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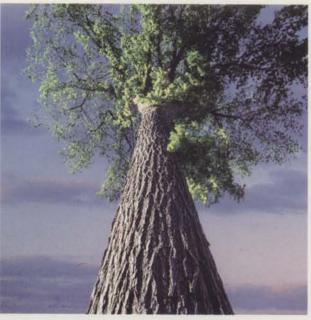
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VOLUME II, NUMBER I



FORMERLY ALA MAGAZINE

FEATURES

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With majority interest in the hands of a Chicago investment firm, Barefoot plans a nine-city expansion and several acquisitions for the new year.

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More than 1,300 attendees and 167 exhibitors were on hand at Cashman Field to see the latest industry innovations.

40 Matching a Suitable Computer System to your Business Now is the best time of the year to buy a computer. But before doing

Now is the best time of the year to buy a computer. But before doing so, make sure you know the exact needs of your company.

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40 Written Agreements Can Benefit Maintenance Firms

Contracts need not be elaborate, but are a good idea so both the operator and customer know what to expect.

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Photographic Design Group,

Warm season annual grasses such as crabgrass and goosegrass pose serious problems for Kentucky bluegrass.

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EDITOR'S FOCUS

THE TORO CO. IS ALREADY MAKing good on its fall purchase.

The Minneapolis-based company just announced that it's raising its fiscal 1990 earnings estimate to "close to \$2" a share because of lower-than-expected financing costs associated with its recent acquisition of Lawn-Boy Inc, according to a report in *The Wall Street Journal.*

Toro, a manufacturer of outdoor maintenance and irrigation equipment, also said the improved outlook reflects its "increased optimism about the prospects for Lawn-Boy achieving its 1990 business plan," according to the report.

Toro purchased competitor Lawn-Boy from the Outboard Marine Corp. in October for \$85 million. Lawn-Boy's sale was the result of an Outboard Marine Corp. decision to divest itself of its nonmarine related divisions.

Prior to the sale of Lawn-Boy, the Outboard Marine Corp. sold its Cushman group, including Ryan and Brouwer, to Ransomes America for \$150 million.

Toro Vice President/Treasurer Dennis Himan said the firm has had a chance to become more familiar with Lawn-Boy and is more optimistic about its performance ability.

Previously, Toro projected that per share earnings for fiscal 1990, ending July 31, would approach the "mid-toupper end" or about \$1.65 to \$2. Per share earnings for fiscal 1989 were \$2.10.

Lawn-Boy which makes mowers, tractors and snowblowers, recorded \$153 million in sales in 1988 and is expected to have sales of \$120 million in 1989, according to Toro. Toro, which manufactures similar products, reported fiscal 1989 profits of \$22 million on sales of \$643.5 million.

No changes are expected in company name or operation through the coming season, according to Himan.

In other business news, ChemLawn recently fired about 1,500 employees in what is being called a companywide restructuring.

Only 500 of the jobs were permanently cut as 1,000 new employees are expected to be hired by the spring season, according to Debbie Strohmaier from Chem-Lawn's public and environmental affairs office.

The cuts were made across-the-board, including management and field personnel. No more cuts and no non-



personnel restructuring changes are anticipated, she said.

"All systems are in place, it's just the people who are delivering it who are changing," Strohmaier said.

The changes are designed to improve operating margins through improved productivity and cost controls.

ChemLawn, which has about 2 million customers and annual sales of \$375 million, has acknowledged having problems with consistency.

To cover the costs associated with the restructuring and other related expenses, Ecolab will charge \$28 to 32 million to its fourth quarter revenues.

Ecolab Inc., ChemLawn's parent company, recently sold \$110 million of Ecolab Series A convertible preferred stock to Henkel KGaA, Dusseldorf, West Germany. The sale is equivalent to 11.8 percent of Ecolab's outstanding voting power, Strohmaier said.

Henkel is the world's largest manufacturer of oleochemicals and is a leading producer of metal treatment products.

Ecolab intends to use the proceeds from the sale of the preferred stock to purchase its common stock from time to time in the open market or in private negotiations.

Strohmaier said the stock transaction represented the initial step in establishing long-term business relationships, including combining respective worldwide cleaning businesses.

A global partnership strengthening the positions of both companies as the European market of 1992 draws closer is another benefit cited in the sale. - Cindy Code

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BPA

NEWS IN BRIEF

PERMA-GREEN ACQUIRES GREEN SCAPE MAINTENANCE FIRM

Perma-Green Lawn Co., Boise, Idaho, recently acquired Green Scape Inc., another locally based lawn and landscape maintenance firm.

The acquisition won't have any immediate effects on either firm. Green Scape will maintain its own identity for at least one year, and its employees will be retained by its new parent company, according to Perma-Green President Mike Spicer.

In addition, former Green Scape owner Ron Hutt has been appointed Perma-Green's director of landscape services, Spicer said. Hutt, who left Perma-Green after five years of service to start Green Scape, will be responsible for sales and marketing at both firms and serve as liaison between them.

Hutt will also be responsible for enhanced customer service at each organization and for integrating mowing and landscape maintenance at Perma-Green.

"We'd like to think of the transaction as more of a merger than an acquisition," Spicer said. "Aside from relocating Green Scape's customer service office to our corporate facilities, we will not be making any changes to the company. Green Scape customers will continue to receive the same level of service from the same people."

Perma-Green reported revenues of \$4.2 million in 1988 and projects \$4.4 million for 1989.



Brickman's McNature Trail at McDonald's headquarters.

REINHOLD LANDSCAPE, VIDOSH MERGE COMPANIES

Reinhold Landscape and Vidosh Inc. announced the merger of their professional landscape companies. The merger makes Reinhold & Vidosh the largest professional landscape service and supplier in Michigan.

"Reinhold Landscape has always been committed to improving itself. We believe our merger with Vidosh will enable us to strengthen our services on a national level while maintaining the same standards of excellence that have distinguished our company for over half a century," said Melanie Reinhold Sawka, president of Reinhold & Vidosh Inc.

The new national headquarters of Reinhold & Vidosh is in Pontiac, Mich. Operations will expand to regional office locations in Michigan, Tennessee and Florida. The company will retain all current levels of staff and managerial positions of Reinhold and Vidosh.

"The fact that we are our own primary source of landscape materials, equipment and management services guarantees our ability to operate on an unprecedented national level," said Donn Vidosh, chairman of Reinhold & Vidosh.

Reinhold & Vidosh clients include many Fortune 500

companies, institutional, retail and multifamily site developers and historical renovation projects such as the Kresge Foundation headquarters building in Troy.

Reinhold & Vidosh also specializes in state of the art construction of major recreational developments, including more than 30 softball complexes and golf courses.

BRICKMAN COMPLETES MCNATURE TRAIL AT MCDONALD'S CAMPUS

The Brickman Group Ltd., Long Grove, Ill., has completed landscape construction for a 3,800-foot nature trail at McDonald's Corp.'s wooded corporate headquarters campus in Oak Brook, Ill., west of Chicago.

Brickman laid out the system of five paths, consisting of oak meadow, woodland stream, marshland, highland and

prairie paths. The landscape firm also cleared and constructed the trail, which is composed of wood chips over a gravel base.

"Water is a very attractive feature of any landscaping project," said Mark Hunner, regional vice president for Brickman. "The McDonald's campus has about 10 acres of lake and waterways."

Other landscape work completed recently by Brickman at McDonald's campus includes seeding and cultivating a wildflower prairie area north of Lake Fred, along the northern edge of the property.

Brickman began working on the site in the spring of 1981. The company also designed

SUPREME COURT FAILS TO HEAR DOW APPEAL

THE FAMILY OF A U.S. Forest Service employee who died of cancer after his exposure to an herbicide can collect a \$1.5 million award since the Supreme Court declined to intervene.

The justices, without comment, refused to hear a Dow Chemical Co. appeal aimed at winning a new trial in the product liability case.

James Greenhill was exposed to 2,4-D, a Dow herbicide, while working for the Forest Service in the late 1970s. A year after he left that job, he was diagnosed as suffering from Hodgkin's disease, and he died in 1986.

A federal jury in Marshall, Texas, awarded the Greenhill family \$1.5 million in damages in 1987.

During the trial, a physician hired as an expert witness by the Greenhill family testified that 2,4-D caused Greenhill's cancer.

According to reports, Dow had appealed over an error in the physician's testimony. Among the records he had submitted in the case, those of another patient, Joseph Moss, were mistakenly included. When questioned by a Dow lawyer, the doctor said he didn't know of a Joseph Moss.

Dow said that because it learned, after the trial, that Moss was a patient of the doctor, it was entitled to a new trial. An appeals court had rejected the argument.

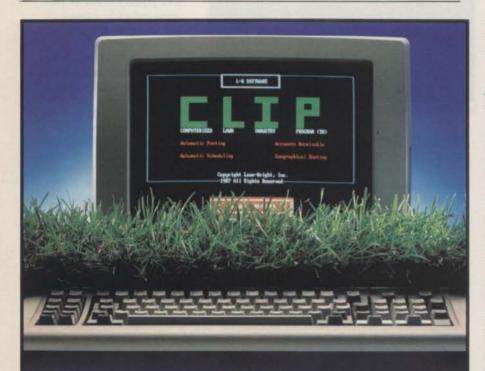
Dow Public Relations Manager Gary Hamlin said the verdict is ludicrous. "According to our attorneys, we would have won 99 out of 100 cases like this." and installed the landscaping at the company's original Oak Brook headquarters in 1970, maintaining it since. Brickman has received five landscape awards for its work at McDonald's.

TECHNICAL CONSULTANTS WIN HUNTER ACHIEVEMENT AWARDS

Irrigation industry technical consultants Chet and Wanda Sarsfield of Lafayette, Calif., were recently honored with Hunter Industries' 1989 Industry Achievement Awards. "The Sarsfield's positive contributions to the irrigation industry have been an outstanding example to us all," said Gloria Stultz, Hunter district manager. "They give tirelessly of their time to our associations, and they are well-regarded by everyone who has worked with them."

As owners of a textbook publishing firm, Irrigation Technical Services, the Sarsfields were honored for their educational contributions to the field of irrigation.

Chet Sarsfield's textbook, "The ABC's of Lawn Sprinkler Systems," is widely used in college landscape design programs, and is recognized as one of the



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most authoritative publications in the field. He has also written many irrigation technical manuals for agricultural engineers, ornamental horticulturists and landscape architects.

Recently, Sarsfield worked as a technical consultant for the East San Francisco Bay Municipal Water District in developing a community-wide water rationing program.

Wanda Sarsfield is a partner in the Irrigation Technical Services publishing firm and has served as executive secretary for the Northern California Turfgrass Council and as the national executive secretary for the American Society of Irrigation Consultants.

The Hunter Industry Achievement Award is presented annually to individuals who have made significant contributions to the irrigation industry.

JOINT SEED COATING CORPORATION FORMED

Valley Seed Co., a division of Arizona Grain Inc., and Canadian Seed Coaters Limited, recently announced the formation of a joint seed coating corporation.

The new company, Precision Seed Coaters, is located in Roll, Ariz., to serve the large bermudagrass seed, legume seed and other grass production industry in the area. It has the ability to coat all planting seeds.

Canadian Seed Coaters Ltd., located in Brampton, Ontario, began commercial production in 1977. Canadian Seed Coaters Ltd. together with its parent companies — Hodder & Tolley Ltd., Palmerston North, New Zealand and Oseco Inc., Brampton, Ontario, Canada — make up the leading group of seed coating companies in the world with nine wholly owned or joint venture coating plants.

EPA COMPILING INTERIOR PESTICIDE HANDLING DATA

Officials from the Environmental Protection Agency will visit Creative Plantings, Burtonsville, Md., this month to gather more information about how pesticide applications are handled in the interiorscape industry. The agency is interested in learning how mixtures are handled, where materials are stored and in seeing pesticide applications.

Currently, a task force within the Office of Pesticide Programs at EPA is rewriting regulations under the Federal Insecticide, Fungicide and Rodenticide Act dealing with pesticide applications, and in particular, storage and disposal of pesticides.

The issue gained public attention in 1988 after EDB was suspended by EPA and was later found to be improperly (continued on page 10)

JANUARY 1990 • LAWN & LANDSCAPE MAINTENANCE

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

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FUSARIUM BLIGHT





SPRING DEAD SPOT

stored in a warehouse in Missouri. Fumes from leaky canisters injured some local safety officials sent to inspect the facility.

JACKLIN LAUNCHES SUCCESSFUL BULK TURFGRASS SHIPPING SYSTEM

An innovative new system of bulk turfgrass seed shipping is being tested by Jacklin Seed Co., Post Falls, Idaho, a move that eventually will save customers considerable money on labor, warehousing and handling.

A carefully monitored first shipment in 500-pound cells from Jacklin's plant in Post Falls, Idaho, to O.M. Scott's headquarters in Marysville, Ohio, last September was considered a success by both firms.

Jacklin Plant Manager Ted Dionne, supervised the initial trailer loading, then flew to its destination in Ohio. There, Dionne, Scott's Marketing Manager Jerry Boroff and Plant Manager James Alderson observed the unloading and inspected the shipment.

The new shipping procedure has been approved by state certifying agencies for shipments of certified seed.

LOFTS DONATES ROYALTIES TO RUTGERS TURFGRASS RESEARCH

Lofts Seed Inc. donated nearly \$288,000 to the turfgrass research program at Rutgers University in New Jersey. In what has become a tradition, Lofts annually donates royalty payments to Rutgers.

The royalties are generated from sales of Lofts' proprietary turfgrass seed varieties. Each year, as sales increase, the royalties enlarge proportionally.

This year's royalty check stems from domestic and international sales of the following Lofts' varieties: Princeton (P-104), Mystic, Ram I and 1757 Kentucky bluegrasses; Palmer, Repell, Yorktown II and Diplomat Perennial Ryegrasses; Rebel and Rebel II Turf-Type Tall Fescues; and Laser Poa trivialis.

The royalties are used to support several research, teaching and extension programs at Rutgers.

SMALL BUSINESS LICENSING PROGRAM FOR LANDSCAPERS

Oregon's Metropolitan Service District's business license program for small building contractors expanded to include landscapers Jan. 1. The business license program is administered by Metro, as mandated by the state legislature. It enables small building contractors to obtain a one year business license good for use in all cities in the region except Portland.

Since the beginning of the program in mid-1988, more than 400 builders have obtained "passport" licenses.

Landscapers were added to the licensing program by the state legislature last year. As with builders, they must earn less than \$100,000 worth of residential business in a year.

The Metro license is optional, but can save time and money if business is conducted in several cities requiring separate licenses.

Building contractors and landscapers working in the tri-county area can receive more information by contacting the Planning and Development Department, Metro, 2000 S.W. First Ave., Portland, Ore. 97201-5398.; 503/221-1646.

NEW TURF MANAGEMENT NEWSLETTER FROM CYANAMID

JANUARY 1990 • LAWN & LANDSCAPE MAINTENANCE

American Cyanamid recently introduced the premier issue of *For Your Image*, a quarterly newsletter for turf professionals.



10

For Your Image is designed to provide lawn care, landscape, grounds maintenance and golf course professionals with helpful turf management news and information.



The name of the newsletter makes reference to Image[®] herbicide, introduced by Cyanamid in 1987. Image can be used for control of certain difficult-to-control and unsightly weeds, like purple nutsedge, wild garlic and wild onion. It is labeled for use on all warm-season turfgrasses except Bahiagrass.

The newsletter features articles devoted to helping turf management professionals. It contains research results, new product and new label information, and testimonials from peers who have solved tough vegetation-management problems.

For a free subscription to For Your Image call or write on company letterhead: American Cyanamid Co., P.O. Box 8459, Spartanburg, S.C. 29305-8459; 803/ 582-1908.

NEW GROWTH STRATEGY PLANNED FOR PRO-LAWN

Pro-Lawn Products Inc., a subsidiary of Agway Inc., has designed a growth plan to provide a higher degree of personalized service to its customers in the Northeast.

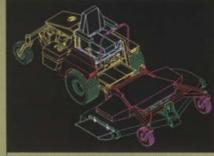
The growth plan, centering around a reorganization of the sales management network, is now in full operation. ProLawn's swift growth necessitated the new strategy, according to John Butenko, manager.

"Pro-Lawn needed to upgrade our service capability in order to sustain that growth as well as to continue to serve our customer base," Butenko said.

The company has also added five salespeople to its force to improve sales and service to professional landscape and turf managers throughout the Northeast.

LAWN & LANDSCAPE MAINTENANCE • JANUARY 1990





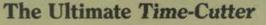
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YOUR NEXT MOWER

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ASSOCIATION NEWS

THE AMERICAN ASSOCIATION OF

Nurserymen is meeting with other national horticultural associations in an attempt to develop a unified horticultural position after two major pieces of legislation have been introduced to amend the Federal Insecticide, Fungicide and Rodenticide Act.

Congressman George Brown (D-Calif.) is sponsor of H.R. 3153 and House Agriculture Committee Chairman Kika de la Garza (D-Texas) is sponsoring H.R. 3292.

Both bills would overhaul the nation's pesticide law by tinkering in part with registration and cancellation regulations. Preliminary hearings were heard in October. Also, in late October President George Bush announced the Administration would soon propose legislation addressing similar pesticide and food safety issues including a more speedy pesticide suspension process.

A new videotape from the **Professional** Lawn Care Association of America titled "The Value of Turf — For Today and the Future," is now available.

The 10-minute tape premiered at the PLCAA annual trade show and convention in Las Vegas, Nev., in November and is available through the Education and Research Foundation of the association.

Proceeds from sales of the tape will go toward the PLCAA's work with educational and research-based programs. The program is sponsored by Ciba-Geigy's Turf and Ornamental Products division, which funded initial production and duplication of the tapes for the foundation.

The tape features interviews with three top turf researchers: Tom Watschke, The Penn State University; Harry Niemczyk, The Ohio State University; and Marty Petrovic, Cornell University. As an incentive for donations to the education and research foundation, the videotape is being offered as a premium to those pledging \$100 a year for three years, said Barry Troutman, PLCAA's director of education. But it can also be bought outright for \$50.

A new exhibition for the machinery industry will take place near London next year.

The International Professional Lawn, Garden and Outdoor Power Equipment Exhibition will run from Sept. 2-4 at Kempton Park, a race course and exhibition venue 15 miles from central London.

The show is a joint venture between the Garden Machinery Association and Interbuild Exhibitions, a member of the Andry Montgomery Group. Another member of the group, Andry Montgomery and Associates Inc., is organizer of the Louisville Expo — North America's Lawn, Garden and Power Equipment Exhibition.

At the end of September 1989, nearly 130 companies had reserved space at Kempton Park including Black and Decker, Ford New Holland, Honda (UK), Massey Ferguson, Perkins and Ransomes.

Products on display will include allterrain vehicles, chainsaws, compact tractors, forestry equipment, garden accessories and tools, mowers, motorized carts and vehicles, sprayers, spreaders and seeders.

Debra Dennis, a 10-year veteran of the Associated Landscape Contractors of America, has been selected the new executive director of the association.

During her tenure with ALCA, Dennis has served in a variety of positions and has developed a thorough understanding of the office and the membership, according to Ron Kujawa, ALCA past president.

As new executive director, Dennis said, she wants to strive for better communications between ALCA, the leadership, the membership, the press and consumers.

"I want to help improve the image of the landscape contracting industry," Dennis said. "If we strive to improve the image it can only help bring more people into the profession."

Rene Gautschi will be the keynote speaker at the Association of Professional Landscape Designers' Fourth Annual Symposium and Resource Fair on landscape architecture and design, "Leaving No Stone Unturned IV" Feb. 23 and 24 in Bethesda, Md.

As vice president of architecture, planning and design for Marriott Corp., Gautschi has more than 25 years experience in creating effective landscapes for Marriott resorts and hotels worldwide. He will also share his knowledge of marketing these services.

Also speaking at the symposium will be Henry Cathey, director of the U.S. National Arboretum.

The Foliage For Clean Air Council recently signed an agreement with the American Horticultural Marketing Council to act as the promotion export council for the U.S. horticultural industry.

The Associated Landscape Contractors of America formed the FCAC last year to interpret and distribute to the horticulture industry findings from the National Aeronautics and Space Administration that show plants can help clean the air in indoor environments.

News of the NASA findings spread quickly throughout the industry, as the

FCAC made it possible for individual companies to use this information in their marketing programs to generate excitement among their customers and to increase sales.

Overwhelming enthusiasm in the United States prompted the FCAC to extend membership outside the country.

Membership in the council provides sponsors with many marketing tools to raise public awareness about the use of plants as clean air machines and increase industry sales.

FOR MORE INFORMATION...

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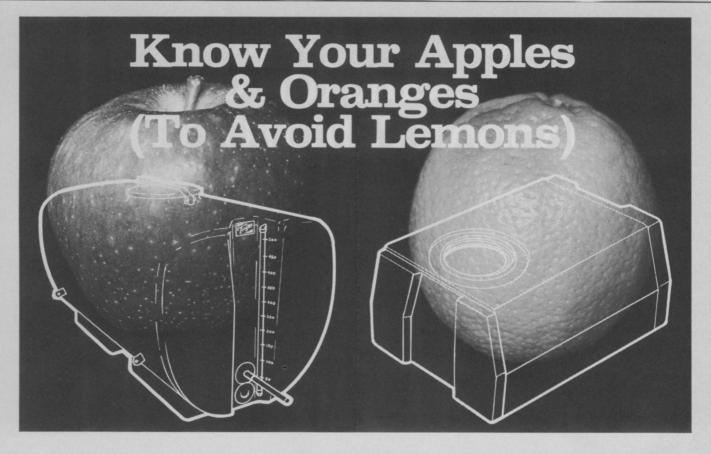
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PLCAA

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Tuflex Manufacturing Company, 1406 S.W. 8th St., Pompano Beach, FL 33060

If your immediate or long range needs include consultation, design or sales, call

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There is some turf even DURSBAN can't protect.

Granted, DURSBAN* Turf Insecticide won't do you much good in a dark alley. But when it's time to get tough on surfacefeeding insects, it doesn't make any sense to take chances. What makes sense is using the industry standard-DURSBAN insecticide.

More muscle for your money. Nothing's meaner on Chinch Bugs, Billbugs, Sod Webworms and other surfacefeeding thugs. Nothing. And there's simply no better value for liquid lawn care applications.

One tough insecticide. What's more, DURSBAN Turf Insecticide offers excellent residual, low odor and superb broad spectrum control. The kind of



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FOCUS ON:

SEEDING

'VARIETY NOT STATED' NO DEFENSE FOR UNLAWFUL SALE OF SEED

A FEDERAL DISTRICT COURT IN Eugene, Ore., recently ruled that a person does not avoid liability under the Plant Protection Variety Act by selling a proprietary grass seed as "Variety Not Stated."

The case was brought to court by Great Western Seed Co., Albany, Ore., after a farm owner who previously rented land to farmers growing Rebel Tall Fescue for Great Western continued to harvest the seed and label it VNS after terminating the growers' lease.

The case does not put an end to VNS labeling. Rather it states that a company must have relinquished its rights to the seed. If a grower harvests a certain proprietary grass for a seed company, and that company decides it doesn't meet quality standards, the grower may then label it VNS.

The Plant Protection Variety Act was

enacted by Congress in 1970 to give plant breeders the exclusive right to market new varieties.

The contract between Great Western and Roger and Larry Ruckert, owners of G & R Seeds, called for all seed grown and harvested by the two to become the property of Great Western.

As VNS controversies occur more frequently, the seed industry has wondered whether a person can avoid liability for buying or selling proprietary varieties by either leaving them unlabeled or by simply marking them VNS.

The court held that labeling of the seed was irrelevant in determining liability under the act.

George Edwin Keech, the defendant, unsuccessfully argued that his rights to the seed grown on his land were paramount to those of the variety owner, especially where the protected variety was planted by a previous tenant farmer under seed production contracts without his knowledge or consent.

As a result of that case, G & R received the seed crop from the 1987 growing season.

Following the court decision, in early to mid-1988, Great Western inquired whether Keech intended to raise Rebel seed from the plantation established on his property by G & R. The company offered to purchase any such crop on the same terms it paid other growers. No agreement was made between the two.

Later that year, Great Western learned that Keech had harvested and transferred a quantity of seed to a farmers cooperative for processing and sale.

Great Western filed the suit claiming Keech had sold, offered to sell, delivered for sale and transferred possession of the Rebel tall fescue seed.

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If you haven't checked out the Professional C new benefits that make joining PGMS more re	Grounds Management S warding than ever! Her	society recently, then you're in for a surprise. We're offering a bundle o e's what we've been up to and how you can benefit:			
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JANUARY 1990 • LAWN & LANDSCAPE MAINTENANCE

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Lawncare and landscape professionals all over the country are using AQUAGRO[®] soil wetting agents on their problem lawns. They're applying it on a regular basis to move water deep into hydrophobic and compacted soils, slopes and through thatch. And as a bonus they're seeing a dramatic improvement in overall turf quality, with reduced irrigation.

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Here's what three AQUAGRO users have to say.



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"I first used AQUAGRO about seven years ago on a bluegrass lawn with thatch-bound roots. Over a three year period I saw a 50-75 percent reduction in the thatch layer from the bottom; the roots penetrated the soil about three inches and I eliminated the hot-spots. About 90 percent of my customers are on an AQUAGRO program, which I often combine with verticutting. As tough as this summer was, the difference in appearance between treated and untreated lawns was obvious...and that keeps my customers happy."



Joseph Broyles Lawn Doctor of Oyster Bay-Syosset East Norwich, New York

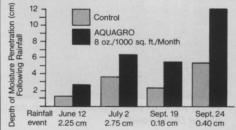
"The soils I deal with are heavy loam often with a compacted layer below the surface. AQUAGRO alleviates compaction by getting water to penetrate this layer. Eliminating standing water helps cure a major cause of fungus diseases...I've been offering AQUAGRO Liquid as an optional service for four years; recommending two, sometimes three applications a year. It's been a solution to a lot of problems, and in some cases helped set me apart from my competition."



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"I am using AQUAGRO Spreadable on about 80 percent of my jobs. Drought conditions have made my customers more interested in products that can both reduce water use and keep their lawns alive. It's clear to me that the wetting agent increases the efficacy of fungicides, soil insecticides and fertilizers....I am able to sell the application as a companion to aerating and my customers recognize that the cost is offset by reduced water use and not having to pay for replanting."

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AQUAGRO moves even the briefest rainfall or irrigation deeper into the soil profile so less is lost to evaporation and run-off. Deeper water penetration also stimulates deep root growth for greater drought resistance.

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FOCUS ON: LANDSCAPE

LANDSCAPERS RECOGNIZED FOR QUALITY WORKMANSHIP, DETAIL



Pacific Water Art Inc., Mountain View, won the Special Effects Award.

THE CALIFORNIA LANDSCAPE Contractors Association presented landscape awards during its annual covention in November. The 1989 awards attracted 217 entries from throughout the state.

This annual competition is different from others because judges actually visit all the project sites rather than judging solely from photographs, said Larry Rohlfes, CLCA's director of communications.

"Our judges literally spend three weeks driving up and down the state," he said. "It's an exhaustive process, but a very thorough one."

All entries are evaluated on a point system. The three categories are: quality workmanship, which counts 60 percent toward the total; quality of landscape construction detail, counting 20 percent toward the total; and quality of landscape materials, also counting for 20 percent of the total.

Judges were: Walter Bray, Advanced Drainage Systems; Ray Swanson, supervisor of parks and buildings for the city of Saratoga; and Lyle Fredrickson, Carducci & Associates.

The tentative entry deadline for the 1990 contest is Aug. 1. Entrants must be CLCA members in good standing. An entry fee of \$100 is required along with six horizontal color slides of the project being entered.

For renovation categories, three "before" photos are required in addition to the stipulation that 40 percent of the original job is still remaining.

Following is a list of the 1989 major award winners.

Winner of the Sweepstakes Award for best overall entry in the contest was Ecosystems Imagery Inc., Encinitas, for work performed on the Fairbanks Estate in Rancho Santa Fe. This project also took first place in the Residential/Commercial Irrigation category for any manual or automatic irrigation system.

The winner of the President's Trophy for best entry from all residential categories was R & D Landscaping/Irrigation, Anaheim and Beverly Hills, for its work on the Humble House of the Butterfly Tile, Beverly Hills. The project designers for R & D were Louis and Carmen Warschaw.

The Special Effects honor for best use of unique methods or materials, and/or special artistic effects was awarded to contractor Pacific Water Art Inc., Mountain View, for its work at Plaza Park in San Jose. Design for the project was performed by Hargreaves & Associates, San Francisco.

The Judges Award for best landscaping under \$50,000 went to Pacific Coast Landscape, Cambria, for the residence of Juanita Hitch. The project designer was Lloyd Gracey. Pacific Coast also won in the Small Residential category for any single family residence with landscaping costs not exceeding \$10,000.

Redwood Landscaping, Santa Rosa, was honored with the Ben Slade Memorial Award for best landscape maintenance from the eight maintenance categories. The project was The Lakes at Santa Rosa Corporate Center designed by Wilson Hentzen, Orange.

The Jeff Driscoll Award for best entry from all commercial installation categories was received by Collishaw Construction Inc., San Jose, for the Santa Clara Convention Center.

The Excelsior Award is intended to recognize the special talents of someone who

has been a CLCA member for less than one year and shows qualities of striving higher. The winner was Terrain Inc., Glendale, for the Donald C. Tillman Water Reclamation Plant, Van Nuys. The designer for the project was Koichi Kawana, Environmental Design Associates, Santa Monica.

Humanitarian Awards are given for any project in which more than 50 percent of the total labor and materials for landscaping are donated. This year two entrants in this category received awards.

The first recipient was the Los Angeles/San Gabriel Valley Chapter of CLCA for work done at the Henry Soto Water Conservation Garden,

MOORE LANDSCAPES WINS ILCA GOLD AWARD

MOORE LANDSCAPES Inc., Glenview, Ill., has been named a 1989 Gold Award Winner by the Illinois Landscape Contractors Association.

The firm won ILCA's top honor for grounds maintenance at Mission Hills Country Club Village, an exclusive, 160-acre condominium and townhouse community with an 18-hole golf course in Northbrook, Ill.

Maintenance at Mission Hills poses special problems. These include an increased maintenance requirement caused by maturing tree and over planting. Also, plants are forced to compete for light and water because of excessive shading on the property.

Creating a more efficient use of water involved mulching trees and planting beds with shredded hardwood, using wetting agents and increasing the mowing height of turf to three inches during the summer, said Victor Moore, the company's vice president.

The ILCA awards are presented to landscapers who beautify the environment and whose work represents high industry standards, according to Gary Borgman, chairman of the ILCA awards program committee.

This is not the first time Moore's work at Mission Hills has been singled out for recognition. In 1975, the American Association of Nurserymen presented Moore an award for the landscape installation of the community's initial phase.

Moore Landscaping was formed in 1948 and has a wide range of clients including office and industrial complexes, parks, zoos, shopping malls, military bases and schools.

Arcadia. This project was designed by Robert Cornell, Cornell & Wiskar Landscaping Inc., Los Angeles.

The second winner was the Sacramento Valley Chapter of CLCA for landscaping at the Sacramento Vietnam Veterans' War Memorial.

In the regular categories, the Medium Residential honor - for landscaping costs between \$10,001 to \$20,000 - went to Adler Rand Landscapes, Folsom. The winning project was the George Martin III Residence, Elk Grove. Design was by landscape architect David Gibson, Sacramento.

In the Large Residential - costs from \$20,001 to \$50,000 - the winner was Koyama Landscaping, Temple City. The project was the Sasaki Residence, Pomona, with design by Takeo Uesugi & Associates, West Covina.

For the Custom Residential category -\$50,001 to \$85,000 - Western Landscaping, San Mateo, received the honor. The company was contractor and designer for the Behar Residence in Hillsborough.

In the Residential Estate category -



Best residential landscape under \$50,000.

\$85,001 to \$150,000 - Lehmann Landscaping Co. Inc., San Mateo, took first place for the Olivier residence, Hillsborough. Design was by Cliff Jones, Redwood City.

The award for Residential Estate Unlimited went to Southwinds Landscaping, Fountain Valley. The project was Las Cascadas, Santa Ana, with design by Stephen Schwartz & Associates, Lake Elsimore.

Three awards were presented for commercial/industrial landscaping.

The first award was the small category for landscaping costs under \$125,000. The winner was Heritage Landscape Inc., Granada Hills, for the Cusumano Plaza work in Burbank. Fong & Associates, Costas Mesa, designed the project.

For Medium Commerical/Industrial costs from \$125,001 to \$300,000 - Toddco Landscape Co. Inc., Venice, won first place. The winning project was the Los Angeles County Museum of Art - Pavilion of Japanese Art.

Winning the Large Commercial/Industrial award was B.L. Cohen Landscape Inc., San Jose, for landscaping at A.T.T. Western Regional Office, Pleasonton.

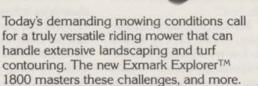
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A Dose of New Cash Bolsters Barefoot's Growth Plans

M AINTAINING A strong, third-place hold in sales revenues for the lawn maintenance industry behind ChemLawn and TruGreen respectively, Pat Norton knows his company will never be the biggest, but he's confident it can be the best.

Soaring to revenues of \$49 million in 1989, a 20 percent growth from 1988, Barefoot Grass expects to expand into at least nine new markets during 1990.

And that's not all. With a strong dose of new cash, Barefoot hopes to complete several acquisitions this year.

"We're real pleased with what we've accomplished. We've grown consistently and want to maintain that as long as possible," said Norton, president of the Worthington, Ohio-based company.

"There's an awfully big lead out there. I don't think we'll be number one, but I think we'll be the best."

Barefoot, a privately held company, sold the majority share of its firm to the Chicago-based investment firm Golder, Thoma & Cressey. Norton is counting on the investment firm to provide the catalyst for growth into the early 1990s.

The sale of the majority share was completed in April 1989 after Golder, Thoma and Cressey approached Barefoot management in late 1988.

"Their intent is to make the business grow in order to make their money," Norton said. "It gives us the financial firepower to compete with the large corporations in the industry."

Sixteen employees still maintain an interest in the company now owned by the \$400-million private investment firm.

"We thought it was a good opportunity to accelerate our growth rate. We worked very long and hard on that (the deal), and so far are very pleased with the results," Norton said.

Norton wouldn't reveal the purchase price or how much the investment firm plans to put into Barefoot Grass. But Norton said the firm is considering the possibility of taking the company public in the coming years.

Barefoot currently operates in 47 markets represented by 26 franchises and 25 companyowned operations. Size determines the company's representation in any given market area: The average franchise handles an area with about 200,000 households. Anything larger is prime for a company-owned operation.

Barefoot offers its services nationwide, but is best represented from Denver to the East Coast. Anticipated expansion may widen its scope.

Norton wouldn't elaborate on which markets the company intends to expand into, nor would he indicate where acquisitions would take place.

Barefoot emerged in the early 1970s as a division of O.M. Scott & Sons Co. It came into its own in 1975 and was sold to The Toro Co. in 1979. Two years later, Toro sold out to a group of Barefoot managers.

In 1979, the company reported revenues of \$2 million, but as it moved out of the Midwest and in-



BAREFOOT GRASS

Headquarters: Worthington, Ohio.

Founded: Began as a division of O.M. Scott & Sons Co. in the early 1970s. Later owned by Toro before selling to current management.

Owners: The Chicago-based investment firm Golder, Thoma & Cressey holds majority interest.

Primary Services: Lawn maintenance including fertilization, weed control, insect and disease control, aeration, seeding and tree and shrub care.

Employees: 500 year-round. 1989 Sales: \$48 million.



to the national arena, revenues grew rapidly reaching \$22.4 million in 1986.

The next two years brought revenues of \$30.9 million and about \$40 million in 1987 and 1988 respectively. Most of the revenues are derived from residential services; commercial business represents about 10 percent of total revenues.

In 1981, Barefoot began with 33,069 customers. The company followed in 1982 with a 22.6 percent growth reaching 40,555 customers. The next seven years saw: 1983, 50,402 customers a 24.3 percent growth; 1984, 71,277 customers a 41.4 percent growth; 1985, 100,311 customers a 40.7 percent growth; 1986, 130,103 customers a 29.7 percent growth; 1987, 172,776 customers a 32.8 percent growth; 1988, 205,595 customers a 19.0 percent growth; and 1989, 235,464 customers a 14.5 percent growth.

Norton came to Barefoot Grass 10 years ago as director of finance and administration. He was part of the management team in 1981 that bought Barefoot from Toro. He became president about five years ago. Far removed from the lawn maintenance industry, Norton previously worked for Arthur Anderson in Cleveland, Ohio. Although he didn't have a background in the green industry, Norton said, he sees a number of similarities in the two fields.

"I think public accounting is similar to lawn care in that there's lots of CPA firms that are basically offering the same service," he said. "Being successful in public accounting is based on your people, as well as what you offer and deliver. I guess some of that background has helped me in lawn care."

Norton said he left the huge accounting firm to go to a company where he could have more of an impact.

"Basically I've gotten everything I've wanted and more out of making the switch," he said.

Like other companies, Norton has followed the green industry's diversification trend with great interest. Unlike others, however, he has no current plans to jump on the bandwagon.

"We think there's still good growth opportunities in lawn care," Norton said. "We offer our customers a number of additional services, but we have yet to test mowing. It's a totally different business. That's not to say we won't ever."

Barefoot Grass franchise and company-owned operations use granular products for fertilization, preemergents and insect control, but use liquid products for weed control.

"We feel that's what the consumer wants and what we know how to deliver," he said. "We like dry products and feel that over time if you apply the right products at the right time in the dry form, you're going to get better performance."

Employing nearly 500 workers year-round throughout companyowned operations, employees complete marketing, routing, training and maintenance work in the off-season.

The company has adopted a territory managerial system, rather than a crew system, in which each manager is responsible for treating a specific region. Within that territory, each manager handles the selling, treating and most of the problem solving or service calls. Barefoot Grass hopes to expand through additional franchises and company-owned operations. Photos: Todd Yarrington. The territories vary from market to market. The more mature the market, the bigger the territory as far as number of customers. The size of the territory, however, is based on the number of customers an individual can reasonably treat within a normal cycle period of about seven weeks, according to Norton.

Pay varies dramatically from one part of the country to another, but it's designed competitively and filled with bonus, overtime and profit sharing opportunities, probably raising it higher than the industry average.

"What we're looking for is people that want to grow with us and contribute to the profitability of the company, and over time build up a significant profit sharing base for their personal goals," Norton said.

In the following interview, Norton shares his insights on the role of Barefoot Grass in the green industry.

Q: How do you plan to grow with your current lawn maintenance services?

A: We expect to add additional customers throughout the country. We're still growing in mature markets where we've been for 15 years. Obviously not at the same percentage rate as you would grow in a brand new expansion market, but we're still growing.

So we look forward. We've got a portfolio of cities, some are going to be new in 1990, some are two years old, some are three years old, some 15 years old and so on. We see different growth patterns for different branches, but we still think that all of those cities still have growth opportunities within them.

Even in Columbus, Ohio, which is obviously a very mature market with ChemLawn and Barefoot both being based here. Although we've both been here a long time, we're still growing in this market. We're pretty positive on the across-the-board growth throughout the country. Q: You seem to sell your services to the affluent homeowner. How do you attract them to your services?

A: We're selling quality and results. The way you get results is quality people and quality products. That's what we're selling. We sell the consumer on the fact that we're going to put down the

BAREFOOT GRASS COMPANY-OWNED OPERATIONS

CITY	YEAR OPENED
Columbus, Ohio	
Lincoln/Omaha, Neb.	1976
Denver, Colo.	1977
Chicago, Ill.	1977
Cleveland, Ohio	1979
Minneapolis/St. Paul, Minn.	1981
Washington, D.C.	1983
Milwaukee, Wis.	1983
Atlanta, Ga.	1984
Philadelphia, Pa.	1984
Indianapolis, Ind.	1984
Houston, Texas	1985
Baltimore, Md.	1985
Kansas City, Kan.	1986
Tampa, Fla.	1986
Dallas, Texas	1986
Cincinnati, Ohio	1986
Pittsburgh, Pa.	1986
St. Louis, Mo.	1986
Ft. Lauderdale, Fla.	1987
Newark, N.J.	1987
Long Island, N.Y.	1987
Boston, Mass.	1987
Harrisburg, Pa.	1989
Toronto, Canada	1989

right products at the right time to get the desired result which is the same for everybody — a thick, green lawn.

We hire, train and retain people that can do that for our customers. I think that's what service businesses are all about. We're selling the same thing as everybody else in the industry, but they're buying our people, our expertise and the products and services that we deliver. So you try and be consistent, not only with your advertising message, but with what you deliver to the consumer. We work real hard at that.

We offer the prelawn inspection like most people in the industry. I just think we do a good job of marketing, selling and servicing. It all goes together over time to help your company grow. Q: Do you offer just one package or a variety?

A: Different types of programs vary in different parts of the country, but essentially, we would probably offer two alternatives in a given market — usually one with a little more service.

In a given market, we might offer aeration as an additional treatment. We have what we call the basic program which might include fertilization, weed control, insect control and preemergents. And then the option, the deluxe program, which might include an additional aeration treatment as part of that program.

Q: Are you offering mowing services in various test markets? A: Mowing hasn't been a high priority for us. That's not to say it won't be, but we don't see it as an important part of our growth at this point in time.

We don't get a lot of requests for it, quite honestly. It's a little bit surprising. We make recommendations for those inquiries we do get based on our knowledge of who's good or bad in a given operating market.

Q: Would you ever consider subcontracting for mowing services?

A: We feel more comfortable making recommendations. If it's not our employee, if we don't have control over the service performed, we don't want to collect from the customer in our name and have someone else responsible for doing it. That's not consistent with what we think is important.

Q: Does the lack of qualified

workers have any affect on future mowing possibilities?

A: That hasn't really factored into it. We just think it's a different business, as opposed to aeration or seeding and those types of things which we feel are add-ons to the existing lawn care business.

There's a lot more mechanical expertise, knowledge and problems that we just don't currently feel comfortable knowing how to solve all those. And rather than go in and try to figure all that out, we figure that as long as the growth is available in lawn care that's where we're going to go.

Several years from now it may be different and we'll take a long, hard look at those kinds of things. We'll probably look at expansion through acquisition as opposed to trying to figure out everything by ourselves.

Q: To what do you attribute your 20 percent growth last year? A: Quality of service and our ability to do a good job of marketing are the main reasons that we've achieved that kind of growth.

Q: Do you expect your 20 percent growth rate to continue in the 1990s?

A: We'd like to try and keep it at that level. The main thing that would increase it would be acquisitions. If we accomplished significant acquisitions, obviously we could accelerate that growth rate.

When you're growing as rapidly as we have, there's lots of opportunities for people to move up quickly within the company and to become managers as opposed to applicators. I want to keep that opportunity available as long as possible.

I think one of the important things that we offer is the ability to either grow within the company or to become a franchisee. Most of our franchisees are former employees. That's a really exciting opportunity to offer.

There's two different career paths for the new applicator or the new territory manager within our company. So if you've got an entrepreneur that's 22 years old, he can work for us for three years or so, get the experience and then go out on his own. Or if he says I want to grow within the company, he has the opportunity obviously to move rapidly through the management of company-(continued on page 26)

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

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

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

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

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

Reducing callbacks and cancellations is the key.

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

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

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



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Bare Foot (continued from page 24)

owned operations.

O: What goals do you have for your company in the next three to five years?

A: Our long term goal is to hit \$100 million in total revenue, and to see how quickly we can do that. I'm sure that over time we will do that, but the sooner we can achieve it, the more successful we'll feel we've been in growing.

If we grew at 20 percent a year, it would probably take us between four and five years. But depending on our acquisitions, it would be nice to do that within a threeyear period. You'd have to make some good acquisitions along the way to make that happen.

O: How much untouched business do you think there is in the industry?

A: I think there's a lot. What I compare the industry to is the situation right here. When I came down to Columbus from Cleveland 10 years ago, the lawn care industry was much more dominant or mature in Columbus than in Cleveland at the time.

In Columbus, a huge percentage of people use a lawn care service in most upper- or middleincome neighborhoods. I don't think that any cities have reached the saturation point, but I don't see any reason that they can't all reach mature levels over time if the industry continues to do a good job of servicing the needs of the consumer.

Q: So would you say there's unlimited growth potential?

A: I think unlimited is probably a little bit bold. There's a lot of cities where 80 percent to 90 percent of the target customers aren't even close to being covered. I think there's a lot of growth still to be achieved, but we've got to solve customers' problems and satisfy their needs, and if we do that, then we'll get to that kind of density in every market. When we do as an industry, you're going to see some continued good growth.

Q: How has traditionally low industry pricing affected Barefoot?

A: We'd prefer that it didn't exist, but we've seen it over the years enough to realize that it's just part of the business. That's part of the competitive framework.

I think most consumers are in-

Q: So you would never lower your prices just to compete with another company in the area?

A: We have a strong policy to maintain our pricing structure. That's real important to us. We think the most important thing to growing the company is delivering the quality that we're advertising. If we meet them (competitors) on price, we wouldn't be able to deliver that quality because we spend more on products than those types of companies do.

We're going to continue to offer our quality services, and we'll continue to charge a fair price. Q: What advice would you offer an operator who's having trouble raising his pricing structure? A: Price it fairly. Communicate that to your existing and potential customers. Let them make the decision.

If you compete with other companies on price, then you win some of those and you lose some

CITY

Lima, Ohio

Madison, Wis.

Logan/Athens, Ohio

Lake Geneva, Wis.

Des Moines, Iowa

Raleigh/Durham, N.C.

Winston-Salem, N.C.

Fort Collins, Texas

Colorado Springs, Colo.

Warren/Youngstown, Ohio

Appleton/Green Bay, Wis.

Rockford, Ill.

Canton, Ohio

Detroit, Mich.

Lexington, Ky.

Toledo, Ohio

Charlotte, N.C.

Richmond, Va.

Austin, Texas

Roanoke, Va.

Louisville, Ken.

Memphis, Ten.

BAREFOOT GRASS

FRANCHISE OPERATIONS:

of those. And you end up not being able to deliver the quality that the consumer wants and you lose over time.

If you have the lowest price in town, you may have a lot of customers for a given year, but we haven't seen anybody that's successfully competed on price as their primary method of competition. We compete in enough markets that we've seen lots of people try that. That doesn't mean that that's not effective for a short period of time. Consumers, I think, eventually make the right decision and make that decision based on quality, not on price. Q: How do you figure a profit into your pricing structure?

A: We have a fairly complex budgeting process, of which obviously, product pricing, equipment and labor costs are the most significant components. Based on that, as well as factoring growth into it, we make a pricing decision.

If we can grow more rapidly to increase efficiency and labor, we'll avoid a price increase. We haven't historically done lots of price increases. We price fairly when we go into a market and then improve our margins by becoming more efficient and getting more customers, which is, I guess

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a different strategy than most companies. Some companies will come into a market very low, try and build a customer base and then raise prices. We don't think that's the way to do it.

Q: When you enter a new market, do you start with the price that you want to keep consistently? A: Essentially. Obviously, you can never know long-term what's going to change or what's not going to change. But it's our intent to price it fairly.

We look at the pricing of competitors and use that as a gauge. If all the major companies in a given market are much higher than what we're used to, then we're going to look at raising our prices to meet them. Or if everyone is lower than what we're used to, we'll take a look at it and usually find a reason for it.

If you have a much higher labor cost in a given part of the country, you're going to have to charge more money for your services. If there's an awful lot of insect problems or whatever in a given part of the country, you're going to have to apply expensive products to control those insects and you're going to have to charge a fair price to be able to pay for that.

If a given market has very few insects or weed problems, that might justify a lower price than some other markets. Those are the kinds of things that we look at when we do pricing.

Q: How accountable are the franchise owners to Barefoot? A: It's very tightly bound. We think that the use of our name is real important and we're not going to have someone out there using the Barefoot name that isn't doing a quality job, using quality products, being environmentally sound and all those sorts of things. The requirements of the franchisee are fairly significant that they follow the guidelines established by us.

Q: How do you intend to market franchises in the 1990s? Is it something that's becoming more appealing?

A: I think it's a good growth opportunity for us and for potential franchisees. We've had some really good success stories in which people have worked for us and then gone out on their own, but retained the affiliation with Barefoot through a franchise. They find themselves growing

1989 1989

(continued on page 28)

When Rick Steinau moved up to the performance of TURFLON, his customers gave him a big thumbs-up.

"TURFLON* herbicides give us about 95% control of problem weeds. The standard three-way products give control in the 80-85% range."—

Rick Steinau, president Greenlon Lawn Care Services Cincinnati, OH

In the lawn care business, you know that exceptional performance reduces callbacks and cancellations—and costs less in the long run.

Less callbacks.

"We started using TURFLON three years ago," explains Rick Steinau. "TURFLON simply does a better job on the hard-tocontrol weeds like spurge, oxalis, ground ivy and wild violets. These are the problem weeds that customers usually complain about most. With TURFLON, we've seen a 25% reduction in weed-related callbacks and a 15% drop in cancellations."

More savings.

"We are definitely saving money by using a premium herbicide," continues Rick. "We know that a treatment with TURFLON costs about 50¢ more per lawn than a standard three-way herbicide, but we actually realize a 30% savings in our herbicide program."

Rick Steinau knows that the performance of TURFLON herbicide has made a big, big difference in his business. Just think what it can do for yours. Call us to find out more. 1-800-373-2DOW (2369).



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TURF FEEDER BEEDER BEED

Now you can save time and money by applying both fertilizer and herbicide in one operation. We've combined a 25-4-8 fertilizer base (blended with 10 percent coated, slow-release urea nitrogen from sulfur-coated urea) with Trimec, a patented combination of three herbicides: 2,4-D, MCPP and Dicamba. It will control such lawn weeds as dandelion, chickweed, knotweed, plantains, henbit and spurge. So now you can provide a balanced feeding for the growing season *and* control a wide range of broadleaf weeds. Only from Lebanon — your source for premium quality turf products.





Bare Foot Grass was featured as one of Inc.'s fastest growing companies.

Bare Foot (continued from page 26)

their own business very successfully.

Right now our main focus is not to actively market the franchises because we've gotten enough interest from two groups: our employees and existing franchises. We've been growing rapidly in the franchising area without marketing it.

That's not to say that at some point in time we wouldn't do that, but our preference would still be to sell it to someone with experience in the business. We think lawn care is different enough from other businesses that the experience in handling chemicals, dealing with customers, solving lawn problems, etc., is real important.

We think it's tougher when you go out and mass market franchising in the lawn care industry and then try and train someone on what their supposed to do. It's easier to say to someone that's been in the business for say five years, here's the way we think you should do it in a particular market as opposed to here's how you treat a lawn, spray a lawn or whatever. We think we have a very effective system of doing business. We think it's most successful when someone already understands the basics.

Q: Why hasn't Barefoot attacked the commercial market more aggressively?

A: We're consistent from residential to commercial in that we continue to offer the quality alternative at a quality reasonable price. That's not consistent with how most commercial buyers make their purchasing decisions.

A lot of them seem to make their decisions just based on price. There's always going to be someone that can do it less expensively than you. We don't want to get into bidding wars and we're not going to drop our prices to what we feel is an inadequate level to deliver the kind of service that we want to deliver. We get some of that business, but we don't get huge volumes.

Q: What issues must lawn maintenance operators tackle to be successful in the 1990s?

A: Government regulation comes to mind. Just the ability to have reasonable regulations. I think it's achievable, but I don't think it'll be easy.

We're getting more and more involved. We were probably like many other companies, just waiting to see what was going to happen and feeling like we couldn't influence regulation. Now we've decided we have to get involved and try and help the situation. So we're getting more involved with PLCAA and other groups to try and be part of a group effort to solve the problems that are going to continue to proliferate.

I respect the consumer and if they've got a question we, as a responsible company, will answer that question and provide any information that they require. But when the government mandates what that should be, the vast majority of the public out there doesn't want to know. I think the industry has to police itself. If we do a good job of that, it will help to make regulation reasonable. (continued on page 67)

Circle 33 on reader service card

For the cost of a candy bar, Bob Kapp made the sweet move up to TURFLON.



"Our customers expect and demand quality —and we deliver. If it costs an extra 50¢ a lawn to keep customers, it's well worth it."—

Bob Kapp, President and CEO Kapp's Green Lawn Munster, IN

How much is customer satisfaction worth? For Bob Kapp of Kapp's Green Lawn, it's worth the performance difference that TURFLON* herbicide can provide.

What price customer satisfaction?

"We switched to TURFLON two years ago because we weren't pleased with our previous herbicide," says Bob Kapp. "Cost has never been a deciding factor in the products we use. The extra 50¢ per lawn for a treatment with TURFLON herbicide doesn't make a bit of difference. In this day and age, you simply have to retain customers—it costs too much money and time to replace them."

Its rewards.

"TURFLON did a much better job, particularly on our problem weeds like wild violets, ground ivy and spurge," Bob continues. "Since switching to TURFLON, we've reduced our weed related callbacks and service cancellations by 50% from a year ago."

With performance like that, you'll be able to add some sweetness to your bottom line. Call us to find out more. 1-800-373-2DOW (2369).



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Circle 6 on reader service card

Proactive User Groups Curbing Harsh Regulations

THE ISSUE OF POSTing and prenotification for pesticide treatments continues to receive radically different receptions in various states.

A Pennsylvania bill, for example, calls for 18- by 24-inch posting signs and would allow each individual on the state's central registry to refuse an application being made within a 1/2-mile radius three times a year. In New York, where the first real controversy arose, appeals are still pending.

But in other states, such as Connecticut and Florida, pesticide applicators and environmentalists (often characterized as "hypersensitive" by the green industry) have combined efforts to produce regulations acceptable to both sides.

Jim Wilkinson, executive director, Pesticide Public Policy Foundation, said the formation of state user groups and alliances, and their proactive responses, is vital to obtain reasonable regulations and legislation.

"In states like Indiana and Washington, the user groups have put together what they would like to see included in regulations and then basically ask that that be adopted," he said. "That makes it relatively easy to live with."

Two factors prevail in explaining such drastic attitudes toward proposed regulations in different states, he said. The first is how fast the industry becomes a part of the process. An already existing alliance of operators will be much more effective.

The second is the intent of the regulators and how much they will allow the industry to get involved. If the intent is to create reasonable and safe regulations, cooperation between the two is more easily accomplished. But if the intent is to severely limit operators, industry input will be delayed or ignored.

"There is a definite move toward groups becoming more active," he said. "When that happens the chance of getting fair legislation is always better."

One tool that has been helpful to user groups is a set of model regulations developed by the American Association of Pest Control Operators.

"The AAPCO model provides a good starting point," Wilkinson said. "Legislation doesn't have to copy it exactly, but it's a rational set of standards that can be changed. It can help in starting a rational discussion."

While the green industry is having more success in getting reasonable laws and regulations passed, those opposed to pesticides still take an active interest. Within about four years, Wilkinson said, probably 40 states will have posting and prenotification laws or regulations in effect.

The pesticide foundation assists individual state organizations, but Wilkinson said, it's better for the foundation to remain behind the scenes.

"We'll provide the user groups with whatever we can to help, but it isn't wise for us to be visible in the state," he said. "It doesn't look good to legislators to have an outside group barge in and tell them what to do in their state."

Following is a state-by-state update of posting and prenotification activities from the past year, and those that are expected to take place this year.

COLORADO.

Steve Day of the Colorado Pesticide Applicators for Responsible Regulation is on the committee reviewing proposed language for posting and prenotification.

The major breakthrough, ac-

cording to Day, is the fact that a new statewide law would preempt any previously enacted local ordinances. This is vitally important because the city of Boulder has enacted tough posting and prenotification ordinances.

A Federal District Court judge recently struck down the city's requirements for indoor applications, but left the door open for the city to enforce its outdoor laws.

Boulder requires the posting of a 12- by 12-inch prenotification sign on the property to be treated at least 24 hours in advance. After the application, a standard 4- by 5-inch sign is required to be posted for 24 hours.

The committee, with representatives from the Colorado Municipal League, Sierra Club, lawn applicators, agriculture and the state, has drafted a bill that will now go to the legislature.

It calls for written prenotification to all customers and 24-hour posting after an application. Signs will probably be the standard 4by 5-inch size.

It also calls for a central registry which chemically sensitive people can have their names placed on for a fee.

"Anytime you get a consensus out of a task force like this, the legislators look favorably at it," he said. "If all varied interests represented on the task force are satisfied, they aren't going to argue with it."

CONNECTICUT.

The atmosphere in New York's neighboring state of Connecticut is much more tranquil. A posting law passed in 1988 and scheduled to take effect last October has been delayed until sometime this year.

The holdup is because the state Environmental Protection Agency has not written the regulations scheduled to be included in the law, said Don Kiley, executive director, Professional Pesticide Users of Connecticut.

It's the first in the country to include posting provisions for homeowners and amateur applicators. Results of a 1988 survey indicated that more than 60 percent of all pesticide applications in the state were made by nonprofessionals.

Another first in the law is the creation of a central registry that does not require a doctor's documentation that the listed person is sensitive to chemicals.

Anyone wanting to know when applications will be made within 100 feet on abutting property can be placed on the registry.

To sign up for the registry, one has to provide the name, address and telephone number of all neighbors who have pesticides applied to their property and the applicating company's name, address and phone number.

The major issue the EPA has to tackle in writing the regulations is the exact wording of the signs. Kiley said it is hoped the regulations are written and finalized before the spring season gets under way.

The law was the result of a joint effort between pesticide applicators and state environmentalists, and satisfies the concerns of both sides, Kiley said.

"We had negotiated the entire agreement before taking it to the legislature, and it passed essentially unchanged," Kiley said. "We feel extremely good about that. It blew the legislators' minds to have the environmental concerns and the professional applicators walk up to them and say 'We agree on this.""

FLORIDA.

Two bills were signed into law last summer, but an exact date of when they will go into effect has not been set.

One bill created a central registry. The other called for posting and prenotification for all customers and neighbors requesting it.

Posting provisions call for standard size signs to be left at the property for 24 hours, and include the universal symbol for the family — an adult, a child and a dog standing on grass with a cross through the drawing.

Prenotification to customers will be made upon request. For the

central registry, the burden of proof is left with registrants. They will have to pay to be on the registry and have a doctor's proof that they are actually chemically sensitive.

GEORGIA.

The major objection to a posting bill now in committee is the 6by 8-inch sign, according to Tom Delaney, director of state government affairs for the Professional Lawn Care Association of America.

The legislation calls for the signs to have 3/4-inch letters reading "Caution. Pesticide application." It should also include the name and telephone number of the applicator.

The bill also calls for providing the common name of the pesticide and phone number for the nearest poison control center to the customer at the time of application.

The bill is expected to make it

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LAWN CARE APPLICATION PLEASE KEEP OFF

TIME:

Please remove

day following

application

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DATE

to the Senate floor again sometime this year. If the industry and PLCAA are unsuccessful in reducing the size of the sign, they may introduce another bill, Delaney said.

ILLINOIS.

A lawn posting bill went into effect the first of this year. All lawns are required to be posted for 24 hours with standard size signs reading: "Lawn care application. Stay off grass until dry."

Prenotification is mandatory for all customers. The same information will have to be provided to abutting neighbors requesting the information. This will include the name of applied pesticides, application rate and concentration.

Another provision to be phased in by January 1992 will call for the retention of wash water. Jay McNalis, TurfTreet Lawn Service, Crystal Lake, said the rules will be fairly easy to com-

ply with.

While the user associations do not exist in the state, several lawn maintenance individuals did take part and had input when the rules were being written.

It is hoped that these statewide rules will curb municipalities' interest in passing their own ordinances regulating pesticide applications to lawns.

Several cities have passed such ordinances. Oak Park's law calls for 72 hour posting. Also there is to be one sign per every 50 feet of frontage. Franklin Park has passed an ordinance prohibiting any pesticide application on cityowned property. This includes parkways fronting residential homes.

Chicago has introduced a similar piece of legislation. It was shelved after pressure from several groups and operators, but may resurface at any time.

State rules do not supersede local regulations in Illinois.

"The city of Chicago would

never accept that," McNalis said. "They want to retain their autonomy and will not give up their right to regulate at the local level."

INDIANA.

Regulations being written by the State Chemist calls for a 4- by 5inch sign. Its background and lettering should be in contrasting colors, and it's to read: "Lawn care application. Keep off until dry."

Unlike most states, the applicating company's name and logo may appear on the signs.

Notification at the time of application includes: Business name and telephone number, name of licensed applicator or registered technician, the common name and concentration of each active ingredient and any label precautions after application.

It's the customer's responsibility to remove the sign after 24 hours. The rules include no provivions for prenotification of neighbors.

IOWA.

Rules written by the Agriculture and Land Stewardship Department went into effect Dec. 20.

The posting section of the rules calls for standard size signs to stay up for 24 hours after an application. They should be posted between two and five feet from a sidewalk or street and read: "This area chemically treated. Keep off. Do not remove sign for 24 hours."

The rules call for all customers to be given prior notification. A central registry may be created and maintained by individual cities. People on the list would have to be notified 24 hours before an application is made on adjacent property.

For cities that choose not to maintain a central registry, abutting residents may contact the applicator themselves and provide name, address and telephone number. The applicator will then have to notify those people. If they cannot be reached during business hours the day before the application, the operator may leave a written notice at the time of application.

MICHIGAN.

Currently regulations are in the process of being written by the Department of Agriculture.

Tim Doppel, Atwood Lawn Care Inc., Sterling Heights, said specific posting and prenotification provisions were kept out of the law, giving the industry more input with regulations.

Using the AAPCO model has been discussed and, Doppel said, he expects the final regulations will follow the model closely.

The Professional Lawn Care Association of America recently scored a victory over one of three Michigan municipalities attempting to enact posting and prenotification laws.

The U.S. District Court overruled the city of Milford's harsh regulations which included paying an annual \$15 fee to operate in the city, a 90-day decal posting for businesses, 24-hour prenotification to chemically sensitive neighbors and 72-hour posting after applications.

Two other cities, Davison and Livonia, have started working on legislation. It's hoped the ruling in Milford will have a chilling effect on the advancement of these regulations, Doppel said.

MINNESOTA.

A law calling for the use of contracts for pesticide application went into effect this year. The contracts should contain basic information including the number of applications, cost, pesticides to be used and the starting date.

Compliance should be fairly easy, according to Terry Ambroz, executive director, Minnesota Pesticide Information and Education.

"It's not all that earth shattering," she said. "It's something a good number of companies are already doing."

Exact dates are not required as in New York, just an approximate date of when the first application will be made in the spring.

St. Paul's city council has established a Toxic Chemical Task Force to make recommendations about the possible banning of all non-organic chemical fertilizers and pesticides in the city.

The composition of the task force is stacked against the industry. It includes two environmentalists, two lawn maintenance professionals, an agricultural education representative, a recycling program representative and two St. Paul youth.

The group will meet through February before making a final recommendation to the council.

During its first few meetings, the group was aggressively antilawn care, said lawn care representative Reid Anderson, Fertilawn Lawn Care, Bloomington.

"They're taking shots at the industry based on misinformed opinions and poor and incomplete information," Anderson said. "They're more interested in legislation to completely ban herbicides and pesticides, rather



OLDHAM
CHEMICALS
COMPANY, INC.Image: Company of the second second

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- B. 5-HP Honda engine coupled to a Hypro D-30 Pump.
 C. Electric hose reel with 300 ft. of 1/2" hose mounted curb side or to back of truck.
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than being educated about safe and proper use of the materials."

NEW YORK.

The latest news in the saga of the New York battle is that enforcement was scheduled to begin Aug. 15, but an appeal is still pending.

According to Marilyn DuBois, director of the New York Department of Conservation Bureau of Pesticides, all the provisions of the law are being enforced. DuBois said she doesn't yet have a report on how many operators have been cited. The fine for a first time citing is \$500.

Oral arguments were heard Nov. 1 in the New York Appeals Court.

"I expect it won't be long before we get an opinion," DuBois said. "But no matter what the decision, one side is going to be dissatisfied and there is one more opportunity for an appeal."

Operators thought they had a victory earlier this year, but that was quickly rescinded when Judge Paul Cheeseman changed his ruling.

While the legal battles drag on, operators are trying to conduct business as usual. Most are complying to parts of the law, but it is proving to be a costly endeavor.

The cost of complying to all the provisions could range from \$20 to \$40 per lawn or even higher, said Don Burton of Lawn Medic in Bergen, N.Y.

As written now, the New York law imposes several new burdens upon lawn care operators:

•Written customer contracts must provide "approximate" dates of chemical applications as well as alternative dates in case of inclement weather. Cover sheets must be provided with specific information on the pesticides being applied.

•Signs posted within 75-foot intervals should be 5½ by 8½ inches; within 100-foot intervals must be 8½ by 11 inches; and within 150-foot intervals must be 12-by 12-inch signs. All signs must read "Do not enter this property" in 36-point type, and they are to be posted for 24 hours after the application.

Regulations covering cover sheets and decals warning of pesticide use are under injunction, DuBois said.

The most objectionable provi-

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sions, according to Burton are the approximate dates and the wording of the signs along with the varying sizes.

For the coming season, the state has agreed to let operators offer customers a contract waiver that would allow a contract to be signed without the dates being specified. But customers would still have to be notified by telephone within 24 hours of an application.

But just because operators are complying to the law doesn't mean they're giving up the fight. Burton is spearheading a legislative lobbying effort to get a new, less stringent law passed.

"The legislators we've contacted so far share our concerns and have voiced a feeling for changes," he said. "But we don't know how widespread that feeling is. The important thing now is to convince some of the key legislators so they can help us."

OHIO.

The rule for posting went into effect in June, but applicators had a grace period until the first of this year to conform to exact size provisions.

The rule calls for posting a 4by 5-inch sign and written customer notification that the sign should be removed after 24 hours. The signs must be posted within 5 feet of the access point and cannot have a company logo or other advertising displayed on the sign.

The rule also calls for the owner to be notified in writing on or before the date of the application. This notification should include: brand or common name of applied pesticide; chemical type; maximum end use concentration and rate of application; special label instructions applicable to customer; applicator's name and telephone number; and date and time of application.

If a written request from an abutting property owner is made, the applicator must make a reasonable attempt a business day before application to provide that person with his company name and telephone number and approximate date and time of application.



Two radical bills introduced to the legislature last year seem doom-

ed for failure. These called for 18by 24-inch posting signs, preposting 48 hours in advance, written contracts, pesticides to have a discernible odor and the creation of a central registry that would allow individuls to refuse applications within ½-mile of their property up to three times a year.

Bill DeHaven, regional technical manager for ChemLawn in Philadelphia, said even though the bills were reintroduced last year, a lot of their supporters have backed off.

In the meantime the Department of Agriculture is working on regulations to implement the Pest Control Act passed in 1987. Expected to go into effect sometime this year, the regulations do not address posting, but do call for the prenotification of neighbors upon request.

A less controversial posting bill was referred to the House Agriculture and Rural Affairs Committee in September. This bill calls for 24-hour posting of standard 4- by 5-inch signs reading "Lawn Care Application: Keep off grass until dry."

It also calls for the signs to be placed at 50-foot intervals along the boundary of the property where a public sidewalk, rightof-way or public property abuts the application site.

The main thing operators would want changed in this bill is the 50-foot interval, DeHaven said.

RHODE ISLAND.

Posting began here in 1987, and complying has not been much of a problem, according to, Paul Mc-Donough, Tru-Green, Warwick, R.I.

The law requires posting signs at points of entry for 72 hours after an application has been made. Signs are 4- by 5-inches and read "Lawn chemicals applied. Keep posted for 72 hours."

Also under the law, abutting neighbors may request to be prenotified of applications, and that must be done 48 hours in advance.

The law is fairly easy to comply with, McDonough said. His only complaint is the 72-hour posting. The number was arrived at arbitrarily and is too long of a period.

"It really has nothing to do with any of the materials we use," he said. "Nothing we use has anything close to 72 hours for recommended re-entry to property."

Also, a lot is left to chance with the long posting period, but he claims the Department of Environmental Management is fair when it receives a complaint.

"Once you post, there's not much you can do. It's out of your hands," he said. "Anyone can come along and take the signs down, whether it's the property owner or kids out having fun.

"Fortunately the DEM realizes that, and when they do get a complaint they're basically looking to find out if signs were posted in the first place."

VERMONT.

The posting bill being considered was patterned closely after the AAPCO model.

It calls for standard 4- by 5-inch signs to be posted for 48 hours along the perimeter of the area where pesticides will be applied. The signs are to stand at least a foot from the ground.

Exact wording is not specified in the bill. That would be included in the rules the Department of Agriculture would write to promulgate the law when it is passed.

The bill also calls for written contracts between applicator and customers. The contract should include:

•Number and approximate dates of applications, total cost, brand and generic names of active ingredients.

•Any warnings that appear on the pesticide label, any information provided by the U.S. EPA that identifies potential hazards of the used pesticide.

•The company name, address and telephone number.

All of the above information must also be provided to abutting neighbors at least 48 hours before applications.

WASHINGTON.

Regulations written by the Department of Agriculture last year cover posting, prenotification and the creation of a central registry system.

Posting will be for 24 hours with 4- by 5-inch signs reading "Keep off until dry." Signs should be placed at the point of entry. Regulations permit the applicating company's logo to appear on (continued on page 70)

Show Attendees View Latest Industry Innovations

HEODDS OF A LAS VEGAS CONFERENCE AND TRADE show being a success is definitely a tossup – judged most often by whether you leave the city a winner or loser.

Despite seemingly overwhelming odds, most exhibitors and attendees were satisfied with what they learned and viewed at the 10th Annual Professional Lawn Care Association of America conference and trade show.

More than 1,300 attendees and 167 exhibitors were on hand at Cashman Field to see the latest industry innovations. They were also part of an enjoyable 10th anniversary celebration which included a slide presentation to the sounds of "Yesterday," and a recount of the infamous June 14, 1979 meeting at Fort Mitchell, Ky., where 34 industry representatives turned out to form what is now the PLCAA.

EXHIBITOR'S DEMONSTRATION COURSE DRAWS CROWD AT PLCAA

DESIGNING A DISPLAY THAT WILL demonstrate your product's features and attract excited customers is every trade show exhibitor's goal. It's not easy, but it can be done.

Like other vendors, Jo Ann Kolley faced that dilemma as she prepared for the Professional Lawn Care Association's trade show in Las Vegas.

Kolley is the trade show coordinator

for Monsanto Co., maker of Expedite,[™] an advanced directed-spray applicator that combines uniform droplet technology with a gravity-fed delivery system. It was Kolley's task to create an exhibit which would draw trade show visitors to the booth to learn about the system.

She supervised the design of a booth that would exhibit all of the features of Expedite. After brainstorming with Mon-



Attendees participate in Monsanto demonstration course.

santo representatives and a display house, Monsanto created the "Overcome your Obstacles with Expedite" course.

The course enabled trade show guests to put the system on their backs and spray demonstration fluid around plants, mailboxes and landscaping. The fluid fell on a black formica floor, showing exactly where the applicator sprayed and how much fluid was applied.

The exhibit was a success, according to Kolley.

"We were busy all of the time," she said. "People enjoy a challenge and the obstacle course provided one for the visitors. Once we got the first group of people to try the system, the flow never stopped."

A promotional campaign also helped draw guests to the booth, Kolley said.

"We sent invitations to PLCAA members at their homes and followed up by delivering a flyer to their hotel rooms in Las Vegas. That reminded them to visit our booth."

Actually using the product gave visitors a better understanding of what it can do for them, Kolley said.

"It's difficult for people to ask questions because they've never used the product," Kolley said. "The design of the booth and the fact the customers actually got to try the system helped them ask questions meaningful to their business."



Attendees shop and compare products at the outdoor demonstration.



"All in all it was another exceptional conference and show," said Jim Brooks, executive vice president of the PLCAA. "We had particularly good comments about the educational sessions."

While attendance was positive, newly elected President Rick Steinau said the location of the exhibit hall in relation to the hotels was a drawback, forcing diminished attendance at the trade show.

"Some exhibitors were disappointed, while others who went for clever interaction had banner conventions, picking up tremendous business," he said. Steinau is also president of Greenlon Lawn Care, Cincinnati, Ohio.

Trade show hours and educational session hours did not overlap this year, giving exhibitors about 10 exclusive trade show hours.

As is the case every year, the association received mixed reviews from exhibitors, according to Brooks. He is encouraged, however, by the overwhelming response to next year's Green Industry Exposition — the result of

WHERE IT ALL BEGAN: PLCAA'S FOUNDING FATHERS

ON JUNE 14, 1979, 34 INDUSTRY REPRESENTATIVES met at Fort Mitchell, Ky., to discuss the development of one national group to represent the fast-growing lawn care industry. At the time, the industry was growing in leaps and bounds, but it suffered from an identity problem.

What resulted from that historic meeting was the formation of the Professional Lawn Care Association of America. Beginning with 162 members in 1979, the association now has 1,247 members.

Following is a list of those who attended the organizational meeting and wherever possible, where they are today. Paul Hairston, Vitalawn Inc., Jeffersontown, N.Y.; Pat Lore and Stan Weber, formerly of Lawn-A-Mat Chemical & Equipment Corp., Westbury, N.Y.; Jerry Amstutz, formerly of Spray-A-Lawn Inc., Orrville, Ohio; Paul D. Schnare, Ph.D., Accu-Grow, Cape Girardeau, Mo.; Ronald D. Baker, Doug Baker, Doug Halterman and Harry Sloan, Leisure Lawn Inc., Dayton, Ohio.; Bob Kautzman, Lawnco Inc., Brooklyn Heights, Ohio; Howard L. Evers and John Hayes, both retired from Tru Green Corp., Atlanta, Ga.: Rick White, Service Master, Memphis, Tenn.; Jerry Faulring, Hydro Lawn, Gaithersburg, Md.; Dave Murphy, Green Valley Co., Shawnee Mission, Kan.; Gordon L. Ober, Davey Lawnscape, Kent, Ohio; Ron Giffen, retired from LESCO, Rocky River, Ohio; Ronald W. Collins, formerly of R.W. Collins, Satellite Beach, Fla.; Joe O'Donnell, Sunbelt Seeds, Norcross, Ga.; Tom Brune, formerly of Atwood Lawn Care, Sterling Heights, Mich.; Fred Rowley, Rollins Lawn Care, Atlanta, Ga.; Ronnie L. Zwiebel, LESCO, Rocky River, Ohio; Jim Kelly, Excel-A-Lawn, Indianapolis, Ind.; J. Martin Erbaugh, Lawnmark Associates, Hudson, Ohio; John Latting, Farm Land Industries, Kansas City, Mo.; Steve Derrick, Orkin Lawn Care, Atlanta, Ga.; Don Burton, Lawn Medic, Bergen, N.Y.; Larry Brandt, formerly of Spray-A-Lawn, Cincinnati, Ohio; Will Schulze, deceased, Finn Equipment Co., Cincinnati, Ohio; John L. Cruse Jr., Easy Lawn Care Co., Kettering, Ohio; Jim Duncan and Rick Eldred, formerly of A-Perm-o-Green Lawns Inc., Austin, Texas; Bill Fischer, deceased Spring-Green Lawn Care Corp., Naperville, Ill.; Richard J.W. Foster, President, Lawn and Landscape Maintenance, Cleveland, Ohio; and Bob Early, Group Vice President, Edgell Communications, Cleveland, Ohio,



From left to right: Joe O'Donnell, Steve Derrick, John Cruse, Marty Erbaugh, Richard Foster, Paul Hairston, Bob Earley, Jim Kelly, Ron Giffen, Ron Collins, Paul Schnare, Dave Murphy, Jerry Faulring, Rick White, Doug Halterman and Doug Baker.

an alliance among PLCAA, the Associated Landscape Contractors of America and the Professional Grounds Management Society.

GREEN INDUSTRY EXPO. The three associations have agreed to a two-year deal which will see their two separate trade shows — PLCAA and the Green Team Conference and Trade Show merged into one. The board of directors from each group voted on the concept before it was finalized.

The three associations have discussed the possibility of a merger for more than three years, but only in the past year have specific negotiations been going on.

The 1990 show will be held in Nashville, Tenn., and the 1991 show will be held in Tampa, Fla.

The Green Industry Exposition will be admistered by a ninemember board consisting of three representatives from each of the associations. PLCAA was named show management and will handle all details of the trade show, but will answer to the board.

Each of the three associations will continue to hold separate educational sessions during the show — only the trade show portion of the conventions are being merged.

"We're coming together in the best interests of the professional associations and the industry, but we don't want to lose the autonomy of each group," said



Kent Hahn from Hahn Inc. demonstrates the company's new boom system for its Multi-Pro 418 and Maxi-Pro 435 spray systems at PLCAA's outdoor equipment demonstration.

Brooks. "In the future there may be some cross-over (in educational sessions) because obviously there's some cross-over in our memberships."

A minimum of 50,000 net square feet of space will be available in the Nashville convention center, a slight increase over the 40,000 net square feet of space PLCAA had available in Las Vegas. The Green Team conference used about 14,000 net square feet in St. Louis.

Together, the group hopes to attract 200 to 250 exhibitors in 1990, according to Allan Shulder, PGMS executive director. It's also expected that the size of some exhibitor booths will increase.

Although the show won't immediately appear twice as large, it will be more representative bringing all aspects of the industry together, said Doug Moody, PLCAA deputy executive director.

Shulder said he envisions the Green Industry Exposition as eventually being a good alternate to the substantial golf course show held annually.

Specific details concerning registration fees, exhibit space and speakers have yet to be determined, but the three associations are working on a Green Industry Exposition logo and promotional pieces.

Most exhibitors were obviously pleased with the prospects of a bigger and better trade show. But a number of attendees, who feel the association is broadening its range too much, are taking a waitand see-attitude about next year's trade show.

Steinau, however, doesn't see how they can lose.

"It's an opportunity for us. If it doesn't work, it doesn't. We're just investigating ways to increase

A MODEL FOR FULL-SERVICE LAWN MAINTENANCE EXPANSION

NO ONE CAN DENY THE SERVICE industry trend toward higher quality. Customers hold their lawn and landscape maintenance contractor more accountable, and contractors want to improve their bottom line through diversification.

Companies choose to expand their business operations for a variety of reasons including: increased profits, growth, more control over customers landscapes, 12-month income flow and customer retention.

But before expanding, a maintenance contractor must determine if it's the right step for his company, said Phillip Christian, a consultant with All-Green Management Associates, Columbus, Ohio.

Some expansion theories to consider before diversificaton include:

 Does the new service really fit your company?

• Does your company have a competitive advantage in the area being contemplated for expansion?

• What about your existing customers? Do they serve as a platform to catapult your new service?

• Is chemical expansion really going

to be needed?

One area to consider before expanding is the nationwide labor shortage. It's estimated there will be seven million fewer workers in the 1990s.

"McDonalds is doing a better job than we are. They train them quicker and faster. We *are* competing with Mc-Donalds," Christians said.

Why hasn't expansion worked before? •We guestioned the need from our

specialty corner of the industry.

 Absence of a dominant national role model.

•Less than a professional image.

•We didn't understand how to communicate with our customers and in some cases still don't.

•We had and still have a problem with pricing.

With the 1990s representing an era of general rather than specific service needs, more firms are deciding now is the time to select expansion services. Operators have any number of options, but mowing is the most obvious and most often discussed.

Mowing has a high frequency rate — 30 to 40 visits a year, but it's also the most unforgiving. Missing a cycle by two weeks can lead to disaster.

Mowing activities also require more athletic ability, must be done on a schedule at the correct height and with sharp blades. But, Christians said, he feels the industry is ready to tackle diversification.

"The lawn service industry brought professional image to the green scene. Not just image, but substance," he said. "We were first on the scene with operational and production skills. You are the model."

The biggest, single problem Christians perceives is the lack of a consistent quantitative measuring system. Instead, each operator uses his own system — square feet, yards, etc. As a result, there's no way to convert the number of properties maintained throughout the industry.

Other areas in need of understanding are what percent of revenues is profit and how overhead relates to revenue, Christians said.

Christians' advice to the industry: No matter what you plan to expand into, operate it as closely as possible to your currently successful services. Don't fall backward. funds," Steinau said. "As an attendee, you won't know the difference. It's not prudent to remain the same old association and hope the exhibitors don't leave us. I don't see any harm. It'll be very positive."

Steinau's immediate goal for the next year is to increase member participation and to help make PLCAA an association for all companies large and small. "Do you want to be a spectator or participant?" he asked the crowd.

"I'm offering you a chance to get involved like never before," he said. "It's an opportunity of a lifetime to shape your future and that of the whole industry."

FUND RAISING. A PLCAA fund-raiser to raise money for the association's educational and research foundation brought in a commitment of \$138,000 over the next three years.

The foundation is a separate corporation set up specifically for contributions to support turfgrass research and educational projects which will enhance the value of turf in the urban environment.

The money cannot be used for the association's issues management fund, but must be used for projects which will benefit the general public.

About \$87,000 was pledged to the Fisher/Marria fund, a separate account within the educational foundation. The fund was set up in memory of James and Karen Marria and Bill Fisher. The Marrias were killed in a plane crash two years ago and Fisher died two months later following a bout with cancer.

NEW PRODUCT EXPO. A first at the November show was a new product expo. An hour each morning of the trade show was dedicated to five-minute presentations from exhibitors introducing new products.

"It's an excellent way to get people to the convention site and ready to go," said Barry Troutman, director of education. "It's



This year's demo drew more than 400 attendees.

a good service to our members and benefitted exhibitors with increased traffic."

A strong, three-track educational program was again a highlight of the show. Don Aslet, chairman of the board of Varsity Contractors Inc., delivered an entertaining speech on business motivation to a standing room only crowd.

His message was clear: It's often easy to forget how great this business is. Don't let increased governmental regulation get you down.

OUTDOOR DEMONSTRATION.

The Outdoor Equipment Demonstration — always a sure winner — drew more than 400 attendees and 23 exhibitors. The demonstration gave attendees an opportunity to gain hands-on experience with mowers, aerators, sprayers, asphalt sealcoaters and more.

The outdoor demonstration will continue to be held on the morning of the last day of the Green Industry Expo. The demonstration will be part of the Expo



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MAILANDER RECOGNIZED WITH PLCAA'S FIRST PURPLE HEART

THE PROFESSIONAL LAWN CARE ASSOCIATION OF America bestowed its first, and hopefully last, Purple Heart to Richard Mailander, Lawn Patrol, East Meadow, N.Y., for his role in the association's New Orleans convention.

Mailander was shot in the left side by an armed robber while he was entering the lobby of the Hyatt Hotel. The Hyatt served as headquarters for the 1988 PLCAA convention.

Several operations later, Mailander is almost completely recovered from the gunshot wound.

At the time of the shooting, PLCAA Executive Vice President Jim Brooks and then Past President Russ Frith visited Mailander in the hospital and handled various arrangements while the family waited at the hospital.

trade show, not the PLCAA conference, and will be open to all exhibitors.

SILENT AUCTION. The second annual silent auction drew bids of more than \$20,000, slightly less than last year, according to Brooks.

Funds from the silent auction will go to the association's issues management fund — a fund which benefits the whole industry as it strives to promote the services of lawn and landscape maintenance operators in a positive light.

Boards are placed at each participating exhibitor booth on which bidders wrote their price for a particular product. Twentyseven exhibitors participated in the auction. At the close of the show, the highest bidder bought the product with proceeds going to the PLCAA fund. — Cindy Code

The author is Editor of Lawn and Landscape Maintenance magazine.

The shooting occurred when Mailander, his wife Bonnie, and four other family members were headed to PLCAA's Early Bird reception, held the first night of the convention.

A man in his twenties approached the Mailanders and demanded Bonnie Mailander's purse. The man grabbed the purse before firing point blank at Mailander with a 9 mm pistol.

Witnesses said the gunman fled down the street in a waiting get-away car. The gunman has never been caught.

Last year's shooting didn't keep the Mailanders from attending this year's conference and show. Both Mailanders publicly thanked the PLCAA for their support, and said they hoped other association members realized what a quality organization they belong to.



PLCAA Officers and Directors (Seated) Neal DeAngelo, Joe Winland, Rick Steinau, Dave Fuller, Bob Parmley, John Robinson. (Standing) Denny Linnell, Tim Doppel, Pat Nibler, Bill Culpepper, Daryle Johnson, Rick White, Ed Coia, Jerry Faulring.



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HILLING



Matching a Suitable Computer to Your Business

T'S MIDWINTER, WITH snow or rain falling outside, a large pile of paperwork inside and you're trying to get a handle on your past season's business performance — not to mention plans for the new season.

After hearing other maintenance contractors praise the advantage of computers in their organization, you have decided it's "time to buy a computer and straighten out the mess." However, there is more to *just* buying a computer. Most of us know that a computer is a type of electronic device capable of rapid mathematic calculations and efficient data storage. A computer is also a tool that can be used to enhance, make easier or replace various tasks that are part of the business.

Therefore, as with any other tool, you should ask yourself "What do I want to use this machine for?" In fact, a good computer dealer or salesperson will not sell you a computer until this question is answered. So before talking to vendors at this winter's trade shows or walking into the loal computer business, a first step is to take a good look at your business.

This is accomplished by listing all the tasks in your business that can be performed with a computer. Customer record keeping, accounting practices and writing/typing are some of the tasks that have been adapted to computerization. (Table 1).

These tasks often represent the bottlenecks in many business organizations. Even if you are not sure if a task can be handled by a computer, list it anyhow.

While looking over your business, take a critical look at your manual system. If you aren't organized and fairly efficient with a manual system, a computer will not "miraculously solve the problem of inorganization." In fact in many situations, it can compound the problem.

In establishing your list of tasks and activities you want to computerize, be as detailed as pos-

SOFTWARE DESIGNED SPECIFICALLY FOR THE GREEN INDUSTRY

FOR LESS THAN \$2,000, MOST lawn and landscape maintenance professionals can provide their company with a basic computer and software system. But more often than not, these contractors aren't getting systems specifically designed for them.

Green industry professionals do, however, have a number of options when it comes to buying green industry specific software with options ranging from payroll and accounting procedures to full financials, as well as routing, automated scheduling and posting.

In the last six years, industry-tailored software options have increased dramatically. On the average, experts estimate only 25 percent to 30 percent of the industry actually benefits from the advantages of a computer system. Numbers are, however, on the increase.

Prices have remained fairly consistent over the last year, with system capabilities running about 10 times faster than before.

Services provided by computer manufacturers include several or all of the following: software, hardware, training, follow-up support and maintenance.

Because software packages vary, maintenance professionals should have a good understanding of their individual needs before approaching a particular company.

Maris Frank, Practical Solutions, said potential buyers may want to visit companies already using the system they are considering buying to see how the computer works in a real work environment.

Users of larger computer systems should consider multi-user options vs. system networking, according to Linda Kerdolff, marketing manager, Thornton Computer Management Systems. A multi-user system runs off one central processing unit providing more power to all terminals.

Although costs and options vary from system to system, the pay off value of a complete computer system can come as soon as two years, depending on how quick the system is up and running, according to Joe Kucik, president, Real Green Computers.

Below is a sampling of companies offering software and hardware which has been designed specifically for the green industry.

Comp-U-Green 3718 Antioch Court Cincinnati, Ohio 45241 513/733-0969 Complete software package for the lawn maintenance market, especially those offering multiple services.

CompuScapes

2653 Gravitt Rd. Duluth, Ga. 30136 404/447-5858 Landscape contractors. Bidding, invoicing, job costing and receivables.

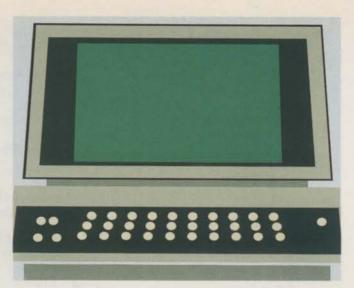
Data Enterprises

P.O. Box 9078 Trenton, N.J. 08650 609/298-8112 Chemical applicators, maintenance operators, landscape contractors. Main emphasis on accounting and billing; other options available.

Data Base Software

6 Dunnigan Dr. Pomona, N.Y. 10970 212/302-2250 Complete software package for the lawn maintenance market.

Datasphere/Control Data Corp. 6443 Beaverton Hillsdale, Suite 305 Portland, Ore. 97221 503/297-9035 Complete software package for the lawn maintenance market.



sible. Also, collect all the forms that you use in your business, particularly if you want to continue using those forms in your computerized operation.

As you are completing your list, start thinking about a tentative budget. Decide what you can afford to avoid any unexpected surprises. In addition, talk to your accountant to determine the best method of purchase for your business. In some situations, leasing is better than buying a computer system. Based on current prices, plan on spending between \$2,000 and \$8,000 for each independent workstation (hardware) such as a desktop or personal computer with a printer.

Computer hardware pricing is becoming similar to car pricing. Usually as the price of hardware increases, the performance, quality and support increases. The tasks and software will also dictate hardware price.

Software will cost anywhere from \$500 to \$10,000. Software costs will be determined by how much work you want done with a computer. The more activities done with a computer, the higher the cost. Usually \$1,000 to \$2,000 is needed as a starting software cost. Figure in an additional \$500 to \$1,000 for accessories and miscellaneous items or services.

Once you've established what tasks and activities are to be computerized and an estimated budget is developed, you can start searching for a computer system — both software and hardware — for your business.

WHERE TO BUY. Computer systems can be purchased from

Labb Systems

6018 E. Osborn Rd. Scottsdale, Ariz. 85251 602/481-9710 Grounds management software for parks/recreation, universities, municipalities and golf courses. Graphics and weather database options available.

Lawn-Wright

18761 N. Frederick Ave., Suite A Gaithersburg, Md. 20879 301/330-0066 Software systems for all maintenance work. Geographical routing, auto scheduling, auto posting and payroll package.

McCollum Systems

6143 Jericho Turnpike Commack, N.Y. 11725 516/499-8890 Software for the landscape maintenance professional. Complete billing and accounts receivables, contract or individual services and optional sales tax and finance charge features.

Nova Electronics & Software 3564 Central Ave., Suite 2G Riverside, Calif. 92506 714/781-7332 Chemical lawn care, landscape maintenance. Routing, invoicing, billing, accounts receivable.

PC Supply

24175 Telegraph Rd. Southfield, Mich. 48034 313/353-0351 Complete software package for lawn and tree care management.

Peststar Software

519 South 100 East Jerome, Idaho 83338 800/869-7741 Complete software operations package including routing, invoicing, mail labels and accounts receivable.

Practical Solutions

7100 N. High St. Worthington, Ohio 43085 614/436-9066 Software and hardware designed for lawn maintenance, chemical applicators, tree care and grounds maintenance professionals.

Real Green Computers

3130 Crumb Rd.Walled Lake, Mich. 48088800/422-7478313/669-1118 (In Michigan)

Complete software for the lawn and tree care industry.

Synetics Group (formerly Cado)

4434 Carver Woods Dr. Cincinnati, Ohio 45242 513/984-9040 Software specializing in full financials plus routing, scheduling, estimating and proposals.

The Systems Co.

10495 Latting Rd. Cordova, Tenn. 38018 901/323-9802 Software and hardware mainly for chemical lawn care. Routing, scheduling and business management systems.

Thornton Computer

Management Systems 424 East U.S. 22 Maineville, Ohio 45039 800/543-7249 800/582-6129 (In Ohio) Complete software and hardware for landscape contracting, nursery/wholesale, landscape maintenance and interiorscape.

Editor's Note: If your company does not appear in the above list and you would like to be considered for future articles, please contact us. a variety of vendors which offer varying levels of prices and support. Vendors can be grouped into several categories: mail order, department stores, computer dealers, value added resellers (VAR) and custom services/ consultants.

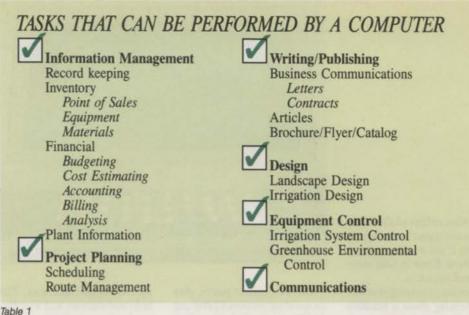
Mail order companies and department stores with computer sections are similar in operation to mail order nurseries and department stores with a gardening section.

The customer has the primary responsibility of selecting, purchasing, setting up and supporting the computer system. These vendors usually offer little or no service or support during or after the purchase of the computer system.

Over the past few years, there has developed many levels of computer dealers with some being equivalent to "computer supermarkets" while others are closer to being value added resellers in some market areas such as CAD and desktop publishing.

However, computer dealers are similar to lawn maintenance equipment/materials suppliers or garden centers as they specialize in computer products and services.

Usually, the sales personnel will assist in the selection of hardware and software. Many will also offer initial training and support after the purchase, some level of hardware service and repair in order to maintain a dealership with a particular computer manufacturer.



Die i

Most computer dealers will not have any expertise in a specific vertical market such as lawn and landscape maintenance. Value added resellers are businesses who target a specific vertical market such as the maintenance industry or nursery management.

Using off-the-shelf hardware and customized application software, they develop a computer system tailored to a particular market. They also provide a fair amount of support and service after the sale. Some VARs will provide software only with computer hardware being purchased by the customer from a computer dealer.

Other VARs sell both software and hardware. Most of the companies advertising computerized green industry systems are of this VAR category.

A customer service or consultant develops a specialized system based on an analysis of your business. You might perform a management practice that no other industry contractor performs and cannot be found in the more generalized maintenance packages.

A developer, as they are also known as, can add very specific custom features to a system to meet your particular needs. Along with analyzing your company and developing custom software, some consultants may also take on hardware purchases, installation of systems and complete training of you and your staff.

As one goes from mail order to custom service, the amount of work required by you to effectively implement a computer system decreases. However, the cost of implementation will usually increase.

Unless you or an employee has a large amount of time and/or expertise with computer systems, it is recommended to avoid major purchases of hardware and software from mail order houses or department stores. Even though these businesses are valuable in providing low cost merchandise, they don't or can't offer the service and support needed to establish a business computer system.

A recommended starting point would be to contact and visit both a computer dealer and a value added reseller.

MEETING YOUR NEEDS. There are many good computer systems on the market. However, if a particular system doesn't have software available to meet your needs, the hardware is useless. Any computer dealer who attempts to sell you hardware without first investigating possible software solutions should be given a thanks, but no thanks to your business.

An advantage of a VAR over a computer dealer is the focus toward a computer system to meet your particular lawn and landscape maintenance needs.

A good VAR will have had some experience in the vertical market they are addressing. Many times a VAR started in that particular market such as lawn maintenance through a need to computerize (continued on page 44)

TYPES OF SOFTWARE APPLICATIONS

Word Processors	Writing/Publishing
Data Managers File Managers Relational Systems	Record keeping/Accounting
Spreadsheets	Budgeting/Calculations
Business Graphics Charts and Graphs	Numerical Analysis
General Graphics Painting Programs Drawing Programs	Publishing/Landscape Design
Computer Aided Design	Landscape/Irrigation Design
Desktop Publishing	Brochures/Catalogs/Publishing
Telecommunications	Communications/Information Exchange
Table 2	

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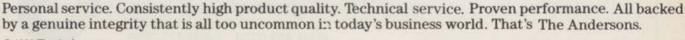
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your nearest distributor.



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Computers

(continued from page 42)

their own business.

When selecting software, it is important to remember that software programs are tools in themselves. You should try to match the right tool to the job. (Table 2). There are several questions that should be asked during your contact with computer dealers and VARs.

Does the software match your particular tasks? A software package should have all the features and functions necessary for you to accomplish your defined tasks.

Try to avoid software with extra features that may not be used. High powered software is analogous to a high-powered sprayer, it may be too powerful for the job at hand.

EASE OF USE AND TRAINING.

The more time spent in training yourself or an employee to use a software package, the more money that has been actually spent on the software package.

Ask for actual demonstrations

558020

of the software. Try to obtain some hands on experience to get an idea of the time spent in learning how to use the software before you or your employees will be productive.

What are the support and service factors? As with other types of maintenance equipment, support and service are important considerations.

Is there compatibility with other software packages? Because there are many interrelated tasks being performed with computers, it is important to look at software compatibility. The software package should allow for data to be imported or exported into other software packages.

A good example of software data integration is the ability to pull customer names and addresses from a record keeping system for merging with a letter in a word processing program to generate personalized follow-up letters.

This should be accomplished without having to retype all the customer information into each letter.

Depending on the software to

be purchased, the selection of hardware can range from very easy, because there is only a specific brand of hardware that can run the selected software, to very difficult, because there are several different brands that can run the selected software.

When selecting hardware the following questions should be answered:

What other software is available besides the selected software? Even though the main goal may be to do accounting on a computer, one may want to start doing word processing at a later date.

It is important that the computer being selected can run word processing software. Otherwise, another computer will have to be purchased that is probably incompatible with the existing computer.

For most small businesses, broad software availability for a particular computer is more important as they have the greatest potential of doing a multitude of tasks on one or two machines during the work day.

Larger businesses which have

many departments doing one or two tasks in each department on a day long basis do not have to be as concerned about the number of software applications available for the selected hardware.

Where is the computer dealer located and what type of service and support is offered by the dealer? As with major landscape maintenance equipment, the closer the dealer, the quicker service and support can be obtained in case of problems.

Ask if the dealer is a fully authorized dealer. Fully authorized dealers usually have full backing from the manufacturer in the areas of service and support. This includes both factory trained technicians and immediate spare parts availability. - Robert Boufford

The author is a grounds management instructor at the Agricultural Technical Institute at The Ohio State University, Wooster, Ohio. Previously, Boufford was a parttime support technician and trainer for a computer dealer in Mt. Pleasant, Mich.

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How Property Managers Select Landscape Maintenance Firms

Editor's Note: One of South Florida's oldest and largest landscape maintenance companies, Pompano Beach-based Land Design Systems Inc. has satellite offices in Dade, Broward, Palm Beach and Collier counties. The 14-year-old firm offers complete landscape maintenance and installation programs for large residential communities and commercial properties, employing advanced computer technology and management techniques.

A S A FORMER CHIEF operating officer of a national asset and property management company and as owner of one of the largest landscape maintenance firms in South Florida, I have experienced the needs and objectives of both sides of the fence in our business.

By understanding our customer's needs, objectives and limitations, we can increase our sales effectiveness and customer satisfaction tremendously.

I hope this article helps you understand your present and pro-

LAND DESIGN SYSTEMS INC.

Headquarters: Pompano Beach, Fla.

Primary Services: Complete services for large residential developments (150-unit minimum), office and industrial parks, shopping centers, golf courses and wetland preserves. Includes ground maintenance, plant installations, plant management and fertilization, insect and pest control, on-site quality control inspections, written reports and tree maintenance.

Employees: 80 to 100 (seasonal) full-time laborers, supervisors, clerical and management personnel. Fifteen experienced maintenance and installation crews, plus full-time equipment mechanics.

Projected 1989 revenues: \$3 million.

1988 revenues: \$2.5 million.

spective clients a little better, and maybe give you new ideas in the marketing and performance of your services.

QUALITY PROGRAMS. We've all heard the saying "first impressions count." That old cliche holds more truth than ever in today's highly competitive real estate market. The first impression — the curb appeal — of the property can be critical to its success.

Maintenance professionals know an integral part of that appeal is properly designed, wellmaintained landscaping. Yet all too frequently, maintenance of the property's lawn, shrubbery, trees and flowers takes last priority during our customers' budget and management planning.

Basic needs such as grass cutting and edging usually make their way into the budget, but equally important services such as fertilization, mulching, weed and insect control, irrigation and material replacement are overlooked until they take on emergency status.

Additionally, we see fragmentation in the selection of contractors, who are assigned to handle these tasks on an as-needed basis, resulting in wasted time and dollars.

Potential problems such as these can be handled by completely understanding the needs of our customers, coordinating a comprehensive plan and an all-encompassing budget.

UPFRONT PLANNING IS KEY.

Before interviewing a prospective landscape contractor, the property manager evaluates his landscape maintenance objectives with these questions:

 How much money am I willing to allocate toward this expense? • What do I want the landscaping to accomplish? (The more specific the property manager is, the easier it will be for the maintenance firm to fulfill the needs.)

• Are these expectations reasonable in light of the allotted budget?

• Is it a "fire drill" situation? Must all the objectives be accomplished immediately, or can they be staged over time?

During the initial interview, we should become aware of our client's objectives, financial capacity and timing requirements as all of these will play a critical factor in the development of our cost estimate, work schedule and sales presentation.

By developing a package that meets these factors, we will have a tremendous advantage over the competition and establish immediate credibility with our prospect.

PREPARING THE BID. After the property manager establishes the landscape maintenance budget and objectives, a bid package is prepared to be presented to candidate firms.

You may be able to develop project specifications from the maintenance manual prepared by the landscape architect at the time of initial planting. If this is not available, we need to evaluate the property and make our own recommendations. Reputable, professional organizations will be happy to provide this service.

ESTABLISHING CREDIBILITY.

As the interview process begins, it's important to establish the credibility and qualifications of your firm.

• Provide a list of reference properties you are currently servicing. Make sure some are similar in type and size to the property you are bidding on.



 Present an insurance certificate naming the carrier company and outlining liability insurance coverage. At the minimum, expect liability and property damage coverage of \$500,000, preferably \$1 million. LDS carries \$1 million in liability insurance.

 Have ready a copy of your occupational, chemical and pesticide licenses.

The following are additional characteristics and requirements your prospect will be looking for.

 A financially stable company: Credit references and the length of time the firm has been operating.

• A company with depth: Does the firm have enough employees to service the property on schedule, with consistent quality? Are the maintenance crews experienced? What is the employee turnover rate? What is the worker-supervisor ratio?

 A company with in-house support to minimize downtime: Are there in-house equipment repair facilities and mechanics? What about spare vehicles and equipment?

Land Design Systems has its own full-time mechanics and formal preventive maintenance and service record programs. Toro, Maruyama and other companies test their equipment through the company.

 A quality and customer service oriented company: Does management provide on-site quality control inspections and frequent, written client reports? Will management call on a regular basis to ascertain your satisfaction? Are billing and accounting computerized for efficient service?

PREPARING THE PROPOSAL. Prepare each submitted proposal carefully: a comprehensive program to sustain growth and preserve the beauty of the property will incorporate:

 Mowing: Determine how many mowing services the firm will provide, how frequently it will provide them, the height of the cut and how clippings will be removed.

• Edging: The landscaper should edge all beds, walkways and define plant areas. How frequently will the service be provided?

• Weeding: Will the procedure be done manually or chemically? How often?

•Trimming of hedges and ground covers: What method will be used? How often? What about clipping removal?

• Tree trimming: The contractor should ask if the client wants limbing or full thinning and cropping. To what degree? How frequently?

• Mulching: What type of mulch will be used? To what depth? How often?

• Fertilization: The contractor should mention different types for different plant materials grass, hedges and trees.

• Irrigation: Will the client pay on a per service basis or take on full responsibility for the irrigation system's operation? Contractors should be willing to replace any parts broken during servicing.

 Pesticide spraying and turf management: What types of chemicals will be used? How frequently?

 Warranties: Does the contractor compensate for plant materials lost through negligence? To what extent?

 Additional services: The contractor should offer optional services, such as clean-up after a storm, to be billed on an asneeded basis.

THE FINAL DECISION. At this point, you've established your objectives and bid proposal, established the credentials of your company and established their capabilities. This is solid information on which to base your selection as their landscape maintenance contractor.

However, your responsibilities won't end once you've made the decision: the on-going quality of your landscape maintenance program is a two-way proposition.

Invest in meeting time with your client, especially early in the program's implementation. Set aside a regular time to update the client with new goals and performance criteria. With these guidelines, you'll have planted the seeds for a satisfying relationship with your client. — Alex Rey and Gaston Ruiz

The authors are president and vice president respectively of Land Design Systems. Rey is the former senior vice president and chief operating officer of Zaremba Management Services, from which Rey and Ruiz purchased Land Design Systems in 1987. Ruiz has been an integral part of LDS management for more than 10 years.



Employees from Ajax Tree and Landscape Service perform brick work (above) and tree pruning below. Photos: Mickey Jones.

Written Agreements Can Benefit Maintenance Operators

F OR LAWYERS, A CONtract needs five elements to be legally binding: the capacity to contract, a valid offer and unconditional acceptance, genuineness of consent, some form of payment or consideration and a legal objective.

"But for lawn care operators," said James Wilkinson, president, Wilkinson and Associates, North Kingston, R.I., "agreements usually consist of verbal offers and handshakes. Unlike their counterparts in pest control and tree care, LCOs generally haven't used written customer contracts. When problems arise, reputable LCOs simply credit the customer or supply free service calls."

Today, however, Wilkinson believes the situation may be changing. "Due to abuses by a few unscrupulous operators," he explained, "such as unauthorized applications and renewal of annual services without prior notification, New York in 1987 passed a consumer protection law requiring LCOs to have written customer contracts. And just recently, Minnesota developed a similar rule."

As a result, "the best time to adopt a written contract system may be now," said Wilkinson, "before state legislation forces you to. That way, LCOs can avoid the turmoil of having to develop contract procedures with limited lead time."

A second aim of state legislation is to protect homeowners and businesses against unknowing exposure to lawn maintenance chemicals. In New York state, for example, operators must obtain signed customer contracts listing "approximate" application dates for the ensuing year, plus alternate dates for inclement weather.

"As the law is written," said Marilyn DuBois, director of the state's Department of Environmental Conservation pesticide bureau, "included with the contract should be cover sheets containing specific information on the pesticides being applied, though that provision is now under injunction."

Given the momentum behind New York-style legislation, Wilkinson said, "suddenly, LCOs are being forced to deal with written contracts." Yet he suggests "some good can nevertheless be gained. Contracts are something you can learn to live with — and benefit from.

"Most maintenance operators who use contracts agree that advantages far outweigh disadvantages. Many say a written contract gives them a competitive edge over LCOs who don't have such policies."

PROPOSAL IS A CONTRACT. Ron Kujawa, president of Kujawa Enterprises Inc., Cudahy, Wis., agreed "in our company at least, we're fairly informal about contracts." The company serves the metropolitan Milwaukee area through commercial landscape management and design/build services, with a peak employment of 75 to 100 workers.

"Everybody these days is suing everybody else," admitted Kujawa, "so we try to limit our potential liabilities. But even in our design/build division, it's not like the construction industry. We don't have to worry about any structures collapsing."

In practice, Kujawa has developed three forms that serve as contracts: a short-form for one-day jobs, a standard maintenance agreement, and a design/build proposal that incorporates contractual elements.

"Most of our work is obtained through negotiation, rather than bidding," Kujawa said, "and therefore, our proposal is essentially our contract. If our proposal is accepted, then we have an agreement."

Among items Kujawa covers in his contracts are: Description of work, starting and completion dates, compliance with health and safety regulations, insurance, materials, optional services and payment terms.

Kujawa believes "lengthy contracts don't fit our type of business. Lawn and landscape work is really cut-and-dried. Keep in mind, we don't deal with the company president, but with a facilities or grounds manager.

"He's there to monitor our work, so it's hard to get off track. And by working so closely together, we develop a lot of mutual trust. In fact, it's with homeowners more than with commerical accounts that you really have to spell things out."

Developing his customers' trust is why Kujawa enjoys a 95 percent renewal rate on his maintenance contracts.

"Pretty much, we just roll over our maintenance agreements from year to year, with maybe a little fine tuning when it's up for renewal. As a rule, the client just issues a purchase order that spells out the terms for that year."

Though Kujawa has an attorney review his contract forms once a year, "I've only had two suits in 20 years — and nothing ever really came of those, either."

He believes written agreements are useful, "but where you really avoid trouble is being selective about who you work with, and getting to know the customer, before any contract is signed. In fact, when a customer starts demanding all kinds of contract documents, it makes me begin to wonder."

To learn more about the main-

WHERE TO GET STANDARD CONTRACTS

•THE "GROUNDS MANAGEMENT FORMS AND JOB Description Guide" (Third Edition, 1989) is available for \$12 from the Professional Grounds Management Soceity, 12 Galloway Ave., Suite 1E, Cockeysville, Md. 21030; 301/667-1883.

•"Landscape Business Forms" is available for \$40 from the National Landscape Association, 1250 I St., N.W., Suite 500, Washington, D.C. 20005; 202/789-2900.

•The construction industry's most widely used and extensive family of standard forms is published by the American Institute of Architects, 1735 New York Ave., N.W., Washington, D.C. 20006; 202/626-7300. Write the AIA Documents Division for a catalog.

•A series of standard construction contract forms is also published by the Associated General Contractors of America, 1957 E St., N.W., Washington, D.C. 20006; 202/393-2040. tenance operator's contracting practices, Kujawa said, "it's important to network with others in the field and share ideas, maybe through a professional association." Kujawa cautions that "our approach is what works for us, but every LCO's situation is different. You've got to look at your own business, and do what's best for you."

ONE WAY TO REMEMBER. For President Tom Lied, Lied's Landscape Design and Development Inc., Sussex, Wis., "using written contracts has become more important as the company has grown bigger. There is a segment of our operation that does work on call. But if nothing else, with all the projects we have going on, contracts are the only way I can remember what I promised to do."

Lied describes his 45year-old firm as a "multidisciplinary" company providing commercial and residential landscape architecture, design/build services, land planning, landscape management and nursery retailing. With a peak seasonal employment of 300, the company serves Wisconsin and northern Illinois.

"We don't have very voluminous contracts," Lied said. "Because we work as a prime contractor directly with the owner, rather than as a subcontractor, most of our accounts are negotiated work. Our contract really just starts out as a proposal that contains some contract language in it."

Lied's contracts include the basics - scope of work, duration, materials, payment terms - but he said, "It's important to plan for what could happen during

September 6, 1989

Thank you for the opportunity that you have given us. After our discussion and inspection of your property, we are pleased to present you the following approval.

(company name) will supply all necessary labor, supervision, tools, vehicles, equipment, materials, supplies and other services that are necessary to complete the following:

Prepare all planting beds using a double dig procedure, to be followed by herbicide and preemer-

Planting will include eighteen (18) cubic yards of shredded bark mulch, eighteen (18) cubic yards of planting mix topsoil amended along with the necessary soil additives to sustain adequate plant

life. Initial watering, tree staking, and 480' lin. ft. aluminum edging.

PLANT MATERIALS AND PLANTING PROCEDURE

(See plan detail and plant listings)

PERENNIALS AND BULBS

Perennial and bulb plantings up to 1,000 sq. ft. Installation of patio will be up to 50 square feet. The style and color of patio will be

All work will be performed in a professional and workmanlike manner by experienced, well trained, uniformed personnel, utilizing clean, well-maintained equipment.

Upon completion of the project, the owner(s) will receive the "as built" Landscape Plan developed To insure the owner(s) they have received the highest "Visible Advantage" and that professional

quality workmanship has been performed, will explain the plan and details within. Terms of payment: 1/3 down, 1/3 within 14 days of start and 1/3 30 days after start.

The prices quoted below do not include state sales tax which will be added at time of invoicing. Any changes to be made in the existing design of contract shall be noted below, so that client may be properly credited or invoiced upon completion of the services listed within.

Please note the following changes:

Amount to be credited or additional charges \$ Contract amount \$ Thank you and sincerely, Total amount of contract \$ (Company representative) Accepted by Date

Sample maintenance contract.

the job."

For example, his company has a set policy on change orders, or additional work ordered by the customer while the job is in progress.

"Change orders have to be approved and the price agreed upon, before we proceed," Lied explained, "because really, we consider change orders as a whole new contract."

The company also makes clear whether any subsurface conditions, such as utility lines, must be avoided during the work. "That way," he said, "if the customer didn't specify anything ahead of time, then repairs are his responsibility if we unknowingly disturb something."

His advice? "It's good to shake hands, but LCOs have also got to be business-like and put things in writing. Also check your customer's credit references, if possible. And to keep out of trouble, never take a job unless you're sure you can perform it."

PUTITIN WRITING. According to Wilkinson, "I hear a lot of LCOs argue that written contracts require great administrative hassles and costs. More work will be needed in the office, postage and telephone costs will increase and productivity will be disrupted when customers fail to send in contracts on time."

But he counters that "there are significant advantages to contracts." Among the benefits:

·Operators can reduce problems with customers who "feel they never really authorized an application, or only wanted one treatment. But using a wellwritten contract, signed by the customer, an operator can avoid this dilemma and cut down the number of credits given out."

·Contracts offer a perfect opportunity to promote prepayment plans. Since homeowners generally read contracts pretty closely, more of them will see the prepayment provisions and take advantage of the savings offered.

In addition, customers can be introduced to optional services such as core aeration, dethatching and lime applications.

•Phone calls and office time may actually be reduced when maintenance operators put their customer base on contract. "Spelling out the terms," Wilkinson said, "such as number of applications, prenotification, service call policy, price, program, payment - lets everyone know what to expect, so things go more smoothly and customers are easier to service throughout the season."

After signing a contract, customers will better understand their own responsibilities for mowing, watering-in and thatch management. Similarily, customers will also have a better grasp on their rights, as well as limits.

• "Most LCOs who have always used contracts would agree their cancellation rates are lower,"

MULTIYEAR CONTRACTS

AN INCREASING NUMBER OF GREEN INDUSTRY customers are switching from a single-year to a multiyear contracts. Clarence Davids & Sons Inc., Blue Island, Ill., explained several of the advantages to multiyear contracts:

•Costs are fixed (known) for budgeting purposes.

•No unexpected price increases.

•Better prices can be offered if required work is known for several vears.

•Site commitment is increased as customers increase their commitment.

• Valuable time is saved, since a complete annual re-evalution bid isn't needed.

claimed Wilkinson. "With contracts, not only do you sign up better customers, but they are also reluctant to cancel during a season once they've signed a contract."

Maintenance operators can also prevent abrupt termination by requiring written cancellation notices.

Wilkinson added that "most LCOs I know say the impact of having to sign a contract is minimal on sales. Most people have no problem with it. And with a

little extra effort by the office, about 95 percent of customers will return their contracts."

For lawn and landscape maintenance operators, the Professional Grounds Management Society has developed a series of standard contract documents, contained in its "Grounds Management Forms and Job Descriptions Guide."

In addition, the National Landscape Association has published "Landscape Business Forms," showing forms currently in use by selected contractors.

For larger landscape design and construction projects, many resources are available.

The American Institute of Architects publishes the industry's most widely accepted contract forms for both design and construction.

Maintenance operators may not need or want an exhaustive form such as the AIA's "A-201 Standard General Conditions" contract. But reviewing such a document can suggest provisions or language contractors may wish to adapt to their own forms.

Moreover, if customers question a particular contract clause, operators can demonstrate the provision is within accepted industry standards.

"Working on a business-like basis," concluded Kujawa, "is a mark of professionalism. You wouldn't accept shoddiness in your workmanship. So why should you accept it in your business practices?" - Mark Ward

The author is a free-lance writer based in Schroon Lake, N.Y.



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Recommended Maintenance Tips to Keep Mowers Running

DON'T BE ASHAMED to admit it. You're not the only one who takes equipment for granted. You run your mowers like crazy three seasons out of the year. You've picked up more mowing work in the past couple years and you're stretching to make the equipment cover that additional work. There's nothing wrong with that.

What's wrong is if you're one of those people who neglect your equipment — one of those people who at the end of the season puts your mowers in a shed and *hopes* to find them in running condition when spring and thriving grass return.

The treatment mowers receive in the off-season will indicate how well they will perform during peak season; and more importantly, how many peak seasons they'll perform in.

If you want to get right to work when you pull your equipment out of storage in the spring, some basic preventive maintenance is recommended to keep your mowers running throughout the season.

If the equipment has already been stored for the winter without having basic maintenance performed, now is not too late. Preventive maintenance will save time, and possibly money, as the season gets under way. It also helps the equipment last longer.

MAINTENANCE GUIDELINES.

Gravely International Inc., Clemmons, N.C., recommends its customers start with the suggested daily and repeated 25hour maintenance guidelines printed in the owner's manual.

These include general lubrication of moving parts such as pivot points and interlock switches; checking the adjustment on clutches, linkages and fasteners; and checking the air pressure of tires. These are general guidelines which apply to all equipment regardless of manufacturer, and are not exclusive to Gravely.

An essential apsect of caring for mowers during the off-season is draining the gasoline. When gasoline is allowed to sit for an extended period of time, it will form a sludge that can damage the engine, said Joe Smithers, Gravely's customer service manager. For this reason, also make sure the carburetor is gas-free.

The best way to drain a gasoline tank is to simply let the engine run until it's dry. A syphon can be used to drain the tank, but this should only be done when the engine is cool. Otherwise, a hot muffler can easily ignite the gasoline's fumes.

The next logical steps are to change the oil and to clean or change the air filter. Having clean oil and air are vital to long engine life. Dirty air can cause internal engine damage after only five hours of operation. Oil keeps the engine clean and lubricated.

If the oil was changed before storage, it needs to be changed again in the spring before regular use resumes.

"The oil that's in the engine while the mower is in storage is working," Smithers said. "It's keeping the engine lubricated and ready, and fresh oil is needed when you start running the mower again."

After changing the oil, Smithers recommends removing the spark plug and adding several drops of motor oil in the spark plug hole. Afterward, replace the plug, but without connecting the lead.

At this point, cranking the engine a few times will create a thin, protective film around the cylinder heads and pistons to help prevent rust.

REPEATED BATTERY CHECKS.

Charging the battery is the next important step. The acid and water in a charged battery freeze at a much lower temperature than in an uncharged battery. In addition, the cells of an uncharged battery are more susceptible to cracking from the cold.

Through the winter, take time to charge the battery every three to four weeks, especially if the mower is being stored in an area



Be sure to tighten all nuts and bolts on the mower.

that is unheated.

"This is a simple task that doesn't take long, but it really helps the equipment," Smithers said.

Finally, some basic cleaning and touching up is in order. Keeping power equipment clean should be a part of the daily routine, but many people skip over it, Smithers said.

Dirt, grass and grease that is allowed to sit on surfaces for long periods of time — such as during storage — will lead to rust and corrosion.

Using a mild dish soap and water is ideal for cleaning painted areas. Abrasive cleansers will cause more harm than good. After cleaning the body, apply touchup paint to any scratched areas to prevent rust.

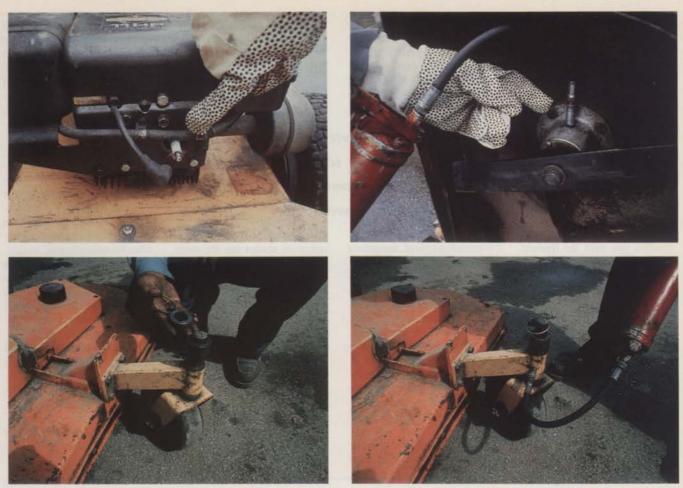
This is important to do before storage. If a scratched area is allowed to sit all winter, rust will set in and winter's moisture will encourage it to spread quickly.

SHARPEN BLADES. Care of the blades shouldn't be overlooked while preparing for spring, said George Kinkaed, National Mower Co., St. Paul, Minn.

All mowers need their blades sharpened. Reel mower blades may need to have the reels straightened before another season begins. Regular use simply knocks them slightly out of line.

If you own hydrostatic equipment or zero turning radius mowers, there isn't much more that needs to be done. In fact, hydrostatic mowers actually require less maintenance than other mowers.

This is because the entire system is enclosed, explained Paul Jurgens, customer service manager, Exmark Manufacturing, Beatrice, Neb. There are no chains or belts to wear out or replace. Fluid, oil and filter



Because gasoline breaks down with time, drain the engine of old fuel before and after winter storage. Change the engine oil and filter. Clean or replace the air cleaner element and wipe out the inside cover and base. Install new spark plugs. Finally, some basic cleaning and touching up is needed. Dirt, grass and grease that is allowed to sit on surfaces during storage will lead to rust and corrosion. Photos: Clarence Davids & Sons.

changes are needed only about once a year to once every two years depending on use.

"The key to keeping hydrostatic mowers in good running condition is keeping it clean," he said. "If you're careless and let dirt or clippings get into the reservoir track, then you're really asking for trouble."

Kinkaed recommends keeping yearly checklists on all equipment maintenance so operators have a handy source of the mower's history.

In zero turning radius equipment an additional area to look out for is uneven tire wear, said Don Synnestvedt, vice president, Brickman Group, Langhorne, Pa. In ZTR mowers, one wheel is rotating forward while the other is rotating backward. When the mower is being driven in reverse, the wear pattern is going against the tread design.

"Under proper or normal operation this shouldn't be much of a problem until you get some cowboy operator on the job," Synnestvedt said. "Someone who isn't careful and runs the mower in reverse far more than is necessary. You always try to weed these people out, but they usually do the damage before you get rid of them."

MAINTENANCE COSTS. To get the best use out of mowers, Kinkaed advises his buyers to set years, he said. But some of the more major repairs such as replacing wheel bearings and cracked decks can typically show up in the third year.

"Really, the first two years are crucial," he said. "If they're treated well then, it's worth putting some money into it later for more maintenance and repairs." plastic will suffice.

If the equipment is stored in a heated garage or shed, do not use a gas heater with a pilot light or an open flame. No matter how well you drained the gas and cleaned the entire mower, gasoline fumes still linger for some time. It's not gas that burns, but the fumes.

Readying mowers can and should go beyond the basic maintenance.

The need to replace an engine should not automatically mean the mower has outlived its usefulness, according to Mike Packer, Bunton, Louisville, Ky.

"In commercial mowing, guys should know that they'll be changing engines before getting rid of the mower," he said.

Also it's a matter that calls for knowing what else is wrong with the mower. "When you pay \$2,000 for a mower, paying \$500 for a new engine usually is worth it unless other things like bearings and belts need replacing along with the engine."

The goal you should have in

The first two years are the most crucial and will determine if ma-

jor repairs can be made later on.

a fixed percentage of the original cost that they are willing to spend on maintenance and upkeep. When that amount is reached, it's time to seriously consider buying new equipment.

It goes without saying that well cared for equipment lasts longer. But it is also more worthwhile to make major repairs on such equipment, Jurgens said.

Mowers can last up to five

Equipment needs to be stored in a clean, dry place. Placing it on wooden blocks or a raised wooden platform provides an extra measure of protection in case water leaks in from outside, Jurgens said. Keeping the tires off the cold ground will alleviate tire rot and cracking.

Make sure the equipment is covered. A fitted plastic cover is best, but a large tarp or piece of mind at the end of a season is making the act of taking equipment out of storage in the spring as easy as possible. If all of the maintenance work was taken care of before the equipment was stored, all that is needed when spring comes around is to clean and put in fresh gasoline and oil. Do not use gasoline from the year before that has has been stored through the winter. More stress is put on an engine in the first few seconds after starting it than from running it all day. The first time it's started after being idle for several months, you want the freshest possible gasoline and oil to get it through that stress.

Larry Stutzman, Smithville Lawn and Garden Equipment, Smithville, Ohio, began providing his customers a winter service program several years ago.

"We go over the equipment from top to bottom," he said. "We take care of the basics and get it ready for the next season. Our goal is not to see this equipment during the peak summer season."

Providing a service such as this is essential because maintenance operators do tend to neglect their equipment, Stutzman said.

"Since starting this, I've proved that taking care of basic maintenance in the winter keeps problems from happening in the maintenance and getting the maximum use out of equipment is being familiar with the equipment, Synnestvedt said.

The way Brickman accomplishes that feat is by assigning

.............

Being familiar with your equipment is the key to good maintenance and receiving maximum use of your mower.

middle of the summer," he said. "When taken care of, equipment will last twice as long."

From November to February, Stutzman picks up the equipment from his customers, takes it back to his shop for the necessary work and delivers it back to the owner.

"Doing it this way makes it easier for everyone," he said. "They have their equipment ready and waiting to be used and we don't get six to eight weeks behind in April like we always used to."

KNOW YOUR EOUIPMENT. For all operators, the key to good specific equipment to crews so operators always use the same machinery and become familiar with it.

At the end of the mowing season the crews and supervisors compile a detailed analysis of what maintenance work each piece of equipment needs for it to be in good working condition for the next year.

"Because they've dealt with the same pieces all season, they get pretty savvy at determining what can limp through another season and what needs immediate attention," he said.

The equipment is then turned over to one of the company's three regional shops where four to eight small engine mechanics work through the winter taking care of basic maintenance and more detailed work such as rebuilding engines.

Synnestvedt agrees with manufacturers' assessments that basic maintenance work is best completed at the end of the season rather than when the equipment is being brought out of storage.

"Realistically, the goal is to have that equipment ready for use when the season begins," he said. "Crew supervisors have enough to do in the spring training new people and preparing for the season in other ways. They should not have to worry about equipment. It should be ready.

"If the equipment is put to bed properly, about the only thing that should be done when taking it out is filling it with gas and changing the oil." - David Westrick

The author is Assistant Editor of Lawn and Landscape Maintenance magazine.



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Herbicide Effects on Kentucky Bluegrass Rooting

ARM-SEASON ANnual grasses such as crabgrass (*Digitaria spp.*) and goosegrass (*Eleusine indica*) can be serious problems in Kentucky bluegrass lawns.

The off-colored and coarsetextured weeds interrupt the uniformity of the lawn. Not only do these weeds affect the aesthetics during the growing season, but their early death following frost brings even more complaints from the homeowner.

As with other pest management problems, sound turf management practices are important in reducing annual grassy weed numbers. Healthy turfgrass plants are good competitors for water, nutrients and light.

A very dense turf shades and cools the soil, reducing crabgrass germination. In addition, raising the mowing height leaves more leaf material increasing the

Rooting studies were run both in the field and greenhouse at Iowa State University.

State University.

amount of shade.

Fertilization is another important cultural factor. Heavy nitrogen fertilization in the spring favors the germinating weeds; as a result, the majority of nitrogen should be applied in the fall for cool-season turfs.

Applications of phosphorous encourage the establishment of shallow-rooted weeds and should be delayed until fall. Daily, light irrigation also favors the weed species so infrequent, but heavy irrigation should be practiced.

Good cultural practices are helpful in reducing annual grass infestations, but are generally not effective by themselves. An application of a preemergence herbicide in conjunction with sound cultural practices in the spring will control most grassy weed problems.

Success is dependent on applying the herbicide prior to germination of the weed seed for they are usually not effective after establishment. A large number of commercially available preemergence herbicides are very effective for crabgrass control.

Often in the same area where crabgrass is a problem, goosegrass is also present. This poses



a difficult problem for the turf manager.

Preemergence herbicide applications aimed at crabgrass often do not control goosegrass. The problem lies in the time lag between the germination of the two species. Goosegrass germinates four to six weeks after the crabgrass and in some areas may germinate throughout the summer.

One of the reasons that poor control of the goosegrass is seen with the preemergence herbicides for crabgrass is the breakdown or inactivation of the herbicide. A preemergence herbicide applied two weeks prior to the predicted crabgrass germination period would have to remain active longer than six to eight weeks to control the goosegrass; and unfortunately, most do not.

The question remains of how to handle the goosegrass. Split applications of preemergence herbicides may be the answer, with the first application prior to crabgrass germination, the second just prior to goosegrass germination and possibly a third application where very late germinating goosegrass is a problem.

The effectiveness of split applications of preemergence herbicides is still quite variable and more research is needed in this area to perfect the technique. Research is currently being done at Purdue University to observe the effectiveness of split applications of a number of preemergence herbicides.

A possible future alternative to split applications is a tank mix of a postemergence herbicide with a preemergence herbicide. This would be applied while the crabgrass is still young and non-obtrusive, and before goosegrass germination. The postemergence herbicide would control the germinated crabgrass whereas the preemergence herbicide would control the goosegrass and any late germinating crabgrass. Because there are a number of good preemergence herbicides, the potential of this method depends on the development of an effective postemergence crabgrass herbicide.

Some postemergence annual grass herbicides have been said to have a reputation of inconsistent control while often being phytotoxic to the turf (2,9). The latest arrival on the market, Acclaim, has been reported to give excellent crabgrass control if used according to label directions, and is quite safe to the turf.

The control of annual grassy weeds in turf can be quite risky because we are trying to control a grass in a grass.

The idea is to kill the grassy weeds while not damaging the related turfgrass species. In order to achieve control, the desirable turfgrass species may be weakened or damaged in some way. Thinning, discoloration and other adverse effects from herbicides have been reported. The damage may not be visibly noticeable until the summer stress period if it becomes noticeable at all.

A study at Iowa State University observed one of these more subtle plant responses. The effect of herbicides on rooting of Kentucky bluegrass was observed over a two-year period under a variety of environmental conditions.

Five commercially available preemergence herbicides, one soon to be released preemergence herbicide (prodiamine) and the postemergence herbicide Acclaim were investigated in these

studies.

In the greenhouse, four-weekold tillers of Glade Kentucky bluegrass were established in the polyethylene tubes filled with fritted clay. Herbicides were applied at their recommended high and low rates 10 days after establishment of the grass plants.

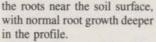
Treatments included Balan at 2.0 and 3.0 pounds active ingredient per acre (ai/acre), Bensulide at 7.5 and 14.0 pounds ai/acre, Dacthal at 10.5 and 15.0 pounds ai/acre, Ronstar at 2.0 and 4.0 pounds ai/acre, pendimethalin at 1.5 and 3.0 pounds ai/acre, prodiamine at 0.5 and 1.0 pounds ai/acre, Acclaim at 0.1 pounds ai/acre and an untreated control.

The herbicides were wateredin after application, and the tubes were irrigated weekly with the equivalent of one inch of water per week.

The three dinitroaniline herbicides, Balan, pendimethalin and prodiamine, were the most injurious to roots. Balan at 2.0 and 3.0 pounds ai/acre reduced rooting in the first experiment 53 percent and 47 percent, respectively.

Pendimethalin reduced total root weight up to 44 percent compared to the control. Prodiamine at both rates reduced root weights by as much as 71 percent in both experiments. Acclaim reduced rooting 37 percent in the first experiment only to have no effect in the second. Dacthal at the 10.5 pounds ai/acre reduced rooting 25 percent in the first study while the 15.0 pounds ai rate reduced rooting 39 percent in the second study.

Severe root inhibition took place in the top four to six inches of the column, with normal root growth below this area. Preemergence herbicides may affect only



This may be a problem with shallow-rooted species or grass plants growing in a compacted area or in a very shallow soil.

Prodiamine caused a sharp decrease in clipping weights, whereas Acclaim and pendimethalin reduced clipping weights slightly. Even though many of the herbicides inhibited rooting, very few inhibited the top growth of the grass plants. Consequently, healthy top growth may not be reflective of the safety of herbicides to Kentucky bluegrass.

In addition to the greenhouse work, repeated field studies were conducted at the Iowa State Horticulture Research Station in 1986 and 1987. The studies were conducted under both high and low maintenance conditions each year.

The high maintenance areas received four pounds N/1000 ft²/yr and were irrigated as needed. The low maintenance plot consisted of one pound N/1000 ft²/yr and no irrigation. The pH of the soil was 7.1 with an organic matter content of 2.3 percent. Treatments were identical to those in the greenhouse.

Rooting measurements were taken in late May, late June and late July of each year. There were no significant differences in rooting between the treatments on any of the sampling dates of both years.

Even though extensive root inhibition was seen in the greenhouse, there was no damage observed in the field studies. Prodiamine, for example, inhibited rooting up to 71 percent in the greenhouse only to have no observable effect under field conditions.

This observable difference in rooting could be explained by differences in movement of the herbicides. Preemergence herbicides can be very damaging when they come into contact with roots and rhizomes of Kentucky bluegrass (4,5,7). This was seen in the greenhouse, where the herbicides could move through the soil profile and come into contact with the roots.

The coarse-textured media, sparse canopy from the single tiller, lack of thatch and little organic matter allowed the herbicides to move through the upper profile. Root inhibition took place mainly in the upper six inches.

The finer-textured field soil with 2.3 percent organic matter, in addition to a denser canopy and a thatch layer, likely prevented the herbicides from coming into contact with and injuring the roots.

Herbicides may be more damaging in coarse-textured soils with low organic matter content than in fine, organic soils. These herbicides may also be more damaging in very thin turfs where they



Greenhouse plants were grown in fritted clay for increased ease and accuracy in harvest.

can come into contact with the roots.

The reports of root inhibition due to herbicides are highly variable (4,6,8). Overall, these herbicides are quite safe to the turf, but from our work and that of others, it is evident that these herbicides are capable of root inhition if conditions exist that allow the herbicides to come into contact with the roots.

It's also clear that these herbicides are quite damaging to roots when applied at rates higher than recommended (7,1,3). One might think that higher than recommended rates would be uncommon in the field, but with the hand-held spray guns in use today, overlaps can occur.

When it comes to annual grasses, there are few alternatives to using some kind of herbicide for effective control. Proper turf management practices in combination with judicious and accurate application should reduce the chance of herbicide damage while still affording excellent annual grass control. — Zachary Reicher and Nick Christians

Reicher is a graduate research associate working on his Ph. D. in the Department of Agronomy at Purdue University, West Lafayette, Ind. He received his master's degree at Iowa State University, Ames, Iowa, while working with Christians, who is a horticulture professor and researcher

All research for the article was conducted at Iowa State University while Reicher was a graduate student. Christians splits his time at the university between teaching and conducting research.

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Treatment	lbs ai/acre	Experiment I	Experiment II
Control	-	100	100
Decthal	10.5	75	105
	15.0	81	61
Ronstar	2.0	111	94
	4.0	91	86
Bensultide	7.5	91	96
	14.0	97	96
Balan	2.0	47	80
	3.0	53	77
Pendimethalin	n 1.5	68	77
	3.0	56	72
Prodiamine	0.5	29	37
	1.0	33	48
Acclaim	0.1	63	88
LSD _{0.05}		24	28

Table 1. Total root weights of the greenhouse study expressed in percent of the control.

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TREES & ORNAMENTALS

FOCUS ON:

EDUCATION INCREASING ACCURACY OF LANDSCAPE APPRAISALS

DEALING WITH THE AFTERMATH of Hurricane Hugo and the San Francisco earthquake last year, more property owners became concerned with the value of their landscape plants.

And that's good news to the Council of Tree & Landscape Appraisers, Washington, D.C., an organization which has been educating operators and consumers that plants do, in fact, have a monetary value that can be assessed.

Owners can collect compensation for trees and shrubs that have been destroyed or damaged. The compensation can come from the property owner's insurance, a tax deduction or from a civil lawsuit if the damage was caused by an outside party.

While natural disasters bring about a rash of landscape claims, most plant damage claims result from mechanical damage from accidents involving cars, trucks or bulldozers. Damage to trees from garage fires also ranks high on the list, said appraiser Ted Collins, owner, Ted Collins Tree and Landscape Co., Victor, N.Y.

The most often-made claim comes from wind damage. However, most insurance policies will not honor such a claim, said Erik Haupt, CTLA chairman.

No specific training or licensing is required to appraise landscape plants, both men said, but it is helpful to belong to one of the five industry associations represented by the CTLA. Through those organizations, a lot of information is available including a landscape appraiser's guidebook titled "Valuation of Landscape Trees, Shrubs & Other Plants."

The guide contains listings of practically every tree and shrub available for landscapes and their corresponding values. It's updated on an annual basis to keep the market values as current as possible. Cost is \$20 for members and \$50 for non-members.

The five member groups are: American Association of Nurserymen, American Society of Consulting Arborists, Associated Landscape Contractors of America, International Society of Arboriculture and the National Arborist Association.

Four factors are considered when determining the value of a tree.

•*Size*. Older and larger trees generally will have a higher value.

•*Kind.* Trees that are hardy, durable, highly adaptable and require low maintenance are worth the most.

•*Condition.* A healthy and well-maintained tree will have a higher value.

•Location. A tree that makes functional and/or aesthetic contributions or is a focal point of a landscape area will be deemed worth more than one growing in a wooded area.

Making sure the figures and estimates made in an appraisal are substantiated is important for collecting the compensation, Collins said.

"Insurance companies are extremely cooperative when it's obvious you didn't just pull your facts and figures out of the air," he said. "They don't like being gouged, but if you present reasonable, accurate figures there really are no problems."

Collins said he has filed about 100 claims with the same insurance company without incident.

One problem that arises when making appraisals is the appraiser becoming an

advocate for the client, Haupt said. Because appraising plants is not an exact science, two appraisals of the same site can render drastically different values.

One case Haupt related involved a contractor who was cutting down trees. He ended up crossing an easement and chopping down trees that stood on public property.

The town hired an appraiser who came up with a lost value of \$75,000. But the contractor hired a state forester who appraised the damage at a mere \$57. The forester appraised the trees as only having value as salvageable firewood.

A third appraiser was brought in to act as an arbitrator and he valued the damage to be about \$6,000.

"It's hard to be totally objective, but those two were definitely guilty of advocacy," Haupt said.

Most homeowner insurance companies have set a ceiling of \$500 for lost landscape plants. A natural skepticism does exist between the insurance company and the appraiser, Haupt said. By involving an appraiser, the client — whether the property owner or the insurance company will get an accurate value for the lost plant.

Often people or insurance companies will simply call the local nursery and ask the value of a specific plant or tree, Haupt said. The nurseryman will then consult a catalog and give them a base price or cost. This is not necessarily a value because it doesn't consider the factors involved in determining the value.

The requirements for filing a loss as a tax deduction have changed in the last several years. The amount of the loss has to be equal to or surpass 10 percent of

the person's adjusted gross income for the year.

So if a large tree determined to be worth \$4,000 is lost, the property owner's income must be at least \$40,000 for the year. All losses can be added together for a collective figure.

This change in the tax law has eliminated many of the smaller and more frivolous claims, Haupt said.

Property owners are more aware of the value of trees and plants than they were five to 10 years ago because landscaping can easily become a major expense, Collins said.

GATHERING ACCURATE APPRAISAL INFORMATION

TO KEEP THE PROFESsional landscape appraiser organized, the Council of Tree & Landscape Appraisers has created a Field Report Form.

The forms provide a system for accurate record keeping while work is in progress, enables appraisers a method of preparing information that gives evidence to clients that a "true professional" is at work and arranges information for quick retrieval.

The form is an 11.75-by 9-inch manila file including an area for a sketch of the tree or plant in question, a guide for judging the condition of landscape trees, a location values chart and a shade tree evaluation field schedule.

"Our field report form helps guide landscape appraisers in the collection of the facts they need when evaluating trees for loss or damage claims and presents them in a complete and professional way to clients," said Erik Haupt, CTLA chairman.

Cost of the forms are \$2 each (one to 50 copies); \$1.50 each (51 to 100 copies) and \$1 (more than 100 copies). Send prepaid orders to CTLA, 12501 St. NW, Suite 504, Washington, D.C. 20005.

FOCUS ON:

IRRIGATION

SUPPLEMENTAL CONTROLLERS: PROVIDING WATER WHERE IT'S NEEDED

WHEN IT COMES TO IRRIGATION, you can't second guess Mother Nature.

"Ultimately, there may be enough (rain), but you can't schedule rainfall," said Don Bulmer, district sales manager at The Toro Co., Minneapolis, Minn.

The way weather varies, agreed A. J. Powell, extension professor at the University of Kentucky, it's almost always necessary to have supplemental water for quality plant life.

Supplying the proper amount of additional water is important not only for plants, but also because water is such a vital and continually shrinking resource — one which must be used to its fullest.

For these reasons, one of the most important components of an irrigation system is a controller. A controller is a timekeeping device with time- and day-keeping abilities. It allows irrigation system owners to schedule when and how long their sprinklers will run.

Most controllers run on seven- or 14day cycles. Watering every day or every other day for a seven-day cycle, and every other day for a 14-day cycle.

But these schedules may not be flexible enough during periods of water restrictions or bans, for example. To handle these more regularly occurring conditions, the industry offers a system with "interval starting days."

The controllers in the system can be programmed for three- or four-day cycles, or whatever cycle particular water restrictions permit, Bulmer said.

When programming the controller, there are many things to keep in mind. Different plants need different amounts of water. The sun — more specifically, the number of daylight hours — affects evapotranspiration, the amount of water leaving the soil.

Open turf will require more water than shaded areas, Powell said, and differing surface and subsurface soil drainage levels need to be considered.

To find a starting amount, Bulmer said, there are charts and books available on evapotranspiration which use a history of rainfall data to set guidelines for specific areas. For residential and commercial purposes, however, it's more likely that programmers will do their estimating based on plant water requirements.

Brian Vinchesi, Eastern Irrigation Consultants, said an average amount of water for lawns in the North is one inch per week, but



Photo: Buckner Irrigation.

that amount increases moving southward. The amount should be based on the precipitation rate of the sprinkler, Vinchesi said. Once a programmer figures out how many inches per week are needed, he simply divides the time needed to provide those inches into whatever sched-

ule he has chosen. It has become so easy to apply water, Powell said, that one must guard against overwatering. Some plants are very susceptible to overwatering and can be harmed easily. Overwatering may also increase weed problems.

According to Bulmer, there are two kinds of controllers: electromechanical and solid-state.

In an electromechanical controller, mechanical movement inside the clock runs the controller. Solid-state controllers are electronic and computerized.

"They have a keyboard operation, much like a calculator and no moving parts within the clock," he said.

Some industry resistance to the newer, solid-state controllers resulted in the development of a hybrid controller in which the memory portion is solid-state and the face, where the controller is programmed, is still knobs and dials.

Controllers range widely in their sophistication. In some controllers, the sprinklers stop in one station signalling the next station to start. It's also possible to have independent timing for each zone, Vinchesi said. Multicycle capability refers to the ability to have more than one start time per day, he said. If there is new seed in the ground, users might want to run short cycles instead of one long one, he said. This also may be useful for cycleand-soak applications, Bulmer noted, in areas with heavy clay soil which tends to puddle.

Both mechanical and solidstate controllers offer a variety of options, depending on their make and cost. In general, however, "the more electronic they are, the more features they have available," Vinchesi said. Electronic systems feature water budgeting in which a user can decide to run 50 percent of a schedule at every

station simply by the push of a button.

Some clocks are self-diagnostic, he said, meaning they monitor themselves to make sure there are no problems with the wiring. Solid-state controllers are also more flexible in that they can be programmed down to the minute. Mechanical systems are locked into time blocks, like 15 minutes or one hour, Bulmer explained.

Offering more and more control may be a challenge to manufacturers, but operators must remember the real challenge — providing the right amount of water where it's needed.

There are, however, methods of testing moisture levels and triggering the controller to respond to such levels. There are two options, Bulmer said. The first is a rain shut-off switch, which consists simply of a moisture gathering cup that is left exposed to the environment. When moisture is gathered, it shorts out the common wire to the controller and when the moisture evaporates, normal operation resumes.

The other option is a moisture sensor buried in the ground to test moisture levels directly in the soil. Most of these, like the rain shut-off switches, simply shut the system down if a certain moisture level is reached, allowing regularly scheduled watering to resume when moisture is no longer sensed.— Jyll Johnston

The author is a staff writer for Lawn and Landscape Maintenance magazine.



FOCUS ON:

WELL-MAINTAINED ENGINES PAY OFF WITH STRONGER PERFORMANCE

SOME THINGS AREN'T FULLY APpreciated until they're gone. So when a machine breaks down or won't start, the importance of a well-built and well-maintained engine becomes clear.

Virtually every piece of major equipment in the lawn and landscape maintenance operator's inventory can be motorized — mowers, tractors, spreaders, seeders, aerators, dethatchers, trimmers, edgers. Losing any of these items due to engine failure can have a major impact on a professional operation.

"Good performance starts with a quality-built engine," said Ron Hansen, merchandising manager of Onan Corp.'s engine division, Minneapolis, Minn. "You may be checking out the engine on a new piece of equipment or buying a replacement motor," but in either case, maintenance operators are advised to look for some basic engine features:

Cylinder block. A single piece aluminum block with cast iron cylinder liners offers rapid heat transfer away from critical components, fewer fasteners and no sealed surfaces below the oil level. Because aluminum weighs about one-third as much as cast iron, the horsepower-to-weight ratio is significantly improved.

Fuel system. Pay particular attention to the carburetor and check for an "antiflood" choke that helps assure steady starts, smooth running and consistent calibration across a wide speed and load range. Other desirable fuel system features include an in-line fuel filter and a pulse or electric fuel pump.

Lubrication. The oil pump should provide both high capacity and positive displacement, so that all oil is distributed evenly to critical areas.

Cooling. To start the action of the blower wheel (fan), the engine baffles must be designed to direct airflow across the engine heads and cooling fins for rapid, uniform cooling. The blower screen and baffles must be constructed to eliminate any clogging from chaff (airborne clippings).

Ignition. The generally preferred system consists of a breakerless, solid-state electronic ignition which provides a powerful spark down to zero rpm, doesn't require adjustments or maintenance, offers improved cold starting, reduces plug



Photo: Briggs & Stratton.

maintenance and extends spark plug service intervals.

For larger horsepower engines, a hardened steel pinion solenoid shift starter can help provide positive engagement, consistent cold starts and enhanced resistance to dust, dirt and chaff. Smaller horsepower units generally feature either an inertial drive starter or recoil starting with an automatic compression release for easier pulling and surer starts.

Alternator. Output available to charge the system should provide enough power to care for any high-power electrical demands.

Serviceability. Find out whether the manufacturer provides easy access to regularly serviced parts — even those items that are only serviced at long intervals.

SET-UP AND SERVICE. "To keep your engine running like new," Hansen said, "you have to know the operating instructions, adjustments and maintenance procedures." Even simple things are important such as "inspecting the engine visually before starting, checking for any loose or missing parts and adding oil."

The battery and battery cables used for starting an engine should be large enough to allow prompt starting, as undersized cables shorten the starter system's service life. The crank-case should also be filled to the correct level using the specified oil — but avoid overfilling which can cause high oil consumption, high operating temperatures and oil foaming.

Check the oil level at least every eight

operating hours, or more frequently on a new or reconditioned engine, since oil consumption is higher until piston rings adapt properly. Use the same brand when adding oil between oil changes, since various brands may not be compatible.

Use of clean, fresh, unleaded gasoline results in less maintenance. Regular leaded gasoline may be used (never premium leaded) but, if used continually, operators must be careful to periodically remove carbon and lead deposits from the cylinder

heads. Otherwise, the engine will lose power.

Actual operating instructions vary according to each engine. However, any machine, regardless of design or type will perform only in relation to the service it receives.

A common maintenance schedule based upon hours of operation:

Eight-hour cycle. Inspect engine generally, checking particularly for fuel and exhaust system leaks. Check oil level.

25-hour cycle. Service air cleaner element and element wrapper. Change crankcase oil for engines without oil filters.

50-hour cycle. Change crankcase oil for engines with oil filters and with standard oil bases. Check battery electrolyte level. Clean cooling fins.

100-hour cycle. Change crankcase oil for engines with oil filters and high-capacity oil bases. Replace oil filter for all engine types.

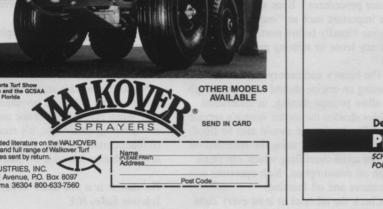
200-hour cycle. Replace air cleaner element and fuel filter. Check valve clearances.

500-hour cycle. Check or replace spark plugs.

1,000-hour cycle. Clean carbon and lead deposits from cylinder heads.

Neglecting routine maintenance can result in engine failure or permanent damage. When running the motor under severe operating conditions, it's recommended that operators service the various parts at even shorter intervals. — Mark Ward

The author is a free-lance writer based in Schroon Lake, N.Y.



Circle 14 on reader service card



At Rain Bird Sales Inc., Michael Shreve has been named specifications manager in north Florida for the turf division.

STEVE JACKSON WAS RECENTLY

Jackson moves to Ciba-Geigy from

ChemLawn, where he was also in

hired by Ciba-Geigy's Turf and Ornamental Division as sales representative in the

Shreve's duties include keeping specifiers, contractors, irrigation consultants, developers and city and state officials updated on current irrigation products and applications. His area will include the Jacksonville, Orlando and Tampa areas.

He has 16 years' experience in the irrigation industry. Previously, he served as manager of the pump division for Aquarius II in Atlanta, Ga.

Jacobsen Division of Textron has named Wayne Whitehead national sales manager for commercial products and Ron Pettifer regional sales manager for turf products in the company's Midwest sales area.

Whitehead is responsible for the promotion and sale of Jacobsen commercial equipment throughout North America. Previously he was dealer sales manager for the company in New England and the mid-Atlantic states.

Pettifer will oversee Jacobsen turf distributors in Illinois, Indiana, Michigan, Missouri, Ohio and Wisconsin. With Jacobsen since 1985, he most recently was national sales manager for commercial products.

Judy Brede has been promoted to director of warm-season grass research at Jacklin Seed Co.

Her breeding program in Southern grasses has resulted in the recent release of Cheyenne and CD-6.67 seeded bermudagrasses.

She also directs the company's grass breeding nurseries in Arizona, California and Texas, and is actively involved in developing seeded varieties.

Brede previously served as a warmseason grass breeder for Jacklin.

At Becker-Underwood Inc., Daniel Holte has been appointed manager of research, development and government compliance.

Holte has a solid background in technical color chemistry in specialty surfactant applications.

The job will have him managing the company's expanded research facility.



Pacific Northwest.

sales.



PRODUCTS

CRUSADER TURFGRASS MIXTURE from Seed Research of Oregon Inc. is comprised of SR 4000 perennial ryegrass and SR 3000 hard fescue.

Crusader combines rapid establishment and outstanding turf qualities with natural resistance to insects and disease.

Both SR 4000 and SR 3000 contain high levels of viable endophyte providing resistance to a number of important turf insects including: billbugs, sod webworms chinch bugs and armyworms.

Recent research also indicates that high levels of endophyte possibly repels certain harmful nematodes.

Circle 127 on reader service card

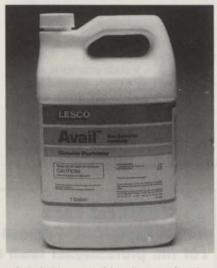
OLATHE MANUFACTURING INC. IS offering a compact yet powerful trailer mounted 20- or 24-h.p. hydraulic disc chipper designed to reduce limbs and



brush up to 6 inches in diameter quietly, efficiently and safely.

The Model 182 Brush Chipper features include an Onan 20-h.p. engine, 170-degree chipper head rotation with 360-degree discharge, 30-inch diameter cutter disc and a 12-by-20-inch infeed opening. **Circle 128 on reader service card**

LESCO INC. INTRODUCES AVAIL[™] herbicide with the active ingredient glyphosate for systemic control of grassy and broadleaf weeds.



Labeled to control brush, annual and perennial grass and weeds, Avail eliminates hard-to-control species such as

PRODUCT SPOTLIGHT

PAGEANT DF, THE GREEN Industry's first dry-flowable insecticide formulation developed by **DowElanco** specifically for the tree and shrub care market, has received Environmental Protection Agency approval. It'll be available in February.

Pageant is a broad-spectrum tree and shrub insecticide differentiated from others by its activity on worms, scale and aphids.

Chlorpyrifos, the active ingredient in Pageant, offers broad-spectrum control, proven efficacy, longer residual, vapor action and an established track record that includes extensive human exposure studies.

Pageant combines its waterdispersible granule technology with convenient disposable packaging.



Pageant DF contains 50 percent active ingredient formulated into water dispersible granules. This formulation offers improved handling benefits such as less dust, less residue in the container, excellent pourbility, ease of measurement, less applicator exposure and minial agitation.

It mixes well in any type of water and contains no solvents.

The product is available in a 5-pound cubitainer with a handle for easy pouring and child resistant cap. The package is collapsible and stackable for easy disposal with no need for triple rinsing.

126 on reader service card

quackgrass, bermudagrass, Johnsongrass, nutsedge, poison ivy, multiflora rose and honeysuckle with its systemic action. It can be used for complete lawn renovations, spot applications, trimming and edging. The short residual allows for replanting one week after application. **Circle 129 on reader service card**

A MORE CONCENTRATED PRODuct formulation of Lebanon Pro 20-3-5 has been introduced by Lebanon Chemical Corp. The formulation contains 1



percent active Chlopryifos (Dursban) for use on lawns, landscapes and other professionally maintained turf areas.

Two jobs are accomplished: fast green-up with sustained feeding as well as surface and soil insect control.

When used as directed, it will provide control of chinch bus, sod webworms, ants, brown dog ticks, crickets, cutworms and other surface soil insects.

The fertilizer base contains 20 percent (four units) coated slow release nitrogen from sulfur-coated urea combined with 1 percent Dursban insecticide. **Circle 130 on reader service card**

SNAPPER POWER EQUIPment's full-sized, two-staged snow throwers have the power and maneuverability to get through deep, wet and ice-crusted snow.



The snowthrowers come in three models: The 8242, with 8-h.p. and 24-inch clearing width; the 8262, also with 8h.p., but a 26-inch clearing width; and the 10302, with 10-h.p. and 30-inch clearing width.

Snapper's friction disc drive allows the operator to match the speed to various snow conditions by shifting through six forward speeds and one reverse speed.

The adjustable discharge chute gives accurate control of discharged snow and the adjustable deflector cap controls the distance the snow is thrown. **Circle 131 on reader service card**

A WIDE RANGE OF WINTER ATtachments provide year-round productivity to Hustler out-front rotary mowers, manufactured by Excel Industries Inc.

Direct drive wheel motors and dual path hydrostatic controls give Hustler a true zero-degree turning radius.

The heavy-duty snow thrower is PTO driven and hydraulically controlled. An



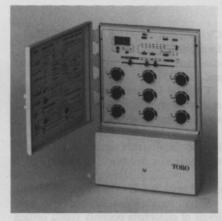
open center auger feeds snow to the spout. Using controls from the operator's seat, snow can be blown in any direction.

The 60-inch V-blade attaches in seconds to work as a tough, fast-working snowplow. The blade is 11 gauge welded steel, with two replaceable, reversible 3/16-inch steel scraper blades. **Circle 132 on reader service card**

A NEW LINE OF TORO CONTROL-

lers called Vision I are precision-engineered, simple to operate and make effective and efficient use of water resources.

Available in six-, nine- and 12-station models, these water efficient controllers



offer internal or 14-day programming, three watering start times and one-to 90minute or 10-minute to nine-hour station run times.

Settings appear in easy-to-read liquid crystal display as they're being made. The LCD also lets the user know which station is operating and how much run time remains.

The Watering DelayTM lets the user



turn off the system temporarily for one to four days. A blinking light designates how many "delay" days are left. Restart is automatic.

Circle 133 on reader service card

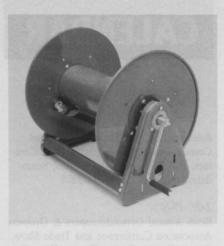
A SOFTWARE PACKAGE FOR LANDscape contractors is available from **CompuScapes.** It will handle every aspect of bidding, invoicing, job costing and receivables and is designed to produce maximum output with minimum input. Data for all functions has to be entered only once.

Information entered for a bid is used to create budgets for the job, a work order for the crew and customer billing information.

The software runs on single user IBM compatible systems, multi-user Novell Networks or multi-user Xenix systems. **Circle 134 on reader service card.**

REELCRAFT INDUSTRIES INC. HAS introduced a line of motor driven and hand crank hose reels that incorporates an all-bolted construction.

The reel frame, spool and drum are fabricated of heavy gauge steel and is available with electric, air or crank rewind mechanisms. The full flow swivel is nickel-plated and equipped with viton O



ring seals. Operating temperatures range from 20-degrees below zero to 250-degrees Fahrenheit. Working pressure is up to 3,000 p.s.i.

Circle 135 on reader service card

THE GO-FER CCDTM MULTIPURpose utility vehicle from **Salsco Inc.** transports personnel and equipment weighing up to 1,000 pounds. Low to the ground, its tailgate/ramp permits easy loading of heavy equipment.

The large 46- by 68-inch cargo area makes easy work of most hauling jobs. ■ Circle 136 on reader service card

Bare Foot (continued from page 28)

Q: Both ChemLawn and TruGreen have been acquired by large service corporations in recent years. As the number three lawn care company, were you ever approached for acquisition?

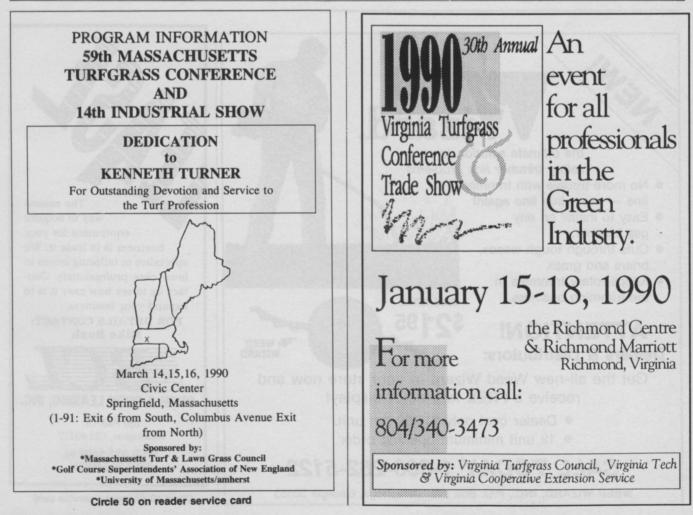
A: Oh we've been approached at different times. We decided, however, that what we did (selling majority interest) was in the best interest to remain independent.

Through this transaction, we made more employees owners, which we think is very positive. We didn't want to be confused with other businesses at this point in time.

Q: Will the high acquisition rate continue in the 1990s?

A: Oh, I don't think so. I think a lot of its been accomplished. It just can't continue at the rate that it did in the 1980s. That's really how TruGreen got to the size they are, which is a different strategy. There's just not lots of good size companies still available. I think that the rate of acquisition is by nature going to have to decrease. — Cindy Code

The author is Editor of Lawn and Landscape Maintenance magazine.



CALENDAR

JAN. 14-17

Second Annual Landscape Magic Conference sponsored by Walt Disney World in conjunction with the Florida Nurserymen and Growers Association, Lake Buena Vista, Fla. Contact: Walt Disney World Seminar Productions, P.O. Box 10,000, Lake Buena Vista, Fla. 32830-1000: 407/363-6620.

JAN. 15-17

60th Annual Michigan Turfgrass Conference, Clarion Hotel and Convention Center, Lansing. Contact: Paul Rieke, 517/355-0266.

JAN. 15-18

30th Annual Virginia Turfgrass Conference and Trade Show, Richmond Centre and Marriott Hotel, Richmond, Va. Contact: Randeen Tharp, 804/340-3473.

JAN. 17

Professional Turf and Landscape Con-

ference and Trade Show, Westchester County Center, White Plains, N.Y. Contact: Bill Renzetti, P.O. Box 307, Scarsdale, N.Y. 10581; 914/636-2875.

JAN. 17-19

Sixth Annual Groundskeepers & Growers Association Conference and Trade Show, Casper Events Center, Casper, Wyo. Contact: Chris Hart, P.O. Box 707, Saratoga, Wvo. 82331: 307/326-5905 or 307/326-8250.

JAN. 19-21

Second Annual Sports Turf Managers Association Convention and Trade Show, Wyndham Greenspoint Hotel, Houston, Texas. Contact: STMA, c/o R/K Communications Group Inc., P.O. Box 94857, Las Vegas, Nev. 89193-4857; 702-735-0000.

JAN. 19-21

Mid-America Horticultural Trade Show, Hyatt Regency, Chicago, Ill. Contact:

Mid-Am, 1000 N. Rand Rd., Suite 214. Wauconda, Ill. 60084; 312/526-2010.

JAN. 22-24

Midwest Regional Turf Conference and Show, Adam's Mark Hotel, Indianapolis, Ind. Contact: Jeff Lefton, Executive Director, Midwest Regional Turf Foundation, Purdue University, W. Lafayette, Ind. 47907; 317/494-9737.

JAN. 23-25

16th Annual Massachusetts Hort Congress, Royal Plaza Trade Center, Marlboro, Mass. Contact: Mass. Hort Congress, 715 Boylston St., Boston, Mass. 02116.

FEB. 4

Women in Horticulture Conference, "Design '90," Sea-Tac Marriott, 3201 S. 176th_Seattle, Wash. Contact: Women in Horticulture Conference, c/o Bill Collins, 18824 93rd Ave. NE, Bothell, Wash. 98011; 206/485-1283.



JANUARY 1990 • LAWN & LANDSCAPE MAINTENANCE

CLASSIFIEDS

RATES

All classified advertising is 55 cents per word. For box numbers, add \$1 plus six words. All classified ads must be received by the publisher before the 10th of the month preceding publication and be accompanied by cash or money order covering full payment. Submit ads to: ALA Lawn and Landscape Maintenance magazine, 4012 Bridge Avenue, Cleveland, Ohio 44113. Fax: 216/961-0364.

ACQUISITIONS

WANTED TO ACQUIRE

Lawn care companies of all sizes in U.S. and Canada being sought by national corporation. Complete buy out or stay and grow with us. If interested please call me directly: Don Karnes, Senior Vice President, Tru Green Corp., 404/ 442-8700. Strict confidentiality maintained.

WANTED TO BUY

Lawn care companies of all sizes anywhere in U.S. wanted to purchase by national corporation. If interested please respond to: *Lawn & Landscape Maintenance*, Box 329, 4012 Bridge Ave., Cleveland, Ohio 44113. Strict confidentiality maintained.

FOR SALE

LAWN CARE EQUIPMENT

Hannay reels new in-the-box, El526s, El530s, \$349; lawn spray hose, 275 psi and 600 psi, all sizes; original Imler measuring wheels, \$48; glycerin-filled gauges, 0-60 psi to 0-1,000 psi, \$19.95; ChemLawn guns, \$75.95; lawn spray boots, \$16.95; lawn spray gloves, \$1.75/pair. **Call Hersch's Chemical Inc. 800/843-LAWN** — outside of Michigan **313/543-2200**

LANDSCAPE TRAINING VIDEOS

Intermediate mower maintenance field and shop repair; efficient/profitable mowing techniques; professional shrub trimming, plant installation, basic landscape plan drawing, etc. ENGLISH AND SPANISH. Write for free brochure: C.D. Anderson Landscape Videos, 515 Ogden Ave., Downers Grove, Ill. 60515. 800/937-0399.



EQUIPMENT AND CONSULTATION

Canann Industries announces the Chemtec line of sprayers designed for professional lawn care use. Custom design sprayers; Professional spray consultation, Flo-jet 12-volt pump; Backpack sprayers; Hannay reels; JD9CT guns; Glycerin gauges; Spray System parts; Hypro and Udor pumps and replacement parts; High Pressure Cleaners. Call today for Chemtec catalog, 800/848-8507.

COMPUTER SYSTEM

Lawn Care Computer System with Software, Data General Hardware, Desktop 20 CPU, 75 MB Hard Drive, 3 Wyse Terminals, Digital Printer, 1200 Baud Support Modem. CLC1 Lawn Care Software with System Support Available. Call: 618/632-5296, or write MLS, c/o LB, P.O. Box 8068, Belleville, Ill. 62222.

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We work with business owners to increase your profit, build your customer base, improve your systems and carefully plan future growth. You receive a complete evaluation that will gauge your strengths and weaknesses followed with recommendations of alternative methods and products. A completely confidential way for you to upgrade your business by incorporating time and money saving ideas that far outweigh the associated fee. We can make a difference — if you will just take the opportunity. Call now 800/462-2308.

Nick Ahrens, executive vice president 25161 Center Rd. Frankfort, Ill. 60423



USED EQUIPMENT

Used Tuflex tanks. Two 600-gallon rectangular tanks with mechanical agitation. Three years old. \$1,700 each. One 600-gallon rectangular tank with three separate compartments and mechanical agitation in each. Three years old. \$2,750. 614/771-0067.

•••

USED SWEEPER

Parking lot sweeper. 450 hours on 14-h.p. Wisconsin engine. 3 cubic yard hopper. Excellent condition. Call 919/342-1540.

SPRAY TRUCK

Industrial and/or railroad spray truck. 1977 Dodge D500 Flat Bed HiRail Truck (18,500 lbs.) Engine rebuilt 1988, new clutch 1987, recent paint, excellent condition. Comes with mounted Stainless Steel FMC 500 gallon spray unit with electric start Kohler engine and 20 g.p.m. pump. Ready to go on ground or rail for \$6,000. Call 708/798-2727. (III.)

GOVERNMENT FINANCING

Let the government finance your small business. Grants/loans to \$500,000. Free recorded message: 707/448-0270. (NK8).

LANDSCAPE BUSINESS

Well-established landscape maintenance and construction business in Phoenix, Ariz. Solid contracts; excellent reputation; immediate cash flow; trucks and equipment; key people; and full crew. Terms available to qualified buyer. Tony Reid, 602/433-4997.

12123

HELP WANTED

FOREMAN POSITION

Top firm needs foreman. Quality conscious Texas-based landscape management firm has immediate opening for detail-oriented landscape maintenance foreman. If you have outstanding professional and horticultural skills and are not afraid of hard and healthy teamwork, then you could qualify for a top position with the finest landscape firm in the Southwest. Outstanding



compensation and opportunity. Reply today to: Lawn & Landscape Maintenance, Box 325, 4012 Bridge Ave., Cleveland, Ohio 44113.

SUPERVISOR/SPECIALIST

Landscape maintenance supervisor/turf specialist. Opportunity to supervise turf program for landscape maintenance company in northern Illinois. Strong background in all phases of turf management is required. Horticultural degree and experience preferred. Excellent opportunity with young, aggressive company. Send resume and salary requirements to: Andre Otting, Scott Byron & Co., 30088 N. Skokie Hwy., Lake Bluff, Ill. 60044.

•••

POSITION WANTED

Need a general manager or trouble shooter for chemical lawn care? Need growth? Increased profits? Need a leaner more productive company or if you want to add a chemical lawn care division or start a new company, call: John, 801/ 399-2181, ext. 311.

GOVERNMENT POSITIONS

ATTENTION — Hiring government jobs — your area. Many immediate openings without waiting list or test. \$17,840 to \$69,485. Call 602/838-8885, ext. R13758.

...

SERVICE MANAGER

Lawn/tree and shrub care. Northeast, growing



The Andersons
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Blackburn Mfg10
Bush & Cook Leasing
C & S Turf Care
Canaan Industries
Center Educational
Classen Mfg
Compuscapes
Compuscapes
DowElanco
Exmark Mfg
Feldmann
Grasshopper Co
Imler Industries
J.J. Mauget
Lawn Tech.38Lawn-Wright.8Lebanon Chemical.28
Lawn-Wright
Lebanon Chemical
Massachusetts Turfgrass
Metko
Oldham Chemical
PC Supply
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Practical Solutions
RND Signs
Real Green
Thornton Computer
Tuflex Mfg
Virginia Turfgrass67
Walker Mfg4
Weed Wizard

company needs a take charge person with practical experience and good communications skills. Total responsibility for all aspects of service will include team-building, customer satisfaction and budgets. Send resume with experience and salary history to: *Lawn & Landscape Maintenance*, Box 337, 4012 Bridge Ave., Cleveland, Ohio 44113.

MANAGER/SALESMAN

Lawn maintenance manager/salesman for awardwinning firm is seeking aggressive individual to head grounds management division in a growth oriented design/build firm. Areas of responsibility would include: professionalism, sales, estimating, training, scheduling and managing for profit. If you are the type of person that enjoys hard work and active company growth, please submit a resume with a cover letter and salary history to: Environ Associates Inc., 6111 Blue Stone Road, Atlanta, Ga. 30328.

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MAINTENANCE POSITION

KT Enterprises Inc., a commercial landscape management firm servicing the Washington, D.C., metropolitan market, is now accepting applications for employment in their landscape maintenance department for the 1990 season and beyond. All positions offer excellent salary, health benefits, retirement and, most important ly, an incomparable opportunity to work in a quality organization that will continue to offer professional satisfaction. Please send resume to: Doug Sevachko, KT Enterprises Inc., 7950-1 Woodruff Court, Springfield, Va. 22151 if you

Pesticide Update

(continued from page 33)

the signs.

The regulations clearly state that it's not the applicator's responsibility to remove the signs as long as the property owner has been given instructions to remove them. They also state that an applicator cannot be held liable for removal of signs by unauthorized individuals before the 24-hour period has expired. These have been major points of contention in other states.

Prenotification is not mandatory under these regulations. Rather, they say applicators should be prepared to provide prior notification when it is requested from a customer.

This information would include the brand name and common name of pesticides applied and any special instructions from the EPA registered label concerning use of the property after the application.

The central registry would be maintained by the agriculture department. It will contain names and addresses of the hypersensitive people and property owners who are adjacent to them or within 30 feet who have pesticide applications. Other states use a 100-foot standard. are interested in any of the following positions: pruning department supervisor, maintenance department supervisor, maintenance department manager, pruning department manager, floral installation manager, turf and ornamental plant specialist.

MANAGER POSITIONS

As a result of continued growth Ruppert Landscape Company is seeking a well-qualified landscape installation/design build manager. Background should include: sales, design, production management, estimating and strong administrative skills.

We are also seeking a talented, well-organized individual to fill a top area management position. Must have strong horticulture and supervisory experience. Individual should have excellent customer relations skills as well. To learn more about these outstanding career opportunities with a fast growing and innovative team call or send resume to: Ruppert Landscape Co. Inc., 17701 New Hampshire Ave., Ashton, Md. 20861. Attn. Mr. Otero, 301/774-0400.

PRODUCTION SUPERVISOR

...

Growing Memphis, Tenn., area firm seeks highly motivated maintenance supervisor. BS degree in horticulture or related field and experience in landscape maintenance desired. Excellent salary, profit sharing and benefits for the right person. Reply to MorGreen Inc., 885 W. Poplar, Collierville, Tenn. 38017; 901/853-9877.

A doctor's verification is needed to be placed on the list.

WISCONSIN.

The Department of Agriculture is in the process of rewriting AG29 which regulates the registration and use of pesticides in the state.

Russ Weisensel, Wisconsin Agri-Business, said the new regulations should be in place for the coming season. Posting is called for only on cases where labels set a certain time interval for re-entry to the property. Those signs will be the standard 4- by 5-inch size.

Prenotification will be up to the customer. When a contract is made, the applicator will notify the customer of the information that is available as prenotification: brand name, common name, concentration, application rate and label precautions.

Also included in the rules will be a provision for a 30-day training period. New employees will be under direct supervision from a registered technician and will not handle restricted use pesticides. Trainees will be able to handle other pesticides, but only under direct supervision from the technician. — David Westrick

The author is Assistant Editor of Lawn and Landscape Maintenance magazine.

Is your weed control controlling you?

You need to reseed, but you can't. That's the trouble with many herbicides. They lock you out of your turf program for months.

Not Balan.[®] It's the preemergence herbicide that lets you reseed your turf only six weeks after application (or 12 weeks at the higher three-pound southern rate). Without harming your new seedlings.

That's how predictable Balan is. Its weed-controlling activity is reduced enough to permit reseeding. You can even apply Balan in the spring to turf seeded last fall. What you'll see is turfgrass. What you won't see are weeds. Problem weeds like crabgrass and goosegrass. Balan has more than 20 years of experience in preemergence weed control.

Control this dependable is now easier to use — with Balan DF. It's a new dry flowable formulation that mixes easily with less dust. Just one more way Balan puts you in control of your weeds and your turf management program. Call your Dow Elanco distributor. Or for technical assistance, call toll-free: **1-800-352-6776.**



Dow Elanco 4040 Vincennes Circle – Suite 400 Indianapolis, IN 46268 U.S.A.

Ryan brings quality aeration from golf greens to green lawns.



The revolutionary Lawnaire 28 combines the technology and precision of golf course aeration with the demands of lawn maintenance. Its reciprocating, crank mounted tine arms feature a vertical coring action similar to larger Ryan aerators. Tines penetrate straight in to a depth of 2½ inches, and come straight out. The results are a more professional-looking job, better root development, greener lawns, and more satisfied customers.

Make more money by the yard.

Because time is money, the Lawnaire 28 is designed to cover big jobs quickly — up to 24,000 sq. ft. per hour. But because not every job is big, it's also compact and maneuverable. Just 34 inches wide, the Lawnaire 28 easily fits through yard gates. The unique tricycle front wheel gives the unit a zero turning radius while aerating! Even the tightest spots are no problem. And because it's a Ryan, you can rest assured that the Lawnaire 28 will keep you on the job and out of the repair shop for years to come.

Check out Ryan's reliability in your own backyard. Contact your Ryan dealer and ask for a free demonstration today. Or call toll free: **1-800-228-4444**.



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