five to eight hours overtime per week in the summer," remarked Janssen. "We found out that one of the reasons more of the employees haven't been taking classes to learn to speak English is because they were working a second job in order to meet their financial obligations.

"As a result, we allowed planned overtime on specified projects this year to accommodate their request," he added.

Janssen also noted that while he agrees that immigrant employees are primarily focused on take-home income when they start work, additional benefits are becoming increasingly important to them.

"As this workforce is maturing, these employees are looking for benefits beyond health insurance, such as a 401(k)," he said. "If we are going to keep our employees, we have to provide wages that allow them to sustain themselves and contribute to their families."



Forms

Ask INS

Got a question for the INS? Just find your state below and the phone number for the district office serving your state. NOTE: Not all district offices are in the states they serve.

Alabama	(404) 331-5158	Nevada	(602) 379-3122
Alaska	(907) 271-4953	New Hampshire	(617) 565-4212
Arizona	(602) 379-3122	New Jersey	(973) 645-4400
Arkansas	(504) 589-6533	New Mexico	(915) 225-1746
California		New York	
Los Angeles	(800) 357-2099	Buffalo	(716) 849-6760
San Francisco	(415) 844-5347	New York City	(800) 357-2099
Colorado	(303) 371-0986	North Carolina	(404) 331-5158
Connecticut	(617) 565-4212	North Dakota	(612) 854-7754
Delaware	(215) 656-7150	Ohio	(800) 375-5283
District of Columbia	(207) 780-3352	Oklahoma	(214) 655-5384
Florida	(305) 762-3358	Oregon	(503) 326-7585
Georgia	(404) 331-5158	Pennsylvania	(215) 656-7150
Guam	(808) 532-3746	Puerto Rico	(787) 766-5329
Hawaii	(808) 532-3746	Rhode Island	(617) 565-4212
Idaho	(406) 449-5220	South Carolina	(404) 331-5158
Illinois	(312) 385-1820	South Dakota	(612) 854-7754
Indiana	(312) 385-1820	Tennessee	(504) 589-6533
Iowa	(402) 697-9155	Texas	
Kansas	(816) 891-0684	Dallas	(214) 655-5384
Kentucky	(504) 589-6533	Houston	(281) 847-7900
Louisiana	(504) 589-6533	San Antonio	(210) 967-7065
Maine	(207) 780-3352	Utah	(303) 371-0986
Maryland	(410) 962-2065	Vermont	(207) 780-3352
Massachusetts	(617) 565-4212	Virgin Islands	(787) 766-5329
Michigan	(313) 259-8560	Virginia	(202) 307-1504
Minnesota	(612) 854-7754	Washington	(206) 553-5956
Mississippi	(504) 589-6533	West Virginia	(215) 656-7150
Missouri	(816) 891-0603	Wisconsin	(800) 357-2099
Montana	(406) 449-5220	Wyoming	(303) 371-0986
Nebraska	(402) 697-9155		

check out the INS web site:

<http://www.ins.usdoj.gov/graphics/index.htm>

About 300 Illinois companies may have to quit doing irrigation work, find a licensed plumber or subcontract to a plumber because of irrigation regulations.



ILLINOIS BATTLE CONTINUES

CHICAGO, ILL. — The debate over who should be allowed to install irrigation systems in the state of Illinois reached the floor of the state House of Representatives on Sept. 1 when irrigation contractors and plumbers testified before the House of Representatives rules and regulations committee.

Rick Doering, president, Doering Landscape Co., Barrington, Ill., operated Sunrise Sprinkler Co. for 12 years in suburban Chicago. He "pulled the plug" on the irrigation installation and maintenance company this year, however, as a result of its uncertain future due to the hotly contested legislation. Although he didn't want to continue the business, he quickly disagrees with the law in question.

At the core of the debate is a 1983 state law that defines lawn sprinkler systems as plumbing systems and mandates that all non-agricultural plumbing systems be installed by licensed plumbers and their apprentice plumbers.

Currently, this law is believed to be the only one of its kind in the country, and the law was widely ignored until a 1994 amendment specified that only licensed plumbers could install backflow prevention devices when the irrigation system is connected.

Dan Cassidy, owner of Sundance Irrigation, Naperville, Ill., was cited for overseeing the installation of the sprinkler heads on a system installed in 1994. He fought the citation he received for this installation and won victories in the local court and the circuit court. The state continues to support its claim, however, and the plumbers' union has joined its side.

"There are good irrigation contractors within the plumbing ranks, and they want to make sure the door isn't opened to lesser contractors," noted Mike Clark, construction manager, The Brickman Group, Long Grove, Ill.

Doering offers a more direct take on the plumbers' motivation. "The plumbers want to keep the law the way it is because that eliminates competition for them," he asserted. "They say they're the ones

who are responsible for a clean water supply and they're concerned that if non-plumbers install irrigation systems there will be contamination within the water system and people could get sick or die."

Clark, who noted that The Brickman Group now routes all irrigation installations through subcontractors, described the groups as "very adversarial thus far," but he's optimistic that a compromise can be worked out if the right people from each group get involved in their meetings.

"I think the irrigation trade should be treated accordingly, and people who are going to be involved in this work should be licensed accordingly," Clark pointed out.

But Clark observed that requiring plumbers' licenses for irrigation installation prohibits contractors from doing this work for three to five years while they pursue licenses.

Clark estimated that of the 400 contractors performing irrigation work in Illinois, only 100 of them are licensed plumbing companies.

"That means about 300 companies either have to quit doing this work, find a licensed plumber to put on the payroll or subcontract to a plumber," he noted, adding that plumbers charge two to three times the hourly rate irrigation contractors charge.

"Personally, I would like to see the plumbers' union amend their rules and add a section for irrigation services that spells out the necessary

and appropriate licensing and products to use," Clark added.

Irrigation contractors may have a friend in the Illinois House of Representatives, as Representative Brent Hassert (R-Romeoville), a former landscape contractor, sponsored a bill that would amend the law in question to let irrigation contractors install systems.

Contractors received a season-long reprieve this summer when the governor suspended the law until Dec. 2 in hopes that a compromise could be worked out. After Dec. 2, the law goes back into effect, along with its potential \$5,000 fines.

Meanwhile, Doering sees his 300 irrigation customers look elsewhere for service.

"And some of the employees I trained now work for these plumbing companies,"

Clark estimated that of the 400 contractors performing irrigation work in Illinois, only 100 of them are licensed plumbing companies.

Doering related. "There are a lot of contractors who have been installing irrigation systems for 20 years, and they've proven they can do this work properly. But now there's a chance they will all end up out of business." — *Bob West* **LL**

EDITOR'S NOTE: Individuals or groups interested in supporting the irrigation contractors' lobbying efforts financially should contact the Illinois Landscape Contractors Association at 630/472-2851.

*If we learned
anything this year,
it's that irrigation is
no luxury.*

By Bruce Shank

State

of the

Irrigation

Industry

T

The demand for irrigation, which follows new construction by about six months, should bring another double-digit year for landscape contractors in the new millennium.

he long-term value of landscape irrigation benefited from droughts and below-average snowfall in 1999.

In many ways, the scarcity of water, caused by La Nina, which characteristically follows El Nino, bolsters the importance of irrigation. Seeing the bottom of reservoirs sends a message to landscape owners – if you don't have control over the water making your landscape possible, who does?

A booming economy might have softened the temporary setback of dry weather, bringing growth rates of irrigation manufacturers into strong double digits. Pent-up demand for irrigation, which follows new construction by about six months, should bring another double-digit year as irrigation contractors enter the new millennium.

From the standpoint of landscape irrigation, Texas showed us that irrigation management can influence the reliability of underground aquifers and surface reservoirs. After experiencing months of below-average rainfall, high population growth and opportunity-based immigration, Texas is gaining control of its water use with the help of Mother Nature and irrigation. The city of San Antonio and the state of Texas, are funneling millions of dollars into irrigation research and education. The effects will be seen before the Irrigation Association holds its show there in 2001.

LOOK WHERE GROWTH MATTERS. Even the predominantly hose-end markets along the Atlantic Coast got a wake-up call this year. Drought threatened the Garden State of New Jersey, the bedroom communities in New York, Connecticut and Massachusetts, and the high-tech growth states of Virginia, North Carolina and Delaware. Even though these are states with comparatively low percentages of residential and commercial



irrigation, the message hit home.

"I spend more on tolls commuting to and from work each year than I do on my landscape, even though it's my time at home that counts the most," said one New York commuter. "When the drought hit, we stayed inside or hung out at the mall while our lawn turned tan and our ornamentals dropped their leaves. My priorities suddenly became clearer. If I liked cement, I would have stayed in the city and gone to art galleries to get an impressionistic glimpse of nature. I want my kids to play on green grass, not plastic or asphalt. I found myself watching the Victory Garden or Martha Stewart with unusual envy. Finally, I realized that my lawn and garden meant more to me than I used to admit."

On the lower end of Manhattan, on a couple of old-fashioned narrow, angular streets like Boston, sits the New York Stock Exchange. If the irrigation industry had more publicly traded companies, this article would be easier to write. The only way to gauge the public's priority about irrigation has been with shares of Toro, one of the few irrigation companies listed on the New York Stock Exchange. Vulnerable, because it is so concerned about weather with its snowblower business, Toro

(continued on page 48)

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USE READER SERVICE #36

(continued from page 45)

expanded its investment in irrigation by buying Irritrol last year. Snow is big business in Minnesota where the company is headquartered. The opposite of snow is the desert, and Toro was the first "rust belt" company to hedge its bet on the Southwest when it bought Moist-O-Matic from Ed Hunter during the 1960s. Mowers, snow-

blowers and irrigation in the desert – how can you go wrong?

HELLO, WE'RE GROWING. Drought is not a threat to irrigation. It is gleaming proof that irrigation is necessary for the economy to grow. During the past decade, landscape irrigation has grown faster and larger

than most of the other complementary markets to landscape contracting. That could be the reason why more state universities, community colleges and the Irrigation Association are experiencing impressive interest in landscape irrigation.

According to the Irrigation Association, landscape irrigation grew at the manufacturing level by roughly 15 percent from 1998 to 1999. If you include pipe, wire, contractor markup and labor, landscape irrigation jumped \$380 million last year, from \$2.25 billion to \$2.59 billion. These numbers include irrigation sales by landscape contractors, not retail sales to do-it-yourselfers. They do include a factor for sales to landscape contractors by retail outlets.

COMPARED TO WHAT? For this State of the Industry report, the idea of comparing irrigation to other tangential landscape markets was intriguing. Markets such as sod, nursery, night lighting, water features and aeration, and precast wall blocks track landscape installation closely. If one of these markets does better than others, that's news because it reveals changing priorities and opportunity in the landscape industry.

We overlook the importance of irrigation. As a contractor, you should have the facts. A landscape contractor, who is wise enough to tackle irrigation, will often be interested in night lighting, fountains and retaining walls. Just talking about landscape-contractor installed products, irrigation is No. 2. It's hard to get good numbers about nursery and sod, since they, too, are predominantly held by private investors. Irrigation might be No. 1 if we could cut through the red tape.

Before we get to national trends, let's be specific about the landscape industry. A number of major industry groups sponsor a Gallup Poll every few years. It makes us all feel good because the numbers begin with a "B" (billions). Allow me to say, if there are 16,000 golf courses in the country, there are at least four times that number of full-time contractors paying taxes to the IRS. Maybe some day we will get our own SIC recognition.

With no disrespect to the hard-working marketing managers in related fields, here are a few ballpark numbers to consider. We already said that irrigation at the contractor

(continued on page 50)



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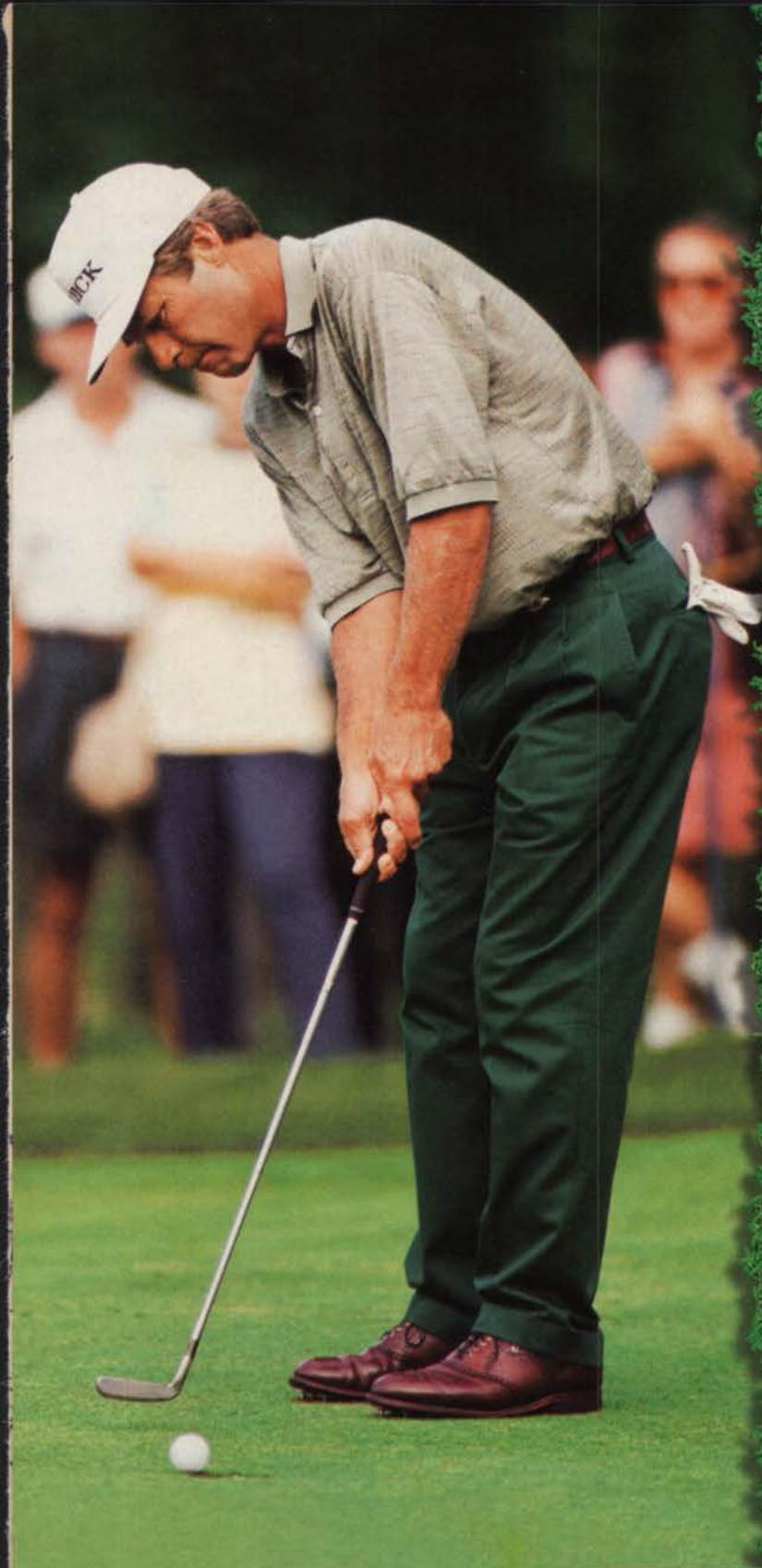
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USE READER SERVICE #28



irrigation report

(continued from page 48)

level (installed) is \$2.59 billion. Nursery is virtually controlled by privately-owned companies. But, I'll stick my neck out to say it is close to irrigation. Out of the \$14-plus billion in annual landscape investments identified by the Gallup Poll, land-

.....

Overall, the greatest growth for irrigation in pure dollars remains in the Sunbelt ... and the future is bright for continued expansion.

.....

scape contractor installed nursery material might be in the range of \$3 billion. Considering the size of the maintenance market, it can't be much higher.

Understanding sod is like trying to know the value of players at poker tables in Las Vegas. From the many I know, and their predecessors who propelled their industry beyond a commodity, today's market, including installation, is about \$1.5 billion.

Low prices in farm commodities could apply some competitive pressure on sod growers. This could cause sod prices to drift downward in some regions. The trick with sod is to concentrate on the leading turf varieties and to specialize in the highest establishment success. Seed producers separate their most successful varieties for sod companies and golf courses in purity and performance. Contractors would be wise to delegate this specialty to turfgrass producers (the new name for sod growers).

The precast concrete retaining wall industry is about \$800 million installed. This market is hard to pin down because it operates through dealers, who are licensed by the big names. It is, however, a favorite of landscape architects and will take some landscape investment dollars from other areas.

The next, most obvious product in the industry is night lighting. What could be

better proof of great landscaping than extending its display into the night? What's that worth? People tell me \$80 to \$100 million at the manufacturer level for contractor-installed lighting.

Once you identify closely with a landscape, you understand that it can include a full palette of nature. Applying water for irrigation lends itself to the question, where does that water come from? Take the next step to, "Can a water source be an attraction as well as a utilitarian component of the landscape?" The answer is yes to the tune of \$20 million, just for landscape contractor installed fountains, aeration, and artistic water features.

To recap, without being too specific, landscaper-installed irrigation is a \$2.59 billion industry in the United States. The nursery industry should be in the range of \$2.5 to \$3 billion installed. This does not include maintenance. So, we are talking

(continued on page 52)

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USE READER SERVICE #10

irrigation report

(continued from page 50)

about \$1.25 to \$1.5 billion in shipping from nurseries. A little-known fact, however, is that you can turn capital in landscaping faster with installation than with maintenance. Maintenance has simply been more consistent and newsworthy in the past two decades. And, if you look closely at the dollars spent, maintenance is nearly twice installation.

The fact is, we love our landscapes and are not that terribly sensitive about the cost of installing or maintaining them. What we want is a few hours of enjoyment after a week of making either ourselves or someone else wealthy. Call it quality time. Hard work is supposed to create enjoyment.

Without water, there is no landscape. Starting from this point, we should have strong confidence in our occupation for at least the next two decades.

NITTY GRITTY. Let's start off with an inflation rate of 3 percent. We can expect land-

scape irrigation to be somewhere between this and the 150 percent growth in stock price of companies such as Intel and Amazon.com. But, if you come down to earth and compare profitability with share price, you will learn that older stalwarts, such as aluminum and oil, are doing pretty well. That is where you will find irrigation in the future.

What does this tell us? Productivity is up. Foreign markets do not lead us, they follow. We don't need to look for junk bonds to make money. The U.S. economy has found peace with its banks. Consolidation has made some things easier and investors less edgy.

You might have seen that plumbing unions are waking up to the fact that their members can make money outside as well as inside. They have taken steps, in at least two states, to wave their public health flags, despite a clear lack of experience with plant water requirements, distribution uniformity

and the science of evapotranspiration. However, a plumber's ability to fit a pipe does not ensure that he or she has a grasp of the workings of a backflow prevention device.

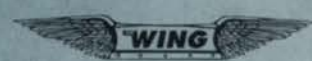
The backflow device is the iron curtain in the public health debate regarding irrigation and the potential for contamination during chemigation or simple suction of lawn chemicals through irrigation systems. Propaganda about licensing of plumbers is threatening public health officials' trust of uncertified irrigation contractors.

Certification is gaining importance when it comes to landscape irrigation. It's the only true way to counteract the plumbers' union assault on our industry. If plumbers really want our cooperation, they can express more interest in working with us.

Overall, the greatest growth in irrigation in pure dollars remains in the Sunbelt. It flows along with population growth and the future is bright for continued expansion.

(continued on page 155)

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The top 11 irrigation mistakes made by landscape contractors are simple and inexpensive to correct.

By David Wickham

E

very landscape and/or irrigation professional truly believes that they know what they are doing when it comes to designing, installing and maintaining irrigation systems. However, virtually many of these professionals have gaps in their irrigation training and knowledge. In fact, some people simply never learned the proper way to begin with. As a result, they can end up creating more problems by their ignorance than they solve.

Here are 11 of the most common irrigation mistakes and problems I have seen repeated over and over throughout the U.S. during the last 30 years.

These 11 mistakes and problems are generally simple and inexpensive to correct. Also, if you can correct these flaws within an existing irrigation system, you can save your clients 10 to 50 percent of their current operating costs to irrigate their landscape.

1. Never put different types of irrigation heads (rotors, sprays, bubblers, drip, etc.) on the same irrigation zone to operate at the same time.

The precipitation and/or application rates of the nozzles and emitters of rotor, spray, bubbler, drip, micro-irrigation, etc., systems are entirely different. Consider the following:

- a) The nozzles for rotor heads generally have somewhere between 0.10 and 0.25 IPH (inches per hour) precipitation rate.
- b) The nozzles for spray heads gener-

(continued on page 57)

11 COMMON Irrigation Errors

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DISPLACEMENT	34.2 (561) cu. in. (cc)	38.1 (624)	41.1 (674)	
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	Intermittent	15.3 (11.4)	18.0 (13.4)	20.7 (15.4)
	Continuous	13.6 (10.2)	16.0 (11.9)	18.4 (13.7)
MAX TORQUE	26.0 (35.3) lbs. ft (Nm) @ 2400 RPM	30.0 (40.7)	32.0 (43.4)	
DRY WEIGHT	110 (52) lbs. (kg)	110 (52)	110 (52)	
OIL CAPACITY W/FILTER	2 (1.9) U.S. quarts (litre)	2 (1.9)	2 (1.9)	
DIMENSIONS	in. (mm)			
	Length	18.6 (472)	18.6 (472)	18.6 (472)
	Width	17.8 (451)	17.8 (451)	17.8 (451)
	Height	18.8 (478)	18.8 (478)	18.8 (478)
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irrigation mistakes

(continued from page 54)

ally have somewhere between 1.35 and 2.15 IPH precipitation rate.

c) The nozzles for bubbler heads generally have somewhere between 2.50 and 20.00 IPH precipitation rate.

d) The emitters for drip/micro irrigation generally have somewhere between 0.25 and 1.50 IPH precipitation rate.

Thus, if you place a lower IPH head (let's say one rotor head at 0.20 IPH) on a zone of higher IPH heads (let's say all of the spray heads are at 1.60 IPH), then you have created a dry spot in the area watered by the zone. This means that you will have to run this irrigation zone longer to apply enough water in the dry (rotor) spot. This also means that you are wasting your client's money that has paid for all of the additional water being applied by spray heads. [In this example, the client ends up wasting or spending eight times (1.60 divided by 0.20) the amount of water and money necessary.]

2. The operating/running times of different types (rotor, spray, drip, micro, etc.) of irrigation zones should be set at different amounts of time at the controller.

Just taking a quick look at the general precipitation rates for the different types of irrigation heads above should give you the idea that zone operating/running times definitely need to be different. For example, an irrigation zone of 0.20 IPH heads will obviously need to run longer than an irrigation zone of 1.60 IPH heads.



By becoming educated on the correct way to install irrigation systems, contractors can save clients water and money.

There is really no mystery in figuring out the general operating/running times for any type of irrigation zone. Simply find out what the irrigation manufacturer indicates is the specific precipitation rate in IPH from their own catalog, or figure out the average IPH precipitation rate in a zone if necessary. Then divide this specific or average IPH precipitation rate by what is considered the generally accepted amount of irrigation water, in inches, that needs to be applied per week to maintain healthy plant material growth in your area. (If you don't know this amount per week in inches, contact your local county extension service. They should have a good idea for your area. Still, in many parts of the U.S., the old rule-of-thumb of 1 inch of water a week is still used.)

Take the number you get after you divide the zone precipitation rate by your locally accepted amount per week, and multiply it by 60. (For example - 0.20 IPH divided by 1 inch a week = 5, then take 5 times 60 = 300 minutes.) This will give you the total minutes per week that you need to operate/run that irrigation zone to apply your locally accepted amount of water. Now, divide this number of minutes per week by the number of days per week you want to

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irrigate to get your beginning daily operating/running time. (Again for this example—300 minutes divided by 4 days per week = 75 minutes a day.) Now all you have to do is adjust this daily zone operating/running time for your site's specific soil, seasonal evaporation and transpiration rates, etc.

3. All spray and rotor irrigation head zones should always have head-to-head coverage.

This means just what it says. The number of feet the manufacturer says is maximum throwing distance (10 feet, 15 feet, 25 feet, 35 feet, etc.) for that nozzle at your working pressure is the maximum distance between heads/nozzles in your rotor or spray irrigation zone or system. You cannot get away with using a greater distance between heads to save you design, installation, operation or maintenance costs.

4. Never adjust or reduce the throwing distance of any spray or rotor nozzle by more

than 25 percent of the manufacturer's published/established throwing distance.

If a contractor or maintenance person adjusts or reduces the manufacturer's own recommended maximum throwing distance of any spray or rotor nozzle by more than 25 percent, the manufacturer has the legal right not to stand behind or warranty the installation and use of their spray head or rotor. Besides violating the manufacturer's published specifications, this adjustment will produce an uneven precipitation/application of water and can waste more water and money in just one year than it would cost to replace a spray or rotor body and nozzle with the correct one(s).

You can save between 10 and 40 percent of the water used in a rotor irrigation zone by proportionally matching the precipitation/application rate of the rotor nozzles.

5. Replace incorrectly matched precipitation/application rate rotor nozzles within a rotor zone with the properly matched nozzles.

Most so-called landscape and irrigation professionals incorrectly assume that to water an entire area evenly with rotor heads they should use the same gallon per minute

(continued on page 60)

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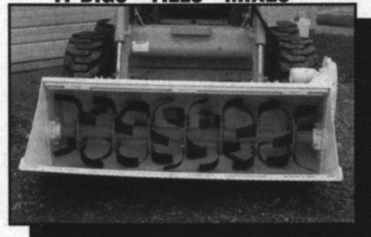
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irrigation mistakes

(continued from page 58)

(GPM) nozzles in every rotor head. This is a big mistake. Why do you think irrigation manufacturer's make all of those different GPM nozzles?

You can save between 10 and 40 percent of the water used in a rotor irrigation zone by proportionally matching the precipitation/application rate of the rotor nozzles. For example, a rotor only covering a $\frac{1}{3}$ circle should have a nozzle installed in it that is roughly applying $\frac{1}{3}$ of the GPM that the nozzle in a full circle rotor in the same zone is applying.

6. In spray irrigation zones, always use the correct spray nozzle patterns for the area you are watering.

Irrigation manufacturers make their spray nozzles in patterns for full, $\frac{3}{4}$ -, $\frac{2}{3}$ -, $\frac{1}{2}$ -, $\frac{1}{3}$ - and $\frac{1}{4}$ - circle areas that throw water a maximum distance ranging from 8 to 15 feet. Truly knowledgeable landscape and irrigation professionals only purchase and use the correct nozzle pattern and distance spray nozzles that they need for the area. Using the incorrect pattern and throwing distance for just one spray head can easily waste more water and money in just one year than it would cost to replace the spray nozzle and body.

7. Shrub and planter beds should always be irrigated separately from grassed areas.

No matter where you are in the U.S., I am sure your local water management district and/or county extension agent keeps telling you to irrigate grass areas separately from your shrub and planter beds. They are correct. Virtually all of your common local landscape plant materials (trees, shrubs and ground covers) have vastly larger root systems than your local grass. This means that your local landscape plant materials can generally exist on roughly half of the amount of water you are putting on your local grass.

8. Eliminate or reduce the amount of overspray of both spray and rotor nozzles.

When a landscape or irrigation designer or maintenance person installs and/or uses an irrigation head that throws water outside the landscaped area (onto sidewalks, driveways, neighbor's property, etc.) just one single half circle head could easily waste the same amount of water that there is in an

irrigation mistakes

average spa or hot tub in just one year. Now, add up how many overspray situations you have on a project and find out how many spas/hot tubs of water you are wasting for your client in just one year.

9. Eliminate the installation of spray and rotor heads on PVC vertical risers within 6 feet of areas where people will be as much as possible.

The few dollars you save by putting spray heads and rotors on PVC risers next to sidewalks, driveways, pools, backyard play areas, etc., won't offset the your legal liability and expenses if a person falls and impales themselves on just one of these risers. If you think these types of accidents and lawsuits don't happen, then you definitely need to have a long talk with your insurance agent/company.

10. Install or retrofit a rain shut off device on an irrigation system.

The proper installation, setting and/or retrofitting of this relatively inexpensive device will prevent an irrigation system from running during a rainstorm or after adequate amounts of rain have fallen. These simple devices generally pay for themselves in about one year. Depending on whom you talk to, these rain shutoff devices can save between 3 and 15 percent of the annual operating expenses of an irrigation system. In many parts of the U.S., rain shutoff devices are required by law to be installed on all new irrigation systems with hefty penalties for not installing them.

11. Never run/operate the irrigation system during the wrong part of the day.

I know you and your client probably like to run/operate the irrigation system sometime during the daylight hours so that you can see that it is functioning and find any irrigation problems. To me, this is about as logical as using a lighted match to find out how much gasoline there is in a gas tank.

Consider the following three problems associated with running/operating an irrigation system sometime during daylight hours:

- Every above ground irrigation system (rotors, sprays, micro-sprays, etc.) has its watering patterns altered and/or distorted by wind, and when does the wind generally blow

(continued on page 64)

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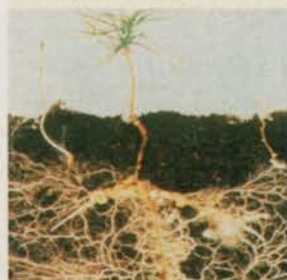
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irrigation mistakes

(continued from page 61)

the most? During daylight hours. The cost of running/operating virtually every irrigation system during daylight hours wastes water and money because the distorted patterns are throwing water (item 8 – overspraying, above) onto buildings, sidewalks, drives, etc. (Besides, how much business do you think your clients are losing when their clients have to walk through the overspray?)

• The highest water evaporation rates for plant materials and grasses take place during the daylight hours. If you run/operate an irrigation system during the daylight hours, the water you apply doesn't generally have enough time to soak into the root zone (or fall to the ground from the leaves) for the plant materials to utilize before it evaporates.

• If you run/operate most irrigation systems in the first part of the early evening, then all the plant material goes to bed wet. Do you know how many plant material fungal, disease, freeze, etc. maintenance prob-

lems are created by plant materials going to bed wet? If you did, you would never irrigate in the early evening hours.

There are many other problems associated with irrigating during daylight hours besides the three mentioned above. However, just ponder the costs to your clients in the three above.

The best way to irrigate a project is to work out a run/operation window in the early dawn hours. This way water is not blown by the wind, it can seep into the ground before the high evaporation rate times, your client's clients are not inconvenienced by watering, and your fungal, disease, etc., maintenance costs are reduced.

Throughout the U.S., I have seen the aforementioned 11 common mistakes made over and over and over again by landscape

Contractors can save between 10 and 40 percent of the water used in a rotor irrigation zone by proportionately matching the precipitation rate of the various nozzles.

and/or irrigation contractors. If you could correct these mistakes by educating your employees, you would be surprised at how much you can actually reduce the costs that you charge your clients, and how satisfied they end up being by correcting these common mistakes. **LL**

The author is the owner of David Wickham & Associates, Inc., Lake Mary, Florida.

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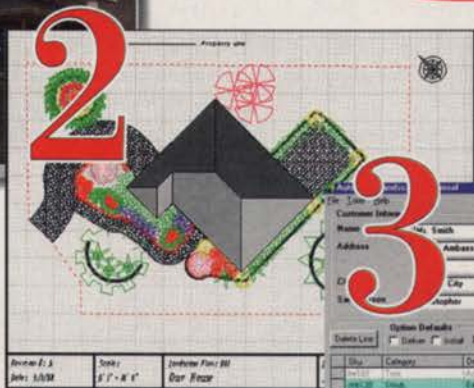
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USE READER SERVICE #32

Getting Started *in* Tree & Shrub Care

Tree and shrub services offer added profits for contractors who can successfully implement it into their businesses.

By Dave Clancy

Commitment. It is a strong word, and a word that is not often heard in business these days. However, for landscape contractors looking to expand their businesses into new markets, such as tree and shrub care, the commitment must be strong. Or they would be better off staying out of that business entirely.

First of all, tree and shrub service requires a level of education not needed in lawn care. Even the most highly educated lawn care specialists must dedicate themselves to learning more than they ever thought they would need.

Quite simply put, trees and shrubs are different animals than lawns.

While there might be a

dozen popular types of turf and another dozen serious pests to be concerned with in lawn care, the tree specialist needs to understand hundreds of trees and shrubs, and dozens of pests. The sheer numbers of variables off those numbers is enough to keep the lawn specialist awake at night.

"A person could expect to become reasonably skilled in lawn care in about one or two months," said Bruce Kopitz, president, Nutri-Turf Tree & Lawn Service, Warren, Mich. "However, there are just too many variables involved for anyone to expect to be proficient in tree care in such a short time.

"There might be 100 different landscape elements at a single site, plus you

(continued on page 68)

Adding a tree and shrub care service to a landscape business involves a higher level of commitment on the part of the business owner and his or her employees. Photo: J.J. Mauget





Dodge  Different.

(continued from page 66)

have to be concerned about 50 or 60 common tree or shrub pathogens," he continued. "There are so many horticultural decisions that have to be made. Is your soil short on magnesium? Short on iron? Do you have sandy soil for trees that love a swampy environment like oaks. You have to look at so much more than you do with

simple turf care."

"In tree care, to be even half way decent, the person must train for a minimum of six months," agreed James Fanning, president, Evergreen Ornamental & Lawn Care, Orlando, Fla. "Our new tree people ride along and do not apply anything for six months. That time is spent acquiring the

necessary knowledge to do a good job servicing our customers."

Fanning added, however, that selecting a person to train in tree care requires a commitment not only from the company, but from the employee as well. "We need someone who will be here for a while because we invest so much time in training. We need someone who has experience and is willing to commit the time and energy to learn this part of the market," he said.

"If I am going to hire someone inexperienced, I will hire him into my lawn care area," he said. "If they show me they are good in lawn care, I can train them in tree care."

Wayne George, president, Green Seasons Lawn & Tree Care of Delaware, Dover, Del., uses only certified arborists to handle his tree and shrub service. "Not only do they know what they should be doing, but they are certified. That gives me and my customers peace of mind."

George said his company used to have a few employees who crossed over and did tree service as well as lawn care. "We now have two dedicated employees who do nothing but plant health monitoring. It is a strong commitment, but one that has to be done to serve customers."

George said that tree care comprises about 30 percent of his business. "We got into it slowly about 20 years ago and grew it as we felt confident we could do the job properly," he said. "It has been a slow learning process, but we knew that was the only way we could do the job right."

For professionals seeking to add tree care to their repertoire, George recommended studying the principles of integrated pest management. "We called our program 'Plant Health Management' long before IPM was an industry buzzword," he said. "Someone

.....

"If I am going to hire someone inexperienced, I will hire them into my lawn care area. If they show me they are good in lawn care, I can train them in tree care."

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— Fanning

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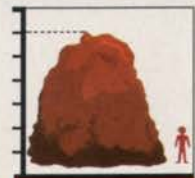
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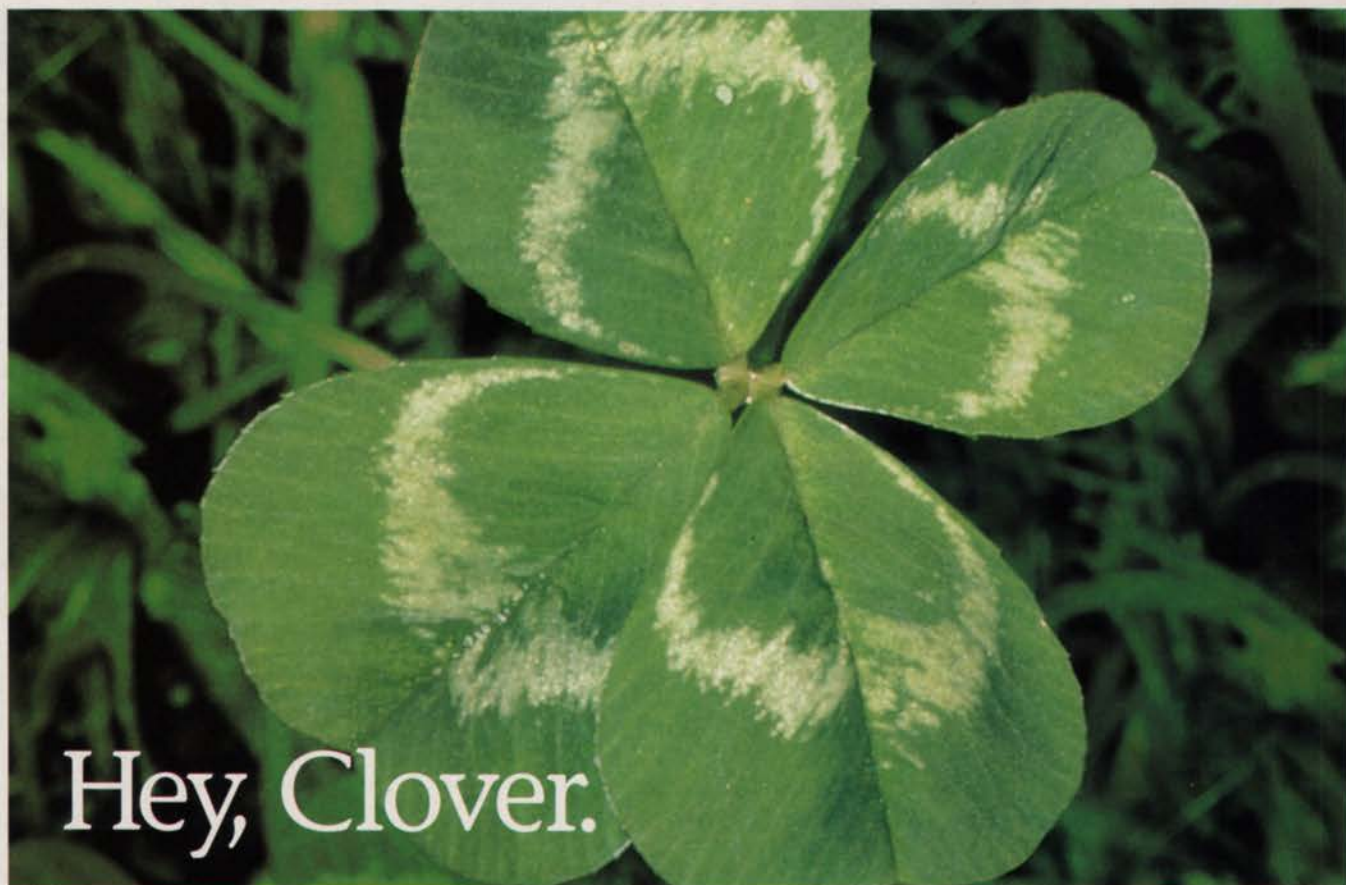


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(continued on page 70)



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USE READER SERVICE #107

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trees & shrubs

(continued from page 68)

trying to service the tree customer must understand IPM and what it is all about. Why are you going out to the site? Why would you spray? Why would you not spray? What are the life cycles of the insects in question? What are the weather patterns? What are the life cycles of diseases? Why do diseases occur? You must be ready."

To get started, George advised contractors to acquire a library of books. "Get any literature you can, and seek out training from universities.

"Your goal is to acquire enough knowledge that you can meet the minimum requirements," he continued. "Tree and shrub care is not easy, but if you really want to serve this market, you must find the time and dedication to get properly trained."

"When we made the initial leap, I spent



a lot of time in the field," said Kopitz. "I researched. I accessed the cooperative extension services in the area. I even hired an experienced tree man who had been in the marketplace.

But, he cautioned, the profit might take a while. "It is an expense for a long time because you are marketing something new and purchasing new capital equipment. You are also spending less time in the field and more time studying and researching."

For Philip Fred, owner, Philip's Lawn

Obtaining proper training and education is important for the landscape contractor who wants to make tree and shrub care a part of his or her business.

& Tree Therapy, Indianapolis, Ind., committing to trees required more effort than he could give without sacrificing service to his lawn customers. "While we do have 'Tree' in our name, we discovered it was very difficult to service trees properly with the resources we had. So we felt getting out of the service was best for us."

Fred said he fell victim to trying to be all things to everyone, but was fortunate enough to realize it and rethink his efforts. "Trees are a bigger deal than they first seemed. They take time and effort, and we could not give that without hurting our bread and butter customers," he said.

(continued on page 74)

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USE READER SERVICE #45

trees & shrubs

(continued from page 70)

"There are so many species of trees and shrubs and so many different bugs and diseases that it takes not only formal education, but years of training to do the job adequately," Fred explained. "That, and the fact that you really cannot piggy back the tree service on lawns, really made it a difficult endeavor.

"If we tried to do the tree work and our service was not up to par, that would reflect on our lawn work, no matter how good we are on lawn care," he continued. "So we felt it was better not to do trees at all."

Although Fred found adding trees a difficult process, Evergreen's Fanning said the process has not been difficult for him. However, he admitted his background is trees, which gave him an advantage from the start.

"But as we get bigger, finding qualified people, or people willing to make the investment in time and education is more difficult," Fanning said.

(continued on page 76)

How High is too High?

Spraying trees is a difficult job, especially when those trees are 85 to 100 feet tall. But how high can you safely spray? The opinions differ.

"We will not treat very tall trees," said Bruce Kopitz, president, Nurti-Turf Tree & Lawn Service, Warren, Mich. "We are permitted accidental spray drift here, but I believe if you are spraying too high, the spray will drift a block or more, and we would not consider that accidental. So we spray no more than 35 or 40 feet and inject immediately."

Green Season Tree & Lawn Care of Delaware will spray up to 85 feet if necessary, said Wayne George. "We don't usually go that high, but we can if necessary. We had a heavy gypsy moth infestation a few years ago where we had to get that high, but that is the exception, not the rule."

As for Philip Fred, president, Philip's Lawn & Tree Therapy, Indianapolis, Ind., spray risk was one reason his company got out of tree care entirely. "On the days with little wind where it was ideal for spraying, it seemed the kids were out playing, the neighbors had their laundry hanging out and the smell would linger in the air," he said.

So spray height is a personal preference. But like tree care altogether, it is a decision that should be made after weighing the pros and cons completely. — *Dave Clancy*

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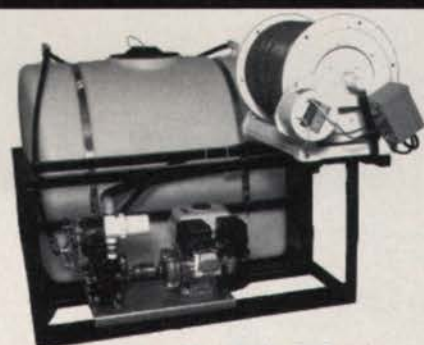


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USE READER SERVICE #100

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trees & shrubs

(continued from page 74)

Fanning said the easiest way to add tree and shrub care service to a lawn care account is to be observant. "About 40 percent of our lawn care customers also have tree care, and we don't push tree business aggressively. Usually, we pick up the business by noticing trouble with the shrubs. By pointing these things out we are providing them a service."

However, to provide that service, the contractor must be confident enough in his own abilities to diagnose and treat problems. "There is a big risk when you begin diagnosing problems because of the variables," Fanning said. "Those risks make us extra careful. If my people are not absolutely sure of the problem, I will go out and visit the property myself."

"There is so much more at stake when treating trees. Sod is still \$2 per yard. Trees and shrubs are not," Kopitz agreed. "You must make sure your people are properly trained and have the best equipment."

"Cost of equipment is also a major factor," said Fanning. "Companies don't want to invest in the right equipment — that is a big mistake."

"For instance, many people who begin treating shrubs will use one chemical tank for trees and one chemical tank for lawns with a valve to let them switch between the tanks," he continued. "If they are not careful they can contaminate the mix and get some weed control into their shrub mix."

Fanning explained that he has separate tanks, hoses, pumps and motors on each vehicle for shrub work. "We have invested an additional \$5,000 to outfit each truck to do lawn and shrub care at the same time on a property," he said. "If I have a guy who has been trained in tree care, it is less expensive for me to have him treat the property than to send a separate truck out."

"And because of my set up, contamination risk is minimized," he added.

"Many companies are sending out inex-

perienced people with inadequate equipment and," Fanning explained. "Not only are they not serving the customers' needed, but they are risking killing their shrubs."

Tree care is a problem-solving business, said George. "If a customer is having a problem with their trees or shrubs, and we can solve that problem, the customer will love us," he said.

And the lawn care provider that wants to move into tree care must look at the undertaking as a serious add-on, not as something that will add a few dollars to the coffers without significant investment.

"This is a serious commitment," said Kopitz. "You have individual plants that can be worth thousands of dollars, and the service provider must have the equipment, the energy and the commitment necessary to handle them." LL

The author is a freelance writer based in Gahanna, Ohio.

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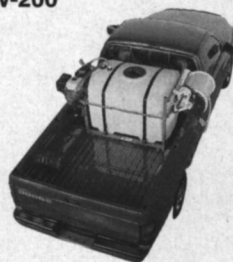
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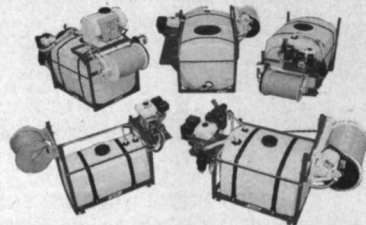
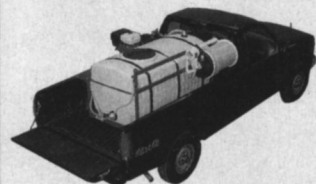
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USE READER SERVICE #54



mowers

The keys to making a mower last longer are ensuring it receives regular and proper maintenance and keeping an eye on how employees treat the equipment. Photo: Toro Landscape Contractor Group

In the past five years, Chris Hayden has never had one of his lawnmowers go in for service.

And why should his mowers have to be taken in for service? Hayden, owner, Hayden's Lawn Service, Greenfield, Minn., prides himself on

his proper maintenance practices.

"When I buy a mower, I buy extra belts, blades, spark plugs, air filters and oil filters," Hayden enthused. "I hang on to my mower manuals and file them away to reference later. These mowers are expensive and I want to get as much time out of them as I can get. I think I do regular maintenance a little more often than the mower manuals even say when it comes to changing oil, spark plugs and filters, but that stuff is cheap. And if I can hang onto my mowers for another few years, then the extra maintenance is worth the time and cost."

And, because of his reputation for impeccable maintenance, Hayden has no problem getting money back for his mowers when he trades them in.

According to landscape contractors like Hayden, proper mower maintenance is crucial to the extension of a mower's lifetime, as is a landscape contractor's ability to tweak his or her buying habits to include making sure the mower being purchased is made of quality components that are durable.

PIECES & PARTS. Before buying a mower, the first two things landscape contractors need to check out are the deck and frame construction, according to Tom Benjamin, market manager, Woods Equipment Co., Rockford, Ill.

The deck should be constructed of 10-gauge steel along with a 7-gauge plate over top of the deck for reinforcement of the spindle housing, Benjamin said.

"This is important because the deck can wear out so easily, especially in areas with sandier soil that can be very abrasive to the bottom of the deck and wear through it," he pointed out. "The deck is also victim to rocks banging up underneath it, grass building up and eroding the metal and other dirt and contaminants

Making Mowers Last

*Contractors and manufacturers
share their secrets for extended
mower life.*

By Nicole Wisniewski

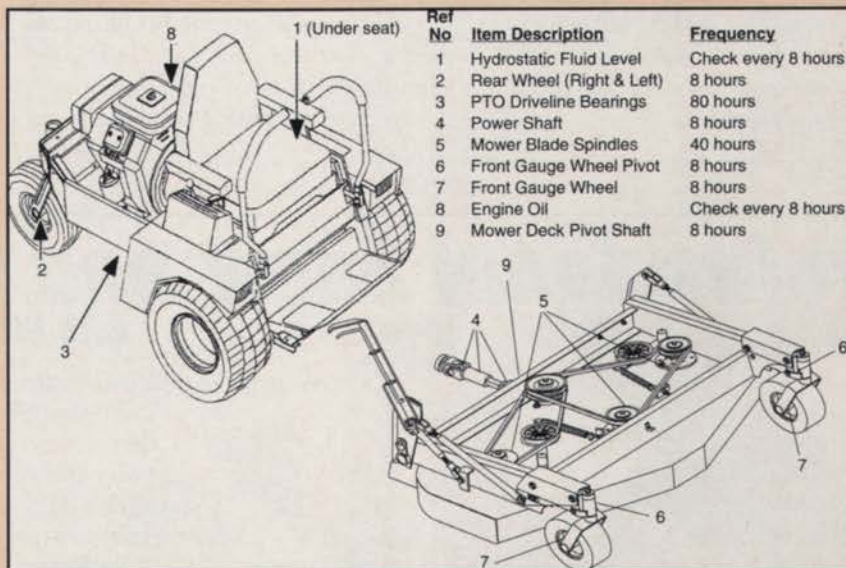
Being Replaced

“You can pressure wash your mowers and keep the grease off of them and have them for five years and one day the engine just blows up in one of them, even though you took care of it as best you could,” explained Chris Hayden, owner, Hayden’s Lawn Service, Greenfield, Minn. “Sometimes you can’t prevent something like that from happening.”

But when is the right time to replace a mower in a landscape contractor’s equipment fleet?

In a situation, such as a blown engine, Hayden said putting a new engine in the mower would probably cost about \$1,000, depending on horsepower.

“If the average walk-behind runs between 12 and 16 horsepower, the engine cost is probably between \$700 and \$1,000,” Hayden explained.



This graphic shows the proper mower maintenance practices and frequencies for a typical front-mount mower. Similar maintenance practices can be used on mid-mount mowers as well. Graphic: Woods Equipment Co.

thrown about from the revolving blades.”

When landscape contractors look at how the frame of a mower is constructed, Benjamin said they should make sure to look at the quality of the welds on the frame.

“For example, when purchasing a mid-mount mower, it might be wise to check out how the front axle is attached to it,” Benjamin said. “If the front axle is part of the overall frame then when the machine goes up a hill, the entire mower will adjust. But, if the pivoting axle moves independently of the rest of the frame, then if the mower goes over a hill, the entire frame isn’t rocking or pivoting – just the front axle is taking on that stress.”

Hayden said he prefers mowers with independent suspension because they absorb some of the shock of bumps and curbs without damaging the frame, and adding life to the mower.

The next important thing to look at when buying a mower is the engine, according to William Lowe, product manager, Snapper, McDonough, Ga. More landscape contractors are buying liquid-cooled engines today, Lowe explained, despite their higher price tag, because of the extra life they give to the mower.

“One way to notice the difference in mower life between air- and liquid-cooled engines is to look at their warranties,” Lowe pointed out. “An air-cooled engine has a two-year or 600- to 800-hour warranty, while liquid-cooled engines typically give the customer a two-year or 2,000-hour warranty. That shows that you may be getting 25 percent more life out of a liquid-cooled engine.

Because diesel engines are liquid-cooled, Lowe said manufacturers are making more of them, marketing diesel-powered units as a lower maintenance unit, and landscape contractors are catching on to the trend.

“With a diesel engine, there is no ignition system,” Lowe noted. “The machine is fired by compression so there are less parts to worry about. All a contractor needs to deal with maintenance-wise is changing the oil and oil filter and keeping it clean.”

Taking a look at the belts on a mower is another simple way to make sure a

landscape contractor is buying a durable piece of equipment, Lowe remarked.

“Belts are long-lasting as long as they run in a straight line,” Lowe said. “Belts work so much better if they are running in smooth, flat curves rather than at 45-degree angles or 90-degree turns.”

MOWER TLC. While not all landscape contractors are as finicky as Hayden about proper mower maintenance, this practice is still the most important part of making a mower last

“Instead of buying a new machine for \$2,500, replacing the engine is cheaper.”

“How often you need to replace a mower depends on the type of product you have,” added Mike Wootten, owner, Greener Creations, McDonough, Ga. “I’ve replaced numerous engines and got another lifetime out of my mowers.”

Typically, a mower needs to be replaced when the repair of the unit is more than 50 percent of buying a new one, pointed out William Lowe, product manager, Snapper, McDonough, Ga.

“All contractors have a hot button when it comes to what they look for in a mower and when they know the right time to get a new one,” noted Tom Benjamin, market manager, Woods Equipment Co., Rockford, Ill. “When maintenance costs become higher than justifying or the constant breakdown of the machine is causing downtime, then the contractor can’t afford to hang onto a mower any longer.” — Nicole Wisniewski

longer for the user.

“We change our oil at least once every two weeks,” Hayden related. “Even if the machine is sitting on a trailer most of that time, condensation can build up. And oil is cheap, so why not change it more frequently?”

One way a landscape contractor can make sure his or her mowers are kept in good shape is by keeping an eye on how his or her employees use the mower, Hayden said.

“Make sure your employees aren’t beating your machines up by running into trees

and jumping off curbs," Hayden warned. "They get paid either way and they didn't purchase the machines, so sometimes they don't understand what kind of destruction or extra cost can come from their actions."

Employees should also understand proper mower maintenance, said Mike Wootten, owner, Greener Creations, McDonough, Ga.

"All of your employees should understand a mower's needs before they begin to use it daily," Wootten maintained, explaining his process of daily maintenance. "I give my mowers a daily inspection in the morning before the machines go out. This inspection includes checking the oil, air pressure and cleaning the filters. Weekly, we conduct belt and blade inspections."

Proper maintenance keeps the body of a mower in great shape longer, Wootten said.

"On average, I've used mowers everyday for eight to 10 years, and these pieces are still what I consider my frontline equipment," Wootten maintained.

Blades are usually the first parts to wear out on a mower, Benjamin pointed out.

"When you buy a mower, you should immediately buy an extra set of blades," Benjamin advised. "Some contractors sharpen their mower blades daily because of the type of grass they cut, such as St. Augustine, or the type of soil involved, such as a sandy-type soil. Blades won't deteriorate as quickly in clay-type soils, but rocks still hit them. Blade life varies depending on how frequently each blade needs to be sharpened, whether or not it's bent or fractured and in what area of the country it is used. Regardless, having a second set of blades on hand at all times is crucial."

By taking care of the basic mower frame, oil changes and blades, landscape contractors could possibly get another life out of their mowers even when parts, such as engines, die out, Hayden said.

"A great thing for a contractor to do

when he or she is just starting out in the business, is to look into purchasing used equipment," Hayden noted. "I have a 1992 36-inch, walk-behind mower that I purchased 2½ years ago. When purchased new, that machine is worth \$2,500. It was run into the ground, but we picked it up for \$600 and put another \$200 into it with new blades and belts. Because we take care of the machine, it lasts for us." **LL**

The author is Assistant Editor at Lawn & Landscape magazine.

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State of the Industry REPORT

The labor market continues to restrict contractors' growth to some degree, but the industry's good time persists.

By Bob West and Nicole Wisniewski

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special **REPORT**

State

of the

Industry

he market is booming," according to Randy James, vice president, Davis Landscape of Hilton Head, Hilton Head Island, S.C.

Audrie Seeley, president, Audrie Seeley & Co., agreed when asked about business in Kansas City Mo. "This year has been a great year, and the market should be strong for at least the next three years."

"We've surpassed the best months in our company's history," added Marty Grunder, founder and president, Grunder Landscaping, Miamisburg, Ohio.

"There is plenty of business out there - I think we'll end up having a great year," echoed P.J. Lenihan, vice president, Nature's Select, Winston-Salem, N.C.

And the list of contractors boasting of record sales and booming services goes on and on all around the country.

However, while the industry's collective growth continues, this same growth has also yielded some challenges that seem to be leaving tangible marks on contractors' businesses.

While nearly 70 percent of contractors responding to an independently conducted *Lawn & Landscape* survey said they would enjoy increased sales revenues in 1999 compared to 1998, this number is down from 72 percent in 1998 and 74 percent in 1997. These contractors anticipate an average increase of 19.5 percent in 1999, compared to 22.7 percent in 1998 and 21.8 percent in 1997.

Fortunately, only 10 percent of respondents to this year's survey said they expected sales to drop off this year, but the remaining 20.7 percent pre-

market OVERVIEW

Companies:	70,000
Revenues:	\$60 billion in 1998
Employees:	875,000
Average years in business:	17.7 years
Average year-round employees:	12.5
Average seasonal employees:	9.4
Average 1998 gross sales:	\$863,800
Average 1998 net profit:	16.4 percent
Average sales growth over 1997:	22.7 percent
Anticipated sales growth for 1999:	19.5 percent
landscape contractors:	35.3 percent
lawn maintenance contractors:	19.3 percent
lawn care company:	14.4 percent
Grounds management:	7.3 percent
Ornamental shrub & tree care:	5.3 percent
Revenues from single-family residential contracts:	58.7 percent
Revenues from multi-family residential contracts:	6.7 percent
Revenues from commercial/industrial contracts:	27.0 percent
Revenues from government contracts:	5.3 percent
Average truck expenditures per company:	\$34,162
Average mower expenditures per company:	\$9,504
Average pesticide expenditures per company:	\$13,045
Average nursery stock expenditures per company:	\$104,027

Source: Research USA

dicted that their 1999 sales would remain flat compared to 1998. This 32.7 percent of respondents indicating that sales will be the same or worse this year than they were last year represents a slight increase from 27.7 percent in 1997 and 31.9 percent in 1998.

Just as noteworthy as the growth in sales were the contractors' responses

regarding the profitability of their businesses in 1998 – 77 percent of respondents said their business was profitable last year, with an average profit of 21.3 percent.

And when asked about profits for this year, 83.2 percent of respondents said they anticipate being profitable this year to the tune of 22.9 percent on

average.

Two factors can be largely cited as the causes for the growth challenges: first and foremost would be the limited labor supply, and second would be the increased competition many contractors are experiencing from new companies attracted to the rapidly growing landscape industry.

Despite the slightly slowed pace of growth for the industry, however, 1999 will go in the books as yet another year of significant double-digit growth for the lawn and landscape industry. In fact, industry growth continues to significantly outpace the growth of the overall economy, which has been between 3.4 percent and 5.1 percent annually over the last five years.

"The last two years have been our best years ever," commented James, adding that his company has already booked several large construction projects for next year that it expects to also maintain. "So we see this growth continuing right through the year 2000."

James explained his market's growth by pointing out the positive cycle taking place

in the Hilton Head area that is driving the entire economy forward. "There is a lot of building going on in this area, and the construction work creates new properties for us to manage and also brings new laborers into the area," he said. "Those laborers then spend money with other businesses while they're here, and that helps these busi-

nesses and lets them afford to spend more on their landscape. All of the growing communities then attract more people to the area, spurring construction of additional communities, and the cycle starts all over."

David Peabody, president, Peabody Landscape Construction, Columbus, Ohio, said the typical late summer slowdown his business experiences each year never took place in 1999, leading to his company's best year ever.

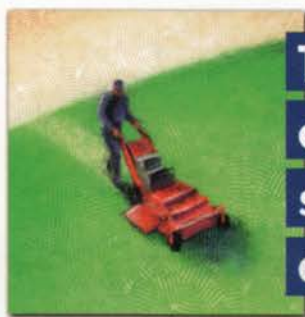
"We're really beginning to focus our growth in the maintenance area and with commercial customers," Peabody explained. "What we want to do is sustain the current size of our design/build services because our guess is that this market has to slow down in the next four or five years. But there will always be a market for the grounds maintenance services as the commercial properties have to maintain a certain level of appearance."

"Unlike a lot of the country, we were fortunate this year to have average or perhaps above average rainfall," noted Mitch Rolsky, vice president of operations, Stano Landscaping, Milwaukee, Wis. "What these conditions have done is challenge us in other ways because we're not only working around the rain but there has been added pressure on us to constantly get the jobs done right be-

cause customers don't think there can be any excuses for problems in these conditions."

As Rolsky mentioned, the drought that has plagued parts of the Midwest

restrictions have been enacted from New Jersey south through Maryland. The effects of the drought have been so severe that one company in Kentucky reported laying off approximately 50



The list of contractors boasting of record sales and booming services goes on and on all around the country.

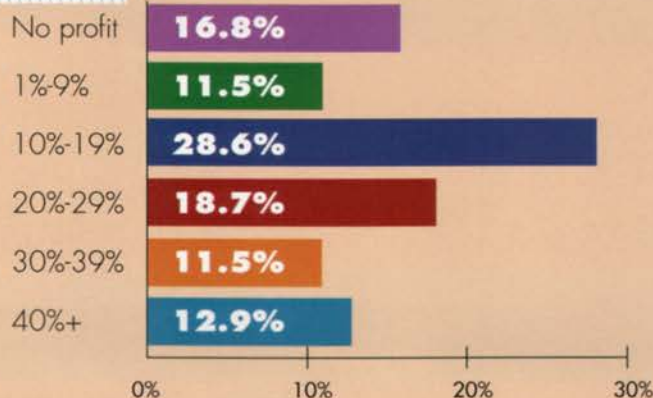
this summer from Missouri east to the mid-Atlantic region and then north along the coast has challenged contractors in those areas. Water reservoirs in New Jersey have run dry due to scarce rainfall and irrigation re-

employees due to a slowdown in work that has left its workforce smaller than the winter staffing levels.

Contractors are hopeful that the drought will yield increased turf renovation work this fall and next spring to replace dead lawns and should also boost sales of irrigation systems for many of those clients.

profits PLUS

Growing your business is most contractors' goal, but growth is only beneficial when it doesn't come at the expense of profits. Following are the responses to a survey of 1,000 *Lawn & Landscape* readers asked about their company's 1999 net profits:



Source: Research USA

ABOUT THEIR BUSINESSES. The average *Lawn & Landscape* reader has been in business for 17.7 years, with only 4.3 percent of those businesses beginning operation within the last two years. While that small percent of new contractors could seem to minimize the impact new competition has on the contractors' businesses, industry observers should note that a high percent of all new businesses are expected to fail within their first few years of operation, thereby lowering this number. Interestingly, despite contractors' reports about the increased number of start-up companies in the

If you buy equipment from one company, fertilizer and control products from another and seed from somebody else, we may take a little getting used to.

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industry today, the percent of companies who said they have been in business for four years or less in this year's research was almost identical to the numbers from 1995 and 1997 State of the Industry Reports.

Physical lawn maintenance services (mowing, edging, aeration, seeding/sodding) remain at the heart of contractors' businesses as these services are performed by 80 percent of survey respondents.

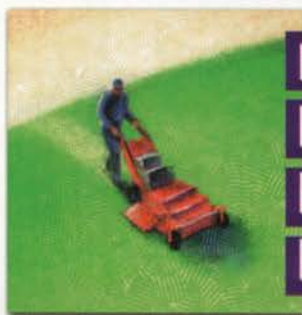
After lawn maintenance, the three most popular service categories are fairly equal in terms of popularity –

landscape construction (69.7 percent), tree and ornamental services (67.4 percent) and chemical lawn care (66.1 percent).

Irrigation services continue to climb in popularity, and irrigation design,

cal irrigation maintenance (35.1 percent) than irrigation installation (30.8 percent).

Nearly 51 percent of respondents said lawn mowing is one of the three largest categories for sales volume for



Few issues have ever challenged lawn and landscape contractors' businesses in the manner the labor shortage has this year.

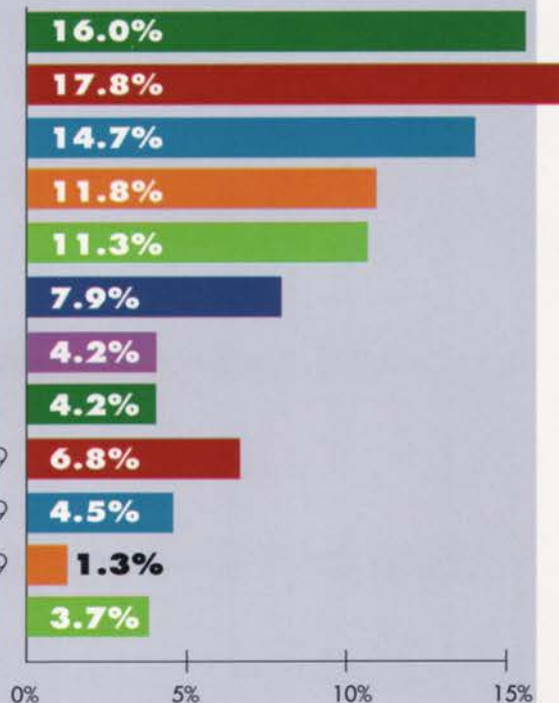
installation or maintenance work is now performed by 43.8 percent of survey respondents (compared to 40 percent in 1997) with slightly more respondents performing the less techni-

cal work. Landscape construction/installation represents one of the three largest categories of sales for 32.5 percent of companies, followed by tree and ornamental pruning (10.1 percent)

super SALES

The lawn and landscape industry continues to be an industry comprised primarily of businesses generating less than \$500,000 in annual sales. In fact, 71.6 percent of respondents to a survey of 1,000 *Lawn & Landscape* readers reported 1998 gross sales of \$500,000 or less.

Less than \$50,000
 \$50,000-\$99,999
 \$100,000-\$199,999
 \$200,000-\$299,999
 \$300,000-\$399,999
 \$400,000-\$499,999
 \$500,000-\$699,999
 \$700,000-\$999,999
 \$1,000,000-\$1,999,999
 \$2,000,000-\$3,999,999
 \$4,000,000-\$6,999,999
 \$7,000,000+



Source: Research USA

and turf fertilization (9.8 percent).

Regarding profitability, turf mowing, landscape construction/installation and then snow removal were the most commonly cited when contractors were asked about the profitability of the services they offer. The gross margins for these three services were estimated at 49.3 percent, 32.2 percent and 38.7 percent, respectively.

Employment was essentially comparable to data collected in 1998, as the companies employed an average of 9.6 year-round employees and 9.4 seasonal employees, for a total of 19 total employees.

The fact that the lawn and landscape industry remains an industry of small businesses was reinforced by the fact that 42.1 percent of respondents employ one, two or three people year-round. Meanwhile, 19.6 percent of respondents employ between five and nine individuals year-round, while 13 percent of the contractors have between 10 and 24 employees year-round. Survey results also indicated that companies tend to hire a comparable number of seasonal workers and year-round employees, thereby essentially doubling the size of their businesses during their peak season.

LABOR OF LOVE. As mentioned above, few issues have ever challenged lawn and landscape contractors' businesses in the manner the labor shortage has this year. (see *The Labor Crisis*, page 9) Contractors focusing on landscape maintenance and landscape installation work struggled to find entry-level employees willing to perform the labor-intensive tasks associated with landscape construction and landscape maintenance, while contractors specializing and chemical lawn care and irrigation services found a lack of experienced personnel for their more technically oriented services.

The shortage of qualified laborers

hasn't been concentrated in any one area of the country, either, and contractors responding to a survey addressing the labor situation indicated that their companies could have grown an additional 10 percent in 1999 had there been an unlimited labor supply.

An additional result of the labor shortage has been wide-spread instances of increased pay for entry-level employees as contractors now find themselves competing with other construction trades and even fast-food restaurants for these employees.

Survey respondents indicated they are paying the average entry-level mower operator \$7.28 an hour with 62.6 percent of respondents paying between \$6 an hour and \$7.99 an hour.

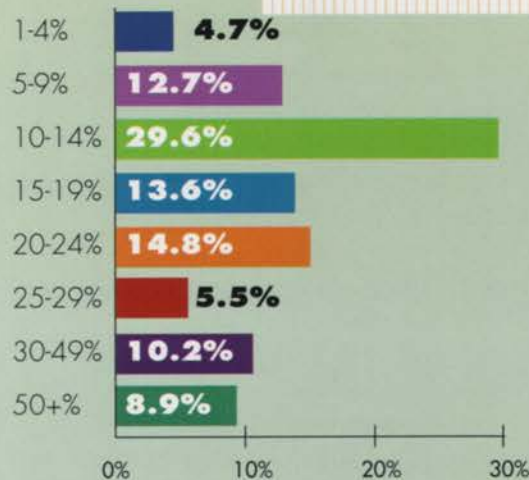
Entry-level spray technicians, meanwhile, are being paid an average of \$8.77 an hour due to the technical nature of their work, and the most popular pay ranges were \$8 to \$8.99 an hour (30.8 percent) and \$9 to \$10.99 an hour (31 percent).

A thriving industry that presents such strong growth opportunities attracts a number of new companies into the market, and many contractors reported that they have lost mid-level employees in recent years who have ventured off to start their own lawn and landscape business. As a result, even those contractors who have been able to tap into an

An impressive 72 percent of *Lawn & Landscape* readers who responded to an industry survey expect their 1999 revenues to surpass their 1998 revenues. This represents a slight decrease from last year's survey, which showed that about 72 percent of the industry enjoyed growth from 1997 to 1998, although last year's growth was stronger than this year's - 24.1 percent to 19.5 percent. This slowed pace of growth is certainly understandable, however, as the labor shortage becomes more restrictive the more companies grow and the overall health of the industry continues to attract new competition.

Of greater concern than the slowed pace of growth is the increase in the number of contractors who expected their sales to decrease in 1999 - from 3 percent of respondents last year to 10 percent this year.

Following is a breakdown of the expected growth ranges from survey respondents who do expect their companies to grow in 1999:



Source: Research USA

adequate supply of entry-level labor reported challenges at the foreman and supervisor levels of their businesses. The foremen who haven't left their employers are earning an average of \$11.54 an hour with 22.6 percent of respondents paying \$10 to \$10.99 an

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hour and 21 percent paying \$12 to \$12.99 an hour.

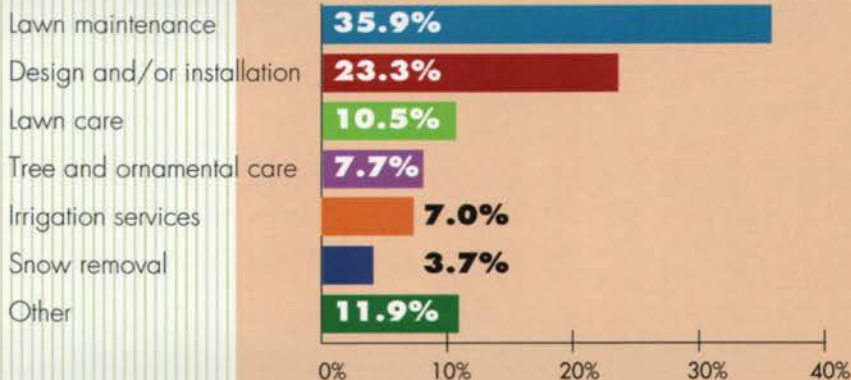
Historical data is not available for these survey questions, however interview-based research clearly indicates that contractors have increased the dollars spent on compensation per hour in the past few years. At the same time, *Lawn & Landscape's* annual surveys have found that compensation as a percent of a company's overall annual expenses has actually fallen slightly over the last three years as contractors increase their relative spending on plant materials and equipment. (see Plenty of Pennies sidebar, page 13).

The frustration of being forced to turn away work and not capitalize on all of the available opportunities because of this labor situation has led to a dramatic increase in the number of immigrant employees in the lawn and landscape industry, particularly those of Hispanic descent. Approximately 73 percent of contractors noted they employ at least some Hispanic employees at their company, which is a significant increase from the 55 percent employing Hispanics last year. In addition, Hispanic employees now comprise more than one-third of all industry employees, with particularly heavy concentrations in the South and West.

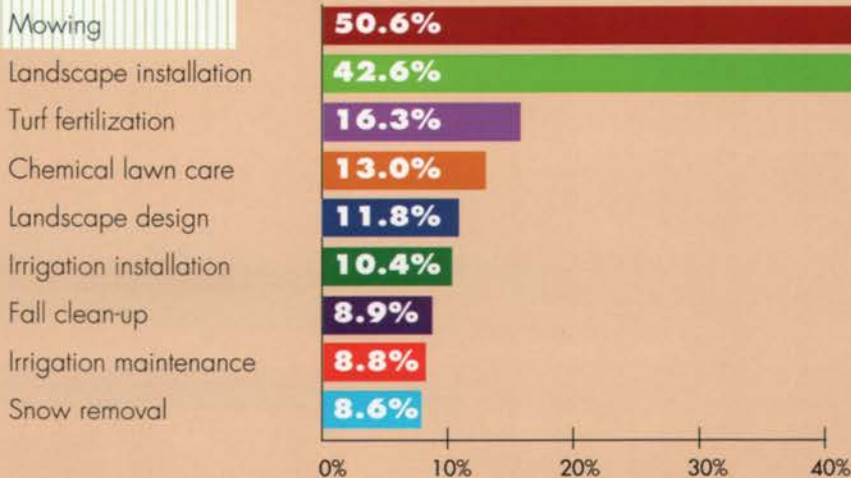
This number, as well as the number of Hispanic employees working at each company, promises to climb rapidly as the Hispanic employees embrace the manually demanding work and relish opportunities to work more than 40 hours a week and earn more money.

Many contractors have employed Hispanic employees for a few years and are just now getting these individuals to be sufficiently conversational speaking English to assume foremen and supervisor positions, which

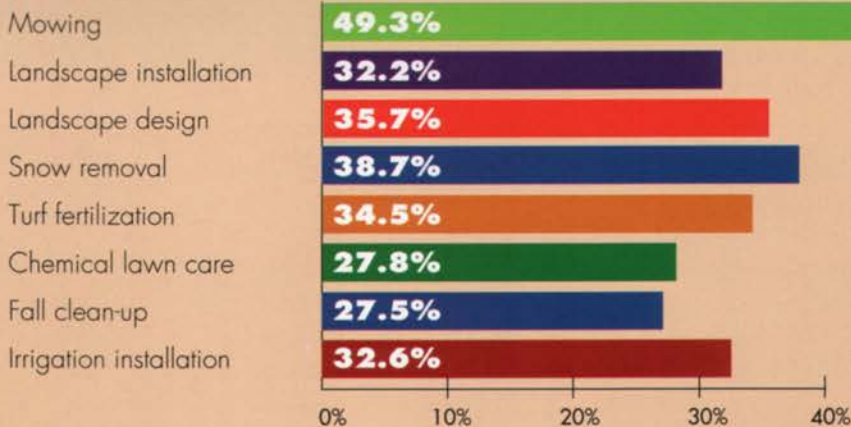
Lawn mowing lies at the heart of most landscape companies, which is certainly not a surprise to anyone in this industry. However, physical lawn maintenance (mowing, edging, trimming, etc.) doesn't even account for 40 percent of the overall revenues generated by this industry, which may surprise some people. While the mix in the first chart below isn't representative of the percent of sales from different services for every contractor, the numbers do reflect the increasingly full-service nature of contractors' businesses and the expected higher billing rates for some services (design and/or installation) over others.



Respondents were also asked to note the three services that represented the largest volume of sales to their company.



Not surprisingly, mowing, landscape installation and landscape design services were ranked as being the three most profitable services contractors offer. Following are respondents' average gross margin for their most profitable services:



the labor CRISIS

IN RECENT YEARS, few issues have challenged lawn and landscape contractors' businesses more than the shortage of quality labor. A survey conducted by *Lawn & Landscape* found that downward pressure on prices, the rising level of education and career expectations within the youngest sectors of the American workforce, and the restrictions and regulations placed on hiring legal aliens (most commonly Hispanics from Central and Latin America) by government agencies have combined to severely limit the pool of workers available to lawn and landscape contractors.

The business lost by lawn and landscape contractors from inadequate staffing is substantial in many cases. On average, firms would employ an additional 9 percent more employees if they could find people willing to work. For 1998, these 300 respondents predicted they would have boosted revenues almost 11 percent – nearly \$150 million collectively – had they had an unlimited supply of qualified workers to hire.

Contractors in the South appear hardest hit by the labor shortage – firms in this area report being understaffed by more than 12 percent. These respondents also report having "lost" the most revenues in 1998 due to inadequate staffing, predicting they would have been able to increase sales by almost 15 percent had they had a sufficient labor pool. Overall, Midwestern firms report being the least affected by the shortage of qualified workers, reporting a labor shortage of just 7 percent and average lost 1998 revenues of 8.5 percent.

Despite looking for opportunities to broaden their migrant worker base, only 11.2 percent of firms currently participate in the U.S. government's H2B program, which offers temporary work visas for legal immigrants. While a number of respondents were not aware of the program and its details, others cited the difficulties, expense, and time involved in participation as deterrents.

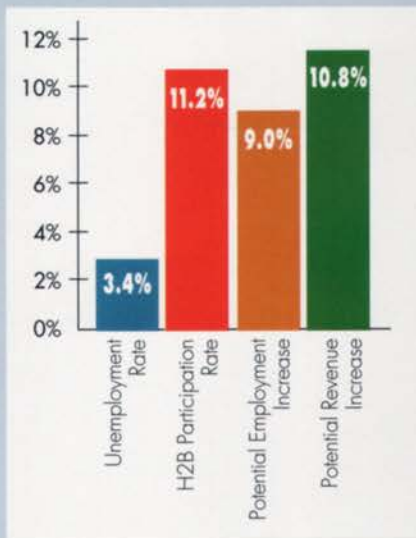
THE CURRENT LABOR POOL. Hispanics in general make up more than one-third of the employees of our survey respondents. Lawn and landscape contractors report particularly high concentrations of Hispanic employees in the West and South, where Hispanic populations are largest.

While many firms would not be able to maintain their current level of business activity without employing individuals from Mexico and other Latin nations, the increasingly service-oriented nature of the lawn and landscape industry

creates challenges for these often non-English speaking individuals. In addition, legal aliens often have difficulty obtaining a valid driver's license.

Employers, for their part, complain that the employment of immigrants is subject to needlessly frustrating and time-consuming legal and regulatory intricacies. Other challenges include high turnover among immigrant employees, which leaves contractors with little choice but to pay overtime to cover their service obligations, thus reducing profits and limiting the wages that contractors can pay field personnel. Some lawn and landscape professionals also complain about having to compete against firms that knowingly use illegal aliens and can undercut those with above-the-board employment practices.

The government's H2B program is cited as a solution by some, although many familiar with the program claim it is too expensive and the process for participation in the program is too slow and difficult. Other solutions include expanded use of high school and college students for seasonal work and the development of in-house programs to teach English, driving and job skills.



THE IMPACT. While contractors remain frustrated with the obstacle the labor shortage creates for their growth, the shortage also has a significant impact on employment and economic growth locally and nationwide. Just based on the strength of the market for lawn and landscape services and even given the current constrained labor supply, lawn and landscape contractors expect to increase employment at an average annual rate of 9.5 percent through 2004, with employment levels accelerating over the period from 2002-2004. However, survey respondents report they would be able to increase their employment today by 9.1 percent on average if they had an unlimited supply of qualified employees. The total effect would be the employment of an additional 2,300 persons just among the approximately 300 firms surveyed here.

Given the number of firms involved in the lawn and landscape industry, the aggregate effect of the labor shortage on the greater economy is potentially enormous.

In aggregate, the availability of a qualified, unlimited labor pool would have raised respondents' 1998 revenues by an average of 10.8 percent, resulting in an additional \$145 million in sales among our 300 survey respondents alone. Only 14 percent of respondents stated that having a much larger supply of workers would not have increased their revenues.

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is where the contractors anticipate realizing the greatest benefits with this group of employees.

CAN PRICES KEEP UP? Another result of the labor shortage has been the need for contractors to offer employees improved benefits packages and recruitment incentives in order to attract and retain them.

"Now we offer a retirement plan, paid vacation, holidays and uniforms for our employees," explained Grunder. "I think there's a lot of value in the 'little things' a company offers, such as an ice machine for employees to file their coolers from in the morning, new equipment and a first-class facility including a place for employees to shower.

"Managers need to put themselves in a prospective employee's shoes and decide whether or not they would want to work for their own company," Grunder continued. "Show these people that they can have a long-term career with opportunities for advancement at your company."

"We offer insurance, a pension plan, year-round employment and vacations, but we still had the turnover this year, particularly with our crew leaders," noted Michael Young, president, Lawn & Shrub, Lafayette, Ind. "The problem is that people will still leave for another job for an extra \$1 an hour."

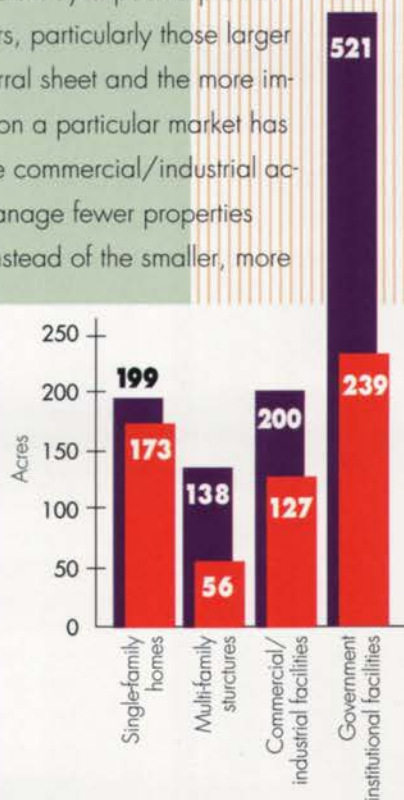
The low paying nature of the lawn and landscape industry overall has become an increasing frustration for companies as they realize that, oftentimes, the only way by which they can keep their employees is to pay them more. The problem these companies encounter, though, is that in order to pay their employees more they need to charge their customers more, which can be difficult to do in

As contractors improve their business management skills and become more savvy marketers of their services, many companies develop greater market focus regarding the customers they expect to provide their revenues. For many contractors, particularly those larger organizations with the lengthy referral sheet and the more impressive equipment fleet, focusing on a particular market has meant a concentrated pursuit of the commercial/industrial accounts that allow a company to manage fewer properties with larger acreage per account instead of the smaller, more price-sensitive residential accounts. At the same time, residential lawn care remains the bread-and-butter service for most of this industry.

The accompanying chart indicates the average number of acres of different customer types contractors maintain. Readers should note, however, that these numbers reflect the average number of acres maintained by contractors who handle these particular clients. Since all survey respondents don't service the single-family residential market, for example, their response of "zero acres" would not be factored into these results.

Again, single-family residential accounts remain the most popular type of account as 55.1 percent of survey respondents indicated they maintain at least 1 such acre. Commercial/industrial facilities were second most popular at 50.5 percent, following by multi-family structures at 23.2 percent and government/institutional facilities at 16.4 percent.

Meanwhile, the number of acres that were maintained with chemical lawn care practices (the red bars) was less for each of the customer categories, with the greatest percentage of acres mowed also receiving chemical lawn care treatments in the single-family residential market (86.3 percent).



such a competitive market.

Fortunately, however, the days when contractors considered themselves lucky to boost their prices by 1 percent from one year to the next seem to have passed in many markets.

Contractors interviewed for the 1998 *Lawn & Landscape State of the Industry Report* were reporting an increased willingness on the part of their customers to bear more significant price increases, and that trend has continued to spread in 1999, although to say the market is no longer price sensitive would be grossly inaccurate.

"Price increases will go through," assured Young. "I tell people that they aren't getting paid enough for their work if they aren't being told 'no' by some customers.

"My advice to contractors is to go for the price increases now when the economy is good, because the economy certainly can change and getting paid more for your work is going to be almost impossible then," Young added.

"We're finding there is less price resistance the longer a company is in business and is able to drive its growth via its reputation," noted Grunder. "We're also fortunate to be serving a lot of the high-end residential market that is comprised of customers who are benefiting from the strong stock market and, therefore, have more disposable income available to them."

Ironically, some contractors believe the influx of new competitors in the industry who take advantage of their lack of overhead to price their services lower than the established contractors in a market may actually be benefiting the industry.

"All of the new companies in the market means that some companies aren't doing quality work, which creates the perception that there are fewer companies providing quality work," remarked Peabody. "As a result, prop-

erty managers aren't being as price sensitive because those low-priced contractors are getting them in trouble."

"Our corporate focus is on the more affluent niche of the market so we can avoid the price wars," noted P.J. Lenihan, vice president, Nature's Select, Winston-Salem, N.C. "Going after this end of the market and expect-

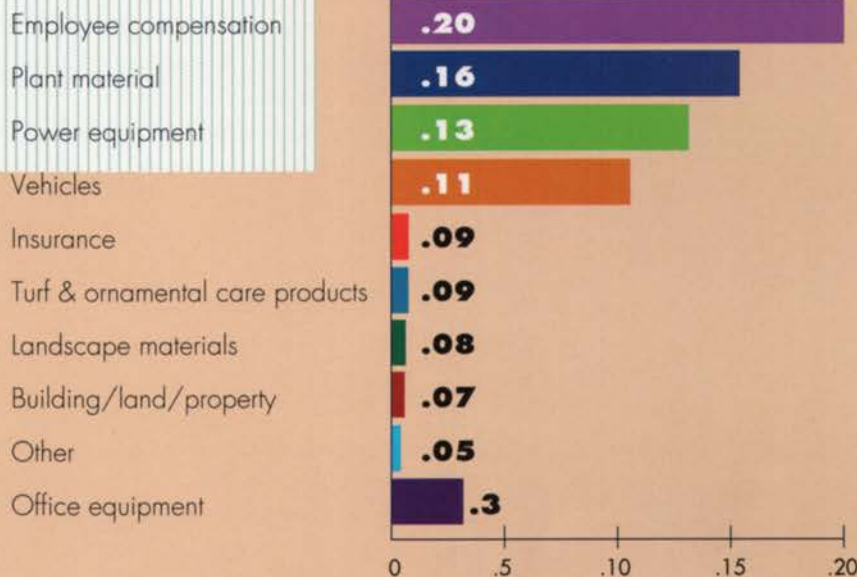
ing to be the highest estimate on a job allows us to get the higher dollars up front and be able to invest those dollars in experienced employees who can deliver the quality of service these customers expect."

Lenihan said his first lawn care company was designed to be more price competitive, and the lessons he learned

plenty of PENNIES

Contractors nationwide continue to point to the lack of qualified labor as a key stumbling block in their efforts to grow their company, but this challenge may be benefiting equipment manufacturers. For the second consecutive year, a survey of 1,000 *Lawn & Landscape* readers has found that contractors have reduced the amount of money they spend on employee compensation while they've increased the dollars spent on power equipment. In 1997, respondents indicated 27 percent of their expenses went to compensation, compared to 26 percent in 1998. As manufacturers push efforts to develop more productive machines and educate contractors on the benefits to be enjoyed by investing in equipment instead of people, contractors may be able to boost profitability and reduce their dependence on people power to some degree.

Readers were asked to break out their total annual expenditures on a percent basis, and almost all categories were up over last year as contractors work to do more work with less labor.



Source: L&L Reader Survey, September 1999

special REPORT

Consolidation

ALONG WITH the industry's labor shortage, consolidation has been the big topic on contractors' minds, although the frenzied buying pace of 1998 has slowed considerably.

To date, the industry's only significant consolidators remain TruGreen LandCare, Memphis, Tenn., with its 60-plus acquisitions in 50 different markets across the country. The group should finish 1999 with a run rate in excess of \$600 million and plans to "continue to take an aggressive position" regarding additional acquisitions.

The company reported it is pleased with its progress to date, particularly regarding its ability to develop a financial reporting system among all of its branches ahead of schedule.

Key benefits to the consolidation to date have included "being the only company able to leverage a national presence to our customers," the cost efficiencies of increased purchasing power and an ability to seamlessly integrate with the TruGreen-ChemLawn lawn care operations.

Interestingly, the company doesn't expect to see other consolidators enter the industry at this point.

before selling that company shaped his current approach.

"If a company's goal is to be price competitive, then that company needs to meet much higher production goals in order to generate the same revenues of a company with higher priced services," he explained. "Granted, we do price ourselves out of the middle of the market a lot, but we don't have the production pressures that other companies have."

An added benefit of the growing market that relates to less price sensitivity has been contractors' ability to be more selective in the jobs they pursue.

"Our margins have been running a little higher and our competition has been consistent," observed Peabody. "But we've seen more jobs where 12 contractors show up for the bid meeting to pick up plans and only three of those companies actually submit bids."

Rolsky also pointed out the importance of understanding the profit potential and business costs associated with offering different services when setting the prices.

"From our perspective, the bid side of our business, which will generally be more commercial oriented and larger in nature, is intended to help us maximize return on other assets that are used for the profitable snow and ice work," Rolsky explained. "But we never feel like we're getting

The lawn and landscape industry has historically been able to track its growth on about an eight- or nine-month delay behind the construction industry. That trend has made new housing start reports valuable as forecast tools for the landscape industry. The industry's growth throughout the 1990s shouldn't come as much surprise then when the total annual housing starts for the nation are examined.

After a significant drop from 1989 to 1991, housing starts have climbed by nearly 60 percent since then with the most dramatic growth occurring from 1997 to 1998.

Unfortunately, financial analysts have raised concerns that the housing boom of the 1990s may be nearing the end of its run as interest rates have climbed back over 8 percent and housing starts for June and July of 1999 were nearly 4 percent lower than June and July of 1998. (all numbers in thousands)



Source: U.S. Census Bureau

paid enough for our work and we think we should be pushing the envelope more.

"Educating the customers and your own sales people about what is fair value for landscape work is always a challenge, but I think everyone is prob-

FQPA threat looms

Dursban, a popular insecticide from Dow AgroSciences, Indianapolis, Ind., became the first widely used green industry pesticide to find itself in the crosshairs of the U.S. Environmental Protection Agency.

As a result of the Food Quality Protection Act, which was passed in August 1996, EPA is reassessing the safety of all previously registered pesticide products, but now the Agency is evaluating these products with widely different standards than those used for the last 27 years.

The EPA has been widely criticized to date, however, for what pesticide suppliers and a host of third-party scientists have termed "unscientific based research. These critics have charged that EPA has launched a politically motivated attack on specialty pesticide products, safe or unsafe.

"We believe in and stand for good science – that's what we're all about as a company," noted Tim Maniscalco, manager for government and public affairs

for Dow AgroSciences. "All that we're asking is that EPA use good science as it reassesses all of these products."

Instead of sound scientific research, critics of the EPA claim the Agency ignores pesticide manufacturer's research and instead relies on tremendously conservative default assumptions about the relative toxicity levels of pesticide products in a response to environmentalists' continued lobbying efforts.

Chlorpyrifos, the active ingredient in Dursban and a product that has been prevalent in lawn care and pest control markets for more than two decades, for example, was found by EPA to be more than seven times as toxic as is acceptable under the new guidelines.

An additional concern of pesticide suppliers is that the new guidelines established by FQPA don't require EPA to consider the benefits of a particular pesticide product and its use controlling unwanted and potentially dangerous pests as early legislation did.

Legislation that would require EPA to analyze all pesticides with more widely accepted scientific practices has been introduced into both the U.S. House of Representative and the U.S. Senate, and pro-lawn care individuals are optimistic about both bills' chances for passing some time this year.

ably getting a little more for their work right now," Rolsky added.

"I don't think the pricing issue will ever go away because we will always be competing with some companies who can do the work cheaper than we can," agreed Kent Miller, vice president, The Groundskeeper, Tucson, Ariz. "But contractors who can decide what market they want to specialize in and then identify their customers accordingly will generally find that pricing isn't as much of an issue for them."

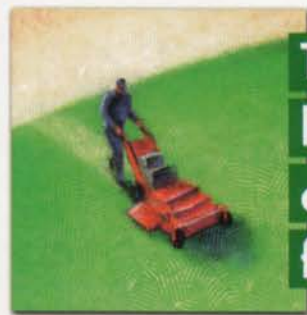
Another approach to the pricing issue has been to focus on developing quality relationships with key general contractors or property managers in order to lock up contracts without having to battle for them

in a competitive bid situation. The idea here is that the clients are willing to pay a few percentage points more for the service when they know they are hiring a contractor they can trust and who will do quality work for them. Contractors must then be sure to deliver the level of service expected by the customer or else risk jeopardizing

tractors that we try to work with ahead of the bid process and negotiate a contract so we can stay out of the bid market entirely," explained Seeley.

MANAGEMENT MASTERS. Increased competition. Thinner margins. Greater productivity demands.

These business influences all place



The low paying nature of the lawn and landscape industry overall has become an increasing frustration.

a relationship that could encompass multiple accounts.

"We have some good general con-

greater demand on business owners and managers for more efficient management of their operations, which re-

special REPORT

quires many contractors develop a skill set they aren't necessarily prepared to rely upon.

"Business management has been important to us ever since we took a slide in 1993 because we had grown too fast," recalled Peabody. "The challenge facing contractors is that so much of the industry's upper management hasn't had any formal, business administration education."

"We're continually finding customers' expectations climbing and they don't want to pay more, so con-

tractors better get efficient," observed Miller. "We're really focusing on the process work - identifying the tasks we need to do best to deliver customer satisfaction and creating a true process for that tasks so there are clearly defined steps to follow."

"Equipment has always been a way to improve efficiencies for us, but now we feel like we really have to look at equipment even more this way," added Grunder. "Before, we sent out a three-person crew with \$50,000 and now we may send out a two-person crew with \$100,000 worth of equipment."

"We're really trying to maintain the momentum we have, and a lot of that has to do with keeping pace with the new technologies available to maximize efficiencies," noted Ed Castro, president, Ed Castro Landscape, Roswell, Ga. "For example, a lot of the computer software has helped us use more information about our budgets. This never used to be an issue, but now we feel like we have to keep up with these advances to know where we are as a business in today's market." ■

The authors are Editor and Assistant Editor of Lawn & Landscape, respectively.

can 1+1=0?

Business is good for the lawn and landscape industry. More customers are coming into the market every day. At the same time, many current customers are looking for contractors to provide more services. A job that used to just be mowing now may require seasonal color change outs, tree and shrub care and holiday decorating.

On the surface, this would appear to benefit contractors, but the reality is that this situation challenges some companies. The problem for these companies is that they feel compelled to add these new services to their lineup in order to grow their business as much as possible while the market is strong and they want to keep their customers happy and not risk losing them to more full-service competitors.

"We just started providing tree care services last winter," related Jason Foesch, president, J'F Lawn & Landscape, Minneapolis, Minn. "I think a problem for a lot of companies is that they are always chasing more accounts instead of trying to get more dollars out of the accounts they already have."

But the problem is that in expanding into new services, contractors run the risk of diluting their focus away from the services they are experienced at and perform well enough to earn the business in the first place.

"We have added night lighting services in the last couple of years," noted Marty Grunder, founder and president, Grunder Landscaping, Maimisburg, Ohio. And, in

fact, landscape lighting has been one of the most popular services for contractors to begin offering.

While Grunder Landscaping has expanded its offerings to include lighting, however, the company has also eliminated a number of other services from the mix.

"An inherent key to our success in the last few years has been our commitment to focus on what we do well," Grunder explained. "We used to do holiday lighting, interiorscaping and concrete edging, but we were having so much trouble finding skilled labor and we felt we were diluting the quality of service we offer every time we added a service."

Consequently, the company has actually turned some clients away this year when their needs weren't deemed to be a good fit with what Grunder wanted his company to focus on.

"We wouldn't have been able to turn people away this five years ago when the market wasn't this strong," Grunder recognized. "But when you look at the truly successful companies in any industry you see that they have been able to replicate the systems they have mastered in order to capture the maximum amount of market share in their core markets instead of always trying to start up something new."

"We didn't used to understand this, so we always tried to do something new," he noted.

paying for PEOPLE

As the industry continues to struggle to find adequate labor, wages for the employees contractors do find continue to climb. And, not surprisingly, employees who become more valuable to companies, by either developing the necessary expertise to serve as a spray technician or crew foreman, earn more money than their entry-level counterparts.

On a geographic basis, employees in the South are consistently paid less than their counterparts in the other areas of the country. Entry-level mower operators earn an average of \$6.86 an hour in the South, compared to about \$7.55 in the other regions of the country. This pay disparity becomes even more pronounced in the entry-level spray technician and foreman categories, where these employees in the South earn an average of \$7.91 an hour compared to \$9.45 an hour as entry-level spray technicians and \$10.14 an hour compared to \$12.18 an hour as foremen.

	ENTRY-LEVEL MOWER OPERATOR	ENTRY-LEVEL SPRAY TECHNICIAN	FORMAN
Less than \$6	4.5%	4.0%	1.2%
\$6 - \$6.99	33.8	5.6	.4
\$7 - \$7.99	28.8	15.1	3.2
\$8 - \$8.99	19.8	30.8	10.1
\$9 - \$9.99	4.1	13.5	10.1
\$10 - \$10.99	6.6	17.5	22.6
\$11 - \$11.99	.8	1.6	6.0
\$12 - \$12.99	1.6	7.1	21.0
\$13 - \$14.99	—	1.6	8.9
\$15 or more	—	3.2	16.5
	100.0%	100.0%	100.0%
Average (per hour)	\$7.28	\$8.77	\$11.54

Source: Research USA

Lawn & Landscape 100

This year, Lawn & Landscape presents its third annual Top 100 list, a listing of the 100 largest companies in the green industry, based on their 1998 year-end revenues.

Companies on this list were surveyed in August and September of 1999 and asked to provide the information included in the chart.

The Top 100 earned a total of \$3,579,454,118 in 1998, or an average of \$35,794,541.18. These companies enjoyed growth of 19.8 percent in 1998 and expect 16 percent growth in 1999.

California again tops the list of states playing home to the most Top 100 companies with 15 headquartered inside its boundaries.

1999 state of the industry

COMPANY	CITY	STATE	98 REVENUES	PERCENT CHANGE OVER 97	EXPECTED PERCENT CHANGE IN 99
1 TruGreen-ChemLawn	Memphis	TN	\$820,000,000	2.5	n/a
2 TruGreen LandCare*	Memphis	TN	\$450,000,000	n/a	n/a
3 Environmental Industries Inc.	Calabasas	CA	\$436,000,000	24	20
4 The Davey Tree Expert Co.	Kent	OH	\$314,000,000	6	6
5 The Brickman Group	Long Grove	IL	\$150,000,000	45	25
6 Bartlett Tree Experts	Stamford	CT	\$104,000,000	15.5	n/a
7 Randall & Blake	Littleton	CO	\$56,466,394	10	15
8 The Lawn Doctor Inc.	Holmdel	NJ	\$50,000,000	16	12
The Weed Man	Mississauga, Ontario	Canada	\$50,000,000	10	10
10 Gothic Landscape	Valencia	CA	\$39,000,000	30	28
11 OneSource Landscape & Golf Services	Tampa	FL	\$38,000,000	15	55
12 Greenspace Services Ltd.	Toronto, Ontario	Canada	\$29,000,000	8	20
13 Hendricksen - The Care of Trees	Wheeling	IL	\$26,864,972	6.7	8.4
14 The Bruce Co. of Wisconsin	Middleton	WI	\$26,000,000	(-5)	13
15 American Landscape Cos. ★	Canoga Park	CA	\$24,500,000	23	11
16 Oak Leaf Landscape	Anaheim	CA	\$23,058,000	21.5	35.5
17 Leisure Lawn	Dayton	OH	\$23,000,000	5.2	7
18 Lipinski Landscape Contractors	Mount Laurel	NJ	\$22,200,000	11	15
19 The Groundskeeper	Tucson	AZ	\$22,000,000	10	15
20 Lucas Tree Expert Co.	Portland	ME	\$20,000,000	25	10
21 Acres Group	Wauconda	IL	\$19,000,000	100	n/a
22 Lewis Landscape Design	Las Vegas	NV	\$18,500,000	110	0
23 Jensen Landscape Services	Cupertino	CA	\$18,000,000	20	20
24 Mariani Landscape	Lake Bluff	IL	\$17,300,000	19.7	5
25 Desert Care Landscaping ★	Phoenix	AZ	\$17,058,000	151	70
26 Teufel Nursery Inc.	Portland	OR	\$17,000,000	0	10
27 Scott Byron & Co. Landscape Architects	Lake Bluff	IL	\$16,300,000	21	17
28 Cagwin & Dorward Landscape Contractors	Novato	CA	\$16,257,033	17.9	15
29 Chapel Valley Landscape Co.	Woodbine	MD	\$16,000,000	14.2	17.5
Landscape Resources Inc. ★	Dallas	TX	\$16,000,000	2	n/a
31 Nanak's Landscaping	Longwood	FL	\$15,500,000	24	20
Naragon Irrigation Co.	Barberton	OH	\$15,500,000	24	20
33 Brookwood Landscape	San Diego	CA	\$15,100,000	18	10
34 AAA Landscape	Phoenix	AZ	\$15,000,000	7	6
L&L Landscape Services ★	Sunnyvale	CA	\$15,000,000	63	n/a
Landscape Concepts	Grayslake	IL	\$15,000,000	25	25
Tropics North	Princeton	FL	\$15,000,000	30	10
38 Lied's - Landscape Design and Development	Sussex	WI	\$14,900,000	18	0
39 Park Landscape Maintenance	Santa Ana	CA	\$14,715,500	27	15
40 Duke-Weeks Landscape Services	Norcross	GA	\$14,700,000	31	40
41 Vila & Son Landscaping	Miami	FL	\$14,263,000	19.5	20
42 The Morrell Group	Stone Mountain	GA	\$14,000,000	36	10
43 Urban Farmer	Englewood	CO	\$13,700,000	3.8	13.1
Naturalawn of America	Frederick	MD	\$13,700,000	19.2	10
45 Dora Landscaping	Apopka	FL	\$13,500,000	18	n/a
46 Post Landscape Services Inc.	Atlanta	GA	\$12,090,000	15	25
47 Clarence Davids & Co.	Matteson	IL	\$12,000,000	20	20
Golden Bear Arborists Inc. ★	Monrovia	CA	\$12,000,000	n/a	n/a
49 Smith & Reynolds	Corona	CA	\$11,800,000	40	20
50 The Highridge Corp.	Seattle	WA	\$11,200,000	25	30



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COMPANY	CITY	STATE	98 REVENUES	PERCENT INC/DEC OVER 97	PERCENT INC/DEC FOR 99 REVENUES
51 New Garden Landscaping and Nursery	Greensboro	NC	\$11,002,273	15	15
52 DuBrow's Nurseries	Livingston	NJ	\$11,000,000	n/a	n/a
Hillmeyer Nurseries	Lexington	KY	\$11,000,000	20	n/a
54 Western Dupage Landscape	Naperville	IL	\$10,700,000	3	13
55 Hermes Landscaping	Lenexa	KS	\$10,500,000	15	10
56 Landscape Management Inc.	Carrollton	TX	\$10,102,603	n/a	25
57 Artistic Maintenance/Landscape Specialist	Lake Forest	CA	\$10,000,000	5	5
Diablo Landscape	San Jose	CA	\$10,000,000	25	20
Pennink Arrimour Inc. ★	Huntingdon Valley	PA	\$10,000,000	(-15)	n/a
60 Nissho of California	Anaheim	CA	\$9,500,000	2	3
61 Cedar Landscape Inc.	Sherwood	OR	\$9,451,000	(-8.7)	12
62 Dennis' 7 Dees Landscaping	Portland	OR	\$9,400,000	23	17
McFall and Berry Landscape Management	McLean	VA	\$9,400,000	21	2
64 Clintar Groundskeeping Services	Markham, Ontario	Canada	\$9,083,000	4	5.5
65 Stiles Landscape Service Co.	Pompano Beach	FL	\$9,000,000	2	0
66 The Munie Co.	Caseyville	IL	\$8,810,604	42	12
67 The Greenery	Hilton Head	SC	\$8,740,800	9.5	26
68 Webb Landscape	Ketchum	ID	\$8,560,000	13	2
69 Gibbs Landscape	Smyrna	GA	\$8,500,000	15	15
Scapes	Smyrna	GA	\$8,500,000	18	20
Senske Lawn & Tree Care	Kennewick	WA	\$8,500,000	6	12
Yardmaster Inc.	Painesville	OH	\$8,500,000	14	15
73 Sebert Landscaping	Bartlett	IL	\$8,321,060	25	26
74 Countryside Industries	Wauconda	IL	\$8,281,000	4.3	1
75 Prograss Inc.	Wilsonville	OR	\$8,200,000	7	10
76 Erlich Green Team	Reading	PA	\$8,000,000	n/a	n/a
Rosehill Gardens Inc.	Kansas City	MO	\$8,000,000	20	20
78 Scott's Lawn Service	Marysville	OH	\$7,900,000	92	70
79 Northwestern Landscape Co.	Puyallup	WA	\$7,800,000	15	15
80 Rood Landscaping	Tequesta	FL	\$7,715,345	6	3
81 ILT Vignocchi	Wauconda	IL	\$7,500,000	14	10
Maintain Inc.	Dallas	TX	\$7,500,000	22	15
Swingle Tree and Landscape Care	Denver	CO	\$7,500,000	15	5
84 Tierra Vista ★	Tulsa	OK	\$7,300,000	n/a	n/a
85 Canon Russeau Landscape	Carleton	MI	\$7,200,000	30	25
Landscape Workshop	Pelham	AL	\$7,200,000	19	27
Denison Landscaping	Fort Washington	MD	\$7,200,000	(-9)	12
88 CoCal Landscape Services	Denver	CO	\$7,100,000	0	20
89 James Martin Associates	Vernon Hills	IL	\$7,067,000	9	28
R. B. Stout Inc.	Akron	OH	\$7,067,000	7	5
91 Massey's Green Up	Maitland	FL	\$7,022,960	17	18
92 All-Phase Landscape	Lakewood	CO	\$7,000,000	0	21
Evergreen Landscape ★	Austin	TX	\$7,000,000	n/a	n/a
Mainscape	Indianapolis	IN	\$7,000,000	0	0
95 Landesigns ★	Las Vegas	NV	\$6,900,000	n/a	n/a
96 RH Dupper Landscape	Tempe	AZ	\$6,656,574	21	10
97 Alpine Gardens	Greeley	CO	\$6,500,000	10	1
Glen Gate	Wilton	CT	\$6,500,000	15	15
99 Industrial Landscape Services	San Jose	CA	\$6,400,000	8	5
100 Russ Fragala Landscape Contracting Corp.	Coram	NY	\$6,100,000	47	n/a
Smallwood Design Group	Naples	FL	\$6,100,000	15	15

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e have observed many changes in landscape pest management in just the last five years. New products, new regulations, and new pests are all a part of a rapidly growing and evolving industry.

Many of the changes we see are exciting, and a few are discouraging. In this article I'd like to discuss a few items that may change in the next five years and perhaps even speculate a bit as to their impact on the landscape industry.

One issue that has stirred up controversy since its signing in 1996 has been the Food Quality Protection Act. This piece of legislation replaced the outdated Delaney Clause with a new safety standard for pesticide residues and exposures. This new law differs dramatically from past regulations in that it looks at cumulative affects from exposures of all pesticides with similar modes of action.

For example, the total exposure to all organophosphate insecticides such as Dursban® (chlorpyrifos) would be lumped together. The EPA establishes a "risk cup" for that particular mode of action. The risk cup is the exposure over a 70-year period of time that is determined to be safe. All uses (food, urban, etc.) of products with a particular mode of action are loaded into the risk cup. If the exposure from all uses causes the risk cup to overflow, then some uses must be eliminated until the risk cup no longer overflows.

The organophosphate and carbamate pesticides were the first products targeted by this new law. As the process moves along (see *Breaking News*, page 20), the risk cup has been determined to be overflowing. This has generated considerable debate. Part of the debate centers on the use of "default assumptions." In other words, when good exposure data isn't available, we rely upon the worst case scenario just to be safe.

(continued on page 104)

The five-year forecast for the ever-evolving landscape pest control industry includes new products, new regulations and new pests.

By R. L. Brandenburg



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pest management

(continued from page 101)

In some cases, this may significantly inflate the risk as the worst case scenario may be much higher than the actual exposure to certain pesticides. Thus, the risk cup contents are artificially inflated.

Due to the absence of data for some exposures and the debate over the use of default assumptions, the whole process has been slowed down. The original deadline for the review of the first group of pesticides was August 1999. The deadline in the year 2000 to review more than 9,000 tolerances for all the pesticides seems out of reach to many professionals in the landscape industry.

However, the Food Quality Protection Act will march on. Its overall impact is uncertain, but without a doubt, we will see

Some manufacturers will have to reduce their pesticide use sites on the label, and this decision will be based, in part, on economics. Some use sites will be dropped if they add an inordinate amount to the risk cup.

the loss of some pesticide products for use in the landscape.

Some manufacturers will have to reduce their pesticide use sites on the label, and this decision will be based, in part, on economics. For example, if a pesticide is labeled for use in the landscape and on agricultural crops, a company may decide to keep the agricultural use label and drop the landscape uses if the agricultural use is more profitable. Some use sites will be dropped if they add an inordinate amount to the risk cup.

In addition, it will be interesting to watch and see if the frustration some people experience over the process to enact this new law will eventually cause it to be amended. Many of the environmental groups represented in the process recently withdrew over their frustrations with the procedure.

ENVIRONMENTAL GROUP INVOLVEMENT. Recently, I read a survey comparing today's college graduates with their parents. One of the interesting comparisons was that today's graduate is much less likely to be actively involved in any sort of environmental organization. Does this indicate that the wave of the environmental movement has crested? I don't know if we can assume that, but we don't necessarily want to see that statistic continue in that direction.

The efforts of reasonable environmental groups have gone a long way toward improving our industry. The pressure they presented, in addition to our own desire to see lower toxicity pesticides, has helped promote more environmentally friendly pest management approaches.

Most of the newer products we see introduced into the market are less toxic to

(continued on page 106)

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pest management

(continued from page 104)

people and wildlife than are many of the products these new introductions are replacing. No one can argue that this hasn't been a good move.

As technology continues to improve, we'll see more advances in that direction. However, in the case of insecticides, we are noticing a general reduction of the broad-

spectrum pesticide products.

Unlike many of the older pesticide products, some of the newer ones are efficacious against a smaller range of insects. This isn't necessarily bad because we are rarely coping with a wide array of pests all at once anyway. This may, however, require lawn care operators to carry a slightly larger inventory so

that they can cover all of the bases.

I anticipate that the trend of narrower pesticide spectrums will continue in the products we see produced in the future because the mechanism by which these insecticides control pests is often quite unique and specific. This may be a certainly acceptable tradeoff as we move toward a market with lower toxicity pesticide products.

Along the same line of thought, these new chemistries on specific modes of action may render these new products a little less forgiving. In other words, the timing of their use and the method of application may be a little more critical.

Merit® (imidacloprid) and Mach 2® (halofenozide) are two good examples of this. They are much more effective against grubs when used proactively than when used as a rescue treatment. If targeted against grubs during beetle egg-laying, they are excellent products. As a rescue treatment to clean up an existing grub problem, they are less effective.

RELYING ON RESEARCH. Thus far we have discussed new regulations, and new pesticides. The ability to deal effectively with these new regulations and the development and effective use of these new pesticides relies heavily upon research.

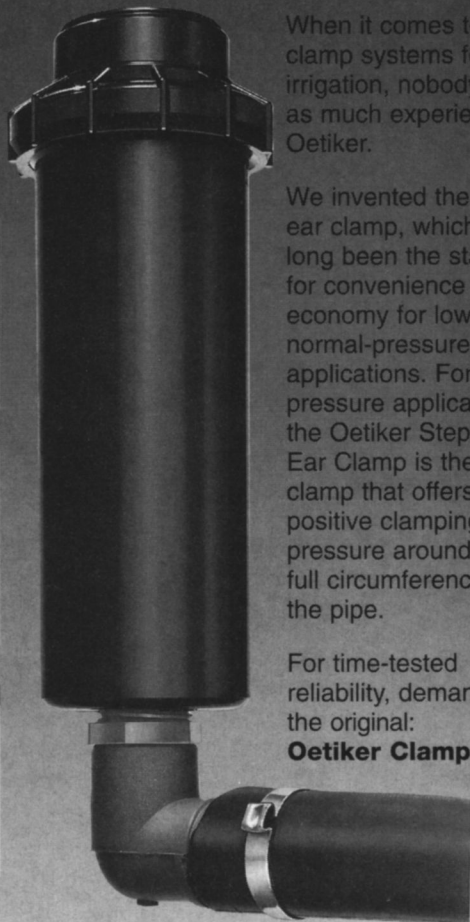
Fortunately, research in the turfgrass and ornamentals programs at the major universities around the country has attempted to keep pace. In light of budget restrictions in most states, this has been quite challenging. Several programs have increased in response to the growing lawn care and landscape industry.

The programs at land-grant universities seek to solve problems of local significance

.....
As we move toward a market with lower toxicity pesticide products, the trend of narrower pesticide spectrums in future products will continue.
.....

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USE READER SERVICE #61

(continued on page 108)

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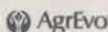
"I started to feel cold. I knew there was no time" says Kay.



For Kay Gambill, time was running out. The temperature was dropping, the weeds were growing, and she and her team had a 2 acre ornamental landscape to clear and re-build in Fayetteville, NC. "Cardinal Landscape works right through the winter" she explained "and that's when most systemic weedkillers quit. But not Finale® Herbicide. Where it'll take Roundup® a month or more, Finale does the job in a few days, even when the thermometer's below 40°. For weeds, it's a sudden death experience, winter as well as summer. Kinda gives you the shivers, doesn't it?"



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USE READER SERVICE #29

pest management

(continued from page 106)

and develop improved management and maintenance programs for the regional landscape industry. This information is communicated to the industry through outreach and extension programs.

In an issue of *U. S. News and World Report* published this summer, an article featuring the home lawn care industry discussed low maintenance approaches. The main thrust of this article was to point out that an efficiently managed and maintained lawn might not require all of the inputs one might assume.

In essence, the article went on to indicate that some lawn care services might be putting more product into the lawn than is necessary. This practice was somewhat defended by the fact that lawn care is a business striving to give the customers what they want. One might agree or disagree with the article, but I was enlightened by a recent phone call from a sales representative at a major national lawn care company regard-

ing their pesticide practices.

Obviously, the caller did not know who I was, or what I did since he passed along many "facts" about insect management in turf that were far removed from the truth. I heard nothing from him that I knew was based on biological research from North Carolina. While I can't say I was shocked at what I heard, I must admit it deviated dramatically from what I would call state-of-the-art pest management. It was based more on economics than on biology.

When I informed the caller what I did, he immediately hung up the phone. The truly discouraging aspects of the discussion were his frequent comments that each prac-

.....

Many of the newer pesticides are becoming narrower in spectrum, which makes the timing of their application increasingly critical and increases the need for pest scouting and monitoring.

.....

tice was based on local research. If these practices are based on local research, their researcher certainly obtains different results than I do.

However, this discussion begs us to ask a much more important question: Are the IPM programs being developed at universities across the country not meeting the bottom line business risk requirements of some or all lawn care

companies? Are the university scientists researching these problems so out of touch with the industry that the IPM programs they produce aren't applicable? Is some-

(continued on page 110)

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pest management

(continued from page 108)

thing missing or was my phone call the exception?

These are important questions for the university program and the landscape industry to ask and to answer honestly. If our answer to any of these questions indicates room for improvement, then we need to address this issue.

As previously mentioned, many of the newer pesticides are becoming narrower in spectrum, and the timing of their application is increasingly critical. In some situations, this could make operating cost-effective pest management programs more difficult and increase the need for more scouting and monitoring of pests.

Since we all seek to make pest management as technologically and environmentally sound as possible, perhaps increased dialogue between the landscape industry and universities is in order.

Such dialogue is certain to benefit both groups. The university scientists benefit by

the feedback from the landscape industry and the landscape industry benefits through programs that continue to meet their needs.

While most university/industry relationships maintain some level of dialogue, as the industry grows and becomes more complex and places increasing demands upon

research, there is perhaps the need to strengthen our relationship.

As we look to the future and try to predict the technological advances that will continue to shape our rapidly changing industry one major factor remains unchanged: Landscape managers must give

the customers what they want.

Three components of customer demands include: cost effectiveness, environmental soundness and satisfaction with the end product, and they are not and need not be mutually exclusive. Aggressive research programs developed in close association with the industry can

assure we will meet pesticide management needs both in the immediate and long-term future. **L**

The author is professor of entomology, turfgrass and peanuts, N.C. State University, Raleigh, N.C.

•••••

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USE READER SERVICE #66

• *A sound approach to fertilization for healthy turf actually begins in the fall.*

• *By Bob Staib*

W

hen consumers think about fertilizer, spring and summer are what come to mind. This is certainly an understandable thought process since nice weather allows for more time to be spent outside, which highlights the need for a lush, green lawn.

However, fall is actually the most important season of the year for all perennial plants, and this is particularly true for turf grass. Fall is when all of the processes for regeneration and readiness for the following year's growth come together.

What is past, is past, but what is going to be depends on how well the new roots are formed and whether or not the year-round fertilization program has instilled an adequate mantle of winter hardiness.

Turfgrasses are constantly experiencing culture shock from both environmental and human-induced stresses. Only a turf stand with a deep and vigorous root system will look spring-fresh all season long. The root system becomes a crucial part of a lawn's healthy appearance because the roots are what send the water, nutrients, enzymes, vitamins and hormones to the leaf blades to keep growth on an even keel when other factors are working hard to bring the whole structure down.



Because turfgrasses are constantly undergoing culture shock from both environmental and human-induced stresses, fall season becomes payback time for turf. During this time, a nutrient-rich soil will favor root formation. Photo: Lawn & Landscape staff

(continued on page 114)

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fertilizer elements

(continued from page 112)

The fall season of each year then becomes payback time for turf. As leaf blade growth slows due to shorter days and cooler nights, roots commence storing carbohydrates that were produced during the photosynthesis process. This storage process is the precursor initiating new root growth. Other factors, especially a good nutrient-rich soil, will favor root formation so long as excessive nitrogen does not over-stimulate top growth.

ALL IMPORTANT NPK. Nitrogen (N), phosphorous (P) and potassium (K) are the major elements required by all plants. But providing plants with the correct amount and ratio of each nutrient is just as important in order to sustain a healthy turf as it is for developing a high yielding agricultural crop.

Nearly all turf grasses utilize nitrogen, phosphorous and potassium in approximately a 3-1-2 to 4-1-2 ratio on an annual

basis. This means that turf will use three or four parts nitrogen for every one part of phosphorous and every two parts of potassium. The ratio of nitrogen to phosphorous to potassium is visibly presented on the front of any fertilizer package.

Other nutrients, such as calcium and sulfur, and some trace elements, including iron, magnesium and boron, are important to turf health, but these elements are typically used in much smaller quantities.

A fall application of a 4-1-2 or 3-1-2 turf fertilizer when top growth has slowed and given way to root formation will aid in more vigorous rooting and set the plant up for a healthy start in the spring. Phosphorous, in particular, plays a vital role in the energy plants utilize in all life processes.

Fall applications of nitrogen fertilizer are best delayed until after the top growth has ceased. Over stimulation of top growth in the fall is counterproductive to root formation.

Potassium, meanwhile, is the chief building block in the structure of plant tissues. Because most leaf growth has slowed by this time, fall is an excellent opportunity to make up for any depletion of either element, especially if the fertilization program has been inadequate to date. (Before beginning a fertilization program for a new customer, contractors may want to con-

(continued on page 116)

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fertilizer elements

(continued from page 114)

sider taking a soil sample from the property and having that sample analyzed by a soil lab to better understand the specific soil conditions they will be working with.)

NITROGEN SOURCES. Fall applications of soluble nitrogen fertilizer are best delayed until after the top growth or leaf blade growth has ceased. Over stimulation of top growth in the fall is counterproductive to root formation. Waiting until November or even December (in southern states) to apply soluble or intermediate slow-release nitrogen sources will assure the presence of a healthy reserve for spring growth while providing minimal risk for leaching loss throughout the winter.

Urea and ammoniac nitrogen will not convert to readily leachable nitrate forms when soil temperatures are below 50 degrees Fahrenheit. Root formation, however, will continue to take place until the

(continued on page 118)

Recommendations

The following recommendations can be applicable to both cool-season and warm-season turf grass varieties. However, contractors should note that cool-season varieties utilize more nitrogen in the fall months vs. the warm-season turf grasses that have a greater nitrogen requirement in the late spring.

EARLY FALL: Apply an NPK fertilizer containing most or all of the nitrogen as ureaform, isobutylidene diurea or polymer-coated urea at 1.5 pounds to 3 pounds nitrogen per 1,000 square feet.

MID-FALL: Apply an NPK fertilizer containing most or all of the nitrogen as methyleneurea or isobutylidene diurea at 1 pound to 2 pounds nitrogen per 1,000 square feet.

LATE FALL: Apply an NPK fertilizer containing most or all of the nitrogen as soluble or sulfur-coated urea at 1 pound to 2 pounds nitrogen per 1,000 square feet. — *Bob Stalb*

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fertilizer elements

(continued from page 116)

ground is frozen. Delaying these applications until the weather has suitably cooled is also important because warm, moist soil subjects soluble nitrogen to leaching and run off.

Slow-release nitrogen sources should



Slow-release nitrogen sources are least likely to over stimulate top growth, and can be beneficial to both the soil and the roots. They should be applied in early to mid-fall.



ideally be applied in the early to mid-fall. These products are least likely to over stimulate top growth, and the nitrogen can be

beneficial to both the soil and the roots.

Ureaform, for example, releases its nitrogen by means of microbial activity. Microorganisms first use the nitrogen for their own food requirements and utilize the carbon in the carbon-nitrogen linked ureaform polymers for energy. The same principle applies to methyleneurea fertilizers, consisting of more soluble carbon-nitrogen polymers.

In fact, the rate of release of ureaform and methyleneurea fertilizer is governed by solubility – the more soluble these polymers are, the less resistance they provide to microbial degradation. In both cases, the nitrogen is gradually converted to the ammoniac form following microbial utilization.


Polymer-coated and sulfur-coated urea fertilizers release urea nitrogen by diffusion through the coating. The more slowly dif-

fused polymer-coated products can be applied in early to mid-fall and they will release the nitrogen slowly enough to minimize the chances for the over stimulation of leaf blade growth talked about earlier. However, as with soluble nitrogen sources, the faster released sulfur-coated urea is best applied in late fall with the benefits being realized the following spring. **LL**

The author is a consultant to Nu-Gro Technologies in the fertilizer industry.

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Landscape contractors have found a niche market cleaning up their customers' landscapes by using edging and border products.

By Nicole Wisniewski

Landscape border and edging products are incorporated into landscape designs as a means of creating permanent, clean bed lines. While edging products are sold as invisible additions to the landscape, border products, such as the concrete border above, are sold as a more decorative element. Photo: ICD

T

he years aren't good to a polished landscape that hasn't had the pleasure of being introduced to landscape border and edging products, according to Bob Gratehouse.

"The gaps between patios and plant beds and the lawn will continue to push out, eventually affecting the look of the plant beds and patios," explained Gratehouse, manager, Joe Galatte Landscape Co., Monee, Ill. "The soil can't hold everything in place by itself."

As consumers demand more low-maintenance landscapes, landscape border and edging products will continue to be incorporated into landscape designs as a means of creating permanent, crisp, clean bed lines. While edging products are sold as inconspicuous, yet enduring, bed perimeters, border products are sold as a more decorative approach to keeping one element in a landscape separate from another.

"Landscape border and edging products are a great niche market," enthused Dave Fleming, landscape manager, Greenleaf Landscapes, Marietta, Ohio, who's been using landscape edging and border products for 15 years. "We always incorporate edging as a low-maintenance option in our designs and our high-end residential customers really favor it."

"By using edging and border products correctly, you are actually preventing landscape problems from occurring," added Gratehouse. "Our customers understand that without edgings or borders, clean bed lines need to be redone annually. All of my high-end residential clients are quality conscious and want a border product to increase the look and sharpness of a landscape. And borders or edging can help a landscape hold a certain look longer."

REASONS FOR USE. Landscape border products have four basic uses, according to Steve Jones, president, PaveTech, Prior Lake, Minn.:

1. As separators to keep materials in place, such as bark, rock or soil
2. As structures to restrain a pavement

(continued on page 122)

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(continued from page 120)

3. As aesthetic additions to the landscape to help outline an area

4. As a mowing strip to provide a surface for proper mowing and to help eliminate trimming

Types of edging and border products range in styles from plastic to metal to brick and concrete.

"Plastic has proven to be the most versa-

tile, while some customers and designers like the look metal edging gives," Jones said. "Brick has a timeless look, while concrete is something that gives a useful and accepted finished look and can be colored or patterned to the customer's liking."

Several years ago, Fleming said installing border and edging products was a challenge

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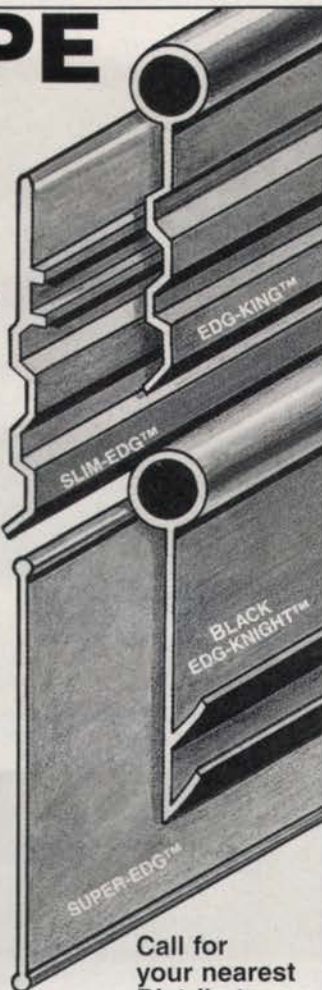
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Overlapping Plastic Edging

Plastic edging products can last longer and make a landscape low maintenance only when installed

correctly. The toughest part of the installation process, according to Larry Olson, president, Oly-Ola Sales, Villa Park, Ill., is overlapping the pieces of polyethylene edging.

The correct way to overlap:

1. Cut off a 3- to 4-inch section of the round bead at the top of one of the edging pieces to be connected.

2. Use a connecting plug that comes with the edging to join the two sections. Overlap the bottom portions of the edging.

3. Drive a steel anchoring stake through both sections at a 45-degree angle toward the turf or outside portion of the bed.

—Nicole Wisniewski

because it had to be done by hand and with a spade. Today, however, there are motorized machines, such as bed edgers that help Abundant Landscape Franchising trench out the ground and install border products.

To sell these products, most landscape contractors carry samples of the different types with them so that a customer can understand their purpose a little better, Fleming said.

PLASTIC EDGING. Plastic edging products typically come in 20-foot strips of polyethylene or vinyl, pointed out Larry Olson, president, Oly-Ola Sales, Villa Park, Ill., and the main purpose of plastic edging is to inconspicuously lower maintenance in the landscape and create clean lines.

Plastic edging tends to receive a bad reputation in the industry, according to Olson, because of the cheaper grade materials sold in chain stores and used by some

(continued on page 124)

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USE READER SERVICE #42

borders

(continued from page 122)

landscape contractors. When shopping for top grade plastic edging, landscape contractors should make sure the products are made with carbon black concentrate and chemicals to protect it from the ultraviolet rays of the sun, Olson advised. Without protection from ultraviolet rays, Jones said the life of plastic edging, if exposed to the sun, could be limited.

"In cheap versions of plastic edging, black die is mistaken for carbon black concentrate," he said. "Landscape contractors should also buy their edging in flat bundles. At chain stores, edging is sold in rolls. They could be sitting there on the shelves rolled up for six months to one year to the point where you can't unroll them into straight lines let alone work with them in a landscape environment."

"The cost and value of these products can usually be determined by the actual type of plastic - for example, PVC or polyethylene - the weight of the material and, to a

When purchasing plastic landscape edging, landscape contractors should look for strong, heavy PVC or polyethylene material that comes in flat bundles. Photo: Oly-Ola Sales

lesser extent, the complexity of the molding. Contractors get what they pay for," added Jones.

Also, Olson warned that landscape contractors should make sure they are installing their plastic edging with non-bending steel stakes to keep it in place.

"Plastic products have improved over the years," Olson enthused. "Better grade products also have v-lips or various shapes cut into the bottom to help hold them down in the ground."

Plastic edging with steel stakes costs between 50 to 75 cents per foot, depending on the material, style and not including shipping costs, Olson said.

The biggest advantage of plastic edging



is safety, according to Olson.

"Plastic tubing is less likely to injure children or pets playing outside," he said.

As for wear and tear, plastic edging tends to be reliable and long lasting in the landscape, Fleming noted. Olson said the average life of plastic edging, depending on the

(continued on page 126)

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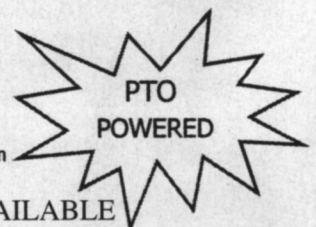
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USE READER SERVICE #81

(continued from page 124)

traffic in the area, is about 15 years.

"I have yet to see plastic edging that I've installed deteriorate in a landscape," Fleming said. "Sure, a mower or weed eater can cut the edge off of it or a piece out of it, but those pieces can be replaced without tearing up the entire edging. However, under normal weather exposure, I've had excellent results."

One disadvantage of plastic edging, Olson said, is that it cannot be installed along hot asphalt poured at 300 to 350 degrees because the plastic will melt, develop ripples or will not hold the asphalt in place. This would be a good place to use metal edging, Olson suggested. Other disadvantages to using plastic involve poor

installation. If installed incorrectly (see Overlapping Plastic Edging on page 122), plastic edging can pull out of the ground over time or due to a frost heave, and then must be reinstalled, Olson said.

"There are points that need some fine tuning with installing plastic edging," Gratehouse commented. "For example, if you pound the steel stakes straight into the ground, they will eventually pop right out,

(continued on page 128)



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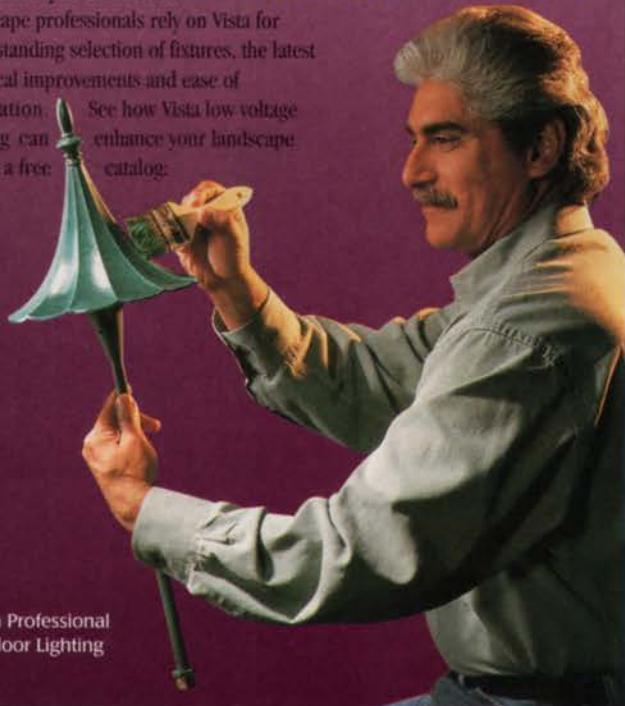


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Mowing Around Borders

Although landscape edging and border products make a landscape more low maintenance, they don't stop grass from growing. Eventually, the customer or the landscape contractor who is maintaining the lawn will have to trim the grass around the edge or border.

A mower reacts differently to the various types of edging and border materials, according to manufacturers and landscape contractors.

Since plastic and metal edging provide an inconspicuous, invisible look, mowing over them should be quite easy, right? It depends. Mowers and weed eaters have been known to cut a piece or two off of plastic edging, said Dave Fleming, landscape manager, Greenleaf Landscapes, Marietta, Ohio, while steel edging can tear up mower blades the same way stray rocks in the soil would.

When plastic edging is damaged by mowers or weed eaters, Larry Olson, president, Oly-Ola Sales, Villa Park, Ill., said the material can be replaced in pieces without having to remove and replace the entire edging.

When it comes to concrete, Robert Parrish, president, Decorative Curb, Layton, Utah, said mower wheels can be run right up over the lip of the concrete border.

— Nicole Wisniewski

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USE READER SERVICE #83

(continued from page 126)

especially in the cold weather during freeze-and-thaw cycles. Proper installation has a little bit to do with trial and error when starting out and a lot to do with taking your time and not rushing the job."

HEAVY METAL. Metal edging is usually sold in two different forms: steel and aluminum. Steel edging comes in different grades from 14-gauge material to 1/4-inch material, while aluminum is typically sold in 1/8- or 3/16-inch thickness, according to Mike Rice, regional sales manager, The J.D. Russell DURAEDGE Co., Tucson, Ariz.

Like plastic edging, metal edging is used as a divider for rock or grass areas and is meant to be invisible. Rice said metal edging works well with brick borders because it holds the brick in place.

Steel can be color matched (powder-coated with an electromagnetic paint that doesn't allow for erosion) in green, brown or black to match a particular landscape, Rice said.

"Steel edging can also be sold in an unfinished material that allows for oxidation and will develop a surface rust," Rice pointed out. "Unfinished steel edging will not rust through, but it creates that rustic look that is really popular in landscapes on the West Coast."

Steel edging comes in depths of 4 and 5 inches, but can also be custom cut to fit a particular landscape, Rice said.

Although Jones said metal edging is hard to keep in a straight line during and

after installation and with heavier gauge materials following an undulating grade, Rice said preplanning is the key to steel edging installation.

"If landscape contractors can preset their curves and lines and take the measurements off of that to determine the lineal footage before ordering their material, then they can save time," Rice advised.

Steel also works very well in the freeze-and-thaw process, Rice said.

"When pushed out of the ground from environmental changes, steel edging can be hammered right back in instead of having to be replaced," Rice pointed out.

A MORE DECORATIVE APPROACH. Brick, unlike wood borders, which have been around for just as long but have never proven reliable due to erosion, and concrete are the two types of decorative border products on the market today.

Brick borders are mortared in place and last only a few years in the northern climates because they cannot withstand freeze and thaw, but work well in southern climates, Jones noted. They are usually combined with plastic or steel edging as extra support for holding the brick in place.

Concrete edging can be colored and textured to match the customer's home or to look like cobblestone, slate, brick, etc. Colors usually range from terra cotta to earth tones to grays, according to Gary Hunter, owner, Borderline Stamp, Phoenix, Ariz.

Concrete borders go down about 2 inches

into the ground as effective root barriers, while also working to retain mulch, bark and other elements, Hunter explained.

To put down concrete borders, a contractor can spend from \$2.50 to \$3.50 per foot for concrete materials and labor, according to Robert Parrish, president, Decorative Curb, Layton, Utah, which is similar to the cost of steel edging.

Concrete is put down with a little help from expansion joints to keep it in place, said Keith Tisdale, president, K&B Enterprises, dba Border Magic of Mississippi, Jackson, Miss. Tisdale recommended putting down expansion joints every 3 feet on residential properties and every 10 feet on commercial properties.

"On residential landscapes, you don't put down as much concrete so there's a greater chance of cracking," Tisdale explained. "By using expansion joints, the problem is alleviated."

Another way to prevent concrete from cracking is by putting a curing seal on it to slow the curing process down because fast drying can encourage cracking and bubbling in the concrete, Tisdale advised.

Although concrete works well in warm climate, it cannot be put down in the rain or in areas with bad water drainage, Tisdale warned. It is also subject to normal cracking and in climates subject to freeze-and-thaw cycles. **LL**

The author is Assistant Editor of Lawn & Landscape magazine.

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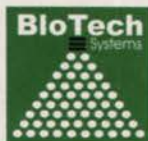
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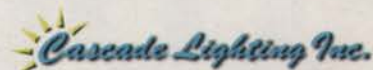


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Closing the deal on bid or non-bid design projects can be done successfully every time by having a solid sales process that focuses on the customer's needs.

By Nicole Wisniewski

A

fter losing money doing commercial bid work for years, Andy Vande Hey said his company shifted gears.

Last year, Vande Hey, vice president, Vande Hey's Landscaping, Appleton, Wis., pulled out of the bidding game and started focusing his company's efforts on non-bid design/build projects with high-end residential customers.

"In bid work, we realized that a landscape contractor cannot possibly expect to be the low bidder, have the project make money for the company and be of good quality at the same time," said Vande Hey, explaining his company's change of focus. "Some corners have to be cut when a contractor is putting in a low bid to get the project and, unfortunately, it starts with cutting down the quality of the work."

Vande Hey isn't the only landscape contractor to refocus his business away from bid work. According to Jud Griggs, vice president of landscape operations, Lied's Landscape Design & Development, Sussex, Wis., not only are landscape contractors getting fed up with the bidding process, but so are general contractors, building owners and architects.

"Now, general contractors are favoring certain subcontractors they know they can count on to guarantee the work and get it done right the first time instead of bidding the project out," Griggs said. "In bid work, it has been proven that if the result is a visually nice end product, the process in getting there was horrible for everyone involved. And, more likely than not, two years down the road when plants start dying because of lousy construction or installation work that was done to cut corners, that customer is spending even more money to fix the mistakes made during the initial project."

As the structure of bid work changes, landscape contractors are learning that by doing more negotiated bid work and sticking to a client profile and sales process while doing non-bid work, closing the deal on any project becomes naturally uncomplicated.

BID WORK. Vande Hey said that 30 percent of the work his company does involves renovating the work that was done incorrectly on past commercial bid projects.

"This is our first year not doing bid work and sales are up 27 percent," Vande Hey enthused.

Bid projects are generally installation jobs for landscape contractors,

(continued on page 132)

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making the bid

(continued from page 130)

Vande Hey explained. Very little design is done by the landscape contracting company. Each part of the project is managed by a different individual.

"Someone produces the design, and then a series of contractors bid on the project," Griggs pointed out. "These companies assume that if they have three bids they can get the best products for the best price, but the low bid is now synonymous with low quality. Companies are realizing that they are at a better advantage by focusing more attention on their landscaping and paying a little bit more instead of taking the lowest bid."

So, as the trend away from bid-work continues, how can contractors keep their name out there, make a profit and still install quality projects while doing bid work?

Griggs said the answer to that is a process known as the negotiated bid.

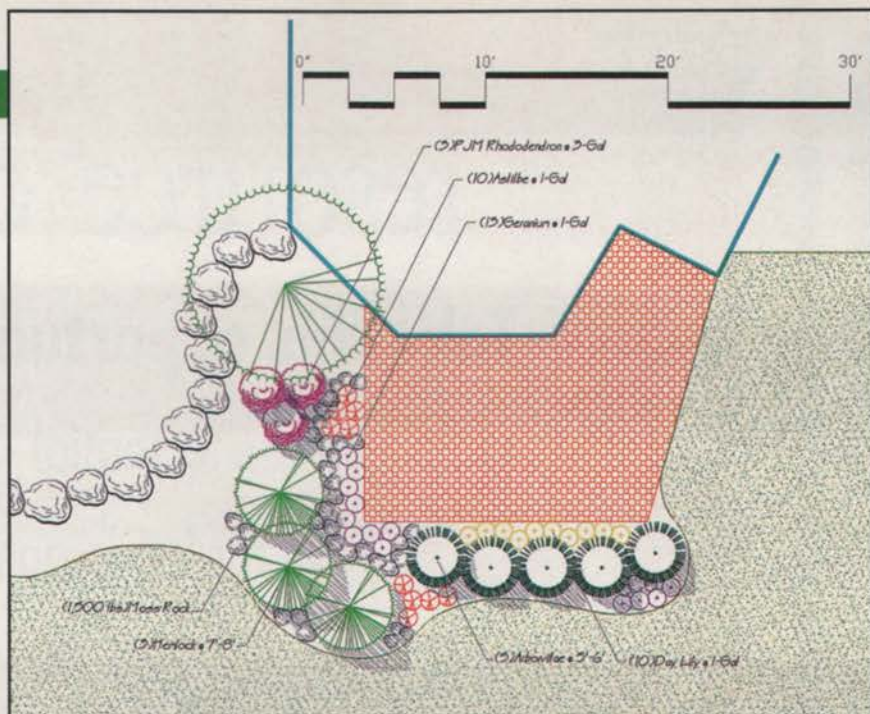
"Three bidders may still be involved in this process," Griggs explained. "Except this time the customer will negotiate more with one or two of the bidders that are the most qualified for the job."

Eighty-five percent of the work Lied's does is now non-bid design/build projects after scaling back its bid work.

"We still do some bid work when we are trying to develop a relationship with a particular client," Griggs said. "But now we go into a project with an architect and a general contractor as a design team working together. That way we're all involved and accountable and the customer isn't being told by three different people that someone else is responsible for a mistake."

Although customers are realizing they have to focus more on landscaping, they are still taking the lowest bid 90 to 95 percent of the time, according to Vande Hey.

Once a contractor is bonded to their bid and then chosen by the company to complete the project, there's no backing out, Vande Hey said. One way a landscape contractor can avoid this mess is by making sure they are bidding correctly and not eliminating any details, such as the cost for bed preparation for plantings, base preparations for retaining walls, etc.



"Unfortunately, however, contractors don't realize right away that they could be losing money doing bid work," Griggs added. "Some of the companies that focus heavily on bid work in Wisconsin are consistently getting all this work and their bid prices are lower than our costs are, and I'm wondering how they are doing it."

NON-BID WORK. As landscape contractors become more recognized for their professionalism, customers become more educated about what a landscape contractor's role is in the design process, Griggs noted.

"We are at the low end of the construction totem pole," remarked Bruce Zaretsky, president, Bruce Zaretsky Landscaping, Penfield, N.Y. "Architects have earned the right to be compensated for what they do, and we should also get paid for our designs and experience."

In most non-bid work today, landscape contractors are charging a design fee for their designs. When the initial design is complete, the cost of the design can be separate or can go toward the project installation cost depending on the way the contractor has set up costs at his or her business.

Zaretsky charges a small fee — never more than \$300 — for a design and, if Zaretsky gets the installation contract, then the design fee can be incorporated into the overall cost. For a design at Vande Hey, customers purchase a gift certificate that can be used toward the installation costs or, if the customer chooses not to install the project, then the customer can use the gift

certificate toward products in the company's garden center. Craig Klingensmith, vice president, Smallwood Design Group/Smallwood Landscaping, Naples, Fla., on the other hand, charges average design costs in the area of \$3,000 to \$7,000 because of the high-end residential clients the company keeps.

But contractors agree that the key to getting a hold of good design/build projects is establishing a customer profile and sticking to it.

A customer service coordinator at Vande Hey's Landscaping takes care of all of the calls coming in from customers requesting design/build work. This employee asks the customer questions and finds out what they are looking for, what their time frame is and what kind of budget they have to spend on a landscaping project. If the customer fits the right profile, which in Vande Hey's case means they want some curb appeal, high quality, low maintenance, long lasting landscape work done, then the coordinator will have a sales representative knowledgeable about the landscape design process visit with the customer.

"If customers come across as people who are looking for low dollar, I have no desire to deal with them," Zaretsky said.

SELLING TIPS. Each landscape contractor has a different way of selling his or her services unique to the way they do business.

The first mistake landscape contractors make is not listening to their customers,

(continued on page 134)

In most non-bid work today, landscape contractors are charging a design fee for their designs. Photo: Michael & Sons Landscaping

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making the bid

(continued from page 132)

Klingensmith stressed.

"We're too quick to talk about us," he said. "Listening to your customers is all about being curious and inquisitive. Customers want landscaping, but they don't want to be sold landscaping. What your company is all about doesn't matter unless you've figured out what your client wants first."

Vande Hey said his sales representatives don't come back from a first visit with a client without pages full of notes. On a typical visit, Vande Hey takes a list of 45 to 50 questions that he can ask his customers to help them come up with a plan that incorporates what the client is looking for, how the architecture of their home relates, the layout of the site and Vande Hey's expertise as to what would look best on that client's property. A landscape contractor should be cautious, however, Vande Hey warned, when suggesting what he or she thinks will work best on a landscape.

"That's where listening comes into play

Becoming a Best Seller

When a landscape contractor has a reliable sales process in place at his or her company, then closing the sale on non-bid design/build projects becomes simple, according to Craig Klingensmith, vice president of Smallwood Design Group/Smallwood Landscaping, Naples, Fla.

Klingensmith has always followed the acronym AID, Inc. from *The Best Seller* by Ron Willingham as a good sales process:

A: Approach – Gain a customer's trust and put him or her at ease by recognizing something in their environment and talking to them about it – football paraphernalia, for example.

I: Interview – Ask customers a lot of open-ended questions to find out their needs. This is the key time to practice good listening skills.

D: Demonstrate – Once you establish a customer's needs, show him or her that you can meet those needs.

I: Validate – This is where you change the

again," he said. "For example, if a customer wants one thing, but you think another thing would work better, you still have to give that customer the one thing they asked for and wanted."

During this education process, the customer should be able to learn something

from you without feeling like they are in a classroom, Zaretsky added.

"Don't come across as smarter than they are," he said. "Try to educate them without belittling them or coming across as overly arrogant. You have to make them feel that it's important and exciting."

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USE READER SERVICE #85

demonstration of your company's features into benefits for the customer. Emphasize value, educate the customer on price and how that customer can benefit from your services.

N: Negotiate – If you've done everything correctly up to this point, negotiation should just become a fact of business. Never give up something without getting something back and never drop your price without a reason. This step includes presenting the final design, price and plans.

C: Close – If you can't close the sale by this point, then you didn't follow the previous steps. "You don't lose a sale at the close," Klingensmith said. "You lose the sale at the beginning."

– Nicole Wisniewski

A good sale also involves preparing a good sales packet to give customers when discussing services with them. Klingensmith gives his customers a packet that includes photos of projects, the company's approach and philosophy, project references, design awards, the organizational structure of the

company, each designer's resume and an equipment list. Zaretsky's packet is very similar, but he also includes an insurance statement, professional affiliations that the company is involved with and an installation sheet. This sheet details what the design fee pays for and the proper way the client's landscaping work should be installed. Zaretsky said he suggests customers take that sheet to other contractors and do a cost comparison of how much others could do the work for the same quality.

"This helps the customers trust my work," Zaretsky said.

Although photos are good at showing customers what kind of plants will be installed into their landscapes, so is the real thing. Many contractors on the second or third client visit invite the client into their nurseries or offices and let them see firsthand what plants look and feel like.

"From a blueprint, most people can't envision what their landscape is going to

look like," Vande Hey said. "So, we invite them to our facility where we have live demonstrations of waterfalls and ponds and take them through our garden center and showroom to see plant materials."

After building a new facility last year, Klingensmith said at Smallwood they take full advantage of inviting customers in to discuss landscape plans and see materials.

"Instead of just talking about our image, we bring our customers here and let them see, feel, touch and meet our company firsthand," he pointed out.

What you need to show the client depends on what kind of visual aids they need, stressed Scott Milovich, landscape architect, Moore Landscapes, Glenview, Ill.

"With some clients, simple sketches will work," he said. "With other clients, they want specific plans and plant photos and so on. You have to treat customers like they are your only ones and learn to understand how

(continued on page 151)

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conversation

Hunter Industries employs more than 1,000 people worldwide and sells approximately \$120 million worth of gear-driven rotors, spray heads, valves and controllers annually. Photos: Hunter Industries

The Hunter family could easily be considered the First Family of irrigation.

Ed Hunter founded Hunter Industries in 1981 after establishing himself as one of the irrigation industry's great pioneers over the course of a career that started in 1952 with his founding of the Moist-O-Matic Co., which became the foundation for Toro Irrigation when he sold his company to The Toro Co. in 1962. After nearly 20 years heading up new product design and development of Toro's new irrigation division, Hunter left the company and started his second irrigation manufacturer.

Ed Hunter was joined in his new endeavor by his three children, Paul Hunter, an irrigation products distributor, Richard Hunter, owner of an agricultural irrigation company, and Ann Hunter-Welborn, a health food entrepreneur. Together, they formed the operating team for the new business.

Ed Hunter retired in 1994, turning over the operation of the company to his son Dick, who became president and CEO.

Today, Hunter Industries generates more than \$100 million in annual sales and is one of the strongest names in the irrigation industry.

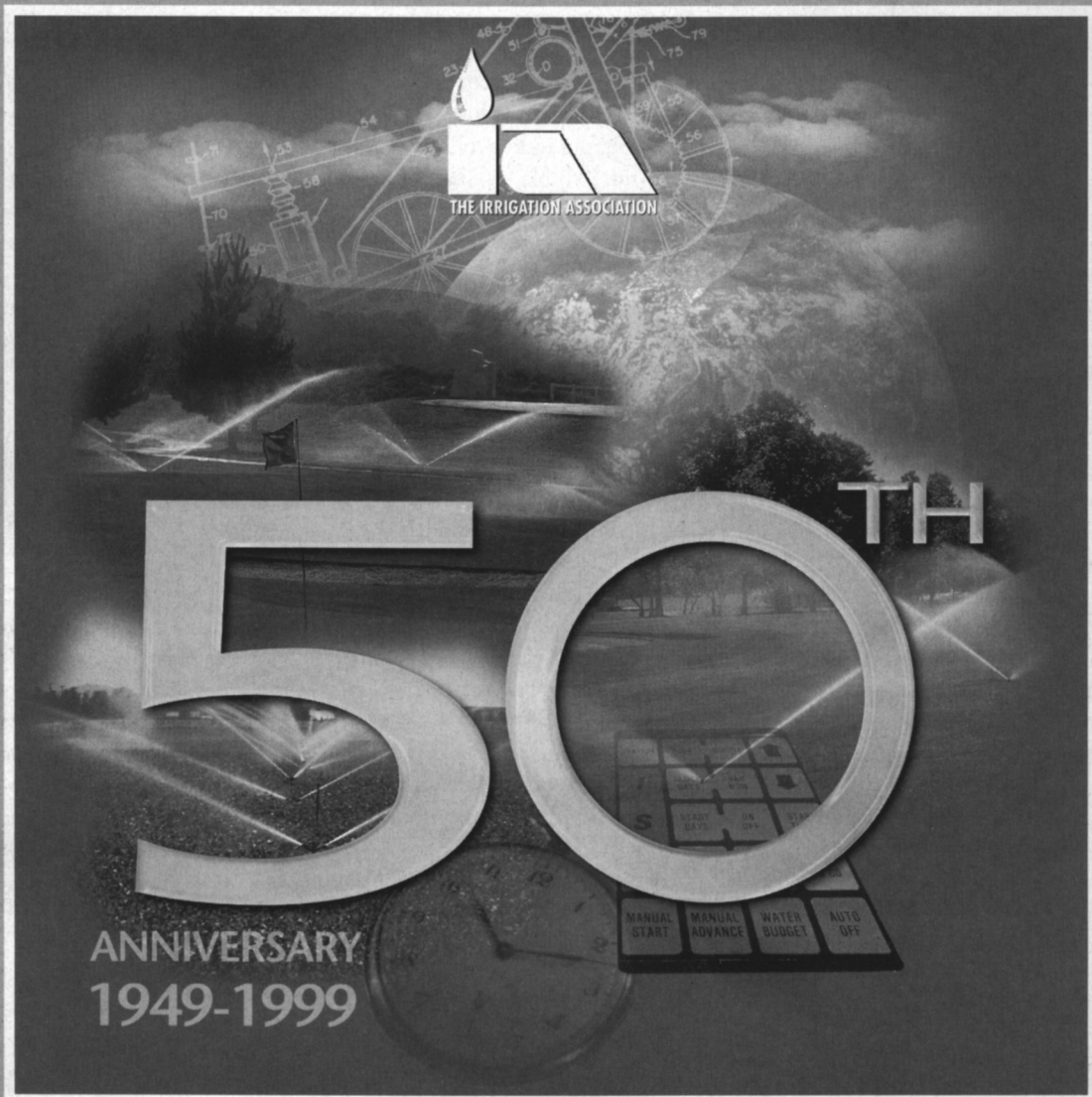
(continued on page 138)



The leader of Hunter Industries shares his thoughts on the state of the irrigation industry, whether or not he expects it to continue growing and the future of his family's company.

By Bob West

A Conversation with Dick Hunter



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(continued from page 136)

Q. What factors are driving the irrigation industry?

A. I think Harry Dent in his book, *The Great Boom Ahead and the Roaring 2000s*, identifies that the baby boom generation is in its peak spending years, which is creating both a construction boom and a remodeling boom. Fortunately for us, the remodeling boom includes a beautiful lawn as a lifestyle choice, so the industry's growth is tied to the sum of the two markets as opposed to just the construction market.

This industry used to just lag behind building permits, but now we also have to consider the remodeling industry to get a good indicator of the future, which makes this a more stable market.

In addition, a larger percent of the remodeling business includes underground irrigation as an option for quality of landscape issues and free time in traditional non-irrigation markets such as the rainy East. That market still has a significant market of penetration to go, whereas everyone in California and Florida has some form of automated irrigation.

In the highly populated Midwest and East, there remains a huge population that doesn't have underground irrigation, so the potential for adding systems to residential

United States to conduct research into the irrigation contracting business. His conclusion was that the current market for installed landscape irrigation systems is between \$3 billion and \$4 billion dollars annually. And I think it's interesting to compare that number to other businesses. In the computer industry, for example, there are numerous companies that sell that much product alone.

Q. Does the remodeling or construction segment of the economy drive more of the irrigation industry?

A. The irrigation industry is pretty closely split with the building industry's split in the neighborhood of 50-50 for remodeling vs. new construction. I think remodeling has caught up a bit in the last decade, however, as people come to realize that if they like the location they're living in they can get more improvements done via remodeling than they can by selling their house and buying a new one.

Also, it's important to note that you've got a huge housing stock across the country right now that is more than 20 years old and families' expectations are for more from their homes, so that is also driving a lot of remodeling.

Q. How rapidly do you expect the industry to grow?

A. We think irrigation continues to be an exciting business. It's one of the fastest growing areas in the entire landscape industry with more contractors adding irrigation as part of their services every day. On average, I expect industry growth to consistently deliver numbers in the high single digits and in good years like this one that number can go significantly higher.

Q. What have been the key changes that have taken place within the irrigation industry in the last few years?

A. There is clearly a proliferation of product and competition among manufacturers - there are so many

more choices of product and even methods for irrigation now. There has been a benefit from this proliferation and competition as prices have continued to decrease in real dollars, and these falling prices relative to the perceived value of a quality landscape are a key for the industry's growth.

Everyone would like to return to the good old days when they could sell an irrigation system for three to five times what they sell for today, but those were also the days when contractors were only selling two or three systems a summer instead of the couple hundred they're selling now.

At the same time, distribution has grown so much in response to the ability to support more sales, particularly in the number of distributor storefronts serving the industry. What's interesting about this growth, though, is that competition and growth have also led to consolidation, so there are a lot more storefronts today than there were 10 years ago, but there are also fewer distributors behind those storefronts.

But I think you can measure the strength of an industry by the number of storefronts it supports, and as long as this number is growing then you've got a positive indicator that the distributors are doing well as a business. Distributors that are not doing well are not likely to open more storefronts to improve their business.

Q. What challenges do you see confronting irrigation contractors?

A. Well, the other side of the growth coin is the shortage of skilled people to do the work for the landscape and irrigation industry. The actual market is larger than current sales would indicate. For the last couple of years contractors have had carryover business they couldn't service the previous season, and I think that trend will continue for awhile because of the realities of available labor.

Q. How has the irrigation contractor improved or grown over the years?

A. I think the irrigation contractor of today does a much better job of managing the entire year and starting earlier and finishing later to compensate for the labor shortage. And while there will continue to be significant improvements not only in the price but also the performance of all irrigation products, the bigger issue is having the people who are trained to adequately use and maintain the products that are already available. The more sophisticated and precise the products get, the greater the training challenge becomes because there's no equipment out there that is precise by default. The products all involve a level of design, installation and maintenance knowledge that isn't typically found in the un-

.....

"I think Harry Dent in his book, The Great Boom Ahead and the Roaring 2000s, identifies that the baby boom generation is in its peak spending years, which is creating both a construction boom and a remodeling boom."

.....

and commercial properties in those areas is driving the industry as well.

I think we've certainly got at least a decade of pretty stable business ahead of us.

Q. How large is the irrigation industry?

A. My brother Paul recently spent more than six months travelling throughout the

skilled labor force.

Contractors are also dealing with more and more sophisticated equipment and they need to stay ahead of that development in order to stay competitive. The proliferation of new products we talked about earlier makes it more challenging for the contractor to be

"There is clearly a proliferation of product and competition among manufacturers – there are so many more choices of product and even methods for irrigation now."

sure he or she is using the right equipment necessary to stay competitive and provide a strong system that yields a satisfied customer. That satisfied customer is so important because most of the successful contractor's business is referral business instead of advertising business, which all comes back to where the contractor gets support.

Q. With more irrigation contractors entering the industry and more landscape contractors adding irrigation services to their service mix, how much responsibility should the manufacturer and/or the distributor bear for training?

A. The reality is that the better the job and higher the customer satisfaction, the faster the irrigation contractor's business grows and the more the company can charge, so it all feeds on itself to some extent. On the other hand, the increased competition and lines of product make training more challenging for the manufacturer because we can't train for something we can't charge for. We either have to get paid for the training or get paid for it in the quality and price of the products we sell.

This value-added selling and training to support downstream sales is always a manufacturer's challenge, and this is a challenge I think manufacturers ignore at their own peril. We need to try to train the contractor base, even if we can't do this with immediate or direct payback. We have to offer this training, though, to bring new contractors

into the trade and improve the quality of the work currently being done.

At Hunter, we use various seminars, regional and national design and troubleshooting schools, and our preferred contractor incentive program to help contractors learn and grow their business by acquiring additional business tools.

Q. How have the changes and consolidation of the distribution side of the industry changed the manufacturer/distributor/contractor relationship?

A. One of the biggest changes in this relationship is that there are fewer markets or areas where any of the distributors are really dependent on a particular product line. As the market grows and matures, we've seen the development of more of a supermarket environment

where a distributor will carry several manufacturers' lines of product, if not everybody's. This comes full circle to manufacturers being price competitive and offering value-added features. Manufacturers are going to have to earn the customer loyalties they get because now the contractor has more choices in terms of products and places to buy product. Irrigation contracting has become a big and serious business.

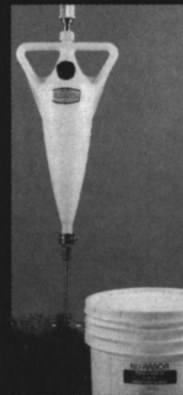
Q. What does the increased presence of the mass merchandisers such as Home Depot and Lowe's mean for the irrigation industry?

A. As we talked about earlier, the number of outlets on the professional side continues to grow as does the number of 'big box' retail outlets. Some of this consolidation is inevitable. But take a look at an entirely different industry like banking. Just as fast as they were being bought up and we had nothing left but the big banks, a number of small banks opened up again because people always want service. There are chances for every business model in the market, and the question is which one fits you the best.

I certainly believe the mass merchandiser has a role to play in almost every market, and landscape irrigation is no different. These stores will clearly be a player in the growth of this industry, but Hunter Industries' No. 1 priority is the professional wholesale distributor and the contractor. This is the market allowing us to leverage



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the use of our marketing and our focus on helping the contractor become a more professional businessperson. That type of customer-focused service and support does not exist in the home center market.

The evolution of the industry has required distribution channels to specialize more than ever before. The homeowner desiring to purchase a sprinkler to replace a broken sprinkler usually visits a mass merchant while he or she is on a shopping trip to pick up light bulbs and paint. On the other hand, the professional contractor is better served by the wholesale distributor that offers a wider breadth of inventory, technical knowledge and support to the small business person.

I think the nature of the underground irrigation industry and the nature of the bill of materials required to do every job, along with the fact that every irrigation job is different with some requiring slow moving items and some being high-volume, generic

jobs, make irrigation a specialty market where the strength of the professional wholesaler doing a good job is going to be the core of this industry for an awful long time, if not forever.

Q. What have represented some of the key product developments in the last 10 years?

A. In a nutshell, the products of today are better and less expensive. Whether you're talking about the mechanical reliability of an on/off valve or the sophistication of the control system, the technology has made quality manufacturing easier and has added tremendous sophistication to the control options.

Ten years ago there were an awful lot of products that didn't perform very well, and almost all of the products available today do perform well. The challenge that these significant across-the-board manufacturing improvements create for manufacturers is that

the quality of your products really doesn't separate you from the pack anymore. Instead, I think a commitment to developing

"I certainly believe the mass merchandiser has a role to play in almost every market, and landscape irrigation is no different."

the market and providing a consistent, reliable level of service to back your products, being reasonably price competitive and still providing enough services and value through additional tools contractors need to run their businesses can create some loyalty in terms of distributor and contractor buying preferences.

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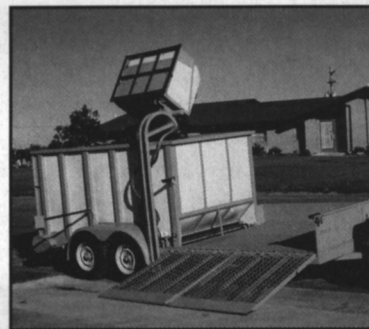
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I think manufacturers have to be realistic about the fact that competition is increasing and we will constantly have to look for improved efficiencies and be able to justify the value-added costs we bring to the market because if the market doesn't perceive these things as valuable then the manufacturer will lose.

Q. In what areas will we see continued product development?

A. Controllers will continue to grow beyond consumers' ability to use them for the foreseeable future. The manufacturers of ten pack products with features that are too far advanced for the customer. Our market research efforts are helping us better understand what the contractor and the homeowner truly need and will use. However, we also have to be mindful that these developments are very powerful and will allow contractors to do things that were virtually impossible in the electromechanical days, ranging from the integration of on-site

weather stations to improving the overall efficiencies of a system.

I think improved conservation of water can be easily achieved simply by assuring that the irrigation system isn't broken and by adjusting according to the time of year on a regular basis. After that, the incremental savings offered by controllers and other system components can be pretty small.

Another area we should see some significant improvement in is pressure-regulated valves. They will get affordable enough to be more commonplace to control pressures and water waste even in residential sites rather than being limited to just specialty use on larger systems.

Q. In this ever-consolidating world, how long can family-owned irrigation companies continue to serve and lead the industry from a manufacturing perspective?

A. Wow ... how do I answer that? (laughs) In the last 10 months I have certainly learned that selling your business isn't the only

option, and we plan to remain a family-owned business. But I think the best way to answer that question is to point out the reality that landscape irrigation is still a very young industry. First- or second-generation ownership covers virtually all of the current management in this industry.

Of course, my father did sell his first irrigation business to Toro in 1961 and Hardie also bought up a lot of independent, family-owned businesses. Now you've got Century Rain Aid, which is publicly owned and has purchased a lot of independently owned distributorships as part of its growth strategy. But this is still a small market and the significant players are still small by Wall Street standards. Even those companies considered to be big are actually small, and I don't see that changing.

Obviously, there has been some consolidation in some allied industries with varying degrees of success, but the vast majority of this business is entrepreneurial and inde-

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pendently owned, and I don't think that will change any time soon.

But the reality is that very few needs are met when two private companies merge, so it's almost inevitable that over time a publicly financed company will buy a privately held company. However, I think the industry will go through a couple more generations before that entrepreneurial nature of the industry changes.

Q. What are your goals for Hunter Industries in the next few years?

A. We're working to rapidly expand our product line and the number of value-added services that we offer to our wholesalers and the contractors they serve. Just this year, we've purchased several new buildings and brought in new equipment to give ourselves the room to grow. We're focused on our goal to become the most important supplier of landscape irrigation components to the professional marketplace. All of our efforts are driven in that direction:

new product development, our contractor development program, and our educational initiatives.

Q. Obviously, your father played a tremendous role in the development of the industry. What do you think is his legacy to the industry?

A. My father's legacy to the industry is the dramatic shift we have seen from components made of brass into those made of plastic. This revolution, which he was lucky enough to help lead in the 1950's has made lawn sprinkler systems affordable to a much wider array of customers. In his lifetime, he gathered over 150 patents for plastic sprinkler and valve technology and many of his earliest designs continue to be manufactured today.

His legacy to Hunter Industries is a process focus, the challenge to do as much of the design and manufacturing yourself as you can, retain control of the products to the extent that you can, be your own worst

competition, don't be afraid to reinvent yourself and to have a vision and go after it. He used to say, "Show me a person who hasn't made mistakes and I'll show you a person who hasn't done anything."

The closer I get to his age at the time he founded Hunter Industries after having worked already in the industry for over 30 years, the more amazed I am at the adrenaline and emotional stamina he had to take the risk and work as hard as he did to start over.

As a company, we benefited tremendously because this is a relatively small, networked industry and people remembered him from his days at Moist 'O Matic and Toro, which is why we put the Hunter name on the company. Fortunately, we created a very loyal following that has led us to where we are today. **■**

The author is editor of Lawn & Landscape magazine.

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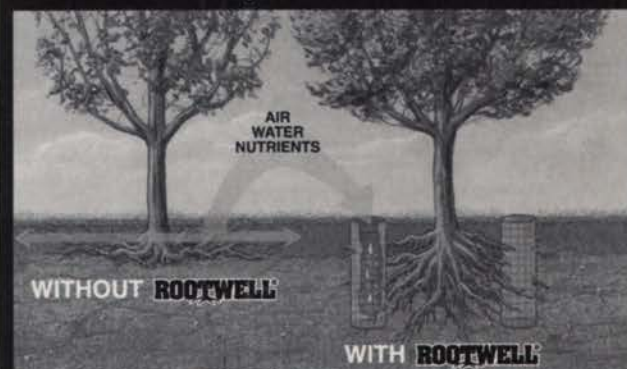
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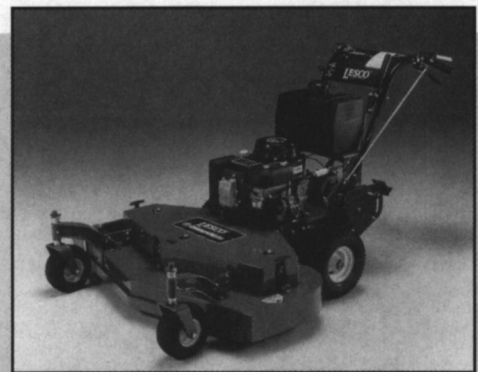
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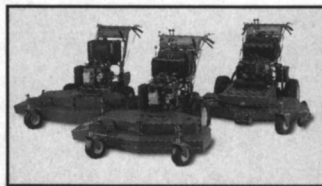
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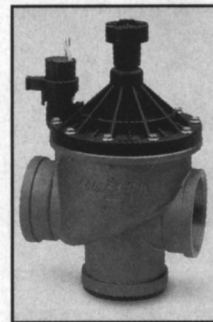


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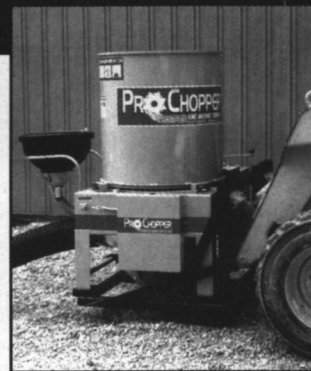
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- Controls up to 999 individual receivers from a single transmitter
- Water/mud resistant
- Digital filtering, factory set receiver access codes, VHF FM communication

Circle 207 on reader service card



Pro Series Products Pro-A-I and Pro-A-II

- Attachments allow the Pro-Chopper and Pro-Crimper to be attached to any size or model of skid-steer loader
- Pro-A-I for Pro-Chopper
- Pro-A-II for Pro-Crimper

Circle 208 on reader service card

Water Champ Professional Controllers

- Available in six, nine, 12 and 15 zones
- Available in indoor or outdoor models with A, B, C, D, S(SPEC) programs
- Non-volatile memory, 4 start times for each memory and 3 manual run options
- Wired to accommodate 3 terminal module upgrades for up to 15 zones
- Rain delay, block days and reset button
- S(SPEC) special program allows watering schedule for new sod, newly seeded lawns, nurseries, greenhouses and propagation applications
- CPU program stacks program starts in chronological order
- Operates a master valve and three solenoids simultaneously
- 24-volt AC/60Hz output and accommodates 50 Hz

Circle 209 on reader service card

Bob-Cat® Midsize Mowers

- Line includes gear drive, hydrostatic drive and variable speed mowers
- Adaptable to the following cutting decks: 32-inch side discharge (31.75-inch cutting width), 36-inch side discharge (35.25-inch cutting width), 48-inch rear discharge (47.25-inch cutting width), 54-inch rear discharge (52.50-inch cutting width) and 61-inch rear discharge (61-inch cutting width)
- Versadeck mulching-side discharge decks available in 36-, 48- and 52-inch widths
- Gear drive has five-speed transmission, "finger-touch" operator-present controls and four engine models: 11-hp Tecumseh, 14- and 17-hp Kawasaki and 15-hp Kohler
- Hydrostatic drive cuts up to 24.6 acres in an eight-hour day
- Features dual Sundstrand/Hydrogear pumps and Ross wheel motors
- Five available engine styles: 14-hp Kawasaki, 15-hp Kohler, Electric Start, 15-hp Kohler, Recoil Start, 17-hp Kawasaki, 20-hp Kohler, Electric Start
- Variable Speed has speed pulley drive transmission and two engine choices: 14-hp Kawasaki and 15-hp Kohler

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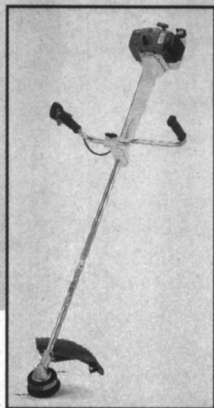
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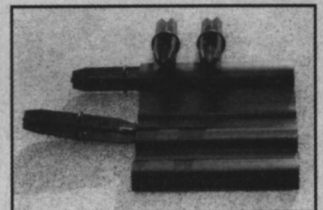
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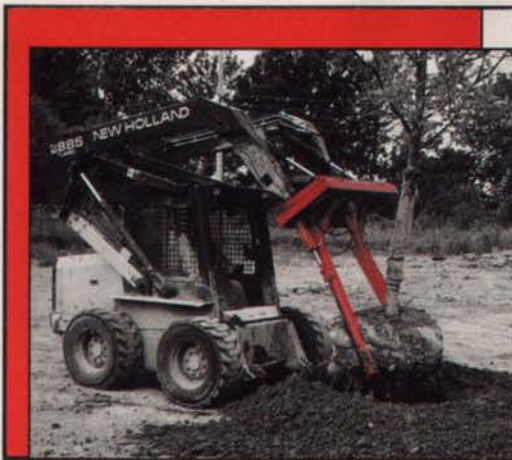
- Mid-mount, rear-discharge mower for New Holland Boomer™ tractors
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- Lower power requirement
- No side discharge chute so operator can get close to trees and other obstructions from either side
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USE READER SERVICE #105

(continued from page 135)

they are going to interpret the information you're giving them. The breakdown in a sale comes with misunderstanding."

NEGOTIATING PRICE & PROJECT. Negotiation is a natural part of closing any deal, but it should be done without dropping price for a reason and without giving up one thing for something else, Klingensmith said.

"If you drop your price, the customer — who trusted you until that point — starts thinking, 'He just took this much off of my project with no validation — I wonder how much he's overcharging me?'" he warned.

Most landscape contractors deal with this situation by substituting less expensive products for more expensive products, trying not to affect the look of the overall landscape too drastically.

"We'll suggest that instead of planting 20-foot trees, we'll put 15-foot trees, or instead of planting trees every 2 feet on center, we'll plant them every 3 feet on center resulting in less trees planted," Klingensmith explained.

When customers are shocked by price and don't want to give up anything in the

initial landscape design, then landscape contractors can negotiate the down payment and if that doesn't work, they can phase in the project over time.

"We require 50 percent down," Klingensmith said. "That's a big chunk of change, especially for someone who has just spent so much money building a new house. So, we'll negotiate 10 percent down at signing, 30 percent down upon the start of the project and then another 10 percent down at 50 percent completion of the project. Our customers are usually very appreciative after negotiating down payment and their cost worries are over."

Also, when a customer is concerned about price, Vande Hey said he will suggest doing the project all at once, which is cheaper than doing it in stages.

"As long as you educate your customers on the process, they usually understand the cost," Klingensmith stated. "For example, if your company doesn't require a down payment and the customer complains about the cost of the project, why not suggest taking 5 percent off the top of the project and requesting that they give a 25 percent deposit.

You can tell them that by doing this you can walk into the nursery and with the cash up front get a slightly better deal for the 400 oaks that you need for their project, which will compensate for that 5 percent. You may not get the full 5 percent back, but you haven't cut too much off of the overall profit, you've received a down payment and have made the customer feel more comfortable with the cost of the project."

In the end, service is more important than dollars and cents, Zaretsky said.

"Negotiation is just a natural step toward closing the sale," he stated. "Once I meet with my customers and give them the whole package, I say, 'Here, I'm going to leave you alone with all this information. You look at it and when you're ready to get started or if you have any questions or concerns, you give me a call.' Seventy percent of the projects I present, I get. The quality of the work you do and how you go about doing it will be remembered long after the price is forgotten." **LL**

The author is Assistant Editor of Lawn & Landscape magazine.

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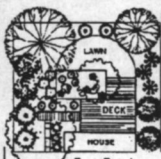
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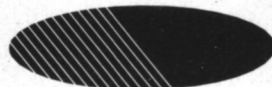
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James Martin Associates, Inc., a well-established commercial and residential landscape maintenance firm, is seeking a team-oriented person with 3-5 years experience in maintenance project management to join the landscape maintenance department. The successful candidate will possess experience in project and client management, contract negotiations, client prospecting, estimating, and a solid understanding of the grounds management industry. For immediate confidential consideration, please send or fax resume and salary requirements to:

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Attn: Chris Keenan
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Qualified applicants must have proven leadership abilities, strong customer relations and interpersonal skills. We offer excellent salary, bonus, and benefits packages, including 401k and company paid medical coverage. For career opportunity and confidential consideration, send or fax resume, including geographic preferences and willingness to relocate to: DeAngelo Brothers, Inc., Attention: Paul D. DeAngelo, 100 North Conahan Drive, Hazleton, PA 18201. Phone: 800/360-9333, Fax: 570/459-5500. EOE/AAP, M-F.

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- Floriculturist - Color manager, chemical application
- Horticulturist - Preservation and care of grounds
- Chemical Applicator - Chemical applications
- Landscape Architect - Degree/experience required
- Landscape Installation Foreman - 3 years experience required
- Landscape Designer/Salesperson - Degree/experience required
- Arborist - 3 years experience required

Apply via resume along with three work references to Sousa's Landscape Management Co., Ltd., P.O. Box PG 130, Paget PG BX, Bermuda. Fax: 441/238-3507, e-mail: jsousa@ibl.bm or www.slm.bm

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- Lawn & Pesticide Applicators.
- Tree Division Manager / Salesman.

Excellent salary and benefit package with advancement opportunities. Fax or e-mail resume with salary history to: Robert A. Lipinski, President, Lipinski Landscape & Irrigation Contractors, P.O. Box 605, Mt. Laurel, NJ 08054. Fax: 856/234-9348 E-mail: pharan@lipinskiland.com

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GROUNDS MANAGEMENT

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GROUNDS MANAGEMENT

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Western States Reclamation, Inc. is a sixteen year old landscape, revegetation, and erosion control company in Broomfield, Colorado who is recognized for our excellent work. We seek to fill the following positions:

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DeAngelo Brothers, Inc. has immediate openings for Chemical Sales Representatives throughout the United States.

Responsibilities include direct marketing of DBI's full product line of chemicals and related equipment throughout a regional territory. Horticulture or related degree desired, with a working knowledge of Vegetation Management Chemicals. (Minimum two years experience). Qualified applicants must have strong interpersonal and communication skills. Applicants will work out of a DBI Regional Office and must enjoy travel. We offer an excellent salary and benefits package, including 401k and company paid medical coverage.

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HORTICULTURE

Horticulture

Help Keep Central Park Beautiful!

After 2 years & a \$4.6 million renovation, the North Meadow of Central park is about to be re-opened. The Central Park Conservancy, a prestigious not-for-profit organization, is seeking several Horticulture professionals to maintain this area of the park, which will include 12 ball fields and 5 soccer fields. Candidates for all positions must have a valid driver's license, the ability to operate power equipment and perform manual labor outdoors. The Conservancy is an equal opportunity employer that offers competitive salaries and a generous benefits package.

SECTION SUPERVISOR: Will lead a 7-person crew in the horticultural and operational maintenance of this area. 3-5 years of related park or horticultural supervisory experience; sound organizational skills and a NYS pesticide license are required. **CODE: NMSS**

CREW FORMAN: The successful candidate will be the lead member of the team, assisting the Section Supervisor. Must have related field experience including turf maintenance & a NYS pesticide license. **CODE: NMCF**

ZONE GARDENERS: For this position, you will perform all horticultural and operational duties in this area. Horticultural experience or education is required. **CODE: NMZG**

We are also seeking a **SECTION SUPERVISOR** for the Woodlands area. In addition to a wide variety of horticultural and operational activities, responsibilities include attending Woodland Advisory meetings. At least 2 years of experience in park management, horticulture or a related field including supervisory responsibility are required, as is a NYS pesticide license. **CODE: WSS**

If any of these positions seem to match your talents and have captured your interest, please forward your resume to us, indicating the position code to: **HR Dept., Central Park Conservancy, 14 E. 60th St., NYC 10022** or e-mail to: hrdept@centralparknyc.org. **FAX: (212) 310-6633**. **EOE**

Central Park
Conservancy

irrigation report

(continued from page 52)

the future is bright for continued expansion. Let us not forget, however, that landscape maintenance boomed first back in Ohio and New Jersey. Droughts in these regions only reinforce the importance of irrigation, even when it supplements natural rainfall.

Keep in mind that mass hardware merchandisers are pushing hard and they are taking irrigation along with them. Simply stocking the aisles of new stores will swell irrigation manufacturer sales. These retailers might spell the ultimate success of the irrigation industry. Growth of irrigation distribution chains is changing the way manufacturers do business, but contractors who want to compete with larger contractors have a vested interest in supporting their local irrigation distributor.

It's probably a good idea to pay as much

attention to the irrigation industry as you do to the nursery and precast retaining wall industries. Irrigation fits well with the fountain and aeration business too. Finally, it would be wise to start stocking low-voltage lighting. All of these technologies are compatible.

While the term interior decorator might not ring a positive chord with the landscape industry, the concept of outdoor decorator is one to take seriously as the landscape industry matures in the next millenium. Without irrigation, you don't have a leg to stand on. To be great at landscaping, you have to be great at irrigation. **LL**

The author is owner of IrriCOM, a communications company based in Palmdale, CA that specializes in the irrigation industry. He has 28 years experience covering the landscape industry and can be reached at irricom1@earthlink.net or (661) 274-0321.

SELLING DESIGN WORK AT GREENLEAF LANDSCAPES



ONE OF THE GREATEST challenges to a residential design/build firm or, in our case, a landscape division of a retail garden center, is to sell and install a sufficient volume of work to compensate designers adequately and operate profitably. This is especially true if your firm is not large enough to support separate designers, salespeople and drafters.

Even if you don't try to "niche" your business to larger, upscale projects, you can make money on smaller jobs. But you have to develop a system that allows you to sell the job during the first visit to the site and install the job in one or two days. Unless you're willing to turn down prospects, you need to make sure you make a profit on every single project.

The very nature of this type of work, generating a high number of small projects rather than a few large projects, demands a streamlined process without added support staff. The first area to focus on is the design/sales process, although your materials handling and installation operations must also be structured.

THE SALES FORCE. We operate in an area dominated by modest homes, valued between \$75,000 and \$125,000. These clients usually cannot afford to spend more than \$2,000

to \$5,000 on any single phase of landscaping their homes. Our firm is able to generate \$1.5 million in landscape sales with three salesmen: the owner, the landscape manager and a landscape architect. That means each salesperson must generate \$500,000 annually. Since our average project is \$2,500, each salesperson must sell 200 jobs annually. With a 64 percent closing ratio, each salesperson must produce and present 300 designs and estimates. Therefore, it is imperative that we close as many proposals as possible in a single visit and streamline the design, sales and installation processes.

Every landscape designer is taught a multiple-step design process. This traditional system must be fundamentally altered if small jobs are to be a profitable market for a professional landscape firm.

CARBONLESS DRAFTING & ESTIMATING FORMS.

A landscape designer must always produce a sketch, showing the existing elements of the landscape and the basics of the design. Usually, this sketch is either transferred by the landscape designer to a blueprint or given to a draftsman.

If the sketch can be sufficient to provide the basis for a blueprint or for a draftsman to interpret, why couldn't a sketch be sufficient for communicating directly with the clients? As long as the sketch is clear enough to present the essential information in a manner that is understandable to the client, there is no reason why a sketch could not serve as the final design for a small job.


This challenge led to our development of a single three-part NCR (no carbon required) form that is used exclusively for

all sales – from the planting of a single tree to a complex \$35,000 project.

The form is 8½ inches by 14 inches with minimal space taken up by our firm name and logo. Most of the area is for the design sketch and the estimate, and a light green grid in the background provides the designer with an appropriate scale. An average scale for residential properties is a 2-foot per grid block.

The bottom left corner of the form contains a series of contract terms and a line for the client's signature, indicating his or her acceptance of the proposal. Since a long, detailed contract is not necessary for the low amount of risk involved by both parties, only the essential terms are listed, which include: payment terms of 1/3 down, balance on completion, that the unauthorized use of the proposal is prohibited and that the client should keep a copy for his or her records.

The cost of each form is 25 cents. The top copy (original) is the working drawing, the second copy is for the client and the third copy is for our files. We are considering adding a fourth copy for use in the yard for loading plants and materials.

Our system is not perfect, but it has allowed us to meet the needs of our marketplace, expand our business and operate at a profit. — Al Lang 

The author is president of Greenleaf Landscapes, Marietta, Ohio.

5 Keys to Success

Selling Design Work

1. Determine customer profile in relation to sales.
2. Streamline the design, sales and installation process.
3. Teach your landscape designers a multiple-step design process.
4. Always produce a sketch as a first step.
5. Develop a single three-part NCR (no carbon required) form that is used for all company sales.



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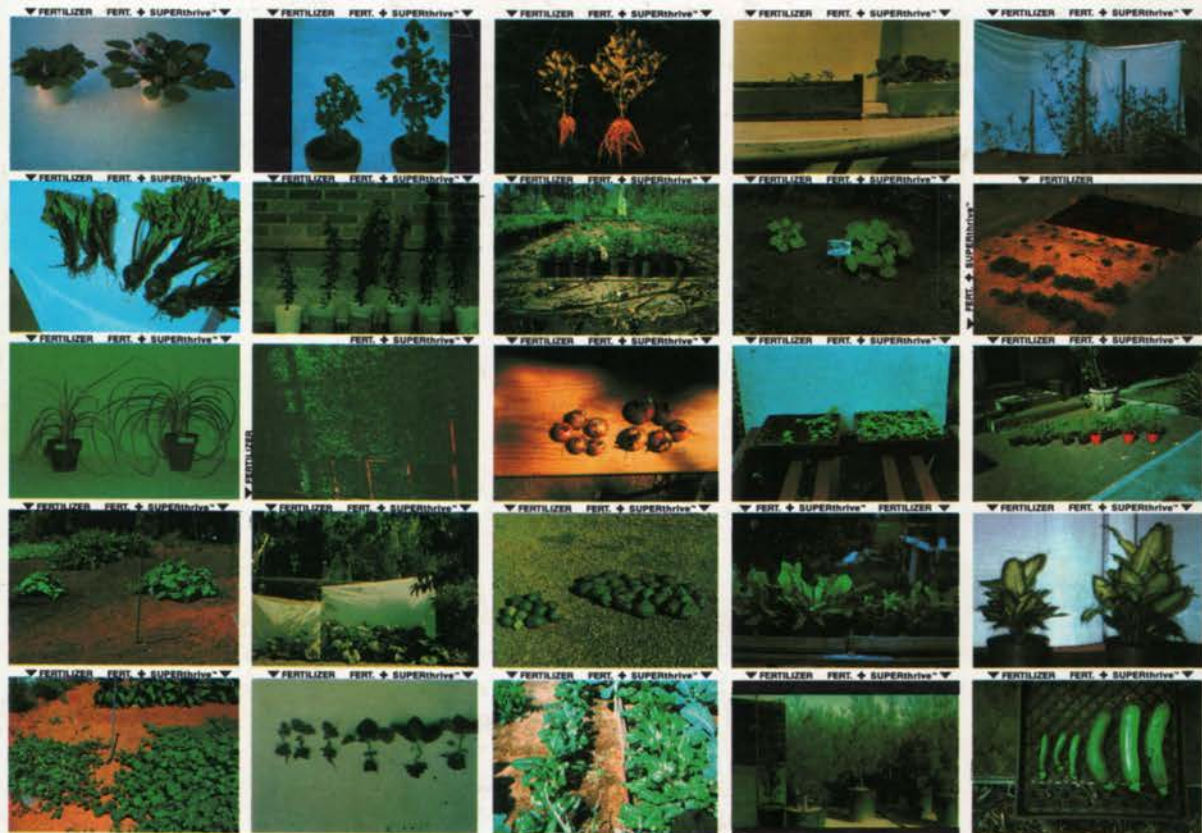
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