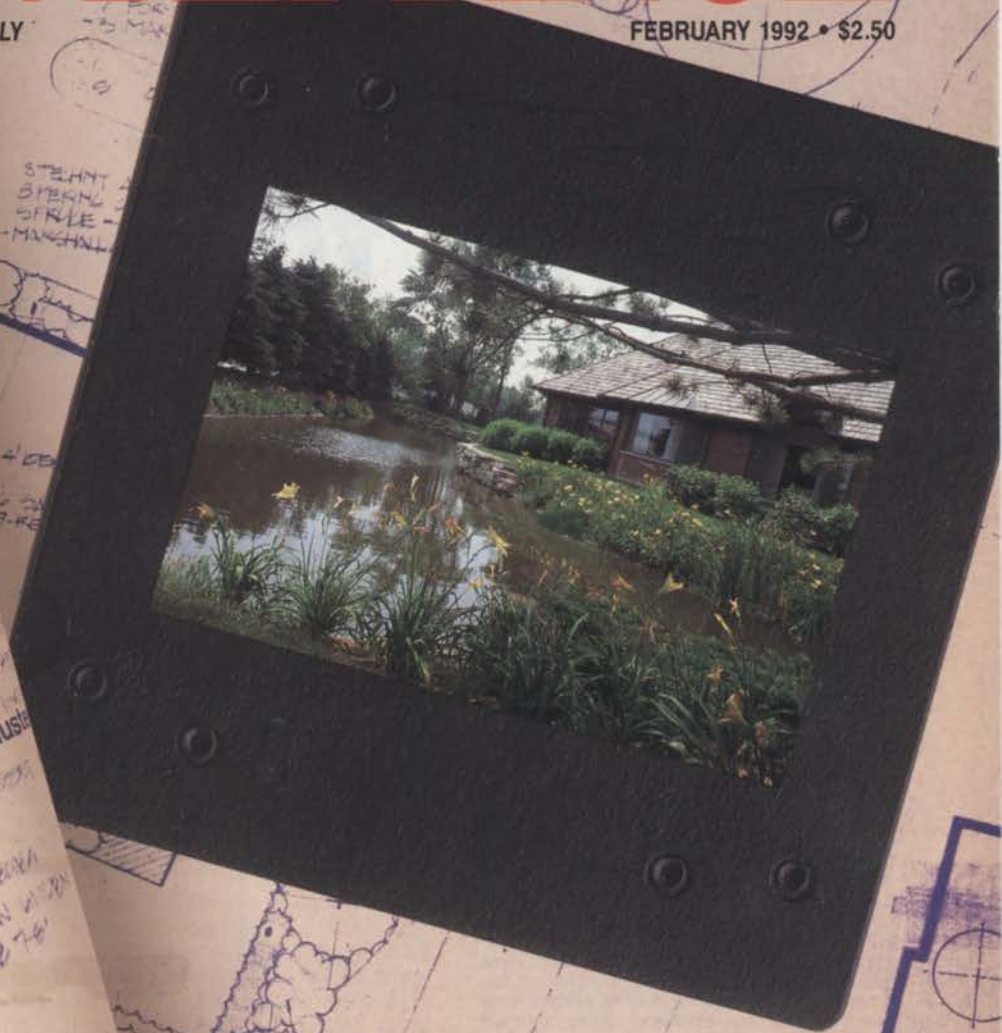


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Everett Mealman, Chairman and Chief Executive Officer
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USE READER SERVICE #39

754-1291

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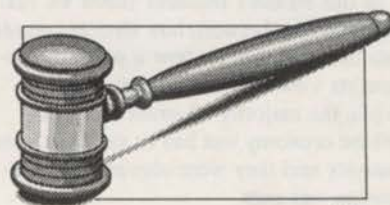
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Editor's Focus

BETWEEN THE WEATHER and the economy, industry prognosticators aren't sure which subject to tackle first. To a large degree, it depends on the region of the country in which business is being conducted.

While California has had more than its fill of the drought, other areas like Texas and Florida are still wringing out their inventory from the rain deluges they've experienced.

Moving on to the economy, or dare I say recession, the forlorn Northeast is a far cry from the more stable Northwest. And, depending on who you talk to anywhere in between, the situation runs from stagnant to steady to growing.

The consumer press tells us that homeowners, hit hard by job losses, huge debts and rising taxes, had little discretionary money to spend in 1991. And with the unemployment rate continuing its climb well into 1992, it's said that first and second quarter consumer spending will increase slowly, if at all.

On the positive side, lower interest rates are expected to get the economy moving by spring, marked by a boost in consumer spending and a rejuvenated housing market.

In this month's *Business Watch* we find discrepancies between how business owners rate the economy vs. how a panel of economists view the recessionary market. While the majority of owners said they felt the economy was bad or very bad, most analysts said they were convinced the recession was over.

In any event, spurred on by the conflicting messages we're hearing on the TV and radio and reading in *Business Week*, *Newsweek*, *U.S. News and World Report* and other news sources, I decided to do my own random survey to determine the state of the economy in the lawn and landscape maintenance industry.

I set to work telephoning major industry suppliers, leading contractors from various regions of the country and delving into available annual reports. In some instances, the picture didn't get any clearer because some of those contacted were hesitant to paint a positive or negative picture. But in most cases, the outlook for the commercial landscape industry was decisive — the industry will experience a challenging, but respectable year.

While the consumer equipment market was way off base in 1991, suffering from excess inventory and discounted prices, commercial demand, met by increased manufacturing efficiencies, remained strong. In



fact, maintenance was said to be the savior of many a landscape firm in 1991 as the construction market soured and lawn care fell off.

Don't get me wrong. I'm not implying all is well in the landscape arena, but this industry has more to look forward to than to complain about.

Suppliers continue to upgrade and improve existing products, restructure and improve efficiencies and indicate they are trying to work more advantageously with their distributors and dealers.

In turn, dealers are trying to keep inventories fresh and new — not an easy task — and service is definitely where the money is. If customers aren't placing overwhelming orders, it only makes sense to provide ongoing service to retain that business when the market picks up.

The industry is also seeing a resurgence in parts sales. In instances where a supplier isn't getting the new equipment sale, parts are a natural source of profit.

Double-digit growth won't be as easy to come by, but all indications point to continued success in the commercial landscape market. While suppliers are improving their understanding of this market's special needs, end users are becoming more proficient in communicating the benefits of professional service.

Based on the green industry's tumultuous history, anything can and will happen at any given time. But it's not a negative situation. Sure, consolidation and restructuring, as well as diversification and increased product scrutiny make life interesting, but in the long run, both suppliers and end users will emerge better and stronger. — Cindy Code ■

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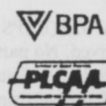
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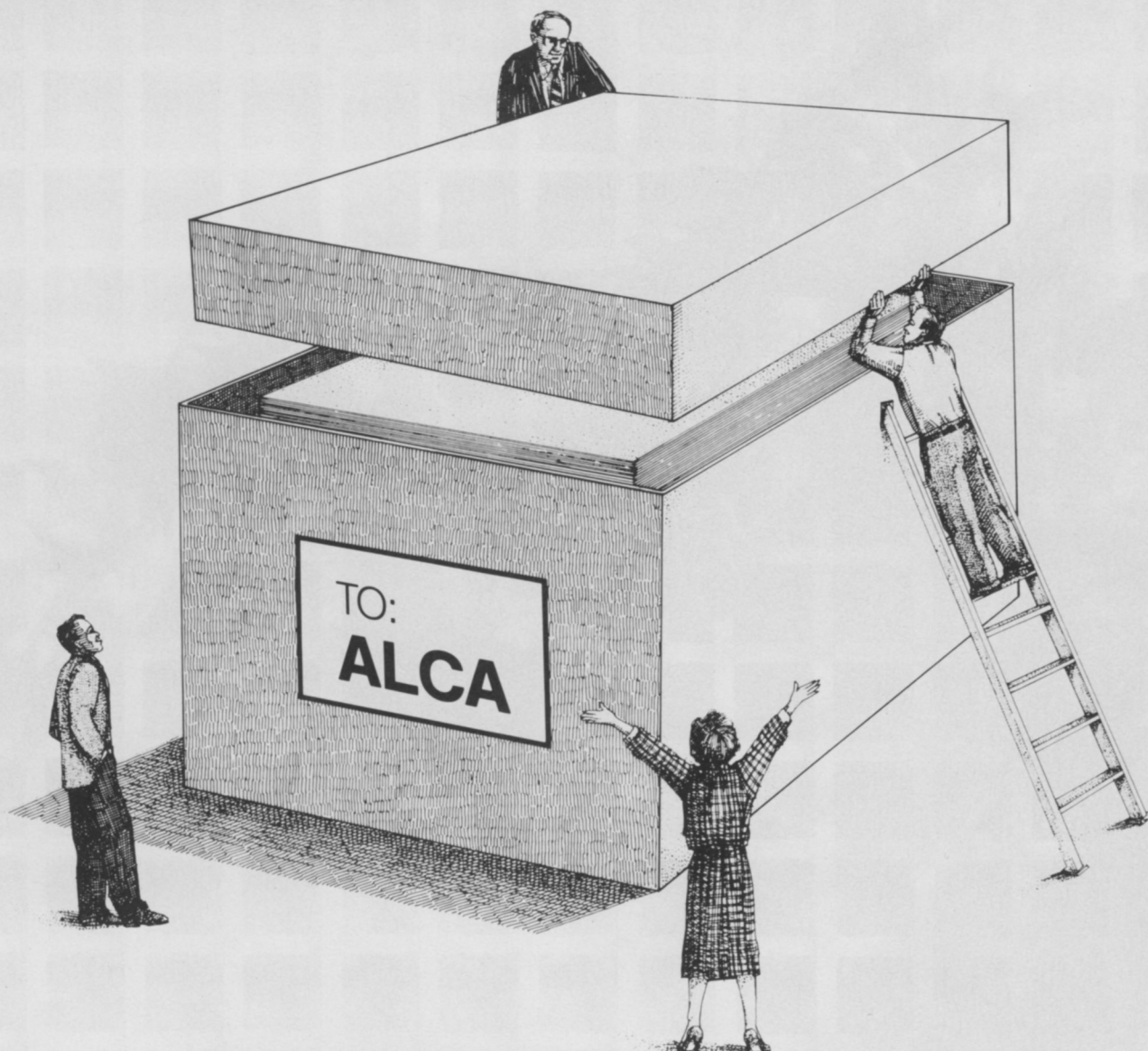
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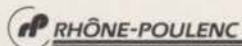


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Brand Fungicide

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Letters

Building Alliances

I just wanted you to know that your November article on Strategic Alliances and your Editor's Focus were terrific.

Your magazine has always had a positive influence on the industry, and those of us in leadership roles in the industry realize and appreciate your efforts. Keep up the good work.

Gary Thornton
Thornton Gardens
Maineville, Ohio



Mandating Certification

Thank you for the interesting article in your October issue. Certainly all companies, large and small, should be interested in the conservation and preservation of our water supplies.

We have been in the business for 10 years and have been installing irrigation systems for the past eight years. But, unfortunately as it sounds, we are continually repairing systems that lack the functional installation that should be given during the original layout, and certainly the installation, of any quality system.

I believe it is up to the business owner to see that his employees are well educated through proper training. Seminars offered by suppliers are obviously an important phase.

We have made an effort to install rain sensing devices on every system to reduce the chances of a system being activated during a rain. Small perhaps in this overall picture, but it does save some unnecessary water loss.

We must all make an effort to improve. If there is a need to make certification a requirement to become a certified irrigation installer, then so be it. It will keep those out of it who are not serious, and maintain the credibility of those who are. I look forward to reading more in the issues ahead.

Zach Workman
Lawns Unlimited Inc.
Cameron, Mo.

Compost Accolades

After receiving a copy of the November issue, I wanted to write you without delay to thank you for the very kind and generous coverage given DK. The article was perfectly written, from our standpoint, that is, and accurately reflected all of my comments. I found the other articles interesting, too.

I find your publication is one of the really good ones, and I say that not because of the attention you have given us. It is always interesting, well written and topical.

Robert Gillespie
DK Recycling Systems
Lake Bluff, Ill.

Letters to the Editor are encouraged. Send them to: Cindy Code, Editor, *Lawn & Landscape Maintenance*, 4012 Bridge Ave., Cleveland, OH 44113. ■

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Business Watch

MIXED SIGNALS CONTINUE to plague the financial markets as the country struggles to climb out of the economic doldrums. A big part of the problem is diminishing business confidence. A recent Gallup poll of 1,000 business owners indicates that 62 percent view the economy as "bad or very bad" while only 5 percent consider the economy "good" (see chart).

Consumer confidence also continues to fall. According to the Conference Board, a New-York based research group, consumer confidence dropped to 50.4 percent, a 12-year low. (Below 80 signals a recession.) By contrast, 59 percent of economists surveyed in a *USA Today*/CNBC poll said they are convinced the recession is over.

What conclusions can be drawn from these mixed signals? While the economy is definitely in need of an overhaul, it could be a lot worse. Despite the hysteria of some who claim the country is on the verge of a depression, the economy is in much better shape than it was from 1929-1931 (see chart). Most forecasters are predicting an economic upturn this spring or summer.

CONSUMER PRICE INDEX*

SEPT.	OCT.	NOV.	DEC.
+0.4	+0.7	+0.4	+0.3

*Percent change from preceding month.

UNEMPLOYMENT RATE(%)

SEPT.	OCT.	NOV.	DEC.
6.7	6.8	6.8	7.1

ANOTHER DEPRESSION?

The U.S. economy is on the ropes, but it could be worse – much worse. The unemployment rate at the height of the Great Depression was 24.9% compared to 6.7% in 1991, and the decline in the gross national product was even more significant.

UNEMPLOYMENT RATE



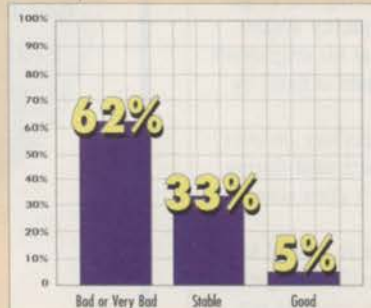
DECLINE IN THE GNP



Sources: (Left) Labor Department and USA Today; (Right) Commerce Department and USA Today.

BUSINESS OWNERS RATE ECONOMY

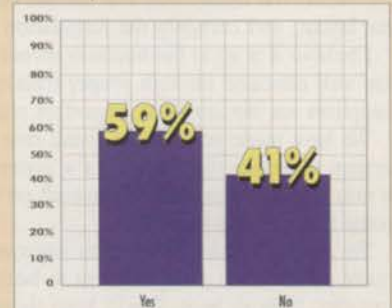
Significantly more than one-half of 1,000 business owners surveyed by the Gallup Organization rate the economy as "bad or very bad."



Source: Small Business United and Gallup Organization

REASON FOR OPTIMISM?

A panel of economists recently surveyed by USA Today/CNBC were asked: Are you convinced the recession is over? This was their response:



Source: USA Today and CNBC



REGIONAL REPORT: NORTHWEST

BY MOST ACCOUNTS, the Northwest region of the United States appears to have been spared the full brunt of the nation's recessionary climate.

"The economy in the Northwest is very strong right now," said Chris Senske, owner and president of Senske Lawn & Tree Care, Kennewick, Wash. "It's not growing as fast as it was a couple of years ago, but it's still stable. The recession in the rest of the country hasn't affected our business negatively."

Stable industry is a leading factor in the region's good health. Business giants such as Boeing, MicroSoft and Nintendo are headquartered in Washington.

Patrick Nibler, vice president of Pro-Grass Inc., Wilsonville, Ore., pointed to "recessionary ripples," but he blames those on negative media coverage.

"There tends to be a more conservative buying climate when the public sees negative press across the United States," he said.

In Sun Valley, Idaho, Frank Trafford remained optimistic about the local economy, despite decreased tourism and a slowdown in construction. Trafford is construction manager for Peter Flood & Co., a landscape maintenance and installation firm.

"We had our best year last year, but we're concerned about business this year because building is down," he said. "That's what drives our construction division and consequently affects our maintenance division."

But he added that low interest rates have driven up the number of building permits.

In Boise, Idaho, housing starts are up and construction is healthy, according to Russ Harbaugh, assistant director for landscape services, Perma-Green. He said that major industries in the agricultural, technological and communications sectors have helped maintain economic stability in the region.

"We had one of our best year's last year," Harbaugh said. "We're looking for a strong year this year."

News in Brief

NEWS DIGEST

Foliage Council Expands Its Horizons

The Foliage for Clean Air Council will expand its research to include exterior plant materials. As a result, the organization has changed its name to Plants for Clean Air Council. The council is administered by Veronica Mrazik of the Associated Landscape Contractors of America, 703/534-5268.

PLCAA Gets New Communications Exec

Laura Tener recently joined the staff of the Professional Lawn Care Association of America as communications coordinator. She replaces Karen Weber who resigned when her husband accepted a job in Nashville, Tenn.

Tener brings to PLCAA five years of government and association communications experience. She is the former publications editor for NAC/The Environmental Information Association.

AAN Establishes Disability Hotline

The American Association of Nurserymen and the Small Business Research and Education Council established a toll-free hotline for information on compliance with the Americans With Disabilities Act.

The hotline can assist with the following: ADA compliance and effective dates for enforcement; employer tax credits under ADA; approaches to making the workplace more accessible and so on. The hotline is available on weekdays from 9 a.m. to 5 p.m. EST. Call 800/947-4646.

Industry Move to Revoke SC Ruling Continues

Efforts by the green industry to amend last year's Supreme Court ruling affecting pesticide regulation continue.

Bills have been introduced by both the U.S. House and Senate to return local regulation of pesticides to the jurisdiction of the Federal Insecticide, Fungicide and Rodenticide Act. Although FIFRA is likely to be reauthorized by year's end, it's unclear whether the local ordinance issue will be addressed.

Lawn Doctor Introduces the 'Natural' Alternative

LAWN DOCTOR FRANCHISES will offer 100 percent natural lawn care in 1992, according to Lawn Doctor President Russ Frith. The service expansion topped the list of agenda items at Lawn Doctor's annual conference, held this year in Atlantic City, N.J., Jan. 6-8.

In his opening address, Frith told franchisees that the move to a natural care alternative is a marketing position, not a technical one. "We have the best marketing position for 1992 and the tools to make it work," he said.

According to Hal Zeve, marketing director for Lawn Doctor, the company encourages franchisees to present both the traditional and natural lawn care methods to prospective clients, along with the advantages and limitations of each.

Zeve said the move to natural care was made this year in response to media and public pressure, as well as "sleazy lawn care operators" who promised "natural" but delivered something else.

"Some customers will look for it and if we don't have it, will go somewhere else," he said. "Our goal is to become a company of choice."

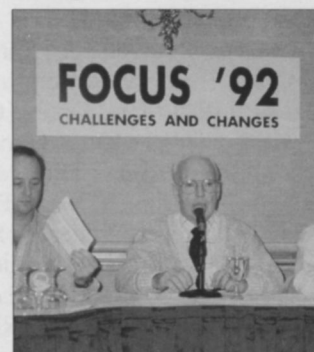
Zeve said that many more customers will inquire about natural lawn care than buy it. "They want information, they want to feel they are making a socially correct decision, and they want to do business with a company they feel cares about the environment. But most will choose regular care services, because it will give them what they want in a lawn."

Another factor that may discourage clients from the natural care alternative is the increased cost of the service. Most clients won't want to pay 20 percent more for natural care than for the company's traditional services, which follow an integrated pest management approach, Zeve said.

Under the new lawn maintenance program, customers choose from three alternatives. "Full Need Maintainer Care" is the company's regular IPM approach, which includes granular fertilization; weed controls of noxious weeds and crabgrass; and surface feeding insect controls where and when needed.

The "All-Natural Fertilization Care" program offers all-natural granular fertilizer applications, with no weed, insect or disease controls. The third offering, "Natural-Plus Care," combines all-natural granular fertilizers with spot treatments of dandelion and broadleaf weed control. The third option is the most costly to clients; it costs about 23 percent more than the regular program.

To promote the natural care line, Lawn Doctor is gearing up for an extensive radio, television and print media advertising and marketing campaign in the spring. A new marketing slogan has been adopted: "Lawn Doctor: Nobody Does It Better, Naturally."



Seminars focused on '92 sales.

Exmark Offers \$1 Buy-Out Option

The Exmark Advanta Lease program now offers a \$1 buy-out option. The new leasing program allows the lessee to purchase the Exmark commercial mower at the end of a 24- or 36-month leasing term for \$1.

Leasing an Exmark mower through the Advanta Lease program enables contractors to free up cash and build credit. Same-day credit approval is available after a short application form is completed.

In addition to the buy out, Advanta Lease offers a variety of competitive leasing

options including 90-days, same-as-cash terms or lower out-of-season payments.

For more information, contact your Exmark dealer or Exmark Mfg. Co., Box 808, Industrial Park NW, Beatrice, NE 68310, 402/223-4010; FAX 402/223-4154.

Doctor Discounts 2,4-D Controversy

Lifestyle, not exposure to any particular lawn care chemical, is the major cause of cancer in humans, according to Dr. George Carlo, an epidemiologist/lawyer with the

Health and Environmental Sciences Group, Washington, D.C.

Carlo recently spoke to more than 50 members of the Ohio Lawn Care Association in a daylong workshop in Columbus.

Much of the controversy surrounding 2,4-D surfaced after a 1986 published study linking multiple exposures of 2,4-D with the development of non-Hodgkins lymphoma in some Kansas farmers. The controversy flared again briefly this past fall with the publication of a separate study reportedly finding a link between 2,4-D exposure and cancer in dogs.

Carlo disputed the significance of both studies, arguing that the way the data was

gathered biased the findings against the use of the herbicide. He pointed to other studies, and also to a series of independent industry and academic reviews that failed to find a similar connection.

Also contributing at the workshop was Martin Lemon, environmental supervisor for Monsanto Chemical, St. Louis, Mo.

Lawnmark Sells Branches To Barefoot Grass

Lawnmark, Hudson, Ohio, last month sold three branch offices to Barefoot Grass,

Worthington, Ohio, for a little more than \$2 million.

While the Cleveland, Akron and Wooster, Ohio, offices were sold to Barefoot, Lawnmark retained 10 branches, one in Youngstown, Ohio, and the remainder in Pennsylvania and New York. Lawnmark's headquarters will remain in Hudson, Ohio.

Lawnmark's Ed Coia said the sale enabled the firm to restructure its resources and open two new branches in upstate New York and New England. At the same time, it gave Barefoot an opportunity to strengthen its position in the Cleveland area.

Lawnmark has maintained a high profile

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6 Tractor Hitch Spreader Spread Rite G Granule Spreader Turbo Wind Gauge Walk-A-Wick® Applicators Warren® Spreader Allegro® Soil
ormula Nature's Cycle® Lawn Formula Rich Lawn® Lawn Fertilizer Rich Lawn® Pro Rich Ringer® Turf Restore Ringer® Super Greens Re
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5WP Best® Small Package Fertilizers Technical Expertise Copper Tri-Basic Fore® Kocide® 101 Rubigan® AS Subdue® 5G Captain 50W

in New York and Pennsylvania, but hasn't had much of a presence in Cleveland, Coia said.

Because of the tough regulatory market in New York, many firms shy away from doing business in the state. Lawnmark, however, has learned to operate in the intense business environment and has developed a good rapport with the Department of Environmental Conservation, according to Coia.

Lawnmark now has plans to open two new branches each year for the next five years. New York and Pennsylvania are the main targets of the company's expansion plans.

Tornado Sues Chipper Imitator

A New York district court recently ruled that Tornado Products Inc. has sole rights to its patented chipper/shredder. The ruling means that competitors in the chipper/shredder industry cannot imitate the Wisconsin company's several patented components.

Tornado's president, Herb Baker, is now seeking a jury trial to protect the appearance or "trade dress" of his company's products.

Baker filed the suit last year.

Sterling Industries of New York and a

former Tornado distributor, J.S. Woodhouse, were named in the suit after their imitation of Baker's product began appearing on the market in 1990.

The verdict awarded an unspecified amount of damages to Tornado based on the numbers of copies Sterling made and sold. The infringement came to Baker's attention at the outdoor power equipment show in Louisville.

Once before the court, Sterling admitted that it had imitated Baker's product, saying it did not believe Baker's ideas were actually patented, as his advertising claimed. Sterling and J.S. Woodhouse denied committing any willful patent infringement.

Shears Flooding Nozzles for JD 9-C Spray Gun Hickok Pole Saws Hickok Pole Pruners Quality Imler Measuring Wheel Kioritz Soil
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"The original version of the Sterling chipper/shredder . . . was," said U.S. District Court Judge Edward Korman in his decision, "externally, a virtually identical replica of Tornado's machine, apart from color, the Sterling label, and some minor details of construction."

The court ruled in Tornado's favor and Judge Korman indicated that not only the components but the trade dress of Baker's chipper/shredder might also be protected.

Tornado is contemplating further legal action in this matter.

Recession Prompts Changes at Toro

Plant closings, employee lay offs and a consolidation of offices announced by the consumer division of The Toro Co., should have no effect on the production and distribution of its shipments to the professional landscape market.

The reorganization is said to be a result of the prolonged recessionary environment, as well as a shift in business strategies to reflect changing market trends and cus-

tomers requirements.

While keeping its servicing dealer network intact, Toro plans to aggressively pursue the mass merchandising market. A little more than one year ago, Lawn-Boy began selling its mowers in Sears, Wards and similar outlets. Toro said it plans to follow the same strategy.

Toro's ProLine mower and Lawn-Boy's commercial series mowers are considered part of the Toro Consumer Division, but no manufacturing or distribution changes are expected, according to Mary Elliott, director of communications and public affairs for Toro.

In fact, 1991 worldwide commercial sales for Toro were up 14.1 percent over the previous year, while consumer product sales were down nearly 9 percent.



The restructuring will consolidate all Toro and Lawn-Boy consumer manufacturing, marketing and administrative functions into one organization.

In addition to restructuring, Toro said budget cuts make it impossible for the company to exhibit at this year's International Lawn, Garden and Power Equipment Expo.

TOCA Offers New Communications Award

A \$1,000 scholarship will be presented this spring by the Turf & Ornamental Communicators Association to a student entering either their junior or senior year of college with an interest in green industry communications.

TOCA, a group of professional editors, writers, photographers, public relations practitioners and others involved in green industry communications, hopes to make the scholarship an annual event.

Funding for the scholarship was provided by GIE Publishing, publisher of *Lawn & Landscape Maintenance*, and Edgell Communications.

Students must have an overall GPA of 2.5 with a 3.0 in their major field of study. An application form, along with a list of specific information required may be obtained by writing to Den Gardner, executive director, 8400 Normandale Lake Blvd., Suite 500, Bloomington, MN 55437.

(continued on page 20)

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By switching to Gallery the superintendent at Crooked Stick Golf Club in Carmel, Indiana, reduced herbicide applications on his fairways from five a year to one. The notoriously picky PGA officials who inspected those fairways for the 1991 PGA Championship raved



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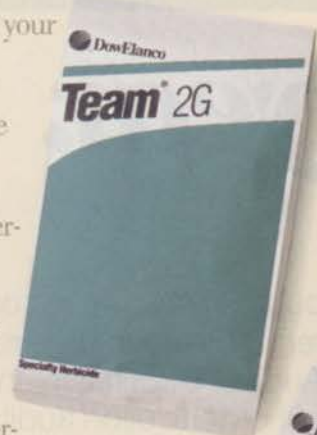
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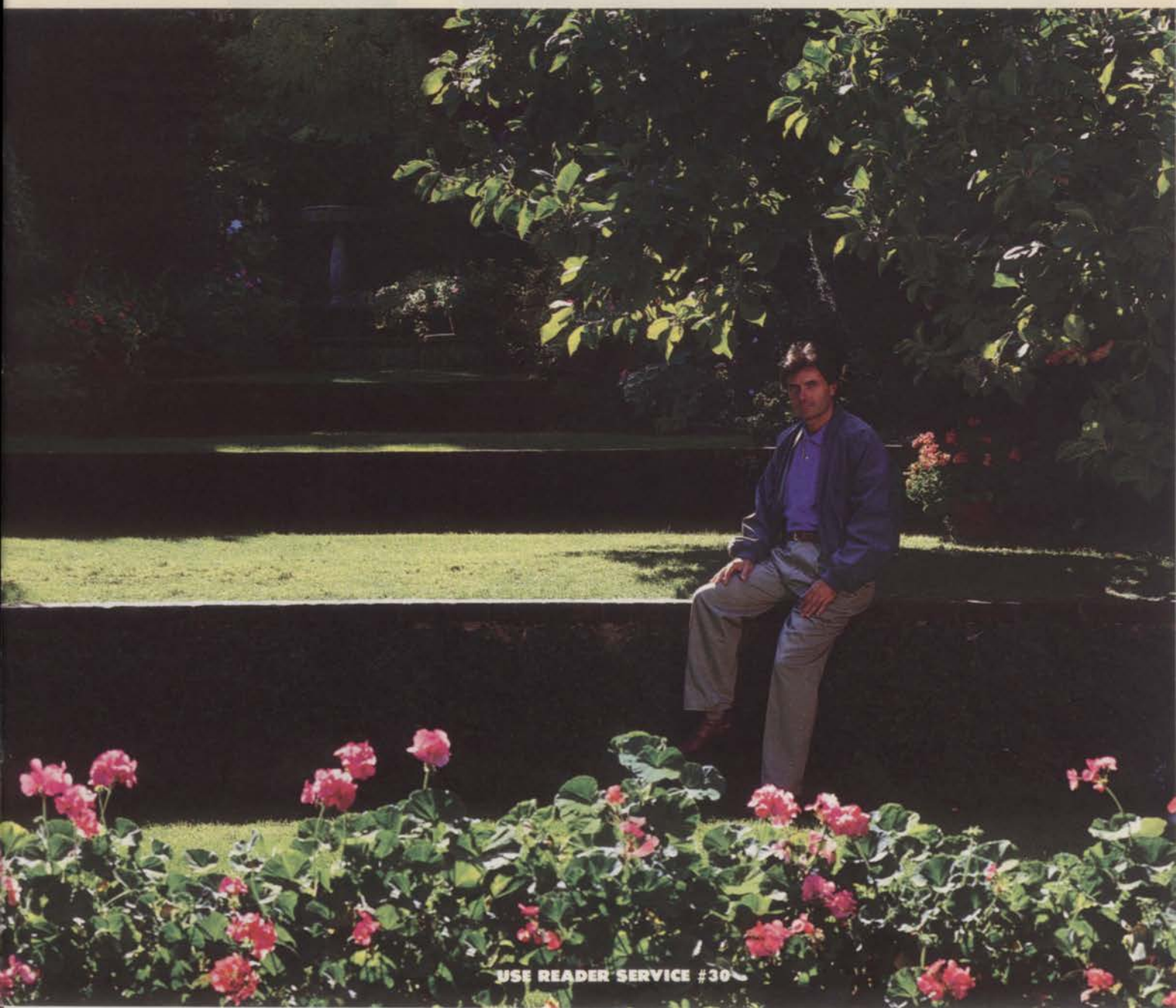


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News

(continued from page 16)

Safety Month Takes On New Identity

The fifth annual National Outdoor Power Equipment Safety month will take on a new look this year.

Celebrated in April, the safety aspects of the outdoor power equipment industry will be expanded to include the environment.

"Safety remains the priority education message for the OPEI and its members," said Dennis Dix, president of the Outdoor Power Equipment Institute. "Yet, we feel it essential to also publicly address the many ways that homeowners can responsibly manage yard wastes."



An education plan to pass on safety and environmental tips, information regarding environmentally helpful outdoor power equipment,

volunteering to speak at community and civic organizations about the yard waste dilemma and products designed to help manage yard wastes represent ways to participate.

Merger Creates New Design/Build Firm

Natural Green Inc. and Artega Corp., both of Minneapolis, merged businesses last month.

The two companies will now operate under the name Artega Natural Green. The corporate offices will relocate to a newly purchased office building at 15195 Martin Drive in Eden Prairie.

David Luse, president and owner of Natural Green is now president of the reorganized company. He has purchased all interest from Artega's previous owner, Jerry Bailey. Terms of the financial agreement were not released.

Artega is a 21-year old landscape design/build firm and Natural Green is a 17-year old commercial landscape contracting organization. The merged company will provide commercial and residential design/build services, commercial landscape bid contracting services, and will continue to operate its 120-acre growing range in River Falls, Wis.

The merger has created a broader-based company which can offer a full range of landscape contracting services, and creative, high quality design/build services, at very competitive prices, according to Luse.

Green Notes

Biosys intends to offer 2,300,000 shares of its common stock according to a statement filed with the Securities and Exchange Commission. All of the shares will be offered by the company.

Once accepted by the SEC, the filing range will be \$11 to \$13 per share. Kemper Securities Group and Vector Securities International Inc. will co-manage the offering.

Copies of the prospectus relating to the offering may be obtained from Kemper Securities Group, 333 West Wacker Drive, Chicago, IL 60606; or Vector Securities International Inc., 1751 Lake Cook Road, Deerfield, IL 60015.

Terrene, a division of Enviro-Gro Technologies, moved to the following new location: 200 Butler Ave., Lancaster, PA 17601-0036; 800/452-1922 or 717/397-6390. FAX: 717/397-6833.

Questions or comments can be directed to James Spindler, manager of marketing, specialty/retail products; or Rick Creamer, manager of marketing, bulk and agricultural products.

Glen-Hilton Products, manufacturer of the Mini-Click II rain sensor, moved to new office space Feb. 1. The new address is 2504 Grenoble Road, Richmond, VA 23294. Glen-Hilton Products, which employs 10 full-time, year-round employees, has grown annually 30 percent or more since 1986.

Applicators Can Receive Training by Video

The Cooperative Extension Service, Maryland Institute for Agriculture and Natural Resources, Extension has produced a six-part

video series that businesses can use to train non-certified workers handling pesticides.

The complete video training series is available for \$120. For more information about the videos, call Amy E. Brown at 301/405-3928. To order, send a check or

money order payable to the University of Maryland, c/o Video Resource Center, 0120 Symons Hall, College Park, MD 20742.

ALCA Names New Leadership


Newly elected officers for the Associated Landscape Contractors of America are Tom Garber, Colorado Landscape Enterprises, president; Gary Thornton, Thornton Gardens, president elect; Rich Akerman, Northwest Landscape Industries, vice president of finance; Terry Anderson, Rentokil Tropical Plants, secretary; and Eldon Dyk, Allen Keesen Landscape, immediate past president.

In addition, Mike Guthrie, Ground Control Landscaping, was named chairman of the Exterior Landscape Division and Rick Doesburg, Thornton Gardens, chairman elect.


Correction

Mark Yahn is president of Ground Control Landscaping & Maintenance, Orlando, Fla. In the January issue, Mike Guthrie, sales and estimating, was misidentified as president.

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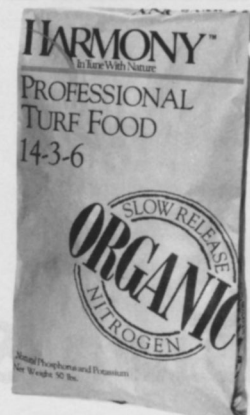
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Association News



THE 16TH ANNUAL Student Field Days, co-sponsored by the **Associated Landscape Contractors of America** and California State Polytechnic University, Pomona, will be held in Pomona, Calif., March 27-29.

The three-day competitive event draws students from horticulture and landscape architecture programs at colleges and universities across the country. Students compete in events designed to test skills in horticulture and landscape contracting, including design/build, sales, surveying, equipment operation, plant identification and irrigation.

Industry registration fees are \$75 for the first person and \$50 for each additional representative. Firms may sponsor competitive events for \$350, which includes industry registration. Student and professor fees are \$40; \$50 after March 1.

Members of the **Georgia Turfgrass Association** have agreed to design and beautify a public site for the 1996 Summer Olym-

For more information...

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301/667-1833

pics in Atlanta. The project was approved by Atlanta Mayor Maynard Jackson and Atlanta's Office of Olympic Coordination.

Following site selection, an intensive beautification plan begins, including landscape design, site preparation, foundation plant installation, color installation and

maintenance. The plan allows four growing seasons for plant establishment.

The entire project will be coordinated and carried out by GTA members. Following the Olympic Games, the site will be turned over to the city for continued maintenance.

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Membership in the **American Society of Landscape Architects** reached an all-time high in fiscal 1991. Despite a 35 percent dues increase, nearly 93 percent of its membership renewed, and 1,021 new members were added bringing membership to 10,300.

New programs on this year's agenda include an information resource center; a workshop for future ALSA leaders; and *LA Letter*, a business to business newsletter designed to enhance members' skills.

In addition, ASLA is sponsoring several research projects, including a study by the Urban Land Institute on the value of landscape amenities. Another study will track green industry trends. Both studies will be published this year.

The "Landscape Management Supervisory Training Manual" is now available from the **Professional Grounds Management Society**. The manual is a reference guide for the "uninitiated" grounds technician. Topics include tools, mechanical equipment, pesticides, material safety, plant biology and customer service; as well as turf, tree, shrub and annual information.

List price is \$69.95. There is a 15 percent introductory discount for non-mem-

bers. PGMS member cost is 50 percent off the list price. A \$5 postage and handling fee applies to all purchases.

The **Professional Lawn Care Association of America** announced a 3 percent dues increase for members currently paying between \$250 and \$1,000 in fees. Dues at the \$2,000 level and above remain the same. Dues are calculated according to a company's sales volume.

Last year, the association significantly decreased its dues structure, bringing it more in line with dues of comparable associations. However, the board determined that a slight gradual increase in lower-level dues will prevent a hefty, one-time increase in the future, according to PLCAA President Bob Andrews.

This year's dues increase follows a small decline in membership. At year end, membership had declined from 978 in 1990 to 935 in 1991. That number has stabilized, Andrews said. The association now hopes to gain new members through increased member services. PLCAA-sponsored state associations have also been proposed as a way to add members.

Despite the member drop, Pat Norton, secretary/treasurer, said that 1991 was a

significant turnaround year for the association. It reported a significant increase in income, reversing a previous year's loss. Actual figures will be released in April, with the publication of the annual report.

A public relations campaign for PLCAA members is already under way. Bob Tracinski, chairman of the public relations committee, revealed an "aggressive and proactive campaign." Included is a crisis management plan, consisting of a press kit of six news releases mailed to 3,000 newspapers and magazines in January and in the fall; five radio public service announcements beginning in February; a Grasscycling PSA; and a two-minute news video.

Interest is being gauged for an affiliate public relations program; members could purchase varying levels of marketing tools, including a custom-made package.

On the legislative front, Norm Goldenberg, chairman of the government and environmental affairs committee, urged board members to keep up the fight against local ordinances.

PLCAA sponsors its annual legislative "Day on the Hill" in Washington, D.C., Feb. 24-25. All members are encouraged to attend. ■

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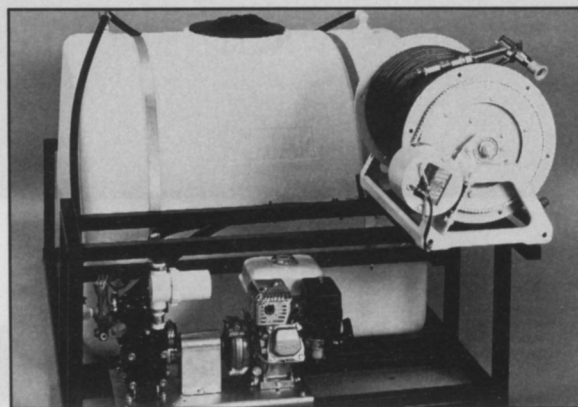
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Irrigation News

California Enacts Water Conservation Plan

THE CALIFORNIA LANDSCAPE Contractors Association recently joined public interest groups and water suppliers to enact a statewide urban water conservation blueprint. The project is designed to deliver annual savings equaling the amount of water used by 2.5 to 5 million Californians each year.

Representatives from the CLCA, Metropolitan Water District of Southern California, San Francisco Water Department, League of Women Voters of California and Sierra Club were among 120 organizations affirming their support for the urban conservation measures.

Since the program was announced in early August, boards of directors of various water agencies and public interest groups have voted to support the Memorandum of Understanding, as the Urban Water Conservation Charter is known.

"The Charter sets a new standard for water conservation not only in California, but for the entire United States," said Contra Costa County Supervisor Sunne Wright McPeak, co-chair of the State Water Conservation Coalition which spearheaded the conservation guidelines together with the State Department of Water Resources.



Agencies that have signed the charter are committed to 16 "Best Management Practices," a series of conservation measures designed to achieve attainable and measurable water savings in local communities. They include: indoor and out-

Sunne said that more than 80 percent of the state's urban population is now committed to the program, which could save 500,000 to 1 million acre feet of water per year.

door water audits, installation of water-efficient plumbing fixtures such as low-flow shower heads and low-flush toilets, as well as leak detection programs and landscape water conservation ordinances.

All signatories are participating in a newly formed California Urban Water Conservation Council.

Glen-Hilton Products On A Fast Track

Glen-Hilton Products was included in the Rising 25 list of the Richmond, Va., metropolitan area.

The Rising 25 program highlights the area's 25 fastest growing, privately held businesses, ranked on their percentage growth from 1987 to 1990.

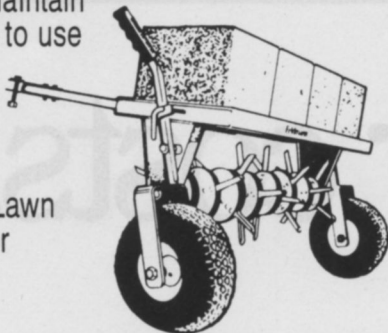
The annual event is co-sponsored by KPMG Peat Marwick, the Richmond Chamber of Commerce and the Metro Business section of the Richmond newspapers.

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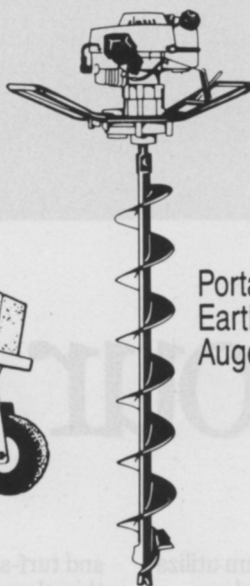
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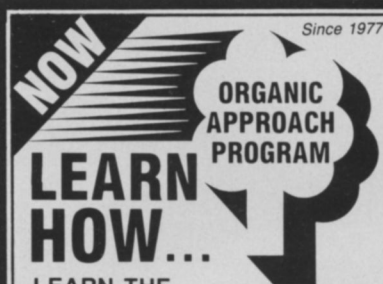
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Economy Delays Xeriscape Party

The Xeriscape 10th Anniversary Celebration, a three-day event sponsored by the California Xeriscape Foundation, was postponed. It was slated to take place Feb. 21-23.

The economy was blamed for the postponement. For further information, contact the California Xeriscape Foundation, 544 Bernard St., Costa Mesa, CA 92627; 714/645-9557.

Toro and Motorola Enter Marketing Agreement

The irrigation division of The Toro Co. has an exclusive agreement with Motorola to jointly market its new MIR 5000 radio-based computerized irrigation management system to non-agricultural markets throughout the United States.

The system uses radio to monitor and control all aspects of large irrigation systems. It can be installed, expanded or integrated into existing systems without disturbing turf and landscaping. The system also can be installed using traditional wire line or leased telephone lines.

The software enables the system to simultaneously operate multiple field units, which independently monitor and control areas with different irrigation needs. The fully programmable system provides 24-hour flow control. It responds automatically to leaks and line breaks, shutting off water only to the problem area without affecting irrigation in trouble-free areas.

The MIR 5000 can be configured with an automatic weather station. This feature provides system-wide or area-specific adjustments in response to changing environmental conditions, such as rain and wind.

Auxiliary functions, such as lighting, security, fountains and other electrical or hydraulic devices, can also be controlled by the MIR 5000.

Other features include hand-held control units that double as two-way portable radios, and alarm paging from key sensors monitoring flow, power and pumps.

Scholarship Recognizes Future Architect

A student of landscape architecture at the Utah State University is the recipient of the 1991 Rain Bird Co. Scholarship, awarded through the Landscape Architecture Foundation.



Huguenard

Patricia Huguenard is completing her final year of undergraduate studies at the university. She maintains a 3.6 grade point average, is a member of Sigma Lambda Alpha honor society and is a student member of the American Society of Landscape Architects. She also is involved in community environmental projects and has worked in landscape and floral design for more than 10 years.

Rain Bird Sales sponsors the annual award to recognize an

outstanding landscape architecture student who demonstrates commitment to the profession. The \$1,000 scholarship is administered by the LAF, a non-profit organization dedicated to the preservation, improvement and enhancement of natural and built environments. ■



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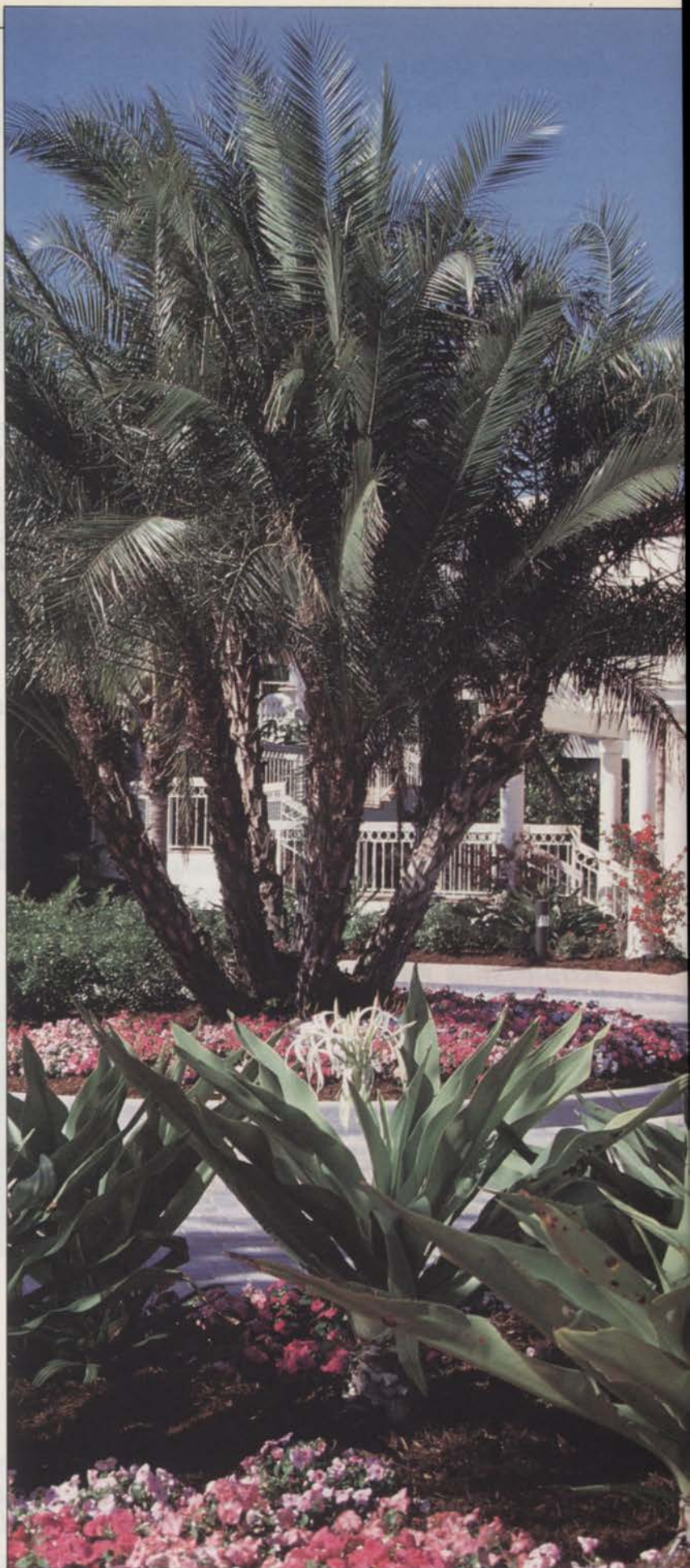


"EVERYTHING FOR THE LAWN MAINTENANCE INDUSTRY"

SIDE BY SIDE

There's a greater willingness among landscape professionals today to be team players. A project can be just as cost-effective or more so with a team approach.

By Alex Hogan





WHO HELPS WHOM more in the relationship between landscape contractor and landscape architect?

Is it the landscape contractor, who provides the landscape architect with valuable information on soils, climate and plant materials when a project is still in the design stage? Or is it the landscape architect, who realizes field experience is a critical element of design and solicits a contractor's input on a plan — perhaps even before it's presented to the client — and recommends the contractor's inclusion on the project bid list?

Who's scratching whose back among various segments of the green industry appears less important today than the fact that barriers — particularly communication barriers — among them are coming down, slowly but surely.

What's being acknowledged is that a newfound level of cooperation and communication is benefiting those who design and install the projects, as well as contractors who maintain them; their clients, who get what they expect from the projects, both short-term and long-term; and the general public, which, in the long-run, may come to better appreciate the value, the expertise and the professionalism of the green industry as a whole.

While the cooperative approach among four major trade organizations has spawned the New Alliance — whose purpose is to foster understanding, communication and better working relationships among landscape contractors, landscape architects, nurserymen and grounds managers — the catalyst to begin the discussions pre-dates formal establishment of New Alliance about two years ago.

It may have come from the realization that there's an interdependence among the members of the Associated Landscape Contractors of America, American

Society of Landscape Architects, American Association of Nurserymen and the Professional Grounds Management Society. But business realities, particularly in difficult economic times, have done as much as anything to get these disparate yet dependent segments talking and working with one another.

"I see a lot more two-way communications, with the landscape architect initiating the sequence," said Thom Maxwell-Miller, president of Ecosystems Imagery Inc., Encinitas, Calif. As a contractor, he sees more landscape architects willing to ask for suggestions and even to walk a job site, asking questions about drainage and plant use, prior to completion of a plan.

Such a team approach to a project will help bring work in on better budgets and avoid extra charges, delays and court cases down the road.

"A project can be just as cost-effective or more so with a team approach," said Maxwell-Miller. "Things go smoother. You're more attuned to working with each other and listening."

There's a greater willingness on the part of installers today to be team players, and there's economic pay back to that attitude, said Maxwell-Miller.

"If a landscape architect calls about pricing out materials for a job, we'll take the time to work with him. They'll put our name on a bid list of four to eight people, and we're pre-qualified," he said. "The contractors who bid are willing to compromise and work with people."

FIELD WORK. Landscape architects have a responsibility not only to pull together the key players for an effective team approach to a project, but also to educate their clients as to the importance of such an approach to the work, according to Bill Canon, vice president of the construction division of

Reinhold & Vidosh, Pontiac, Mich.

"The landscape architect is the owner's representative, and the construction firm is required to build according to specifications. There's a clean split, but nobody has all the answers."

A good landscape architect, spearheading the team, will realize the contractor has expertise in field operations such as plant materials, soil, drainage and in estimating rough costs. "We encourage the use of landscape architects and the sharing of information," he said. "With the more professional firms, there's more talking and more of the team approach."

Canon, himself a landscape architect, cited the installation work his firm is now doing on Sears, Roebuck and Co.'s new corporate-campus development in Hoffman Estates, Ill. Reinhold & Vidosh is working with landscape architects, the owner, construction manager and general contractor to identify problems, issues, design elements and installation dates.

Having an LA in the field not only helps the contractor identify problems and address them quickly and efficiently, it makes an owner more likely to see problems and want to resolve them.

"Educating a client about the need for doing landscaping in a certain way is a major part of the critical path to completing any project today," Canon said. "The landscape architect and the landscape contractor are on the same side. It helps us do a good job and be profitable, and it helps the owner and general contractor get what they want."

Economics plays an important part in the warming relationship between landscape architects and landscape contractors, said Patrick Moore of Patrick Moore Landscape Architecture, Alexandria, La. The reluctance of the two disciplines to work together is dis-

appearing because, he said, "when I'm busy, they're all busy."

Moore, an ASLA board member and a landscape architect-site planner, recognizes that a contractor's performance can make or break the reputation of an L.A.

"A design can be great on paper," he said. "But a truly successful job is done out in the field." His fees, in fact, include monitoring installation work after bidding, "to protect our good name."

"A good, close working relationship with the people who install your jobs is the best," Moore said. If he spots a problem with a bid that's "super low," or if a problem develops after bidding, he will work with all involved to resolve it. Likewise, if a contractor runs into an unexpected problem that increases the project's cost, Moore will go to the client on the contractor's behalf to seek a resolution.

IN-HOUSE DESIGN. The relationship between landscape architect and landscape contractor doesn't always have to be at arm's length. Increasingly, the two professions are being practiced under the same roof.

Design/build firms, where projects are taken from concept through construction, are growing in numbers. Externally, they offer clients a continuity through an entire project, with an ease of planning and communicating as



a job moves from paper and into the ground. Internally, a design/build firm creates synergy by having its planners and installers working closely throughout the duration of a contract and being able to respond more quickly and effectively to client requests.

"Essentially, we don't believe there's any other way to do it," said Paul Drummond, director of business development for Smallwood Landscape of Naples, Fla. The firm's business runs about 50 percent residential and 50 percent commercial, which primarily comprises luxury hotels and condominiums in the upscale Gulf Coast community.

"We need to be in on the first

meeting with the engineer, the architect and the builder," Drummond said. "We may, for example, suggest situating a house in a particular way on the site to place the master bedroom one way, the entrance one way or to provide more privacy."

Drummond has seen the relationship between landscape architects and landscape contractors improve over the past 10 years, as LAs, in general, realize they lack the hands-on knowledge they need to develop realistic plans and offer their clients the best advice.

But there still needs to be more communication, since there remains "a lack of expertise within

A design/build residential project in Naples, Fla. Photo: Smallwood Landscape Inc.

large landscape architecture firms about field-related problems from the contractor end such as types of plant materials specified or habits of the plant materials specified. We benefit (in design/build) by dealing daily with our own construction personnel. We see how decisions cost owners and what options exist," explained Drummond, a landscape architect himself.

Understanding regional variations of soils, materials and climate are critical to developing plans which meet a client's short-term criteria and also last beyond a guarantee period, Drummond pointed out. A California design firm can easily plan a project in Naples if it does its homework in critical areas. But without understanding local conditions such as Florida's west coast winds and salt spray from the Gulf of Mexico, a project would have a tougher chance at survival in the long-run.

"There's constant back-and-forth (between LA and installers), which reflects our main concern for the customer, from an aesthetic and maintenance standpoint," he said.

While LAs and landscape contractors are "not really in competition with each other," there

(continued on page 32)

NEW DESIGNS BRING ENVIRONMENTAL IMPROVEMENTS

LANDSCAPE DESIGN OPTIONS in 1992 cover a wide range of elements. While some are determined by an owner's taste or a landscape architect's inspiration, others are dictated by climate conditions or even by local or state regulations.

In California, for example, the use of more drought-resistant materials is becoming popular among both residential and commercial customers, said Thom Maxwell-Miller of Ecosystems Imagery Inc. in Encinitas. Well-planned irrigation is also a part of new projects, since water auditing and management plans will become state law in January 1993.

The use of "artistic representation" in landscape is also popular in California, he said. That can include actual pieces of sculpture or other art, or landscaping elements which are more interpretive and frame entrances or views of the ocean.

"No job is being done in this office without some kind of environmental improvements included," said Patrick Moore of Patrick Moore Landscape Architecture, Alexandria, La. "It's a gold mine."

Industrial and commercial work — teaches clients about their relationship with the environment.

An oil-refinery project, for example, comprises trees, which absorb pollutants and provide visual improvements to the facility; and also storm water retention and holding which creates a wetlands using native plant materials. The water project filters water

for re-use, saving 100,000 gallons per day, Moore said.

Water management is becoming more important in landscaping projects in southern Ohio as well, said Gary Thornton of Thornton Gardens, Maineville, Ohio. Designs are using storm-water runoff to create retention basins, lakes and wetlands, and on-site water resources are being used in planting areas.

Lighting has become a "giant area," Thornton said, with more lighting being specified in residential plans than there was on commercial work 10 years ago. Lighting of homes today is more for "showcasing," said Thornton, with more sensitivity to the way a project looks and to its beauty.

Other trends Thornton identified are "a desire to use plant variations that we quit using 25 years ago" and the desire to create "naturalism" through a wider range of colorful perennials.

On Florida's Gulf Coast, "amenities" are the thing, according to Paul Drummond of Smallwood Landscape of Naples. "People want to feel like they're in the tropics," he said, and are installing "the most phenomenal pool designs."

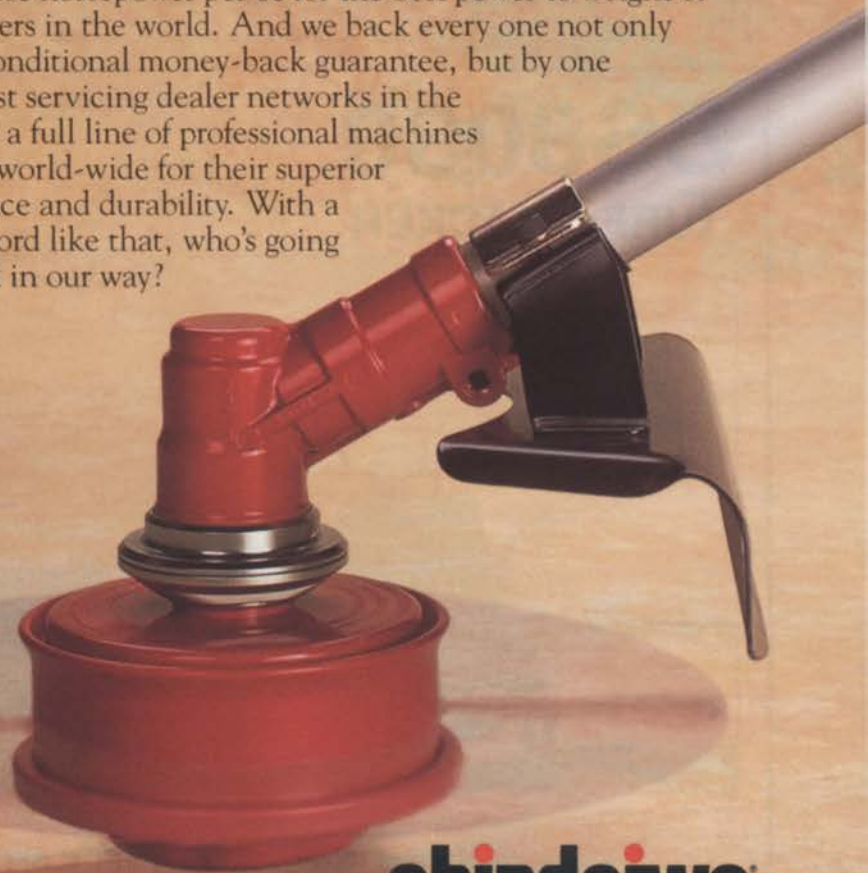
These can include waterfalls, cascading spas, bridges and plantings throughout. The outside is an extension of the inside, and it allows people to enjoy their gardens.

Transforming homes and boat docks makes people "appreciate the value of landscape architecture," Drummond said. "The residence creates a standard of life for them."

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Side By Side

(continued from page 30)

remains "a fair number" of landscape architects who have not yet left their "ivory towers," said Gary Thornton, chief executive officer of Thornton Gardens, Maineville, Ohio.

"We've been in somewhat of an antagonistic situation for years, and I don't know if we'll ever solve the problems," said Thornton. Landscape architects think of their work as art, while landscape contractors will sometimes try to "see what they can get away with" to quote the lowest bid.

Design/build is seemingly the trend in the green industry today, according to Thornton, but there's generally "an awful lot more work going on than in the past 10, 15 or 20 years. There are a lot of landscape architects working for contractors, and a lot of contractors who are LAs."

He called the direction of the industry today a "dual trend." There's a lot more good work, big work, being done by design/build firms today, and the overall in-

fluence is causing both types (of the planning-building process) to expand.

LONG-TERM TEAMWORK. Just as landscape architecture's relationship with the development and installation of a project is growing closer, so it is, too, with maintenance of that work after it's completed. Here, also, economic as well as aesthetic considerations make it cost-effective to assemble a team — including the landscape architect, landscape contractor and maintenance contractor — from the outset.

The design-maintenance connection was the focus of a series of meetings coordinated through Michigan State University's department of horticulture beginning in 1986. One outcome was the recommendation that designers prepare manuals which detail both the long-term objectives of a project as well as how to care for it.

"Once a guarantee is up, a maintenance contractor quite often will maintain a site without concrete direction on what was

intended for the project and the relationship of the plants," explained Dr. Bob Schutzki, an MSU assistant professor. Although everyone may be performing "by the book," a project may suffer without involvement of the landscape architect at the maintenance end.

A contractor, for example, may follow specifications in backfilling tree wells, and gain the immediate effect, according to Schutzki. Long-term, however, poor soil conditions outside the tree pit may cause distress in the plants. After the guarantee period expires, the maintenance contractor finds plantings don't respond to a routine fertilization program, and substantial reconstruction — including aeration and soil modification — is necessary.

"This should have been addressed at the beginning," Schutzki said.

Cost of long-term maintenance should also be a landscape architect's concern upfront, he said, and is an area where a maintenance contractor's expertise is invaluable.

While a client pays the designer's fee and possibly \$100,000 for construction, maintenance costs are often overlooked early on. When maintenance bids range from \$13,000 to \$25,000, people ask, "What aren't we getting for \$13,000? How would this low bid affect long-term quality?"

Had the owner anticipated \$25,000 in annual maintenance of the project, its scope may have been altered in the design stage, said Schutzki.

"It's a landscape architect's responsibility to be an adviser to the client, and to make the client aware of short-term and long-term considerations," he said.

Moore's firm has addressed clients' long-term maintenance needs by the addition of a site-management company to his design/build firm. The site-management fee provides for inspection "forever" of third-party maintenance work.

"In many cases, an owner puts out a set of (maintenance) specs that say 'mow, weed, edge, fertilize and make it look good,' "

(continued on page 83)

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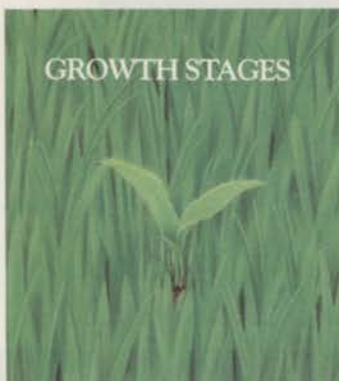
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USE READER SERVICE #58

LANDSCAPING:

AN INVESTMENT THAT TAKES ROOT AND GROWS

The benefits of landscaping can't be denied, but landscape contractors and landscape architects must become more vocal in promoting this to appraisers and the general public.

By Julie A. Evans

IT'S ONE FOR the history books. The '80s decade and its carefree spending days are over.

In its place, a much different decade has emerged. Words like *value* and *quality* have become the buzzwords as cost-conscious consumers tighten their purse strings and demand more "bang for the buck."

For the service industry, this shift in public demand requires fresh marketing strategies. What worked in the '80s may not be so effective in the recession-cramped, sobered-up '90s. And for the landscape contractor, this means a renewed emphasis on the value of landscaping — aesthetically and financially.

Value sells.

EXAMINE THE FACTS. Consider the marketing advantage: Landscaping is an investment that returns financial, aesthetic and health rewards. How many industries can make that claim?

Ironically, one of the first major studies of the value of landscaping was completed during the spending frenzies of the '80s. In 1986, the "Weyerhaeuser" study was commissioned by the Nursery Products Division of Weyerhaeuser. (Weyerhaeuser has since divested itself of its nursery division.) It included original research by the Gallup Organization, Trendnomics and the National Gardening Association. Among its many findings:

- New home buyers and buyers of previously owned homes estimated that landscaping adds 14.9 percent to the value or selling price of their home on the average (Gallup Organization).
- Sixty-two percent of all U.S. homeowners consider landscaping a good or better investment than an investment in other types of home improvements, including kitchen and bathroom remodeling. Also, a majority of homeowners agreed that landscaping holds its value compared to other types of remodeling.
- Ninety-five percent of real estate appraisers agreed that landscaping adds to the dollar value of residential real estate; 86 percent said that landscaping adds to the dollar value of commercial real estate.

The Weyerhaeuser study is now six years old, but many within the landscape industry still quote from it and point to it as an authoritative source. Regrettably, the study is out of print.

Bruce Butterfield, executive director for the National Gardening Association, Burlington, Vt., was responsible for much of the study's statistical research. He said the data is still fairly accurate, but voiced one concern: that the current economy has forced real estate values down in certain markets. This could somewhat skew statistics about the value of landscaping in a depressed housing market, he said.

This year, the industry awaits the results of a new study on the value of landscaping and its impact on commercial real estate. A coalition headed by the American Society of Landscape Architects, with financial assistance from the American Association of Nurserymen, the Associated Landscape Contractors of America and the California Landscape Contractors Association, has commissioned the Urban Land In-



Lifescapes, an Atlanta-based firm, installed a multilevel swimming pool and spa with a waterfall to overcome a sloping site.



stitute, Washington, D.C., to conduct research on this topic.

According to ULI Project Director Michael Bayard, the national scope of the study makes it a first for both the real estate and landscape industries.

The study will examine landscape features, techniques and amenities, and assess their value to real estate developers. It will also consider the value of landscape amenities to the users and tenants of developments and the public at large.

"We recognize that we won't be able to put a dollar figure on value, and that value will vary by

location," he said. "But we think we'll be able to learn some general lessons about which of the amenities are valued most and also determine whether they add value to the renters, whether they add value to tenants organizations..."

To conduct the study, the ULI will go on site to approximately a dozen developments throughout the country, ranging from residential to office parks, and conduct interviews with representatives of tenants organizations, public agencies and real estate brokers.

As ASLA focuses on new research, a couple of green industry associations are conducting suc-

cessful public relations campaigns with "recycled" information.

Last year, the ALCA released a colorful brochure entitled "Landscaping: It Works for Everyone!" The brochure is intended as a marketing piece to help sell customers on the value of landscaping. Among its proclamations: Landscaping adds 15 percent to the value of a home; screens unpleasant sights and sounds; cleanses the air by absorbing ozone and producing oxygen; and keeps temperatures down.

While these facts and figures may be old news to the landscape

community, many potential customers will find the information new and noteworthy.

According to Debra Dennis, executive director for ALCA, the brochure premiered at the Green Industry Expo in November. In just 30 days, it sold out its first print run of 15,000 copies.

"The exterior landscaping division (of ALCA) felt there was a need to educate the consumer on the importance of landscaping, both as an investment and to the environment," she said. "A secondary reason was to provide landscape contractors with a marketing tool they can use in the residential market."

Rick Doesburg, vice president of sales for Thornton Gardens, Maineville, Ohio, chaired the committee that coordinated the project. He said the information for the brochure came from the Weyerhaeuser study and other sources.

"Anytime I see anything like that I save it," he said. "I use the information in sales presentations to the client. Anytime you sell anything, you should have the facts and benefits why people should buy."

Doesburg said that the company has been selling its clients on the value of landscaping for years by using facts and figures similar to those in the brochure.

"I've been teaching my sales staff for 20 years that you have to sell benefits," he said. "This brochure is put together to help those companies that don't know how to sell."

Doesburg added that the brochure provides an authoritative voice from a neutral source, "not a Thornton Landscape brochure."

ALCA plans to release another marketing brochure, this time for the commercial landscape market. According to Dennis, production could begin as early as spring; however, the association may decide to hold off until results from the ULI study are released in the fall.

The Garden Council of Chicago, Ill., also has produced a

HEALTHY LANDSCAPES = HEALTHY LIVES

THE LATE '80s AND early '90s have signaled a positive trend in environmental thinking. As stewards of the land, members of the green industry should trumpet the health benefits of a well maintained lawn and landscape.

According to statistics:

A 50-square-foot lawn produces enough oxygen to meet the needs of a family of four. At the same time, the lawn is absorbing carbon dioxide, hydrogen fluoride and peroxyacetylene nitrate.

Turfgrasses sweep 12-million tons of dust and dirt from the air annually. The root mass and soil microbes filter and break down pollutants in water flowing into un-

derground aquifers.

A healthy and dense lawn is an efficient erosion prevention system. Healthy and dense lawns absorb rainfall six times more effectively than a wheat field.

The front lawn of an average house has a cooling effect that is double the power of that home's central air conditioning system. Eight average front lawns have the cooling effectiveness of a 70-ton air conditioner.

But grass is not the only environmental ally. Landscape plants provide an enormous boost to the ecosystem. In "Valuation of Landscape Trees, Shrubs and Other Plants," the International Society of Arbo-

riculture lists a number of proven benefits culled from research. They include:

Shade from trees provides human thermal comfort. Deciduous trees block up to 90 percent of sunlight in summer and reduce home cooling costs.

Plants reduce the impact of air and noise pollution. Their foliage absorbs sulphur dioxide and ozone, two major pollutants; as well as absorbs carbon dioxide and releases oxygen.

The eighth edition of *Valuation of Landscape Trees, Shrubs and Other Plants* is due in June. For more information, contact: ISA, Leal Park, 303 West Univ. Ave., P.O. Box 71, Urbana, IL 61801; 217/328-2032.

marketing tool for landscape contractors. The "Yard and Garden Remodeling" kit, co-sponsored by ALCA and the National Landscape Association, is designed to educate consumers on the rewards of a landscape investment. Included is a formula that allows homeowners to calculate their financial return on a landscape remodeling investment.

The formula is based on a study by *Money* magazine that reports landscaping as having a recovery value of 100 percent to 200 percent, "if it is well done and harmonizes with foliage nearby." The recovery value is compared to that of a kitchen renovation (70 percent to 125 percent) and a bathroom renovation (80 percent to 120 percent).

Response to the kit has been "tremendous," said Christine Kane, spokeswoman for the Garden Council. This March, the kit receives widespread exposure when it's featured in the eight-million-circulation *Better Homes and Gardens* magazine.

WHERE'S THE BEEF? Although consensus within the real estate industry is that landscaping adds value to a property, little has been published (outside of the Weyerhaeuser study) to back up those claims with hard data.

The Appraisal Institute, the National Association of Realtors and the Council of Tree & Landscape Appraisers were all contacted for this story, and not one of them could point to a single study that definitively linked home sales and appraisal values with the value of landscaping.

Michael Cannon of Appraisal and Economic Associates, Miami, Fla., blames the landscape industry, in part, for this void of information. He said that the role of landscaping comes up often during the appraisal process. If two homes of comparable worth are on the market, one that is landscaped and one that is not, the landscaped home would "in most instances sell for more, and always sell faster," he said.

But Cannon said that landscape contractors and landscape architects are not vocal enough in promoting this value to appraisers and the general public.

As an example, he pointed to a recent project to construct a monorail in Dade County, Florida. Initial plans called for a large investment in landscaping, he said, but as construction costs soared, landscaping was one of the first budgets to get slashed.

"Government agencies will cut costs of landscaping when other building costs get too high. The landscape industry should argue that point," he said.

As for the Dade County project: "It looks like hell," he said. "They shouldn't have cut landscaping. Shame on the industry for not having more clout than the concrete people."

Cannon's claims — that appraisers lack input from the landscape industry — is supported by the Weyerhaeuser study. It revealed that the majority of real estate appraisers felt that they had not been provided with adequate guidelines for evaluating and appraising the dollar value of landscaping.

However, the publication of the ULI study would close that information gap.

Real estate brokers and landscape contractors are generally in consensus that landscaping adds to the dollar value of a property, but the questions remain: to what extent and how is it measured?

"Homes that have a well thought out landscape, an attractive landscape and one that might be easier to maintain will definitely have their sales price enhanced, if nothing more than to the extreme price," said Larry Rowan, manager for Coldwell Banker's Schaumburg, Ill., office. "But it's hard to generalize. All the landscaping in the world isn't going to help out a home that needs repair or an interior that needs updated."

Rowan quoted a rule of thumb that he's heard, that 25 percent of the value of the home ought to be spent on landscaping. "I can think of \$250,000 to \$300,000 homes where \$30,000 has been spent on landscaping. Those homes will sell."

But it's quality, not quantity that counts when homes go up for sale, he added. "Landscaping has to fit the community. That's where some of our customers may lose touch with reality."

He said landscaping that is out of step with the community could actually hurt rather than help resale efforts.

Joe Skelton, co-owner of Lifescapes, a design/build firm in Atlanta, mentioned curb appeal, a common term for the real estate industry.

"Landscaping is perhaps the

most important factor in getting someone to look at your house," he said. "That curb appeal can determine whether someone is going to look at your house at all. If someone does a kitchen renovation and installs expensive carpeting, but only spends one percent (of the home's value) on landscaping, there will be potential buyers who will not even come to that door because the overall appearance is not nice."

Skelton said it is not unusual for clients to contact him prior to placing their homes on the market. "In Atlanta, the resale market is very competitive. A lot of clients invest money in landscaping before they put a house up for sale, like replacing worn carpeting before selling. In a competitive real estate market, any little thing can turn off a potential buyer."

Skelton does his part to promote the value of landscaping to the community. He has written several articles on the subject for consumer publications such as *Atlanta* magazine.

IN THE BEHOLDER'S EYE. "Rarely do we tie landscaping to financial benefits," said Tom Lied, president of Lied's Landscape Design and Development, Sussex, Wis. "Most of the clients are looking for personal benefits."

"We feel that the value of landscaping is relative to the quality of life. So the primary question is, 'how do you want to feel about your landscape?'"

But Lied added that he occasionally fields questions about the financial rewards of the landscape. "Our installation work is

one of the things that grows in value. If the landscape was well designed, it will mature and become more valuable.

"Buy a car, drive it out of the showroom, it's worth less. Buy a landscape, and each year it increases its value," he said.

Lied said that a number of factors should go into calculating the value of a landscape. "How unique is the landscape and how widespread will its appeal be to a cross section of people? A personalized landscape may increase the value, but may appeal to a more narrow cross section of people," he said.

Lied said he once did an informal study that compared a landscape installation with other investments. He found that if someone invested \$200 in gold and kept it for 10 years, or invested that \$200 in a sugar maple tree, the tree would have been the better investment.

Also, clients have told him that landscaping helped them sell their homes faster.

"A home is an emotional investment. It just happens that real

estate landscaping appreciates in value and becomes one of people's best investments over a lifetime, not because of conscious choice, but because they've developed a pleasing environment."

To Lifescapes' Skelton, selling clients on the value of landscaping is a two-pronged process.

"Part of it is the value of landscaping in general, the other is the value of our own professional services," he said. "It's important for clients to understand the value of landscaping in general. It's going to ensure they do some landscaping — but not necessarily with my company.

"I want to find out what my client's long-term goals are. There's one value if it's for resale, another value if it's for personal enjoyment and another value if it's for taking away negatives."

To express that value in concrete terms, Skelton suggests that at least 5 percent of the home's value should be spent on landscaping. But he emphasized that he only uses that 5 percent figure to gauge a client's reaction.

"People will spend any number on their house, from a portion of 1 percent of the value of their home to 20 percent of the value of their home. I want clients to think of at least 5 percent of the value of their home as a starting point in landscaping. That is a budget that would allow the exterior of their home to be in keeping with the quality of what they spend on the inside," he said.

The problem, Skelton said, is that when expressed as a percentage of the value of a home, landscaping can sound like an expense too high to justify.

"Someone is building a million dollar home and you tell them 20 percent. They say, '\$200,000 is what I should spend on landscaping?'"

The solution, Skelton said, is to offer a masterplan with several phases.

"If someone can't budget 4 or 5 percent when they're building a new home, I can understand," he said. "They have other things they need to spend money on, but I'd rather have them understand that they need a master plan, and

in the master plan's first phase start building toward a well-planned landscape."

Also important is determining the client's goals for the property — whether the home is a long-term investment or one that will be back on the market in under five years. The scope of the master plan would depend on how long the client plans to keep that property, he said.

Skelton added that when he sells a service, he communicates that all landscaping is not valuable. "A lot of people think that do-it-yourself landscaping is going to be just as valuable. But unless you are an expert or have had professional help..."

"If they invested \$100 with Lifescapes, I feel confident that it will return \$100 to \$250. If they call XYZ company, my feeling is that it would not return nearly the percentage as it would when they invest in an experienced, competent landscape designer."

The author is Associate Editor of Lawn & Landscape Maintenance magazine.

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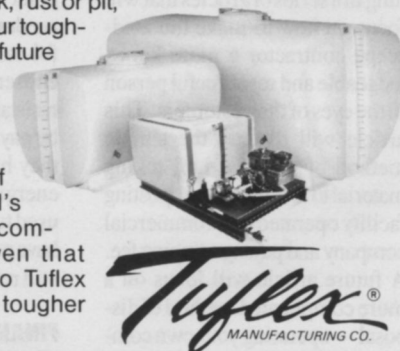
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GRASPING COMPOST CONCEPTS

Compost applications can improve plant health, reduce landfill storage and increase your bottom line.

By Rod Tyler

THE GOVERNMENT IS making it more difficult for landscapers to do business these days. And while burdensome, state mandates to find alternative sources for the disposal of landscape waste is an obligation the industry must prepare for.

But the issue doesn't stop there.

Landscapers today face a dilemma of simple or complex disposal of their landscape wastes. Landscaping over the years has been a service-related business. Customer is king, and giving that customer the best often pays big dividends in the end.

The same should remain true in compost applications.

Therefore, this is the beginning in a series of articles that will focus on how to make the landscape contractor a more knowledgeable and resourceful person in the eyes of the customers. This article will discuss the simple method of disposal i.e., taking material to an existing composting facility operated by a commercial company and paying a tipping fee. A future article will focus on a more complicated method of disposal — operating your own compost facility.

There is a maze of complications that landscape contractors are exposed to due to the nature

of regulations surrounding the compost field. These regulations concern the inflowing material in the raw waste form, and the out-flow material in product form.

Currently, both are being reviewed and various ideas on what compost is and how it should be made are currently being discussed at the state and national level.

As the compost field struggles to identify what quality compost is and the correct uses of various compost products, landscape contractors cannot lose focus of what they do best, which is servicing customers with quality landscape work.

To reach this objective, there is a vital need to create a starting point from which all end products are derived. Many large, successful landscape contractors have chosen to take the route of least resistance with the waste dilemma by paying tipping fees. However, they have directed some of their energies that would normally be used to operate their facilities and have put them to use in other areas still related to the compost arena.

FINANCIAL CONSIDERATIONS. The efforts have paid off as testified by many landscape contractors incorporating compost as a new product or program offered

to customers. Not only does such a program eliminate waste from landfills, the end product provides a number of opportunities to convert horticultural wastes to usable materials, and returns beneficial nutrients to the environment.

For instance, it may make excellent economic sense for a contractor who is already in the maintenance business to offer additional maintenance practices such as topdressing with compost, core aeration with overseeding and some type of bed renovation on a yearly or bi-yearly basis.

In this manner, they can bring additional income-producing services to a portfolio of professional services they currently offer, giving customers an increased menu from which to choose.

Rick Thomas, president of R.G. Thomas Landscape & Design in Akron, Ohio, first started using compost from a commercial compost facility in Akron about five years ago. TechnaGro, as it is called, is a high quality Class I sludge compost that has approximately 70 percent organic matter and excellent soil conditioning properties.

Most major metropolitan areas already have some form of commercial compost products available. Availability is projected to increase due to state laws banning yard wastes and sludges from landfills.

Thomas first started using the product in ground cover beds as replacement for peat moss. Initially, he used the product on approximately 10 percent of his jobs.

"The growth rate was observed to be one-third more than with peat moss at about one-third of the cost," Thomas said. He has now increased the use of compost in all of his planting jobs in place of peat moss, and vows that the results have far outweighed any results comparable to peat.

SELLING BENEFITS. Many contractors may skimp slightly on peat moss due to the high cost, but with composts locally produced, the cost factor allows much

more liberal usage. Thomas' excitement has carried over to the extent that he is now involved in a county extension program to help educate and gain feedback from the green industry.

"The education of customers is an extremely valuable and useful tool in making them aware of the product and the problem that we face in our industry," Thomas said. "I look at compost as another product and service I can offer to increase my professionalism in the marketplace."

Thomas has chosen to take his waste to a commercial compost facility and pay a tipping fee, and has heavily promoted the "Don't Bag It" campaign.

"There are always customers that want you to pick up clippings," he said, "however, research has shown that when grass clippings are left on the lawn, no adverse affects occur."

Thomas has learned to sell the benefits of compost to customers in the initial planning stages.

"We really try to let them understand the full benefit of what they are getting from the compost," he said. "If they are comparing my plants and prices to another contractor's package without compost, we want them to understand that we have a significant edge in survivability and plant growth. We have less than a 1 percent replacement rate since we started using compost."

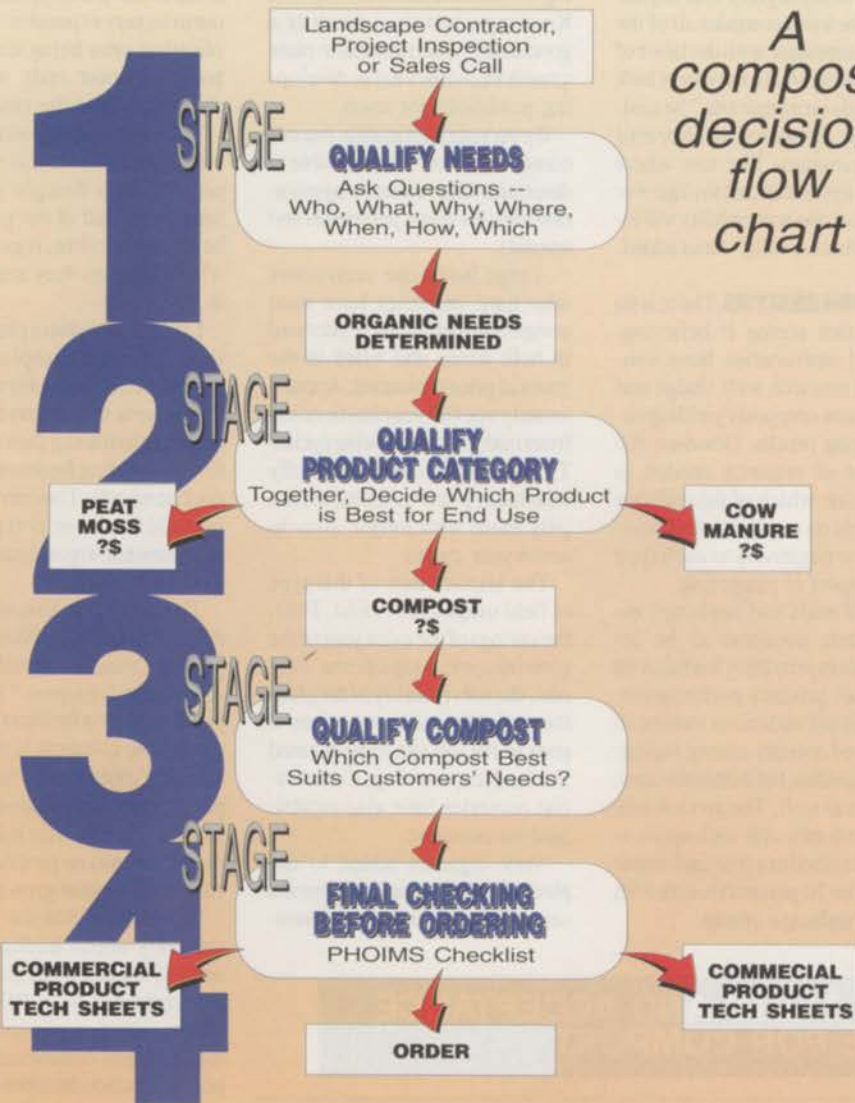
These are impressive statistics for the drought conditions which have occurred in the maintenance industry the past few seasons.

The concept of landscape contractors learning to sell compost within their normal product or service lines is especially strong. By replacing peat moss at about one-half the cost, the contractor is able to keep the difference or pass part of the savings on to the customer. Either way, an increased profit results.

For example, on a \$50,000 job, as much as \$5,000 of peat may be needed. If compost is used instead, at half of the cost, the bottom line increases 5 percent. Re-

SELLING COMPOST

A compost decision flow chart



Whether you're making or buying the compost, all landscapers play an important role in the compost process.

tolerance over a period of time. New seedlings especially seem to do well," Brunner said.

Compost has a natural balance of fertilizer with about 25 percent of the nitrogen being available, which means burn potential for new seedlings is extremely low. At the same time, the moisture retaining properties help germination and growth stay near optimum conditions.

"Good compost stays put a little better than peat, and holds moisture well. We use a pancake-type approach in new seedlings that seems to work best. When topdressing, we usually shoot for 1/8- to 1/4-inch application rates."

The real bonus is when the three pounds of nitrogen per 1,000 square feet is delivered over a long period of time. The three pounds of nitrogen is approximately 25 percent immediately available and is based on an 1/8-inch application rate.

Dennis Barriball of Hemlock Landscapes, Chagrin Falls, Ohio, has had extreme success using compost in planting bed renovations.

"We use it in every bed prep job that we do," Barriball said. "We try to educate the customer as to the benefits of compost and the more we work with the product, the easier it is to describe to the customer."

"An increase in root development in each case has helped the plant help itself. We also have better drainage because the compost provides better air and water movement," Barriball said. Each time plants are transplanted, there is a shock which is eased by the use of compost.

"We use very little pre-planting or post-planting fertilizers. We use compost as a bed prep for perennials each year in lieu of a commercial fertilizer," he added.

An older, proven practice regaining popularity is vertical mulching. Vertical mulching involves boring a hole in the root

freshening news for an industry that has historically been victim to eroding margins.

Many landscape architects are taking notice of the benefits of compost and have started to include the material in their specifications. By requiring approximately 20 percent of the growing materials to be composted, they can help ensure success for all parties involved.

The architect wins because the project succeeds and reflects his original rendition on paper. The contractor wins because plant material thrives and is more drought tolerant. And the supplier wins when compost demand increases.

PRACTICAL APPLICATIONS. Legislation is presently being considered in many states to mandate compost usage on state jobs. Problems often arise during state jobs when an alternative material is proposed, unless the materials are already listed as acceptable equals in state handbooks.

Several other successful contractors are starting to offer many compost-related programs. Some are offering to use the products in new seedlings for turfgrasses by taking a two-inch layer of compost, tilling into a depth of six inches and then planting directly into the rototilled mix.

Another program includes aera-

tion and overseeding options that link overseeding followed by a topdressing with a compost. As the compost sifts down into the holes and is blended with the thatch layer, the agronomic and fertility aspects of growing and maintaining a lawn improve significantly.

Compost can also be used as a topdress, which in some ways is similar to many organic lawn care programs. Tom Brunner, president of Personal Lawn Care in Avon, Ohio, has been using a finely screened compost for topdressing lawns for three years.

"We have seen a strong response on growth and drought

zone of existing trees and either filling it with some type of material such as pea gravel or sand, or just leaving the hole open.

Providing air and drainage to plant roots to keep them from suffocating in heavy clay soils is a key for many arborists. Compost has been used as a vertical mulch in a few cases, but not extensively.

"The trees that benefit the most are in mature areas that receive a lot of traffic or have poor soil," Barriball said. Compost provides plenty of air, absorbs moisture and releases nutrients evenly to help feed tender roots.

Composts may be used successfully for backfill materials to help increase the survivability rates of plants in drought situations.

"We used Soil Magic (a product from the Akron Compost Facility) in a state job recently due to the fact the material was already pre-packaged and pre-measured," said Terry Stout, vice president of R.B. Stout Co., Akron. "This lent itself very well to the size of the holes that we were digging to plant trees in. It was easy to work with inspectors that were in charge of the highway project because they could see within a short amount of time that we were dividing evenly one bag of compost in each of the three holes that we were digging."

Stout reports many benefits to working with existing soil whenever possible. Often times, the use

of an imported material for backfill gives the plant a "potted" effect in that once it reaches the existing soil outside the backfill mix, it is unable to grow at the same rapid pace.

"As far as costs go, the bags pencil out to be slightly less expensive when you consider all of the costs associated with the labor of transporting small portions of bulk materials on a large site," he said.

"Once the state sees the benefit from programs like this where there is a potential cost savings over peat moss, the acceptability will increase dramatically," Stout added.

ONGOING ANALYSIS. There is no doubt that seeing is believing. Several universities have conducted research with sludge and yard waste composts yielding encouraging results. However, the amount of research needed to determine which of the millions of plants on earth respond positively or negatively to each type of compost is staggering.

Field trials and landscape experiments continue to be invaluable in providing feedback on compost product performance. Occasional variations have been observed not only among various plant families, but within the same species as well. The general rule of thumb of a one-inch application rate tilled to a five-inch depth (or about 20 percent) is safe with most landscape plants.

This 20 percent "thumb rule" has been reinforced with research performed by Dr. Elton Smith at The Ohio State University in Columbus, Ohio. In the last few years, Smith has involved several popular landscape plants in conducting research on various composts. Knowing when "too much of a good thing" is detrimental to plant growth becomes vital in developing guidelines for users.

By varying application rates of composts, Smith has been able to determine ideal compost application rates for many perennials and annuals.

Large landscape contractors who have nurseries have used compost in their fields, topdressed in bulk form, and tilled in the material prior to planting. Approximately one full year has been cut from many of the growing cycles. This has been done successfully with many plant varieties, especially those with longer, five- to seven-year cycles.

The implications of this type of field usage are twofold. First, the savings of the extra year of the growing cycle is significant. Second, the survivability of the plant theoretically increases when it goes to the job site to be planted in a landscape setting. Commercial nurseries have also capitalized on compost.

"Any organics added to depleted fields just makes common sense," said Gail Ruckel, presi-

dent of Warner Nurseries. "If you are going to re-use your soils, it is an investment. Using compost is an affordable option compared to peat moss."

Peat moss has been one of the only alternative organics to use in the nursery, but typically turns out to be very expensive. With application rates being similar for both, compost ends up being about one-third the cost.

"The vigor and growth seems very even in fields this year, especially for a drought year. We want to give all of our plants the best chance to live, regardless of what situations they are planted in," she said.

Logic dictates that a plant grown in good soil and transplanted will have a better chance for survival.

One area that contractors can help in determining their own destiny is providing feedback for product standards. The current playing field for all compost products is somewhat argumentative and generic.

There is work currently being done at the Solid Waste Composting Council to actually determine what "compost" is. Compost production facilities that help ensure the compost is ready for sale. By using such criteria, all parties agree that compost is only suitable for use after it is finally cured, and has no properties detrimental to plant growth.

The criteria that the industry currently needs feedback on is spelled out in a word that is easy to remember — "PHOIMS". These letters represent recommended tests conducted at compost production facilities that help ensure the compost is ready for sale. By using such criteria, all landscape contractors may be put on a level playing field when using compost products in their bids for future projects.

With the commercial use of compost being so new, it gives the green industry a unique opportunity to keep integrity in such a young market. As more and more landscapers and contractors get involved in using compost products, it will be important for them to match available services that they currently offer with additional income-producing services that are related to compost. ■

The author is director of product and market development for Kurtz Brothers, Cuyahoga Hts., Ohio.

RECOMMENDED TESTS AND ACCEPTANCE RANGE FOR COMPOST

P = PHYSICAL TESTS: Particle Size Analysis. 100% should pass through a one-inch screen.
PATHOGEN FREE: Time and temperature minimum 55 degrees Celsius for three days; pathogens destroyed by intense heat over time; process to further reduce pathogens (PFRP) achieved within EPA guidelines.

H = HEAVY METALS: More potential concern with sludge and MSW compost; Cadmium 12.5 ppm, lead 500 ppm, CaZn .015.

O = ORGANIC CONTENT: Percent of organic matter should be consistent with source; ranges from 30% to 75% depending on source.

I = INERT CONTAMINANTS: Glass, metal, plastic, etc., ideally should be 1% to 3%; future standards may allow up to 5% by weight for MSW composts.

M = MATURITY: Compost should be stable; variety of tests available; O₂ uptake tests, plant assays, etc; immature composts draw valuable nitrogen from soil for further breakdown of free carbon.

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The PHOIMS method is an easy way to remember what to look for in a compost. Credit: Kurtz Bros.

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USE READER SERVICE #21

COLOR CHANGEOUTS

CREATE DAZZLING DISPLAYS

As businesses clamor for prospective tenants and clients, many are turning to seasonal color to draw them through their doors.

By Julie A. Evans

BOB BARNES' Creative Annuals is the "Ferrari" of the flower industry, he said. "If you want a Ford, call someone else. We don't work for everyone."

Barnes can afford to be choosy. His 1991 sales reached \$250,000 — not bad for a business whose primary service is to design, install and maintain begonias and impatiens on just 60 to 75 beds a year. Actually, the begonias are not your ordinary, garden-style variety of plants. Barnes' "monster" begonias grow 3 to 4 feet high in his special soil-less mix.

While Barnes may offer one of the more unusual flower installation and maintenance services, many businesses now offer seasonal color, either as a stand-alone business or add-on service. And with good reason: Faced with a tough and competitive business climate, property owners and managers have turned to seasonal color to attract new tenants and customers.

Cynthia Harper and Joe Burns founded Color Burst in Atlanta,



Seasonal color is a big business, requiring anywhere from three to six changeouts in one year on a given property. Photo: Color Burst.

Ga., in 1987. Since then, they've watched their revenues grow to \$1.5 million. Their primary service: seasonal color of commercial properties.

Color Burst also runs a Nashville office and handles accounts in Huntsville and Birmingham, Ala.

Prior to Color Burst, Harper worked for a landscape maintenance firm in Atlanta. "We found that most landscape maintenance workers' first priority is to get the grass cut, then if they have time,

tend to the flowers."

Now Harper sees an increasing number of landscape maintenance firms involved in seasonal color. "There's quite a bit of competition from landscape maintenance companies. They see it also as an additional source of income."

At Color Burst, seasonal color requires changeouts three times a year. Mid-April through May, they install flowers for summer color. Then, a partial changeout occurs during the short season,

late August through mid-September. Late summer flowers such as marigolds, mums and petunias are planted to perk up the landscape. Finally, pansies are planted beginning in October, and bulbs are planted in December.

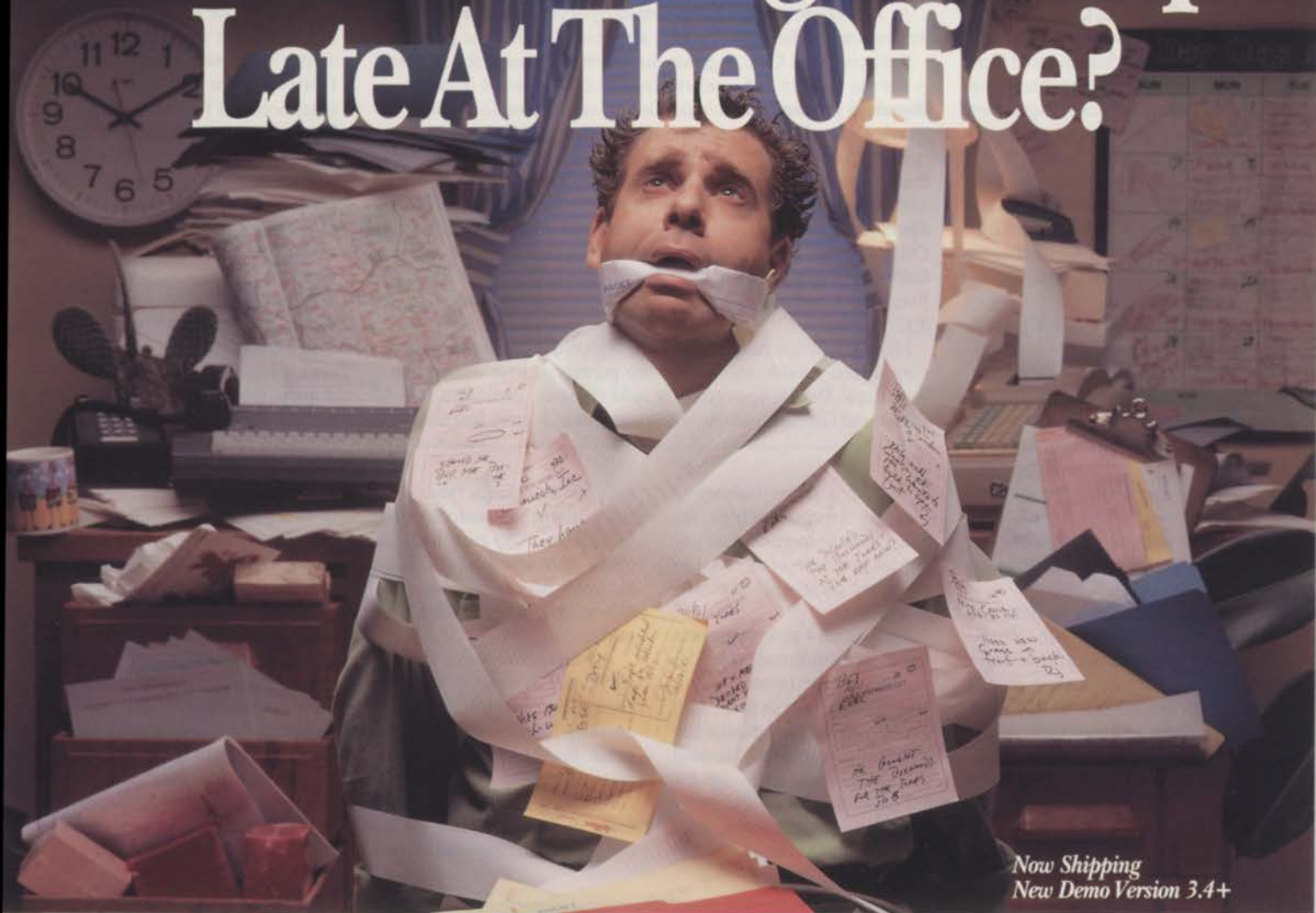
"Some annuals will not look good through the entire growing season," she explained. "For example, petunias planted in May start to decline in late summer. We replace them with marigolds to brighten up the display and move toward fall colors."

Color Burst's strategy works: In 1991, Color Burst installed close to one million flowers on 160 accounts. Ten full-time employees in the Atlanta office and three full-time employees in the Nashville office install and maintain the accounts, along with 25 to 30 part-time employees.

And business growth continues. "Commercial properties have so much competition for tenants, they need to draw attention to the property," Harper said. "Seasonal color is the best way

(continued on page 44)

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6	6	A. J. M.	McMILLAN
7	7	A. J. M.	McMILLAN
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USE READER SERVICE #36

to draw attention."

Seasonal color is a specialty, but it's not confined to specialized businesses. Environmental Industries, Calabasas, Calif., has been offering annual color since the company was founded, said Pamela Stark, corporate vice president. But she's seen a significant increase in marketplace awareness recently.

"Especially right now with the economy the way it is, everyone is scrambling for it (seasonal color)," she said. "Everyone wants to stand out from a competition standpoint."

Stark estimated that 80 percent of clients subscribe to some degree of an annuals program.

Parallel to increased demand for the service has been a rise in the number of firms offering it.

"There are more companies now that specialize in color than there used to be," she said. "It used to be that color was done just by some landscape maintenance companies."

Environmental Industries, and its Environmental Care subsidiaries, offer as many as six changeouts a year, depending on the client and the desired impact of the display. Areas such as entryways and around signs typically

About 75 percent of ProLawn ProScape's accounts subscribe to its floral display. Photo: Bart Sheeler.

PERENNIAL FAVORITES

DESPITE THEIR longevity and durability, perennials are often overlooked in landscape design. They are relatively easy to grow and reduce the cost of annual plantings. Many perennials can exist on lower amounts of water and fertilizer than annuals.

As for design, perennials provide early-season color in cold winter areas and offer other textures and colors to enhance plantings.

Environmental Care suggests the following perennials, primarily for the western and southern regions of the United States:

Mountain Perennials. Includes Denver and Colorado Springs. Shasta Daisy, Chrysanthemum, Hosta, Lupine, Liatris or Gayfeather, Columbine.

Desert Perennials. Includes Phoenix, Palm Springs and Las Vegas. Salvias/Sages, Mexican Evening Primrose, Parry's Penstemon.

Southeast Perennials. Includes Florida and Houston, Texas. Coleus, Oyster Plant, African Iris, Society Garlic, Canna Lily.

California Perennials. Includes Northern and Southern California. Evergreen Candytuft, Euryops, Sea Lavender, Geranium, Gaillardia, Yarrow.

Most perennials favor a particular region due to climate and environmental considerations. But two perennials have almost universal use: Daylily (evergreen in mild climates; deciduous in cold areas); and Lantana (blooms nearly year-round in frost-free seasons).

ly require a larger number of changeouts due to their high visibility. Parking lots and other low impact areas demand less frequent new plantings, sometimes as few as two.

"We can do 4 to 6 changeouts a year, using different colors depending on the season," Stark said. "We'd like to sit down with a client one year in advance and plan for the year ahead. We need to find out their plans for the holidays, favorite colors, etc."

Stark said that seasonal color in California has become "high-

tech." That includes "swirls" of color in large beds and colors that harmonize. "We even had one client who was a loyal college alumnus. All seasonal color had to be in that school's colors," she said.

Autumn in California is not as significant in terms of seasonal change, Stark said, so fall colors are often based on a client's personal preference and existing plant materials.

ProLawn ProScape, a landscape maintenance firm in Cincinnati, Ohio, offers what it terms

a "floral display program." Although it's an option, the service is requested by approximately 75 percent of accounts. The extent of the client commitment varies, from a couple of flats to several hundred flats.

"Most of our class A offices and apartment complexes subscribe," said Bart Sheeler, ProLawn ProScape president. "But other accounts (industrial sites) have cut back because of the economy. I definitely think that the '90s will see more use of flower displays. Maintenance is getting better and better, and customers want to compete more and more for tenants."

Pricing information is included within the company's grounds maintenance proposals, Sheeler said. If a client opts against flower displays, the contract is amended, and the service is deleted from the agreement.

Sheeler said that money can be made from flower displays, if costs are added for maintenance as well as installation. "If you only bill for the installation of flowers, you end up caring for them anyway," he said. "Because if someone else takes care of them and they look bad, it looks bad for your company. So it's important to sell programs as full service."

Summer annuals are a wise choice in terms of aesthetics and maintenance, Sheeler said. A summer annual program that is well managed will last until mid autumn. Some clients also request annuals that last until Thanksgiving. Typically the company does changeouts twice a year. Summer annuals make way for fall colors in late August to early September. Spring bulbs are installed during the off-season.

DESIGN/MAINTENANCE. Because of their high visibility, seasonal color displays require a rigid weed control and irrigation program. Unpredictable weather, particularly in drought years, makes maintenance an even bigger challenge.

In California, where water conservation is always an issue, irrigation is key to the success of the plantings, Stark said.

"A lot of times we'll go in and find a bed has been created out of a section of what used to be turfgrass, or a bed not properly irrigated. If at all possible, we try

(continued on page 46)



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Color Changeouts

(continued from page 44)

to convince the client that the irrigation system needs to be modified."

Stark said that irrigation demands also depend on the region of California, as some areas are more water-conscious than others.

"If we're in a heavily restricted (water) area, annuals are not the best thing to put in right now," she said. "If it's irrigated, we tend to use perennials and ground cover. Shrubby, flowering plant materials can also be used."

Another option for water-restricted areas, she said, is to key into focal points of the property and install annuals at those points. "Then use perennials and ground covers to replace annuals temporarily."

At Color Burst, 75 percent of accounts are irrigated, and Color Burst monitors the systems. Harper said that a management-level employee visits every account within 10 days and makes the necessary adjustments.

For non-irrigated properties, Color Burst selects plant materials that are more drought tolerant. Super absorbents also come into play.

Color Burst does most of its weeding by hand, and does no preventive spraying. One employee is in charge of spraying herbicides where necessary. Mulching is used to cut down on weeds.

Visual impact is an integral part of seasonal color. Designs are proposed to potential clients during the initial sales presentation, Harper said.

"Most of the time we want a bed placed near the street to catch people driving by," she said. "Apartment complexes have beds situated so they lead people toward the leasing office. And with an office building, we want to lead them toward the building."

Barnes of Creative Annuals enjoys freedom of design from his commercial accounts. He spends hours scouting for proper planting sites.

"We always visit a job site first, and spend three to four hours walking up and down the street

or coming in where people might see it. The first impression I get of where I think flowers ought to go is often where I put them."

Barnes installs some trees and bushes, but he is very careful not to draw attention away from his begonia displays.

If he had his druthers, begonias would stand alone in a planting bed as the only attraction. But that's not always possible. "Some people don't want to see dirt in the winter. They wish they had more greenery around, so we incorporate certain bushes."

Barnes prefers Blue Rug Junipers, a low growing shrub that doesn't dwarf or take away from the flowers.

What Barnes won't do is mix flower types within a planting bed. "We don't mix flowers in our beds because each bed is like a work of art. It looks tacky if it isn't done right."

Irrigation and weed control are pursued aggressively by Barnes. Weeds are hand pulled once a week, and woe to the employee who missteps and lands on one of his begonias.

"When weeds come, they come in a sea of green. It takes a special person to go in and hand pull weeds without stepping on the flowers," he said. "We don't use any liquid weed control. We don't trust it," he said. "Some people say it will work, but I can't risk my 3- to 4-foot begonias."

Nowadays, Barnes won't install accounts unless they have underground sprinkling systems. "It's impossible for a human to do watering in a timely fashion to the extent they need it," he said. Barnes' monster begonias require twice the amount of water that other flowers need, he added.

Planting begins on May 20, a date that he admits sounds rather late to some, but it's a precautionary move for Barnes.

"A lot of people start earlier. I stick 8,000 or 10,000 (begonias) in a bed, so I have to wait until frost warnings are over. I can't afford to lose all those flowers. I don't have time to replant them."

The author is Associate Editor of Lawn & Landscape Maintenance magazine.

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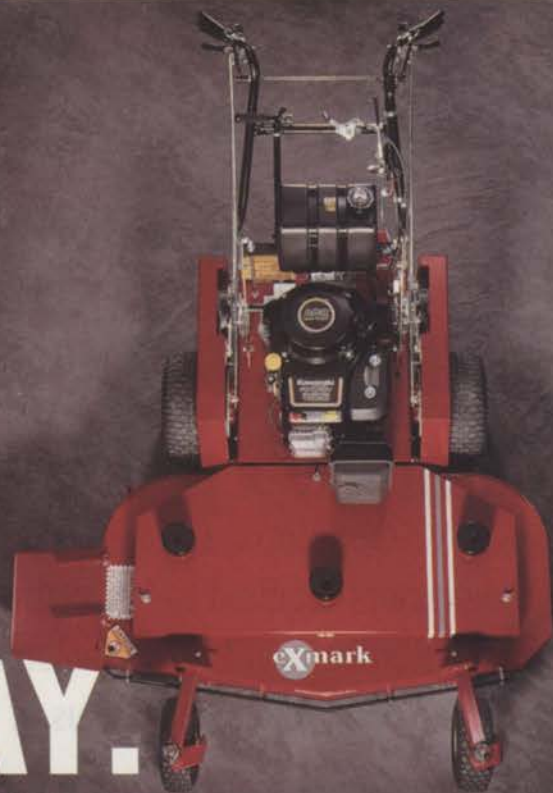


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ACHIEVING NEW STANDARDS THROUGH CERTIFICATION

Only in rare instances are irrigation contractors required to be certified and/or licensed.

However, testing could be an important step in legitimizing the professional status of irrigation.

By Brian Vinchesi

CERTIFICATION and licensing are two hot issues in today's irrigation contracting business. Three states, Connecticut, New Jersey and Texas, currently mandate state licenses (called certification in New Jersey) to install turf irrigation systems; and many other states are trying to get irrigation licensing legislation passed.

Texas has required licensing for many years, whereas Connecticut and New Jersey's licensing requirements are relatively new. The requirements of each state's licensing statutes are quite different with various application, experience, management and enforcement requirements. Some of the states require continuing education credits or recertification to maintain the license.

Certification in the irrigation industry is most widely known through the Irrigation Association's certification program. Since



Installing irrigation takes knowledge, teamwork and professionalism. Photo: Mickey Jones

its inception in 1983, this program has grown to a multi-step, specialty testing process which certifies irrigation professionals in various aspects of irrigation fundamentals depending on an individual's expertise, experience and area of interest.

Certification in the irrigation

industry is a voluntary process that is achieved on an individual basis. It represents a mechanism by which individuals can further educate themselves within the irrigation industry and be recognized for their accomplishments by their peers.

Certification is also a way in which individuals can separate themselves from their competition. It demonstrates a knowledge of irrigation fundamentals and a desire on the applicant's part to act in a professional manner.

In the future, as more and more irrigation designers and contractors become certified, certification

may become a necessity for working on irrigation projects. Eventually, it's hoped that certification will become one of the foundations for qualifying the expertise of irrigation industry professionals.

Already, in some areas of the country, only certified irrigation

designers can bid and design municipal and state irrigation projects. In other areas, only certified irrigation designers can bid on design/build type projects.

More than 2,100 individuals are enrolled in the IA's three-step certification program, but only half have fulfilled the requirements. Certification is not an easy process. The Step II testing is difficult and requires a great deal of studying and general irrigation knowledge. Many applicants have found themselves stalled at this step. After Step II, individuals can specialize in an irrigation area which usually makes the tests easier to study for and pass.

The IA's program is administered by a board of governors with assistance from the National Assessment Institute, a professional testing firm. By previous arrangement, the certification tests can be taken at IA-sponsored functions, select green industry conferences and at NAI facilities throughout the United States.

IRRIGATION DESIGNER. Design certification tests an individual's ability to prepare irrigation plans, specifications and details; evaluate site-specific criteria; and calculate irrigation schedules along with testing familiarity with general irrigation terminology and concepts.

The certification process tests the applicant's ability to choose the appropriate irrigation equipment for a particular project. The individual is also graded on the efficiency and economics of a design. Irrigation-related issues such as grading, drainage, plant material and site maintenance are also included in the design certification process.

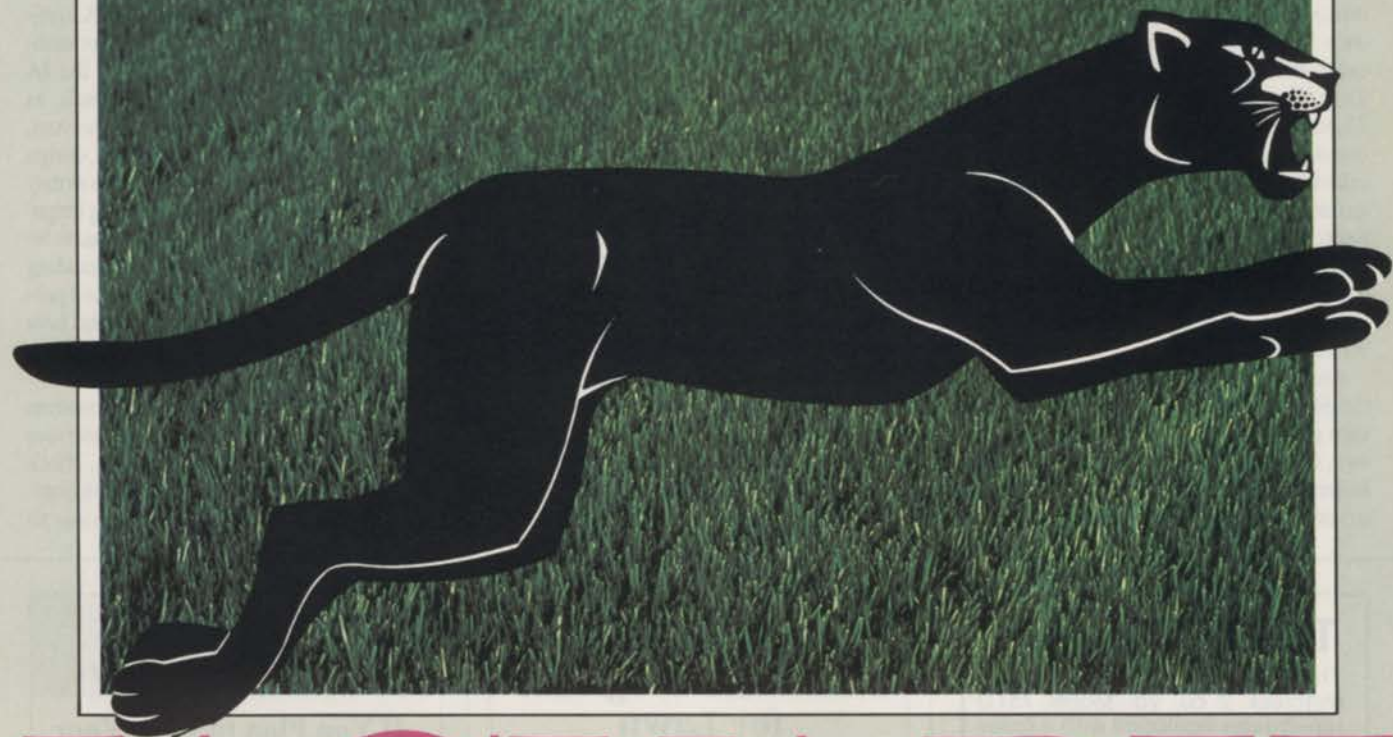
Step I is the application stage. Applicants must prove a minimum of one year of work experience in an irrigation-related field, fill out appropriate application forms, provide letters of verification and sign the IA Code of Ethics.

Step II consists of passing a multiple choice test on the general aspects of irrigation, both turf

(continued on page 50)

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Certification

(continued from page 48)

and agricultural. The Step II test is broken into six categories: hydraulics, electricity, soil/water/plant relationships, pumps, irrigation terminology and irrigation scheduling.

To receive a passing score on the Step II test, an individual must have an overall score of 70 percent or above on the test and a minimum score of 50 percent in each of the six categories. Test categories are weighted as follows: 27 percent basic hydraulics, 25 percent soil/water/plant relationships, 20 percent irrigation scheduling, 12 percent irrigation terminology, 8 percent pumps and 8 percent basic electricity. An applicant is given three hours to complete the Step II test. Results are mailed to the applicant within 90 days of the test date.

After successful completion of the Step II test, applicants may then proceed to Step III. At this step, an individual can specialize in the areas of agricultural or turf irrigation. Both have three spec-

ialty certification design tests: agricultural; drip, surface and sprinkler design, turf; and residential, commercial and golf course design.

Step III consists of a general test, similar to the Step II exam, for either agriculture or turf depending on when and which certification test is taken. This is a multiple choice, three-hour test and a four-hour design test.

The IA is in the process of changing from subjective to more objective testing within the design certifications; therefore, depending on when and which certification test is taken, the applicant will be required to either complete an irrigation design or answer questions relating to an irrigation design which is provided. All tests are specific to the subject matter for which the the applicant is trying to obtain certification, such as golf course or drip irrigation specialties.

After passing the Step III test, an individual is recognized as certified in that specialty. Upon passing a general design specialty exam, agriculture or turf, at Step

III, an individual can take any of the three specialty design exams without having to re-take the general Step III test again.

IRRIGATION CONTRACTORS. The IA also offers a certification program for irrigation contractors. This certification, known as the Certified Irrigation Contractor, has the same Step II requirements as the design certifications. Step III tests an applicant's ability to execute contracts and to install, repair and maintain systems as specified.

Applicants should be experienced in the installation of piping, irrigation controls, sprinkler heads, valves and wiring. A thorough understanding of sprinkler system layout, staking, excavation, boring, trenching, grading and backfilling is needed, as well as limited design knowledge. Applicants should also understand site, grading and landscape plans and shop drawings; and have the ability to keep a basic set of books and be familiar with OSHA requirements as they pertain to irrigation contracting.

The Step III test consists of a

multiple choice, three-hour general test dealing with contractor issues; followed by a four-hour test regarding installation of a typical irrigation system from a design provided.

The California Landscape Contractor's Association also has a certified installer program. This voluntary program is available to irrigation contractors doing work in California.

WATER MANAGEMENT. A certification program for water managers is also offered by the IA which certifies individuals as qualified to evaluate water sources, water records, equipment, design and maintenance practices as they relate to water-conserving irrigation systems. This certification requires a thorough understanding of irrigation scheduling, soil properties, plant material and how climatic effects influence an irrigation schedule.

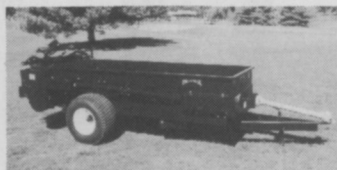
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(continued on page 52)

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Certification

(continued from page 50)

ponents and conduct and evaluate water application distribution tests. Additionally, the applicant must be able to study and determine uniformities and efficiencies as well as troubleshoot and make recommended changes or repairs to an irrigation system.

The Certified Water Manager is also required to have a thorough understanding of irrigation design principles. The certification procedure parallels the design and contractor certifications with passing of a specialty test for completion.

The design, contractor and water manager exams use the same general test at Step II; therefore, once an individual has passed the Step II exam they may take any of the Step III certification tests as long as the applicant meets the experience requirements of that specialty.

IRRIGATION AUDITOR. The IA's most successful certification program to date is the Certified Land-

scape Irrigation Auditor program. More than 500 have already passed this testing category.

This program is very popular in the Western United States, especially California, where a prolonged drought has created major demands on existing water supplies. The water auditor program is a hands-on certification where an individual assesses an existing irrigation system and determines how the system can be improved, updated and managed to save water.

To obtain certification, a candidate must attend a two-day seminar to learn the auditing procedure. A two-hour test, when passed, completes the certification process. The audit uses specialized equipment and computer programs to help the auditor develop the most efficient, water-conserving irrigation schedules. The auditor certification process requires no previous experience or further testing.

IRRIGATION INSTALLER. The association currently is developing a certified irrigation installer pro-

gram. This program is envisioned to parallel the auditor program with the candidate attending a one-day seminar or being provided with a study guide as preparation for the certification test. As with the Certified Landscape Irrigation Auditor program, this program will consist of only one test with no experience prerequisites.

WHY CERTIFY? Applicants who have successfully completed the certification process are listed in the IA's annual certified specialist directory. IA members who are certified are also noted in the association's annual membership directory. Certified individuals also receive a certificate recognizing their accomplishment.

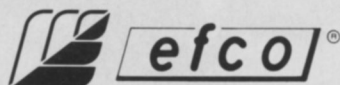
Certified specialists, (water managers, designers and contractors) also receive an identification card for each specialty in which they are certified along with a specialist seal or stamp for plans and literature. An annual fee of \$25 is required to keep certification up-to-date, and re-certification may also be required in the future.

Certification demonstrates to prospective clients and customers that the individual they are dealing with has a minimum of three years of irrigation-related experience (or two years, plus acceptable education credits), has successfully passed a series of examinations covering both general and specific irrigation topics, and has agreed to follow a Code of Ethics set up by the Certification Board of Governors.

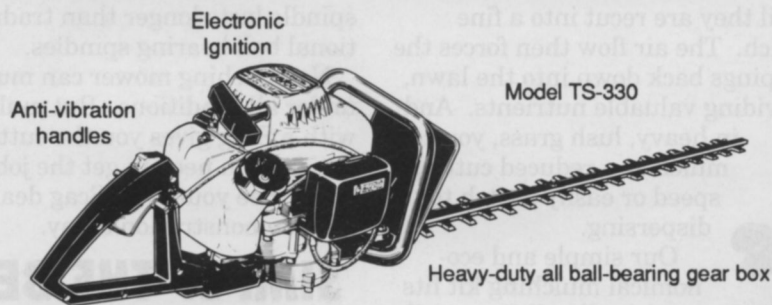
For more information on IA certification programs or an application, contact the Irrigation Association, 1911 North Fort Myer Drive, Suite 1009, Arlington, VA 22209-1630; or contact Denise Stone, IA Certification Manager, 703/524-1200. ■

The author is a consultant with Eastern Irrigation Consultants Inc., Pepperill, Mass.

Editor's Note: Certification is a growing issue in the irrigation industry. If you know of a certification program in your area which wasn't highlighted in this article, please send us the details.



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UNDERSTANDING TURFGRASS QUALITY RATINGS

*Interpreting national
turfgrass evaluation program
progress reports can aid
in turfgrass selection.*

By Kevin Morris

THE NATIONAL Turfgrass Evaluation Program was initiated in 1980 to coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Tests are conducted at universities and some private institutions with most states evaluating at least one NTEP test.

Since its inception, the NTEP has collected information on more than 50 turfgrass characteristics from approximately 800 experimental and commercial cultivars encompassing 17 turfgrass species. Annual progress reports containing data collected the previous year are released for each species tested. A final report containing all data collected is produced at the end of the testing period. These progress reports are available to anyone who requests them.

The number of experimental and commercial cultivars in NTEP tests has increased greatly in the last few years making decisions about varieties more difficult for consumers. The current national perennial ryegrass test, for instance, has 123 entries.

To use NTEP information effectively, it's important to know how to correctly interpret the progress reports. For each variety studied, information is compiled and presented in tables and charts and bound into booklet form. While each variety is self-contained, standard information pertaining to soil type, climate conditions, irrigation and so on is presented consistently from report to report.

Table A, for instance, will always provide information pertaining to "Locations, Site Descriptions and Management Practices." This section provides the reader with information on soil type and pH, levels of soil phosphorus and potassium, whether the test was conducted in sun or shade, the amount of nitrogen and irrigation applied and the mowing height.

COMPARE APPLES TO APPLES. Make sure the tests from which you are considering data are man-

aged in a similar manner as your site. Data from a Kentucky bluegrass test mowed at one inch and irrigated to prevent any stress would be of little value to you if your site is a non-irrigated home lawn.

Table B — "Locations and Data Collected" — summarizes the data that each location collected. This is especially helpful for monthly quality data as some locations may collect data from only one or two months within a year. In this case, the data presented for that location is not represen-

tative of a cultivar's performance for an entire growing season.

Turfgrass quality ratings are collected monthly and are an overall visual evaluation of each grass. Quality ratings encompass all the factors that affect the quality of a turf stand including genetic color, density, percent ground cover, disease and insect injury, heat and drought tolerance and uniformity. In past research, we have found that most researchers evaluating NTEP tests emphasize color and density when rating turfgrass quality.

Turfgrass quality is contained in tables 1-3 in all NTEP progress reports. Table 1 displays data from each test location and an overall average (mean). To best use this table, determine what locations are the closest geographically to your location. The overall average is useful to gauge the cultivar's performance over many locations and is helpful in regional and national marketing. However, national averages can be misleading to the average consumer working within only one city or state.

Table 2 gives the same turfgrass quality data but presents it for each month collected. Evaluation of this table can lead to a greater understanding of the varieties that perform better or worse during particular months or seasons. Many people use this table when trying to put together blends of varieties. An individual may want to blend a grass that performs well in spring but poor in summer with a good summer performing grass.

FIELD APPLICATION. When considering data from any NTEP table, there is a figure at the bottom — the "LSD Value" that

(continued on page 56)



Seed trials showing a variety with and without endophyte.

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TURFGRASS QUALITY OVER LOCATIONS

ENTRY	CA3	DC1	KS2	MD1	NJ2	MEAN
BLACKSBURG	5.7	1.4	7.3	6.1	7.0	6.5
MIDNIGHT	6.2	1.7	8.3	6.5	6.8	6.3
ASSET	5.8	3.9	8.0	4.5	6.4	6.2
PRINCETON 104	5.5	1.7	8.0	6.6	7.4	6.2
ECLIPSE	5.5	1.7	7.3	6.2	6.8	6.2
LSD VALUE	0.5	1.5	1.1	1.7	1.2	0.3

This quality chart provides a sample of information found in tables 1-3 in the NTEP progress reports.

Quality Ratings

(continued from page 54)

needs attention. LSD (least significant difference) value is a statistical tool to determine if the difference in cultivars is a real difference or just happened by chance. To determine if a statistical difference exists among two cultivars, you need to subtract the cultivar with the smaller value from the cultivar with the larger value.

If the difference between the

two numbers is not as large as the LSD value that is at the bottom of that column, then no statistical difference exists between the two cultivars for that particular characteristic. An example follows:

- Turfgrass Quality
- Entry A 6.0
- Entry B 5.5
- LSD Value 0.6

Entry A has a mean turfgrass quality rating of 6.0, Entry B has a turfgrass quality rating of 5.5 and the LSD value is 0.6. In this

case, no statistical difference exists between Entry A and B for turfgrass quality. Keep in mind, however, that you must use this LSD value for each table and each year as cultivar performance can vary greatly depending on the location, the trait you are interested in, the month and the year.

Table 3 gives a ranking of quality ratings over each location. This table is useful for quickly determining the general performance of cultivars over different locations and regions. No LSD value

is present at the bottom of this table; therefore, to determine statistical differences among cultivars, consult the LSD values found in Table 1.

Data on a number of "descriptive" turfgrass characteristics including genetic color, density and leaf texture are collected by one or more locations for each test. With these descriptive characteristics, it is helpful to have data from many locations and to use an average of these locations.

This approach of looking at overall averages is different from the approach for turfgrass quality (looking mainly at local averages) because the cultivar differences that exist with these descriptive characteristics primarily come from each evaluator's preference for a certain color or leaf texture, rather than from a difference in the environment or management of the turf.

Percent living ground cover can be collected in spring, summer or fall. Percent living ground cover is designed to express damage caused by disease, insects,

(continued on page 58)

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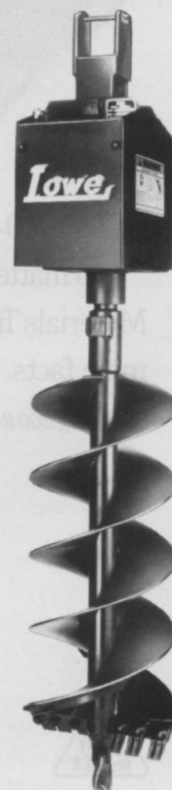


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Quality Ratings

(continued from page 56)

drought, etc. This differs from density ratings which are designed to rate the number of living plants per unit area (excluding damaged patches). Ground cover ratings are useful to determine the survival of turfgrasses through various stresses. Many people use ground cover ratings to determine how a grass survived the summer stress period and consequently, how the percent ground cover changed (how well the grass recovered) in fall.

Certain diseases such as leaf-spot, red thread, dollar spot and brown patch occur quite frequently and uniformly in test plots. Therefore, the NTEP often contains data from several of these diseases in each progress report. Since disease organisms can vary from one location to another, it is important to choose varieties that have resistance to a particular disease at several locations even though no data for that disease may have been collected at test sites nearest your location.

In addition, tracking a cultivar's response to diseases over several years gives a better indication of the true disease resistance under different environmental conditions.

Many diseases occur infrequently if at all in test plots. Many diseases, when they occur, do not distribute themselves uniformly across the test area, making an accurate estimation of resistance or susceptibility difficult.

Diseases such as summer patch and necrotic ring spot seem to show their characteristic frog-eye symptoms only after significant levels of thatch are produced (usually 2 to 4 years after establishment). Diseases such as powdery mildew occur mainly in shade. Some diseases are prevalent only in certain locations (i.e. stem rust in the Pacific Northwest).

Making decisions concerning resistance to these infrequent diseases should follow these guidelines:

- Be careful using only one year's data from one location to determine resistance.

- If you choose to evaluate data from only one or two locations, look closely at the LSD value. A high LSD value that shows little statistical differences among all entries probably indicates that disease was not distributed uniformly enough across the plot area.

- Only consider resistance to

About 800 test cultivars have been viewed since 1980.

diseases that are problems in the region your company services.

Data on resistance to certain insect pests is occasionally reported for NTEP tests. Often, insects do not appear uniformly across an entire test or in numbers large enough to cause significant damage. Therefore, when a high insect population does occur, the resulting data can be very bene-

ficial. Even though only one of two locations may report data on insect resistance, this data can be very useful in determining some level of resistance or susceptibility.

The NTEP progress reports also contain small amounts of data of several traits including vertical growth ratings, sod strength, winter kill and wear tolerance.

NTEP tests are shown at field days in many states each year. This is a good opportunity to see variety differences firsthand and discuss these with turfgrass researchers. However, keep in mind that you are looking at these varieties on only one day of the year and their appearance changes sometimes daily during the growing season.

NTEP progress reports contain information collected during an entire growing season and are good to investigate after attendance at field days. The reports can be obtained at no charge from Kevin Morris, National Director, National Turfgrass Evaluation Program, BARC-West, Bldg. 001, Room 333, Beltsville, MD 20705.

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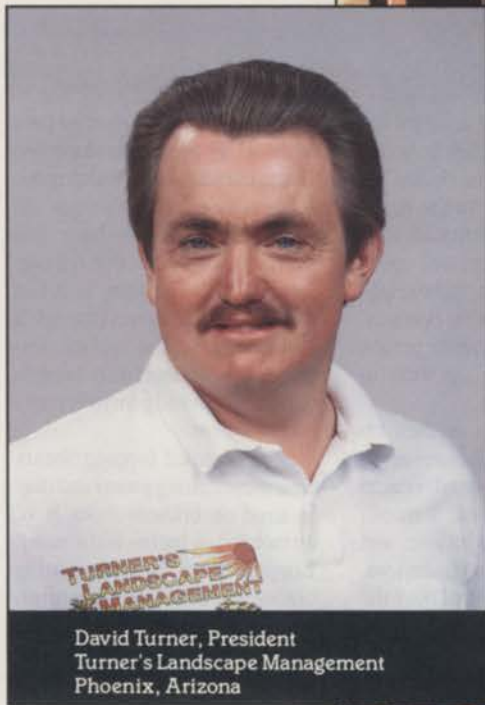
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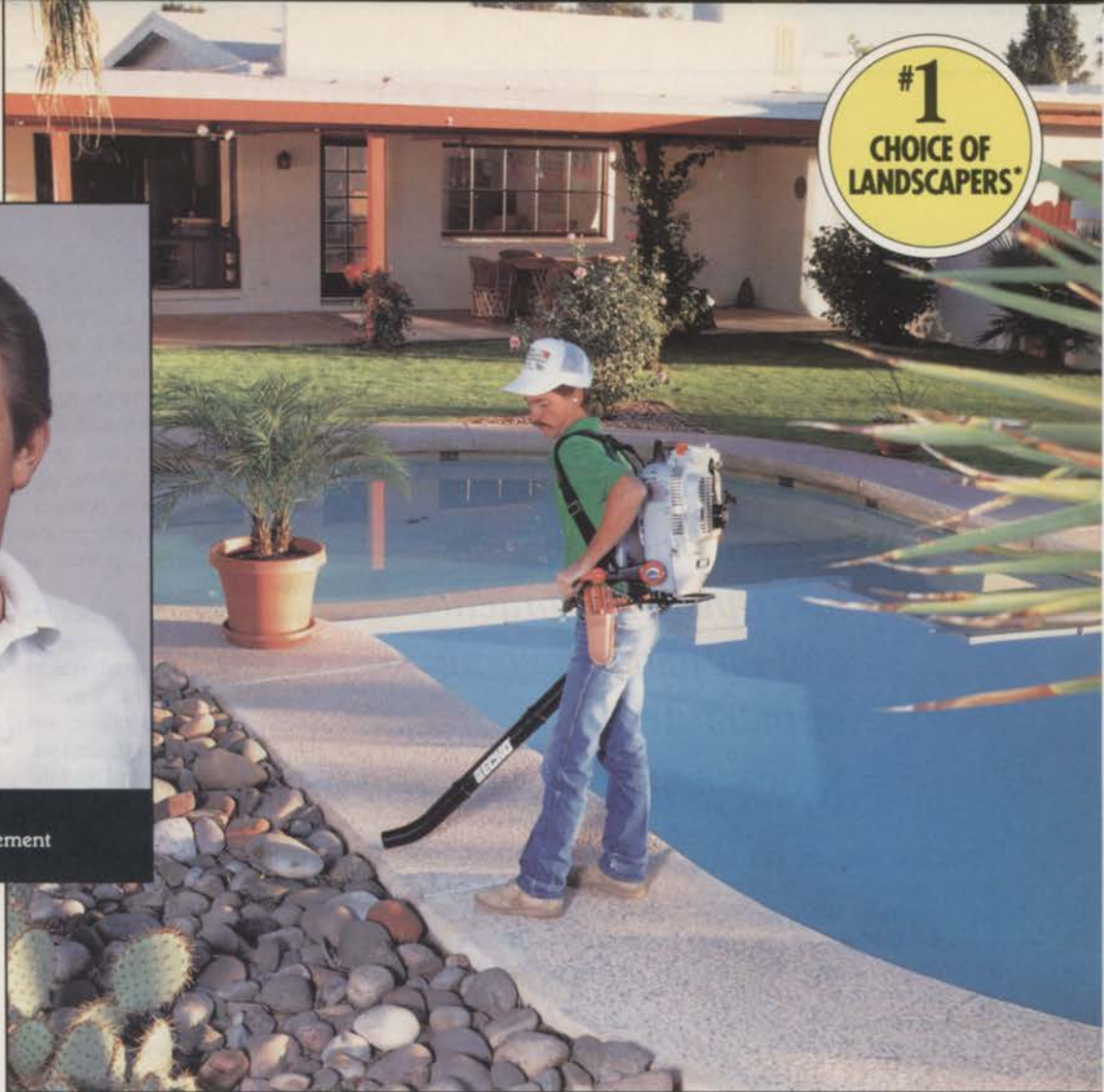
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PRUNING WITH A PURPOSE

*Proper pruning
takes plenty of practice
and an understanding
of plant needs*

By Steve and Suz Trusty

PRUNING SHRUBS IS a necessary part of most full maintenance programs. When done properly, this task improves the vigor of the shrubs and adds to the beauty of the landscape. When done poorly, pruning can distort a plant, distracting from the landscape and even threatening plant health.

Pruning must have a purpose, with every cut made to achieve a specific result. To attack a plant

with pruners, loppers and saws simply because pruning is part of the contract is unfair to the plant and to the customer.

Skillful pruning is an acquired technique, built on simple basic principles and honed with practice. An employee skilled in pruning will accomplish the job more quickly and with better results.

Plan to designate one person on each maintenance crew as the pruner. When the workload allows it, assign a second employee as an assistant. The assistant will be able to learn pruning techniques by observation and super-

vised practice. This assistant can also remove trimmings from one area while the more skilled individual moves on to the next.

Select quality tools that are sturdy enough to perform well under heavy use, yet are lightweight enough not to fatigue the operator. When practical, allow the person who will be using the tools to make the selection.

Individuals differ in their attitudes toward such features as the fit of the tool to the hand; coated or non-coated blades; a metal, wood or cushioned handle; and the placement of locking devices. Giving the user control over the selection of tools usually pays off in the efficiency of their use and the care taken to preserve them.

Additionally, sharp, well-maintained tools are easier to use, cut faster and make cleaner cuts. Follow the manufacturers' directions for care.

Match the tools to the job. As a general rule, when one tool meets strong resistance or requires so much pressure that it is uncomfortable to operate, move up to the next tool.

TOOLS OF THE TRADE. Hand pruning shears are used for the small cuts on stems and branches up to $\frac{3}{4}$ of an inch in diameter.

Pruning shears are either by-pass or anvil. By-pass shears have two sharp, curved blades which move scissor-style to cut through the plant. Anvil shears have one sharp, top blade and one flat surfaced blade. The stem is cut as the sharp blade moves through it and strikes the flat surface. By-pass shears are less likely to crush the plant stem and generally make a cleaner cut.

Long-handled lopping shears have more cutting power and may be used on branches from $\frac{3}{4}$ of an inch to 1 $\frac{3}{4}$ inches in diameter. Loppers have by-pass cutting blades and a variety of features. Some have bumpers to stop the action of the blades and stress on the tool once the cut is made.

Some are gear driven or have ratchet action to increase their cutting power. Handles may be wooden or metal, and come in differing lengths. Longer handles give more leverage and greater cutting strength, but put more stress on the handle.

Larger branches will need to be pruned with pruning saws. Saw teeth will vary, with coarse teeth giving a faster, but rougher cut. Some pruning saws are double edged, with fine teeth on one side, coarse teeth on the other. Curved-bladed saws are usually fine-toothed and allow reaching into tight spots. Bow saws are coarse toothed, lightweight and easy to use because leverage and reach can be adjusted according to the position on the bow the saw is gripped.

Pole pruners, saws and chain saws are useful for pruning trees, but seldom necessary when trimming shrubs.

Shearing is a specialized type of pruning, cutting and shaping the soft, outer foliage of shrubs. It is used primarily for shaping hedges and some types of evergreens. A hand hedge shear has two long, sharp blades that cut with scissor-like action. Power hedge shears may be battery-run or electric, or operate as part of an interchangeable gas or die-

(continued on page 62)

Sheared hedges and shrubs add a formal touch to the landscape scene. Photo: Steve Trusty



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USE READER SERVICE #40

Pruning

(continued from page 60)

sel operated system.

With power shears, two blades move quickly back and forth, cutting the part of the plant that comes in contact with the blades. The distance between the cutting extensions on the blades determines the size of the plant material which can be effectively cut. Small openings between the extensions may not accommodate larger branches and stems, and "chew" or "shred" the plant instead of cutting cleanly.

WHY PRUNE? Use pruning to control the size of a shrub; train the form or shape of plant growth; create a more pleasing appearance; increase or decrease flowering or fruiting; improve plant vigor; or rejuvenate an old or overgrown plant.

Unfortunately, there is no one right way to prune shrubs. The timing, amount and type of pruning needed varies with the goal you wish to achieve, the type of plant, its growing cycle and your geographic region. There are,

however, some basic guidelines that will make pruning easier.

Shrubs fall into one of three general categories. Deciduous shrubs shed their leaves annually. Evergreen shrubs have foliage that is green year-round; and are classified either as needled, such as yews and junipers, or broad-leaved, such as rhododendrons and hollies.

Deciduous shrubs are often chosen for the landscape because of one or any combination of their seasonal contributions — beautiful spring or summer flowers, colorful winter fruit, shades of fall foliage or branch color and ability to form in winter or very early spring. Needled evergreens are usually selected for their contribution of form and color. Broad-leaved evergreens are chosen for flowers, fruit, foliage or a combination of features.

Understanding why a shrub was placed in its landscape setting will help you determine how to prune it. Prune a spring flowering shrub to encourage blossoming; a yew to form the desired shape and stimulate dense foliage.

It is generally best to follow the natural shape of any type of shrub during pruning. It's easier to maintain the plant in this form and it's usually the most graceful and pleasing to the eye.

Before pruning, spread a tarp under the plant. Trimmings will fall on the tarp, making clean-up easier and faster.

Shrubs grow from the top and from the ends, or tips of their branches. Main branches radiate from the ground or from a heavy central stem. Side branches angle off from the main branches or stems.

Buds formed at the ends of branches are terminal buds; the main buds formed along the branches are lateral buds. Smaller, nearly inconspicuous buds may also be present along the branches or hidden under the bark. These are dormant buds, which serve as a backup to the regular buds in case something threatens the life of the plant.

TRIMMING DECIDUOUS SHRUBS.

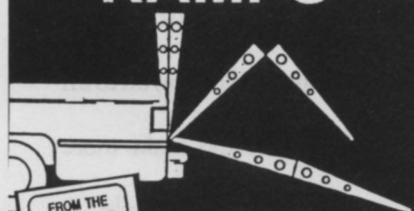
When removing entire side branches, cut all the way back to the

natural juncture; that is, to the branch from which the branch you are removing originated. When removing entire main branches, cut back to the central stem, or to the ground, depending on where the main branch originated.

For branches that originate from a central stem, there will be a small ridge, or collar, which is underneath the branch just where it emerges from the main stem. Make the cut at the outer edge of this ridge. This will result in a small, open wound, a bit oblong in shape. Do not seal this wound; studies have shown that clean, untreated cuts close as quickly or more quickly than treated ones. (There are certain exceptions. Check with the local extension service for pruning recommendations in your region.)

When trimming portions of a woody branch, rather than removing the entire branch, you will prune back to just above a bud. Make the cut approximately $\frac{1}{4}$ of an inch above the bud, not so close as to touch the bud itself, and not so far from the bud as to leave a stub. Make a slanting, rath-

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er than a straight cut, with the high side of the slant on the same side of the branch as the bud. Always cut to a bud emerging on the outer side of a branch. Growth will angle in the direction of the bud, outward and upward from the branch.

With deciduous shrubs, you may remove up to one-third of the plant. First cut away any broken or damaged branches. Older, woody stems can be pruned to ground level. Then trim back long branches to encourage the development of side shoots.

In hot, humid regions where fungus conditions frequently affect shrubs, thin out the center of the plant to allow better air movement. In regions with harsh, dry summers keep the shrubs more dense for better cooling.

Spring flowering shrubs should be pruned one or two weeks after blooming has been completed. Next year's flowers will form on the new wood that develops during the current year.

Summer flowering shrubs will bloom on old wood. They may be pruned during the dormant

period of late winter and early spring, or in midsummer, after they have finished flowering.

Certain shrubs, such as roses, have more complex pruning needs that will require special training of your personnel.

Don't prune any deciduous shrubs during the late summer or early fall. You may stimulate a late flush of growth that would make the plant highly susceptible to early frost and cold damage.

TRIMMING NEELED EVERGREEN SHRUBS. Needled evergreen shrubs are trimmed to contain or shape growth. Those with determinate growth (branches that radiate from the trunk in whorls), such as spruce, fir and most pine, will not put out new growth along the inner portion of the branch, beyond the point where green foliage is actively growing. Trimming into the plant beyond this point will result in bare branches.

Also, when lower branches are removed, that portion of the plant will remain bare. No new branches will develop from the lower part of the shrub. Indeter-

minate needled evergreens, such as yews and arborvitae, have branches that radiate more randomly. A few of the indeterminate shrubs will put out growth from dormant buds along the stem, but it's wise to avoid such deep pruning except when attempting to save a badly damaged plant.

Trim determinate evergreen shrubs only as needed to maintain the desired shape. Trim the new growth back to a bud. On pine, trim back only the candles, removing up to two-thirds of the candle, before the needles have fully developed.

To remove damaged branches or thin out uneven growth, cut back to intersecting branches or to the main stem. To fill out and thicken thin plants, trim back the terminal bud of side branches to encourage growth from the lateral buds.

Start trimming spreading needled evergreen shrubs from the bottom of the plant. Make each cut so that it is shielded from view by the upper branches.

Most of the indeterminate evergreens should be trimmed dur-

ing dormancy or periods of slow growth. Yews, which are prone to winter sun and wind damage in colder regions, are best pruned in early spring, after the damage has become apparent.

TRIMMING BROADLEAVED EVERGREENS. Since most broadleaved evergreens are relatively slow growing, they require only occasional pruning. Remove dead, broken, damaged or diseased branches, cutting back to branch junctures. Minor pruning and reshaping should be done just prior to periods of rapid growth, usually in the early spring.

Again, many plants in this category, such as rhododendrons and azaleas, have special requirements that call for additional training.

There's great satisfaction in watching a plant develop to its full potential because of proper pruning. With skilled technicians on your crews, be prepared for many compliments from your accounts.

The authors are partners in Trus-ty & Associates, Council Bluffs, Iowa. ■

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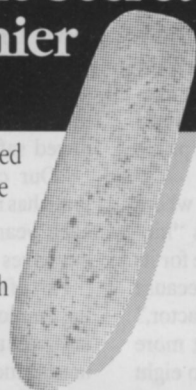
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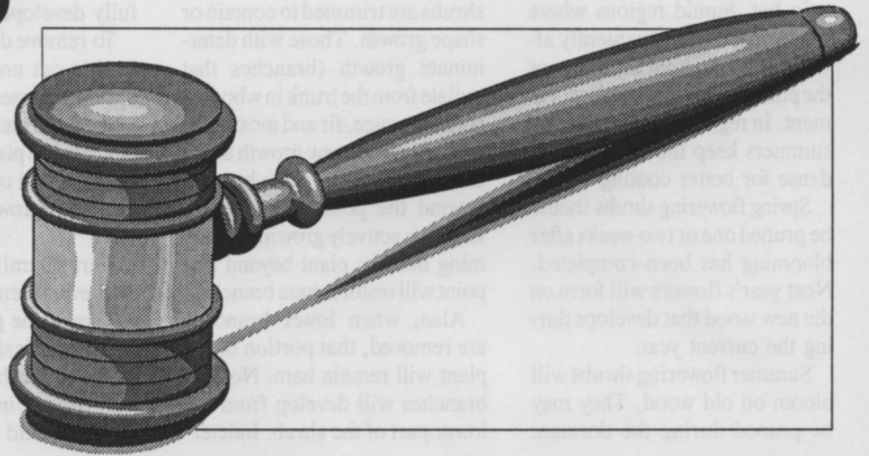
USE READER SERVICE #68

USE READER SERVICE #69

PUTTING A LID ON INSURANCE COSTS

Effective, formal safety programs can result in reduced injuries as well as significant discounts by many insurance carriers.

By Tom Garber



INSURANCE COSTS continue to escalate at a time when businesses are being asked to provide expanded coverages. It's not uncommon for landscape industry companies to spend 10 percent of gross revenues on various types of insurance. Insurance costs rank second only to payroll for many companies.

For most companies, the "big three" insurance coverages are business liability, workman's compensation and health insurance. Of the three, only health insurance is "optional."

Consequently, containing or reducing insurance costs has become an important business skill.

CONTROLLING COSTS. Establishing a clear idea of what your insurance needs are is the first step required to contain insurance costs. Important questions need to be answered before you seek insurance quotes:

- "How high should our collision deductible be?"
- "Should our health insurance program include dental coverage?"
- "How much liability insurance do we really need?"

Rich Akerman, president of Northwest Landscape Industries,

Tigard, Ore., insists that his company produce a clearly written set of specifications before requesting insurance quotes.

"We want to be in the driver's seat when it comes to establishing our actual insurance needs," Akerman said. Clear specifications should result in receiving "apples to apples" competitive proposals from insurance companies.

Akerman also believes that companies can save money by

**Companies
committed to
safety programs
will see dramatic
insurance
savings.**

consistently "shopping" their insurance needs in the marketplace. There is something to be said for loyalty, however.

Companies who shop around too often may have difficulty getting good quotes after a while. Joy

Estes, of Van Gilder Insurance in Denver, believes that companies should stay with their insurance carriers for at least three years before seeking competitive proposals. Estes has found that the loyalty demonstrated by a three-year relationship "means that I can get more bids and better prices for my customers."

She cited a recent case where one of her customers was "hit" with a 22 percent increase for its health insurance policy. Because of a three-year "loyalty factor," Estes was able to present more options to her customer to eight carriers resulting in a 37 percent savings for the same or better coverage.

SAFE BUSINESSES SAVE MONEY.

Business liability and collision insurance is a major cost that can often be contained or reduced when companies commit to an effective safety program.

Effective programs go well beyond safety signs in the shop and seat belts in trucks. Safety programs that are effective result in at least two types of costs savings: Reduced injuries, accidents and damages save money without question; and companies that achieve these positive results by

means of a formal safety program are usually offered significant discounts by their insurance carrier.

David Frank, president of David J. Frank Landscape Contracting, Germantown, Wis., provides his employees with more than 30 hours of in-house produced safety videos.

"Our company's safety program has resulted in huge savings each year since we committed ourselves to it," Frank said.

Part of this process is convincing employees that the company is serious about safety. Verbal pronouncements about the importance of safety will seem insincere to employees who are required to ride unprotected in the back of a pickup truck. Frank's company offers substantial financial incentives to his employees for safe operations in an effort to underline the importance of safety in the firm.

The important elements of an effective company safety program include employee training, safety rules and company commitment. Increasingly, companies are requiring employees to view safety videos and receive training prior to their initiation into "on-the-job-training."

(continued on page 66)



Roger Albrecht, president of Nitro-Green Corporation, says that weed control is the most important single item in customer

satisfaction. "Excellence in weed control can be summed up in one word," says Albrecht... "Trimec!"

Weed Control in the Environmental Age

A leading lawn care franchisor who has set a goal of eliminating all broadcast spraying of herbicides freely discusses how TRIMEC® fits his basic strategy to accomplish this end.

Everett Mealman, Chairman and Chief Executive Officer
PBI/Gordon Corporation



Roger Albrecht is president of Nitro-Green Corporation, which has 38 franchisees scattered over 15 different states. In addition to liaison with the franchisees, he manages two locations in California, primarily to keep abreast via hands-on experience.

"All business is local," says Albrecht, "so there is no royal road to success that will universally apply to all of our locations. But there are three basic fundamental realities that do apply."

Albrecht sums them up this way:

- People who pay money to have their lawns taken care of realize that perfection may not always be possible, but they appreciate our efforts to strive for it.
- Efficiency is the key to growth, so every dollar for chemicals, labor, and equipment in a landscape maintenance budget must be justified.
- Environmental stewardship is good business.

"These realities have caused us to set a goal on every property of totally eliminating all broadcast spraying of herbicide and replacing it with spot-treatment of the appropriate Trimec Complex as needed," says Albrecht.

"We want to be pro-active on environmental issues," continues Albrecht. "We want to be able to tell our customers that we are not spraying any herbicides to chase phantom weeds."

"Obviously, such a program has to be built over a period of time," says Albrecht. "We like to start out a new customer with an

early broadcast of Trimec... either Super or Classic, depending on the weather. We want the ultimate degree of weed control that's possible so we can start a program to thicken up the grass so weeds can't get back in.

"When the program matures, we want to be able to rely entirely on Trimec spot treatment to eliminate broadleaf and grassy weeds. Crabgrass is usually our biggest problem, but we have absolute confidence in Trimec Plus to handle any crabgrass or nutsedge that shows up. And what a plus, since it knocks out broadleaves, too."

There is nothing like Trimec

Albrecht says that because of his desire for hands-on experience, he has tried every herbicide that has come along. "Perhaps you can imagine," says Albrecht, "how many times I hear salespeople say 'hey, this is just like Trimec, and I can save you a few dollars.'"

"I could write a book about the folly of trying to save money on Trimec substitutes," laughs Albrecht, "but I'll simply remind you of our position that every expenditure in an operating budget must be justified, and there is no expense that equals the cost of a call-back."

Why Trimec is superior

Trimec herbicides are Complexes, not formulator tank-mixes of ag-grade chemicals. To make Trimec, three acids are reacted together to form a unified salt. This salt is then formulated with wetting agents and disperants, and is analytically monitored continuously during formulation.

This unique process makes every droplet of every Trimec formulation an exact mirror image of the total, and thus precisely optimizes the intended synergistic activity.

The differences between a tank-mix and a Complex become major when the goal is weed control in the environmental age.

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USE READER SERVICE #38

Insurance Costs

(continued from page 64)

In Tigard, Northwest Landscape Industries requires several days of training before a new employee joins a crew and safety rules are clearly articulated in the

employee handbook.

Safety rules need to be carefully explained and reinforced on a regular basis. Many companies accomplish this through regularly scheduled safety meetings. Weekly "tailgate" talks offered by field supervisors or foremen can

be an effective means of "preaching" safety. And, when these talks can be documented, insurance carriers are impressed and costs come down.

Many companies have been assisted in the development of their safety programs by insur-

ance companies who know the green industry such as MRP, Sedgwick James and CNA. CNA alone insures more than 4,000 industry companies and has jointly produced with the Associated Landscape Contractors of America numerous publications and

STRETCHING YOUR DOLLARS THROUGH SAFETY

BY ADOPTING simple guidelines for controlling accidents and losses, landscape professionals should be able to work with their insurance brokers to lower insurance costs.

The Associated Landscape Contractors of America suggests the following minimum guidelines when establishing a safety program:

1. A written safety program should be available for review by both management and employees. The program is to contain as a minimum:
 - Management's statement of policy regarding accident and injury control.
 - Safety rules established and enforced.
 - The details of a safety training program.
 - Health hazard recognition program.
 - Description of the duties, functions and responsibilities of persons administering the safety program.

- Drivers checked for competence and safe driving records.
- Program to control injury to the public and damage to property is in effect.
- 2. Regularly scheduled safety committee meetings with the minutes recorded.
- 3. All accidents investigated, corrective action taken and records maintained.
- 4. Management provides a safety orientation session for all new employees and employees that changed jobs.
- 5. A continuing program of effective material handling and manual lifting established and enforced.
- 6. Personal protective equipment safety standards established and enforced, i.e., eye, head, foot, hand protection, etc.
- 7. A fleet safety program is established and contains as a minimum:
 - A list of employees authorized to operate company cars and trucks.

- Drivers assigned to operate a specific vehicle.
 - State motor vehicle records on all drivers obtained before hire and on all existing drivers on a frequency consistent with the size of operation.
 - Drivers with poor past driving records not permitted to operate company vehicles, i.e., records indicating convictions for driving while intoxicated, multiple moving convictions, etc.
 - Drivers physical competence to drive verified when required by interstate regulations.
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- A complete set of safety guidelines is available from ALCA, 405 N. Washington St., Suite 104, Falls Church, VA 22046; 800/395-2522.

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safety videos.

David Minor, president of Minor's Inc. in Fort Worth, Texas, credits these materials with the success of his company's safety program.

"I had no idea how to start a safety program. The CNA/ALCA safety manual, the videos and other materials have allowed our company to develop a program that works well for us," Minor said.

Interested companies can easily access a variety of resources to help them develop a safety program and promote safer operations. But, this commitment to training and safety costs money upfront. Significant savings come later.

WORKMAN'S COMP: BANE OR BENEFIT? Many companies struggle with the difficulties caused by workman's compensation problems. A minority of doctors, chiropractors and attorneys build their businesses on "work comp" claims.

The most effective way to control work comp claims is to es-

tablish an effective Occupational Injury Management program, according to Don Brown of CNA's Loss Control Division.

Brown recommends that companies "manage" employee injuries from start to finish. He recommends that companies develop a system of medical care providers including a "company doctor." When an employee is injured, companies should provide transportation to the designated medical care providers.

"I know from experience that when employees feel the company doesn't care, they can fall into the hands of attorneys and doctors who specialize in work comp claims," Brown said.

He also recommends that companies keep in close touch with the injured employee during the recovery period. "Call regularly and show them that you care," he said.

An important step in the claims management program is to get the injured employee back to work as soon as possible. Eldon Dyk, vice president of Allen Keesen Landscape in Denver, said that,

"we find something productive for them to do whether it's helping in the office or pushing a broom."

Employees who sit idly at home for weeks at a time are far more likely to respond to work comp television ads than are those who are being paid for productive work.

Another important factor in controlling workman's compen-

sating from an insurance broker who is ignorant of our industry. Try to work with insurance professionals who know the industry and don't be afraid to compare notes with your peers. One contractor in Denver saved \$20,000 after comparing his employee classifications with a friendly competitor.

Most permanent employees consider health insurance to be the most important benefit in their compensation package. The best way for companies to control health insurance costs is through a "cost containment program" in which a company indicates its willingness to work with the insurance carrier rather than against it.

It means a "managed" health care program that gives the carrier some control over costs as opposed to an "open" system that allows the insured to make all the decisions about accessing health care services.

Most "managed" health care systems are health maintenance organizations, HMOs, or preferred provider organizations, PPOs. HMOs like Kaiser Per-

It's not uncommon for landscape firms to spend 10 percent of gross revenues on insurance.

sation insurance costs is to make sure that your broker has your employees classified correctly. Many companies are penalized each year with higher costs re-

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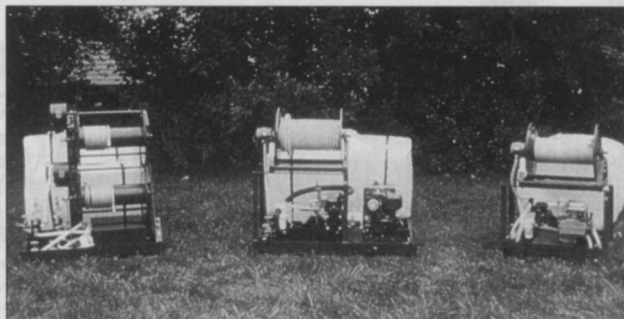
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manente require that employees use their system of health care. PPOs encourage employees to use a specific network of contracted doctors and hospitals.

In theory, insurance carriers are willing to offer companies lower rates in exchange for their ability to "manage" health benefits. One example of a cost containment program is the "case manager." When an insured becomes seriously ill, the case manager — a trained nurse — is assigned the task of securing the best possible care at the lowest cost.

"If you want lower health insurance rates you need to allow the carrier some say in how the benefits are delivered," said Estes of Van Gilder Insurance.

Estes pointed out that companies can save money in the health benefits arena by supplementing their health insurance coverage with a "cafeteria plan" known as Section 125 by the Internal Revenue Service. A cafeteria plan is an employee benefit that is essentially a flexible spending account.

This account is meant to pro-

BEFORE RENEWING OR BUYING INSURANCE

- ✓ Produce a clearly written set of specifications.
- ✓ Establish a safety program to contain or reduce costs. Employee training, safety rules and company commitment are critical.
- ✓ Establish an in-house program to "manage" employee injuries from start to finish. A cost containment program can also control health insurance costs.
- ✓ Make sure your employees are classified correctly by your broker.
- ✓ Shop insurance needs in the marketplace.

vide employees with health benefits not covered by health insurance programs. These benefits would include eye glasses and orthodontics, for example. A Section 125 Plan allows companies

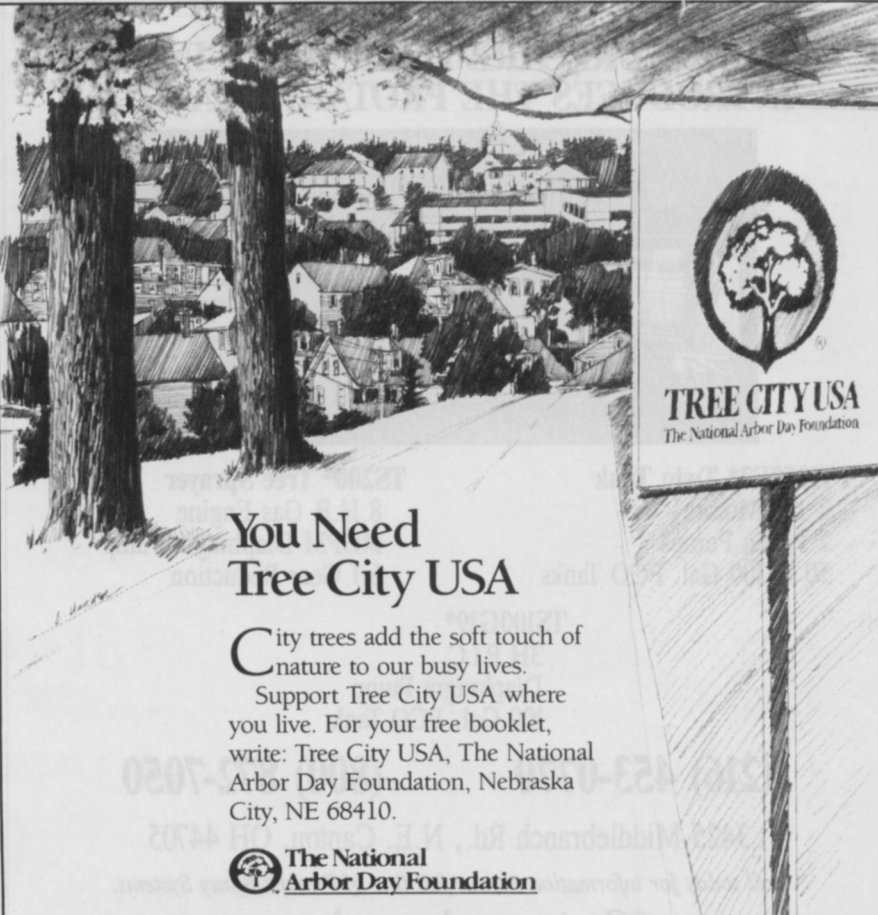
to use payroll deductions to pay for the premiums. Employees are able to pay for necessary health services and products with pre-tax dollars, often resulting in savings on income taxes of 20 per-

cent to 28 percent.

Companies also benefit by reducing payroll taxes by as much as 10 percent. These programs require care in their development because of IRS regulations. Estes recommends that companies seek the help of an employee benefits consultant.


Controlling or reducing insurance costs requires a lot of hard work. Large corporations often are able to use full-time staff members who devote all their time to these efforts. The small business operator has no such luck. Still, an on-going commitment to this effort usually pays off in substantial ways. For most of us, the key element is not full-time staff, but hard work, knowledge and commitment to the process.

The author is president of Colorado Landscape Enterprises, Westminster. Garber also serves on LLM's advisory board and is president of the Associated Landscape Contractors of America and an active member of the Associated Landscape Contractors of Colorado.



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Compost Digest

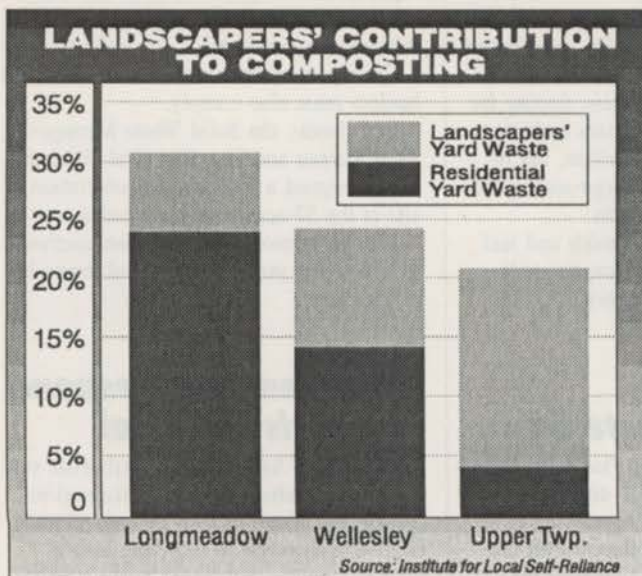
Congressman Seeks Quality Standards

REP. AL SWIFT, D-WA, recently introduced legislation to establish compost quality standards.

The National Waste Reduction, Recycling and Management Act, or H.R. 3865, would require the Environmental Protection Agency to establish standards for all compost products and elevate composting as a recognized ingredient of waste management.

The proposed legislation also provides for community-based decision making on matters of solid-waste management. The bill would require local governments to do a full cost accounting of waste-management methods, permitting a side-by-side comparison of composting with other waste management techniques.

Market incentives for compost products are included in the bill. Within 18 months of enactment, the administrator of EPA is required to prepare guidelines for federal



Economic incentives for landscapers to compost yard waste have significantly increased recovery rates in Longmeadow, Wellesley and Upper Township, Mass. Longmeadow landscapers pay moderate tipping fees at local disposal sites (\$23 per ton); or dump their yard waste for free at a 100-acre farm where the town's collected leaves are tilled into the soil. As a result, Longmeadow diverted an additional 7 percent of its waste from disposal in 1989.

procurement of compost made from yard and other organic wastes.

The bill also would exempt organic

materials to be composted from interstate fees on the transportation of municipal solid waste.

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USE READER SERVICE #54

OBG Operations Begins Wood Waste Processing

OBG Operations, Syracuse, N.Y., began processing wood waste and leaves at its Cicero Wood Recovery division. OBG is a subsidiary of O'Brien Gere Co., also based in Syracuse.

The company charges a base tipping fee of \$35 per ton for wood wastes including brush, limbs, lumber and pallets, but offers volume discounts for large-scale generators and long-term contracts.

It sells the wood chips, mulch and leaf compost to nurseries, landscapers, individual homeowners and others.

Florida Deals With Yard Waste Ban

Time's up for residents of Florida to learn new methods of yard waste disposal. Last month, yard wastes were banned from Class I landfills, in compliance with the 1988 Florida Solid Waste Management Act.

In response, a Dade County, Fla., ordinance now mandates the separation of yard trash from other types of solid waste. It applies to the unincorporated and

municipal areas of Dade County and makes it illegal for residents to mix yard waste with garbage or trash; place yard waste at the curbside for collection as garbage; or deliver yard waste mixed with other trash to any of the county's 21 trash and recycling centers.

County, municipal and commercial waste haulers must also comply.

In Orlando, the Solid Waste Management Bureau and Leu Botanical Gardens have designed a compost demonstration site at the 57-acre botanical garden.

The site demonstrates different methods of converting yard clippings and leaves into fertilizers.

NAA Members Respond to Debris Disposal

The National Association of Arborists surveyed its members on debris disposal/recycling and found that 48 percent of members were involved in recycling in one form or another. Seventeen percent of its active membership responded.

Among its findings: 55.3 percent leave debris in some form with their clients; 29.4 percent take debris to a recycling

facility; and 15.3 percent recycle and sell or give away the end product.

About 77.2 percent of respondents said they make limited use of landfills; of those, 53.5 percent said they recycle all chips and wood; 35.2 percent recycle only wood chips; and 11.3 percent recycle only wood.

Costs of debris disposal averaged \$31 per ton for chips; \$37.50 per ton for logs and \$35.50 per ton for stumps.

YIMBY Program Offered in Fairfax County

Fairfax County, Va., launched a yard debris management and source reduction program named Yes In My Back Yard. The YIMBY program consists of backyard composting; mulching of yard clippings, leaves and brush; landscape alteration; and grasscycling — leaving grass clippings on the lawn.

As part of the plan, the Department of Public Works, Fairfax, sponsors seminars and expects to distribute 500 composting bins this year.

Last year, yard waste collection and composting programs diverted 28,760 tons of yard debris from the landfill. ■

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People

NORM GOLDSMITH has been appointed sales administration manager at Cushman. He is responsible for the administration of dealer sales order processing, as well as sales forecasting.

Mike Hoffman, director of marketing for The Toro Co.'s commercial products division, has assumed the additional responsibility of service operations management.

Toro's irrigation division recently promoted **Delancey Spain** to key accounts manager in the Orlando/Jacksonville/Tallahassee area of Florida. She has been with the company for more than five years, most recently as district sales and specification manager for the division.

Also within the division, **Teofilo Mendez Lynch** was named area manager for Mexico and Central and South America. Mendez Lynch previously operated a landscape contracting firm in California.



Goldsmith



Hoffman

Management changes at Pennington Seed resulted in the following personnel moves: **Brooks Pennington III**, legal counsel for the company, now also serves as vice president of finance; and **Dan Pennington** is now vice president for all Pennington Seed manufacturing divisions.

Also at Pennington, **Richard Best** was named vice president for distribution operations. This is a new position within the

company. **Keith Kelly** now serves as vice president for product development, specializing in lawn and garden chemicals and fertilizers. **Steve Triplett** was named director of national accounts.

Dr. James Murphy is the new turfgrass extension specialist for Rutgers University. He is a recent graduate of Michigan State University.

Tim DeMars was named director of marketing communications for Husqvarna. DeMars oversees all aspects of advertising and marketing communications. Previously he was an account executive with Lee DeForest Communications.

Husqvarna also named **Steve Woods** its new lawn and garden marketing manager. Woods has more than 25 years of sales and marketing experience in the lawn and power equipment business.

Yazoo Manufacturing named several

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USE READER SERVICE #11

personnel changes: **Chris Sharp** was named marketing manager of dealer and government sales; **Howard Day** is now vice president, marketing support and service; **Mike Hammer** is territory manager; and **Troy Berry** is technical plant manager.

American Cyanamid's agricultural division reorganized its vegetation and pest control department into three operating units: industrial vegetation products, turf and ornamental products and specialty pest control products.

Under the reorganization, **Dr. A. Thomas Perkins** joined the department as business manager, turf and ornamental products; **Charles Galley Jr.** was named business manager, specialty pest control products; and **Lisa Dry** was appointed marketing communications manager.

Bill Schaut was promoted to inside/outside sales representative for the industrial division of Briggs & Stratton. Schaut joined the company in 1989 as an inside sales representative for the lawn and garden division.

John Schmidt was appointed northern California district manager for Netafim Irrigation. He is responsible for irrigation sales and marketing to landscape contractors, landscape architects and distributors.

ISK Biotech named **Gerald Harrison** senior technical supervisor, North Carolina. Previously, he was senior technical supervisor, Georgia.

Harrison is responsible for directing, implementing and monitoring all field development activities with experimental and proprietary ISK Biotech products in the Mid-Atlantic states.

Randy Malkin is Rain Bird's new product manager for the commercial division. Malkin joined the company in 1989 as an area specifications manager for southern Nevada and the northern portion of Southern California. He has more than 18 years in the irrigation and landscape industries.

Also at Rain Bird, **Don Fisher** was named product manager in charge of rotors for the contractor division; **John Holmquist** joined the contractor division as district sales manager for the San Francisco Bay area; and **John Terry** joined the commercial division as technical services manager.

Richard Valentine has been named technical staff consultant for the Verti-Drain aeration system and turf overseeder product lines. He is a former superintendent at the Merion Golf Club in Ardmore, Penn.

Ampel Corp. has appointed **Thomas**

Anderson as president and chief operating officer. Anderson recently was an account executive with the Millhiser Smith Insurance Agency, Cedar Rapids, Iowa.

Henderson Manufacturing has added four members to its sales and engineering staff. They are: **Denis Duppong**, engineering manager; **Glenn Beck**, western regional sales manager; **Tom Noland**, central regional sales manager; and **Ted Ruder**, eastern regional sales manager.

Agri-Diagnostics Associates promoted **Jim Donovan** to the new position of sales and marketing manager, turf and ornamentals. Previously, he was national sales manager for turf.

Russell Hayworth joined Turf-Seed Inc. as Southwest marketing manager. He now markets all Turf-Seed varieties and blends, and is involved with new product development and testing throughout the Southwestern United States.

Dr. Joseph Duich was named technical adviser and consultant for Tee-2-Green Corp. In December, he retired from Penn State University where he was professor of turfgrass science for more than 36 years.

Nicholas "Nick" Owens was appointed president and chief operating officer of L.R. Nelson Corp.

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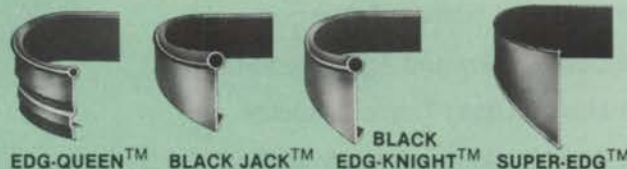


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Products

THE **METER-MAN** measuring wheel is available in 34 models. Standard, commercial and industrial wheels read up to 1,000, 10,000 and 100,000 feet/meters, respectively.

The 25-inch diameter 79 series is designed for rough agricultural terrain. The 12-, 31- and 60-series wheels are rimmed with durable rubber tread for accurate measure even on smooth, hard surfaces.

Circle 126 on reader service card

New features have been added to the Irritrol MCPlus, Dial and IBOC controllers. From **Hardie Irrigation**, the MCPlus and Dial controllers now feature non-volatile memory that holds programs forever, even after power failure. Also, a self-diagnostic electronic circuit breaker overrides shorted stations and alerts the user of problem stations.

The two controllers also have a programmable valve test and programmable rain off, which allows the controller to be

set to an off status of 1 to 7 days.

The IBOC controller is battery operated and has new housing and improved circuitry.

Circle 127 on reader service card.

The Line-Ward L-2 Line Layer installs irrigation pipe or cable with little effort. It maneuvers in tight turns and is ideal for "leaky" or "porous" pipe irrigation systems.

Product Spotlight

BARRICADE® WG, a preemergent herbicide for the lawn maintenance and golf markets, received Environmental Protection Agency registration.

Barricade provides season-long control of key weeds such as crabgrass and goosegrass with a single application. The product's residual is said to control grassy weeds all season. It will also control annual bluegrass, common chickweed, henbit, knotweed and prostrate spurge among others. Barricade is designed to control turf weeds as they germinate by inhibiting root and shoot growth.

Circle 125 on reader service card

Also available is a boring attachment that bores under drives or roadways. It can be installed in 60 seconds with no tools, bolts or pins.

Circle 128 on reader service card

Sea Green soluble seaweed powder from **Soil Technologies Corp.** is formulated to provide nutrients and growth hormones to turfgrass. The powder is reconstituted to treat one acre with 50 to 100 gallons of

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USE READER SERVICE #29

water and can be tank mixed with foliar-applied pesticide sprays.

Applied in the fall, it helps to increase turf resistance to winter kill and frost damage. Spraying newly seeded or sodded grass helps initiate root growth.

Circle 129 on reader service card

J. Thomas Distributors introduced a three-piece rear wheel assembly that allows both the tire and the pulley to be unbolted from the rim. The assembly is designed so that flats can be repaired on the job



site. It is available for Bobcat, Bunton, Exmark, Jacobsen, Scag and Snapper/Kees walk-behind equipment.

Circle 130 on reader service card

Eliminator Trailers introduced its new model A-58LS landscape trailer. It offers steel construction with steel mesh or treated plank flooring, 4-inch rails with stake pockets, wheels, fenders, D.O.T.-approved lights, reflectors, ball and wiring.

Circle 131 on reader service card

Greenlee offers a line of outdoor lighting fixtures to meet a variety of needs. The Bullet series includes a number of sizes and mountings for uplight and downlight applications and is easily concealed among shrubbery or plant material.

Low-level fixtures in the Pathway series can be used to create borders, accentuate features and illuminate paths. Other fixtures for diverse applications are available.

Circle 132 on reader service card

Encore Manufacturing Co. now has a mulching kit that adapts to and retrofits all Encore 48-inch PRO-line mowers, including 1988 models.

No new holes need to be drilled to



adapt the kit. Mulching kits for additional Encore intermediate commercial mowers will soon be available.

Circle 133 on reader service card

Green Clip is a new print media clipping service for marketing, public relations and advertising managers in the green industry. The service tracks references to company names, personnel and competitive products. More than 400 state and national industry magazines, newspapers and newsletters are scanned daily for clients.

Green Clip will only service companies, institutions and associations that are involved in landscaping, irrigation, agricul-

(continued on page 76)

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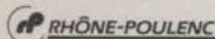
Of course, you still get the same dependable control of 25 broadleaf and grassy weeds—including goosegrass, crabgrass and Poa Annua—that you've come to expect from CHIPCO® RONSTAR® G. And you get this proven control all season long from just one pre-emergence application; without the leaching and root pruning associated with some herbicides. You can even use it on a wide variety of ornamentals to keep more of your course weed-free with each application. • For more

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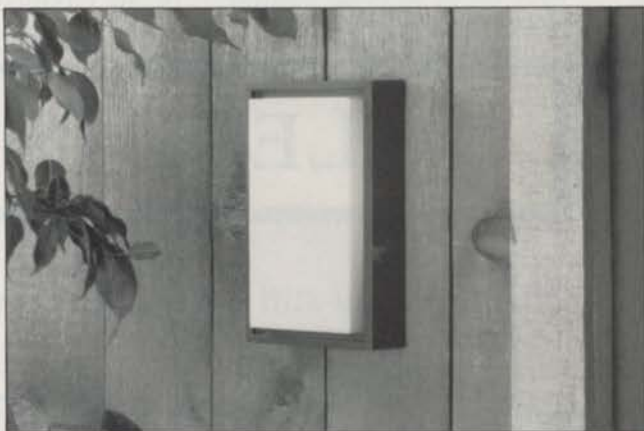
Products

(continued from page 74)

ture, interiorscaping and nursery businesses. Clippings are mailed once a week.

Circle 134 on reader service card

Stonco Lighting is offering an improved version of its TLB decorative surface bracket. The TLB18 offers a lower starting temperature with no tradeoff in lumen output. Typical applica-



tions include entranceways and stairwells. It mounts horizontally or vertically.

Circle 135 on reader service card

DEER-AWAY Big Game Repellent from **IntAgra** is formulated to protect trees and plants from deer damage. Available in liquid spray or dry powder, it's designed to provide protection for more than two months, even in rain.

The active ingredient is inedible egg solid. The product repels deer by its odor.

Circle 136 on reader service card

A heavy-duty, self-feeding brush chipper is available from **Vermeer Manufacturing Co.** The Vermeer 1220 chipper is designed to handle large diameter tree limbs, brush and construction waste materials. It comes equipped with a hydrostatically controlled vertical feed roller system, which makes large, bulky and bushy material easier to process.



Other features include variable speed control from 0 to 120 feet per minute, a 30-gallon fuel tank, pusher fan, electric brakes, lockable tool and battery box and engine hood. For safety, the discharge chute pivots 270 degrees to prevent chips from being directed at the operator.

Circle 137 on reader service card

The Danziger series of 12 New Guinea impatiens varieties is being introduced in the United States and Canada by **Fischer Geraniums, U.S.A.**

The series offers large flowers and excellent performance under extremely hot weather conditions, according to the company. New varieties include: Danlight, a light pink flower with a purple blotch and stripes of purple; Danshir; and Rondo, a blood-red flower with dark green foliage.

Circle 138 on reader service card

The **Converto-Cart** changes from a cart to a trailer in up to one minute. The steel bed is 30-inches wide, and 36-inches long with 12-inch-high solid side boards. Load capacity is 9 cubic feet. A removable board allows for back end dumping.

As a trailer, the 10-inch tongue height provides compatibility with most riding mowers and small garden tractors. The 1/4-inch by 2-inch solid bar tongue extender allows for adequate wheel clearance. Weight capacity is 300 pounds using a 5/8-inch axle.

Circle 139 on reader service card

Green-T liquid fertilizer contains triazone nitrogen, a new controlled release nitrogen source. It features low burn potential and high stability.

Green-T is compatible with turf chemicals and can be used with a regular spray program. It is 100 percent water soluble.

Circle 140 on reader service card

Banjo Kentucky bluegrass from **International Seeds** offers heat and shade tolerance and superior resistance to brown patch disease. It can be used to increase stress tolerance in bluegrass blends and to add strength and structure to turf-type tall fescue sod.

Circle 141 on reader service card

Legacy is a low-growing, turf-type perennial ryegrass from **LESCO**. It features a high level of endophyte, dark green color, fine leaf texture, good density and a dwarf growth rate.

Legacy has demonstrated improved mowing quality, density and heat and drought tolerance. It offers improved resistance to leaf spot, brown patch and stem rust, and is broadly adapted as a premium turfgrass in cool-humid and cool-arid zones.

Circle 142 on reader service card

Lawn and Garden Products offers **SAF-T-SIDE**, a suffocating oil for control of aphids, whiteflies, mites, mealybugs and other insects in ornamentals, vegetables and citrus.

It can be used by itself or mixed with other biological or chemical insecticides

for residual control. Quart containers are now available.

Circle 143 on reader service card

Woods midsize commercial mowers are available in 36-, 48- and 61-inch cutting widths. They feature hydrostatic transaxle drive, Kohler Magnum series 4-cycle engines, fingertip steering and large 8-inch disc brakes.

The heavy-duty mower deck is designed

to resist flexing and maintain a quality cut. Blade spindle housings are custom-designed cast aluminum with sealed double ball bearings and top access grease fittings.

Circle 144 on reader service card

Super Turf Fertilizer from **O.M. Scott & Sons** offers an extended feeding from 12 to 14 weeks, initial greenup with uniform growth and maintenance levels of available

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USE READER SERVICE #31

phosphorus potassium. It can be used on fairway-height grass.

The fertilizer incorporates Scotts' new Poly-S™ technology, which combines polymer and sulfur in a coating for controlled-release turf fertilizers. Residual is programmed from two to six months, according to the application.

Circle 145 on reader service card

PermaLoc now offers 1/8-inch by 3-inch aluminum edging. Included are one clip and two heavy stakes.

Circle 146 on reader service card

American Excelsior Co. offers Quickgrass, a dyed green wood excelsior erosion control blanket with photodegradable netting applied to one side.

Made from Aspen curled wood fibers, Quickgrass is designed to prevent erosion, assist in germination, protect seedlings and provide the appearance of natural turf instantly. Rolls are 180 feet long and 48 feet wide. One roll covers approximately 80 square yards and weighs about 80 pounds.

Circle 153 on reader service card

FYI...

Meet the satellite family. The Rain Bird satellite controllers brochure outlines key features and specifications for these water management aids.

Circle 147 on reader service card

Grow your business. Nursery Supplies Inc. has launched a free, quarterly newsletter to inform growers of industry trends and business strategies.

Circle 148 on reader service card

Thomson Publications revises guide. The "Tree, Turf and Ornamental Pesticide Guide" includes information from basic manufacturers' labels and Environmental Protection Agency summaries.

Circle 149 on reader service card

Reduce the risk of Lyme Disease. "The Comprehensive Deer Tick Control Manual," published by EcoHealth Inc., discusses landscaping techniques and chemical options for deer tick control.

Circle 150 on reader service card

Chain saw training on video. The National Arborist Association offers a two-part VHS video series on chain saw use and safety and chain saw selection and maintenance.

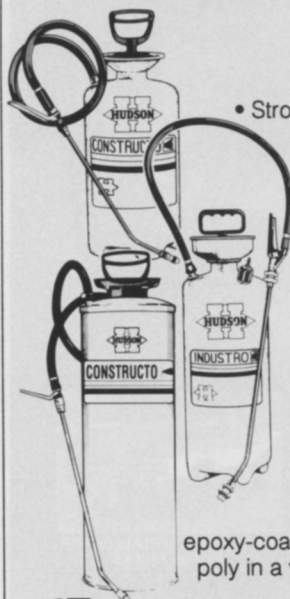
Circle 151 on reader service card

Wild about flowers. A program for long-term wildflower maintenance is outlined in Applewood Seed Co.'s 1992, 24-page catalog. More than 100 wildflower species and nine regional mixtures are offered.

Circle 152 on reader service card

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Product Profile

CUSTOMER SATISFACTION CRITICAL TO ACCOUNT RETENTION

IN THE LAWN MAINTENANCE market, it's a well-known fact that a company is only as good as its last application. That's why Randy Zweifel, president and owner of Lawn Managers, makes it a point to understand his customers' needs.

He gives them high-quality service with the personal attention they expect from a small company. And with the lawn maintenance market nearing saturation, customer retention has been the key to success for the St. Louis, Mo., company.

"Our excellent staff who is familiar with the industry and with the customers has been a factor in our success," Zweifel said. "All of our personnel are properly trained and licensed, so they're familiar with our products and pesticide usage in general. This training ensures safety to the customers as well as to the individual.

"The market has pretty much stabilized," Zweifel added. "So keeping the customers we have today is the reason we are successful. Our customer base has stayed about the same for the past three years, with our total production dollars up about 6 percent this year."

Zweifel emphasized that providing personal service has kept his customers calling back. Since 1979, when Zweifel started the company, he has stressed personal service to ensure customer satisfaction. That helped turn his one-man service into the seven-man company it is today, providing various lawn maintenance programs to more than 1,800 residential customers in the St. Louis area.

Providing personal attention to so many customers can be tough, especially around the spring burst. Too often, homeowners call to start a lawn service when they see the weeds — after crabgrass has germinated. "Then it normally takes two treatments — a postemergent to kill the crabgrass that has already come up, and a pre-emergent to stop the weeds that haven't yet germinated."

Dimension™ turf herbicide from Monsanto Co. has helped Zweifel in this battle against crabgrass, by widening the window of application. "Dimension controls the germinated crabgrass prior to tillering and also works as a preemergent. This saves us time so we can service more people," he said.

Yet, more important than servicing more people, the herbicide enables him to ser-

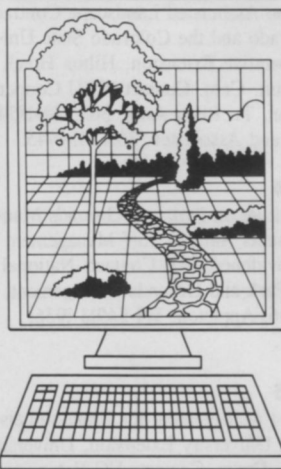
vice these customers better. "Customers don't tell you that their crabgrass and weeds are gone. That's what they expect from a lawn service. But they will tell you when the weeds aren't gone," he added.

Zweifel said he's satisfied with the performance of preemergents in his arsenal, but appreciates the postemergent control Dimension provides. Compatibility with fertilizers and other broadleaf weed control products is a plus.

The company has been doing some ad-

vertising and direct mail to build its customer base, but customer referrals account for 40 percent of new business.

The company sends out surveys every year to each of their customers asking for comments on the services they have received in the past year. "We get an excellent response," he said. "We even pay for the return postage, which really adds to the cost of the survey. It's expensive and time-consuming, but this is important to us and to our customers." ■



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Calendar

MARCH 1

The Ohio State University Agricultural Technique Institute sponsors the 1992 Spring Garden Preview, Agricultural Research and Development Center, Wooster, Ohio. Contact: Dr. Gary Anderson, OSU/ATI, 1328 Dover Road, Wooster, OH 44691-4000; 216/264-3911.

MARCH 3

Nassau Suffolk Landscape Gardeners Association, 24th Annual Professional Turf and Plant Conference, Huntington Town House, West Huntington, N.Y. Contact: NSLGA, P.O. Box 489, Brightwaters, NY 11718; 516/665-2250.

MARCH 3-5

61st Massachusetts Turfgrass Conference and 16th Industrial Show, Springfield Civic Center, Springfield, Mass. Contact: Mass. Turf & Lawn Grass Association, P.O. Box 489, Hadley, MA 01035; 413/549-5295.

MARCH 12

Integrated Pest Management: Issues and Frontiers for the Professional Horticulturist, Swarthmore College, Swarthmore, Penn. Contact: Penn State Cooperative Extension, Box 20, 1015 Route 113, Creamery, PA 19430; 215/489-4315.

MARCH 12-13

New England Landscape Exposition, sponsored by the New Hampshire Landscape Association, Holiday Inn, Manchester, N.H. Contact: Guy Hodgson, 18 Debbie Lane, Eliot, ME 03903; or call NHLA, 207/439-5189.

MARCH 14-22

1992 New England Spring Flower Show, Bay-side Exposition Center, Boston, Mass. Contact: Massachusetts Horticultural Society, Horticultural Hall, 300 Massachusetts Ave., Boston, MA 02115; 617/536-9280.

tural Hall, 300 Massachusetts Ave., Boston, MA 02115; 617/536-9280.

MARCH 19-20

Dr. Alex Shigo presents a lecture and workshop on tree care, Marylhurst College, Lake Oswego, Ore. Contact: John Kirkland, Tree Care Educators, 6005 S.E. 70th Ave., Portland, OR 97215; 503/254-0482.

MARCH 19-20

National Institute on Park and Grounds Management presents Athletic Turf Management Seminar, Roanoke, Va. Contact: NIP&GM, P.O. Box 1936, Appleton, WI 54913-1936; 414/733-2301.

MARCH 20-21

Xeriscape West '92, sponsored by the Western Chapter of the Associated Landscape Contractors of Colorado and the Colorado State University Cooperative Extension, Hilton Hotel, Grand Junction, Colo. Contact: CSU Cooperative Extension, Tri River Area, 303/244-1834; or Ciavonne and Associates, 303/241-0745.

MARCH 23-24

National Institute on Park and Grounds Management presents Athletic Turf Management Seminar, Providence, R.I. Contact: National Institute on Park and Grounds Management, P.O. Box 1936, Appleton, WI 54913-1936; 414/733-2301.

MARCH 24-25

Turfgrass Pest Management for Professionals, sponsored by University Extension, University of California, Davis. Contact: UC Extension, University of California, Davis, CA 95616; 916/757-8777.

MARCH 26

Conifer Identification Course, Graham Visitors Center, Washington Park Arboretum, Seattle, Wash. Contact: Center for Urban Horticulture, University of Washington, GF-15, Seattle, WA 98195; 206/685-8033.

MARCH 26-27

Understanding the Urban Tree, sponsored by Rainbow Treecare, Pheasant Run Resort, St. Charles, Ill. Contact: Rainbow Treecare, 4601 Excelsior Blvd., St. Louis Park, MN 55416; 612/922-3810 or 800/369-3810.

MARCH 27-29

Associated Landscape Contractors of America, Student Field Days, Cal Poly Pomona, Calif. Contact: ALCA, 405 N. Washington Street, Suite 104, Falls Church, VA 22046; 703/241-4004.

APRIL 4

Xeriscaping: How to Create a Drought-Resistant Landscape, University Extension at the University of California, Davis. Contact: UC Extension, 916/757-8777.

APRIL 6

Agriculture and Green Industry Computer Expo '92, Doubletree Hotel, Ventura, Calif. Contact: University of California Cooperative Extension, 702 County Square Drive, Ventura, CA 93003-5404; 805/645-1451.

APRIL 29-30

Green Tech '92, sponsored by the California Landscape Contractors of America, Long Beach Convention Center, Calif. Contact: CLCA, 2021 N St., Suite 300, Sacramento, CA 95814; 916/448-2522.

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Side By Side

(continued from page 32)

Moore said. "Maintenance bids come in from \$1,200 to \$12,000, and nine times out of 10 you end up with an adverse relationship."

After a project is bid, Moore explained, his site-management firm inspects it regularly and, after completion, reviews it regularly with the maintenance contractor and the owner. Problems not identified in construction can be dealt with, and liability issues can be addressed. Work orders are sent directly to the maintenance foreman.

"It's more work for (the maintenance contractor), and the owner trusts us as long as the project looks good."

"The owner should know his maintenance budget while the project is still on the drawing board. In the eight years we've been doing this, the price for contracting (through maintenance and site management) has been lower than the total price owners had been paying before."

SETTING STANDARDS. New Alliance doesn't take credit for the warming relationship between its landscape architects and other segments of the green industry. But it has raised the issue of better working relations to a new level since its inception.

"We have opened the door to good communications through our New Alliance meetings across the country," said Peter Kirsch, ASLA director of marketing. An industry-wide perception that communications and cooperation among its segments is improving will only spawn improved relations, he said.

One of New Alliance's early goals, in fact, is nearing reality. It's expected that by the end of March, New Alliance will publish the combined specification guidelines of its four sponsoring associations as well as other related organizations whose input is being sought.

Likely to participate, along with the four charter members of New Alliance, are the National Bark and Soil Producers Association, National Arborists Association, International Society of Arboriculture, American Sod Producers Association and the Professional Lawn Care Association of America.

Other green industry associations are also being solicited for their standards. All participating associations will receive copies of the completed manual to provide to their memberships.

The manual "will mark a new era of understanding" for all the groups, particularly landscape architects and landscape contractors, said Thornton, ALCA's New Alliance representative.

"The landscape architect needs to convey how they want a job done; the landscape contractor has to know information on pricing and plant material, using AAN

standards; PGMS has its own set of standards," Thornton said. The manual will serve the industry as a reference resource — "a joint set of standards for what we think is the right way to do things" — rather than a literal "how-to" guide, he emphasized.

Admitting "there's still a lot to be desired from an overall standpoint," it's "better than nothing," he said.

Beyond the benefits of better-coordinated, better-designed, better-built and better-maintained projects and the hope that greater efficiencies in the process will result in an improved business climate for all involved, the growing unity among segments of the industry can pay another dividend as well. As the general public sees the results of cooperation and communications, its appreciation of the green industry as a "profession" will grow, many observers say.

"We're not just pickup and shovel people," stressed Toby Johnson, president of TreeCrest Landscape-Design Inc., Stone Mountain, Ga. "There's a perception, and we have to educate people of the professionalism in the landscape field."

Thornton cited McDonald's Corp. for doing as much as anyone to raise the public's level of appreciation of good landscaping. "They don't put up buildings and blacktop without plantings," he said. "The restaurants look better, and they do better." Disney parks, too, have "taken landscape architecture to a whole new realm. They combine sights, smells and sounds. Everything is put together so well."

"A lot of the general public may not know the intricate details of plant growth and development, but they do know what looks good," said Michigan State's Schutzki. "Curb appeal is how they judge the industry."

At the corporate level, for example, a headquarters project can project the image of how a company deals with the community and can affect how the community perceives the company, he said.

"The sophistication of landscaping does have a bearing on what's needed to create curb appeal," Schutzki said.

There's a major image problem with public perception of the industry today, said Maxwell-Miller. "This industry will probably never be like the American Medical Association. There will never be a time when someone who needs landscaping work feels they need to go to a member of ALCA or ASLA."

"Most people are never exposed to the process. But if developers and general contractors, our clients, start to absorb what we're doing together, they'll get better projects, more controllable projects and they'll see the ability of our teams to give them quality."

The author is an Edison, N.J., free-lance writer.

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