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Perma-Green's acquisition of Green Scape reunites two industry professionals and promises expansion into the maintenance market.

30 Experts Predict Mild Weather Conditions for 1990

After the Drought of 1988 and some excessive rains last year, manufacturers and maintenance operators alike are hoping for a more temperate year.

34 Operators Turning to Franchising More Frequently

The relatively small amount of cash needed, along with the support and know-how from the parent organization are fueling increased lawn maintenance franchise sales.



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Cover photo by Warren Faubel, Los Angeles, Calif.



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More competition and increased environmental awareness are causing many maintenance operators to rethink what they include in their advertising.

46 Competition Increases Need for Insightful Bidding

Making your bid proposals too general can lead to problems later on. Find out what to include so you and the client know exactly what to expect.

50 Mobile Mole Crickets Often Elude Control Measures

Mole crickets are a major menace to turf managers in the Southeast. Insecticides remain the best control, but application timing is crucial.



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54 Crabgrass, Goosegrass Control in Warm-Season Turfgrasses

Preemergence herbicides have worked well on crabgrass for some time, but the introduction of oxadiazon brought goosegrass under control too.

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EDITOR'S FOCUS

HOW CAN A LAWN AND LANDSCAPE maintenance operator save money on his insurance bills?

That's a question frequently asked in response to our reader surveys or phone calls to our office. Unfortunately, there's no simple answer. In fact, a panel discussion on liability insurance at the Green Team Conference in St. Louis was met with a standing room only crowd, many of whom were disgruntled customers.

Although every state has different regulations, the panelists agreed there are several steps every company can take to ensure a better working relationship with insurance representatives.

From his own experiences, panelist Charles Glossop said he understands the frustration lawn and landscape maintenance operators go through. "There was a time when I was happy just to have insurance," he said. "But now I feel comfortable working with my agent."

Glossop, president of Green Masters Industries Inc., Plymouth, Minn., described what happened to him.

"The insurance agent came in, saw the whole business and lumped us into one category — landscape construction," he said. "I had to fight to get into the landscape management category which has a much lower rate."

Glossop said the experience is fairly typical of similar sized maintenance firms. Once he established relatively reasonable rates, however, Glossop went to work trying to maintain them.

In-house safety testing became mandatory before operators could venture into the field. Such a step reduced workman compensation carrying rates by about 25 percent, he said.

Green Masters' in-house program was aided by videotapes covering each aspect of general landscaping. The videos were produced by the safety and insurance divisions of the Associated Landscape Contractors of America.

"The tapes are a cheap investment for safety," Glossop said.

In addition to a personal commitment to safety, maintenance operators want an insurance company with a proven safety record as well, according to Gary Borgman, Clarence Davids & Sons, Blue Island, Ill.

"Finding a company with a good safety program and keeping them aware of your (safety and training) programs will help lower premiums," he said. "Preventive maintenance enforces safety procedures and reduces employee turnover. More ac-



cidents happen with new people."

Other tips for reducing insurance premiums: higher deductibles, controlling losses, keeping a neat and clean shop particularly during visits from your insurance carrier and remaining with one company for at least three years to develop a working relationship.

Weekly safety meetings can't be emphasized enough, Glossop said, adding that the whole company should be made aware of each and every accident. Many companies even go as far as requiring employees to sign a form attesting that they have attended a training program.

A commitment from management is the first step to setting a program in motion, according to Marla Rabritch of CNA, Chicago, Ill. Details are secondary.

CNA currently insures about 4,000 landscape companies and promotes its ability to tailor insurance coverage to an individual company, she said.

According to experts, the last three years have been extremely competitive for the insurance industry and will only get harder as a result of environmental disasters like Hurricane Hugo, the San Francisco earthquake and the Exxon Valdez oil spill.

Look for more detailed articles on the issue of liability insurance this year. In the meantime, if you've had a positive or negative experience with insurance coverage, let us know. Maybe your experiences can help other readers.

In other news, watch for the winner of *Lawn and Landscape Maintenance* magazine's 1989 Professionalism Award. Did your peers nominate you? Will you be the next winner? Find out the results in our March issue. — *Cindy Code*

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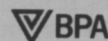
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ATTENDANCE CONTINUES TO GROW AT EXPO SHOW

ATTENDANCE AT THE 1989 INTERNATIONAL Lawn, Garden and Power Equipment Expo increased 11 percent over 1988 registration, according to the show's survey and marketing audit.

The increase doesn't include exhibitors and show officials. In addition, 32 percent of the attendees were first-timers at the show.

Purchasing power of the attendees increased significantly. According to the survey, 91 percent of the visitors are a buying influence in their companies, compared with 83 percent in 1988.

The estimated average purchases at the show increased 14 percent — from \$17,823 per attendee at EXPO 88 to \$20,438 per attendee in 1989.

Fifty-four percent of those surveyed said they attended primarily to see new products, and 24 percent visited primarily to seek new suppliers.

The study also showed that 53 percent of the 1989 exhibitors were power-oriented and 47 percent exhibited non-power products.

Because survey participants indicated they want to see more tools and service equipment, commercial products, portable power equipment, tractors and non-power

PRODUCT ORIENTATION OF RETAIL AND WHOLESALE VISITORS TO EXPO '89



About 50% of both wholesale and

retail merchants sell to both the commercial and consumer markets. Only wholesale merchants specialize in commercial products in significant percentages. From 1988 to 1989, there was a 6 percent point swing toward non-power oriented exhibitors.

equipment at future EXPOs, show officials will be working to attract even more exhibitors of those products for EXPO 90. Louisville continues to be an inexpensive

site for the show. Excluding products purchased at EXPO, 39 percent of the respondents said their trip to Louisville cost less than \$250. Sixty-five percent estimated the business trip cost less than \$500.

Seventy-five percent of those surveyed said they were already planning on attending the 1990 Louisville show, set for July 29-31 at the Fair & Exposition Center.

The survey and marketing audit were conducted by Giltner & Buskey, a market research firm based in Louisville, Ky. The key components of the study were the analyses of EXPO registration data and five surveys that were fielded immediately after the 1989 show.

For information about EXPO sponsored by the Outdoor Power Equipment Institute, contact the EXPO management office, P.O. Box 70465, Louisville, Ky. 40270; or call toll free 800/558-8767. In Kentucky or outside the United States call 502/473-1992.

NOTIFICATION REGULATIONS STRUCK DOWN AGAIN

PERSEVERANCE FINALLY paid off for lawn and landscape maintenance professionals in New York. The end result: rejection of the state's pesticide regulations.

In an unanimous decision, the Appellate Division of the state Supreme Court ruled that the state Department of Environmental Conservation was obligated to conduct an environmental and social impact study of the regulations before putting them in place.

The DEC, author of the stringent regulations, is entitled to another appeal, but those who have been involved in the two-year battle said victory is nearly in hand.

"We're ecstatic," said Beth

Seme, executive director of the New York Turfgrass Association. "The legislature is saying that we can't have this happening."

State laws governing pesticide applications are still in effect.

Tom West, attorney for the Green Council, said an impact study would consider the significant adverse impacts the notification regulations would have on operator attempts to do business, including the use of integrated pest management programs.

The council is an organization of lawn maintenance firms, arborists and nurserymen who have contended from the start that the state's regulations were

in violation of the Federal Insecticide, Fungicide and Rodenticide Act.

The DEC had 30 days from the filing of the appellate court order to decide whether it will appeal the decision. Based on case history, the DEC will appeal.

Since the law governing pesticide applications remains in effect, operators must still post 4- by 5-inch signs after applications and must use contracts.

Cancellation of the regulations eliminates excessive signage, supplying customers with contracts 48 hours in advance of an application and retaining contracts for six years among other things.

ECOLAB HALTS TAKE OVER BID BY CARLYLE

Ecolab shares recently fell 2 points to \$26¾ after the cleaning system giant said it had bought the 6.5 percent stake

owned by Carlyle Group. The group was rumored to be readying a take over bid as late as mid-January.

Carlyle walked away with a \$5 million profit and promised not to buy any more Ecolab shares, according to a report in *USA Today*.

Carlyle began accumulating Ecolab stock last summer. Ecolab shares peaked in September at \$35 3/4 — the low end of Wall Street's takeover estimate.

According to analysts, Ecolab began struggling to service its takeover debt almost immediately after its ChemLawn acquisition. The St. Paul, Minn.-based firm purchased ChemLawn in April 1987 for \$376 million.

Ecolab paid \$55.3 million or \$30.75 a share, for Carlyle's 1.8 million shares. Ecolab executives said the purchase price reflected the market price for the stock Jan. 11 when Ecolab approached Carlyle about the purchase.

DOWELANCO SETS SIGHTS, STRUCTURE FOR GLOBAL FIRM

The end of last year saw the merger of two chemical industry giants as The Dow Chemical Co. and Elanco Products Co. joined forces to form DowElanco.



Dick Holzschu, DowElanco general manager.

The new company, ranked 26th on the "Fortune 500" list with \$1.5 billion in sales, will be headquartered in Indianapolis, Ind., under the direction of John Hagaman as president and chief executive officer.

Research will also be consolidated in Indianapolis, where an 800,000-square-foot headquarters costing more than \$100 million is being constructed.

A five-member board of directors includes three representatives from Dow and two from Elanco, mirroring the two companies' 60/40 partnership.

The move is regarded favorably by representatives of both companies since the two product lines are complementary. The company employs more than 2,500 people.

According to Dick Holzschu, general manager, North American Specialty Products, the merger "gives us the critical mass to do a lot of things in the markets we serve. When you combine the critical mass of the two markets, you have a sizeable company. There was almost no competitiveness between the two product lines and that made coming to an agreement a lot easier."

Despite their divergent product lines, however, the two companies did have a great deal in common, Holzschu said. "We think a lot alike and embrace the same core values: a commitment to safety, product stewardship, business ethics and hard work."

He added, "There's a terrific degree of synergy between the two companies. We have a very extensive technical service and development operation. And when you take the complete package and put it together, we're pleased with what we have in research and development."

Bill Culpepper, commercial director, DowElanco Specialty Products, said he expects the company's product mix to remain virtually unchanged, and both men agree that the commitment to specialty products is fully respected by the company's agricultural chemical entity.

"I think there's a recognition that it's a

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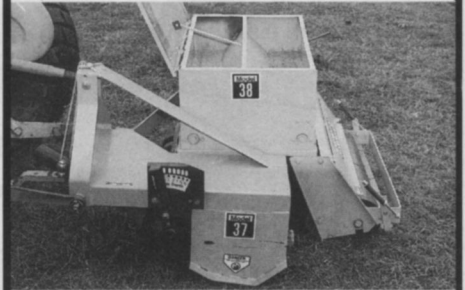
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very important business to us (specialty products)," Culpepper said. "We're an equal partner with our ag counterparts."

DowElanco becomes the sixth largest agricultural chemicals company in the world, with half its sales expected to be outside North America. Overall, it will serve 17 markets including professional pest control and grounds management.

Four management groups, each with a sales and marketing manager, will focus on turf and ornamentals, professional pest control, vegetation management and chemical sales to formulators and companies offering over-the-counter products.

"The formula for success for each market segment will not be the same. We can grow our sales in each one of the market segments we serve," Holzschu said, adding that the company will continue to improve existing products and support new product development.

"The specialty market is becoming respectable in size, and turf and ornamentals warrants the discovery of its own molecules rather than ag related," he said.

Culpepper added that DowElanco will be just as aggressive in acquiring molecules as it will be in developing them. "There are growth opportunities in all the markets we serve. We definitely have growth plans for the business."



Bill Culpepper, Dow Elanco commercial director.

1990 CHAIN SAW SALES EXPECTED TO ESCALATE

For the first time in nearly 10 years chain saw sales are expected to increase significantly in 1990, offering stronger profit opportunities for dealers and distributors.

James Dunne, president of Solo Inc., is optimistic about sales of chain saws and other outdoor power equipment despite a softness in the economy and growing concerns of the logging industry to pending legislation from environmental groups.

"We began to see an increase in demand for chain saws toward the end of 1989, and I think this demand is real," Dunne said.

The industry has made great strides in developing better and safer products, and the demand is growing for these products.

CHEVRON RESTRUCTURING TO IMPROVE COMPETITIVENESS

Chevron Chemical reorganized the company's U.S. fertilizer business to improve its profitability.

Major elements of the restructuring include: streamlining its marketing and administrative organizations; closing its regional offices in Kansas City, Kan., and Fresno, Calif.; and accelerating a major manufacturing cost reduction program in its phosphate fertilizer plant at Rock Springs, Wyo.

"Taken together, these steps will significantly reduce our costs and improve our profitability in a very competitive commodity business," said Peter McCrea, vice president of the fertilizer division of Chevron Chemical Co.

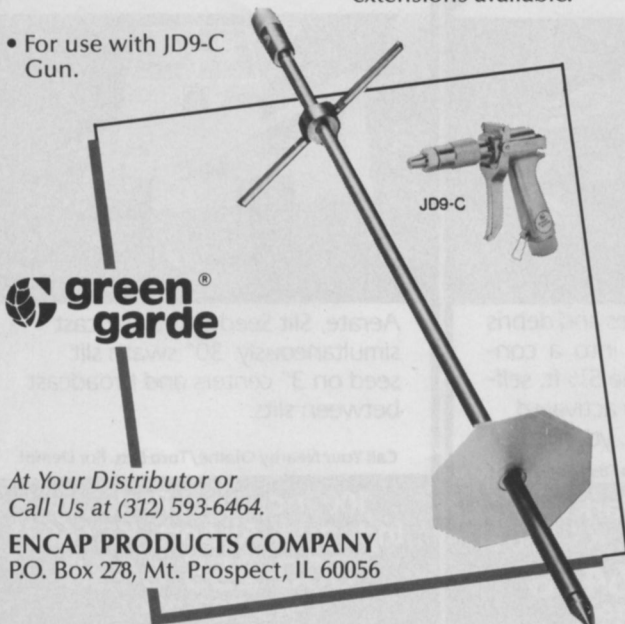
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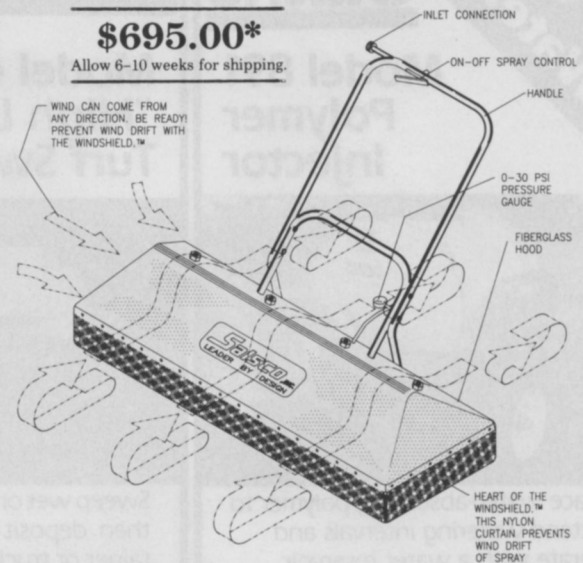
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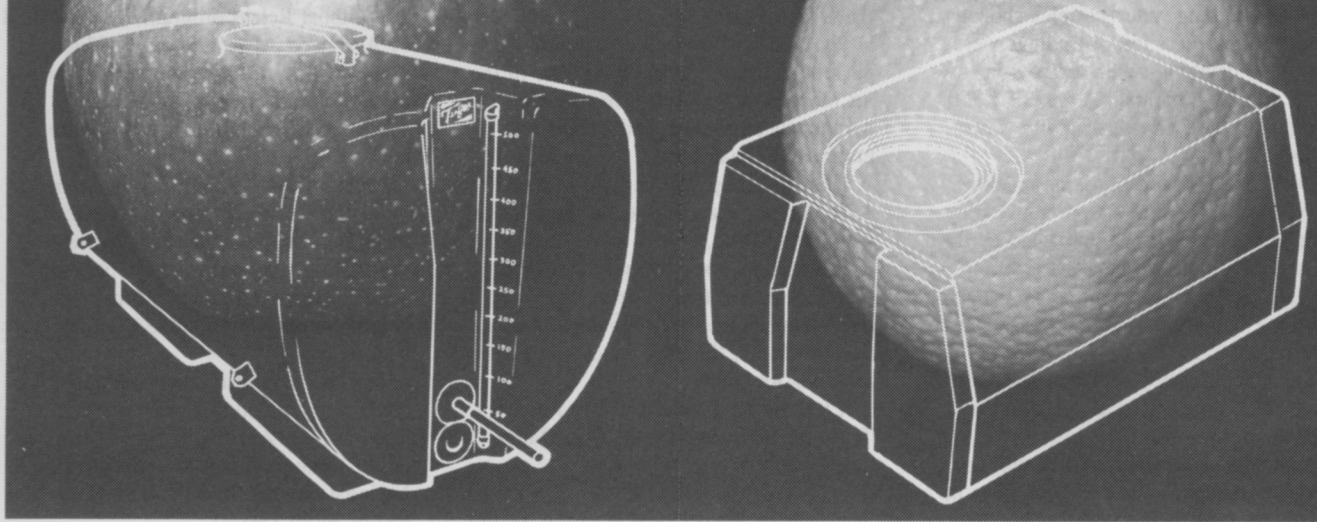
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ASSOCIATION NEWS

THE ENVIRONMENTAL PROTECTION Agency recently released test findings on drinking water samples showing pesticide residues. Initial findings were from 295 drinking water samples in what is to be a national survey of 1,350 community and private drinking water wells.

Of 15 wells where pesticide residues were found, only three were above lifetime health advisories established by the EPA. Only eight of 145 wells found to contain nitrate levels were above the drinking water standard of 10 parts per million.

The samples were analyzed for more than 100 commonly used pesticides as well as nitrates/nitrites.

Information from the survey will determine frequency and concentrations of pesticides in drinking water wells, and examine potential relationships between the appearance of pesticide in drinking water wells and patterns of pesticide usage and ground water vulnerability.

The Outdoor Power Equipment Institute has chosen Louisville, Ky., as the host city for the International Lawn Garden and Power Equipment Expo for the next five years.

OPEI Executive Director and Chief Operating Officer Dennis Dix said two offers were strongly considered. The other city in contention was Cleveland, Ohio.

Louisville won out because of better financial arrangements and because of feedback from exhibitors and attendees. The Expo has been held in Louisville since its inception in 1984. A number of people did not want to see it move.

The American Society of Consulting Arborists announced the schedule for its

1990 specialty workshops. The two topics are "Controlling Tree Use" and "Trees in the Urban Forest."

The first will cover the background, current status and a proposed state of the art movement for control of tree use, maintenance, removal and hazard considerations in urban areas.

This workshop will be held March 16-18 in Tampa, Fla., and again Sept. 7-9 in Columbus, Ohio.

The second workshop will consider planting spaces, tree selection and use, tree maintenance, environmental effects, tree problems, life expectancy and public relations for trees.

It will be held June 22-24 in Research Triangle, N.C., and Dec. 7-9 in Dallas, Texas.

The Interior Plant Division of the **Associated Landscape Contractors of America** has produced a 20-minute video on pesticide safety.

The video is designed to show technicians how to safely apply pesticides and how to clean up and handle spills. The video covers labels, material safety data sheets, right-to-know concerns, proper application, approved cleanup procedures and basic principles of integrated pest management.

The IPD board agreed to produce the video last spring following several meetings with officials from the EPA and the Department of Agriculture.

This spring the **American Association of Nurserymen**, the **American Forestry Association** and *Weekly Reader*, will be conducting a national education program on global warming and the environmental benefits of trees.

The program is designed to teach children about the causes

and effects of global warming and how each person can help by planting a tree. The Global Releaf program, co-sponsored by AAN and AFA, is being highlighted in the *Weekly Reader* curriculum as a model for individual and community involvement for environmental improvement.

An estimated 20,000 teachers across the country have received a resource kit including facts about global warming, trees (environmental benefits, planting and care tips) and other information to help them plan informative, meaningful lessons.

Teachers will also be encouraged to include a tree planting as part of the curriculum unit. April is being recommended for these plantings to coincide with National Garden Month, Arbor Day and/or Earth Day.

The Global ReLeaf program is gaining momentum. Nearly every state has named a Global ReLeaf coordinator, and a number of national and local organizations have joined the effort and are initiating education and planting programs of their own.

Many participants are gaining the support of local businesses and national corporations.

The landscape industry's largest trade show recently announced a name change. The **California Landscape Contractors' Association** has changed the name of its annual show to GreenTech/90. It formerly was known as the Landscape Industry Show.

Another change involves the show's committee hiring a full service advertising agency, Dana/Foran Advertising, Sacramento, to handle the show's publicity. This is all part of a three-year plan to update the show's image and increase attendance.

The show displays the latest technology and newest ideas for landscape contractors, and the association wanted the name as well as the show's marketing to reflect that, said Greg Meyer, show committee chairman.

The theme for GreenTech/90 is "Where New Ideas Grow." The show is set for April 26-27 at the Long Beach Convention Center. ■



FOR MORE INFORMATION...

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Rick Steinau, president
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IRRIGATION VALVES KEY TO PROPER WATERING SCHEDULES

SEVEN OR EIGHT YEARS AGO AN irrigation system was considered an after-thought; something that was installed only if the budget allowed.

"Today, it's like putting up walls," said Don Bulmer, district sales manager at The Toro Co., Riverside, Calif. The business has really taken off because of efforts by landscape designers and irrigation consultants.

"There is a natural tie-in between irrigation and landscaping," Bulmer added. "When people pay from \$5,000 to \$20,000 for landscaping, it's not enough to hope for rain."

Proper irrigation will also bring plants to maturity sooner, an important consideration to homeowners who have spent large amounts of money on landscapes.

Suitable irrigation involves controlling the water, not only through accurate watering schedules, but by using a specific number of valves in key places that will



Photo: The Toro Co.

execute that schedule.

The main valves of a system can either be manual or automatic, Bulmer said. If they are manual, there is usually a T-handle shaft over the valve that must be opened and closed by hand. It may also be operated by a lever, knob or key.

Electric converters are available to upgrade manual systems. These can easily be hooked up without disturbing the piping and with little other disturbance.

Automatic valves have their advantages, but manual systems still have a place in the industry because of the higher costs associated with automatic valves.

Sometimes owners will use both valves in a system, placing the manual valves in areas that don't need much water, said A.J. Powell, extension professor at the University of Kentucky. This lends more control in those areas and may save some money, although the cost difference is not that much.

Manual valves come in either gate valves, consisting of a metal or plastic piece that obstructs the pipe, or ball valves, which contain an actual ball inside the valve.

Both types have handles to turn them

(continued on page 20)

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Irrigation

(continued from page 18)

on and off, but a gate valve is more prone to leak than a ball valve, Bulmer said.

Often used as a master valve, manual valves are placed near the house and can shut off the water to the system. Master valves can also be found in the beginning of some systems, before any other valve, said Brian Vinchesi of Eastern Irrigation Consultants, Pepperell, Mass.

If one of the stations opens up, the master valve opens up to unpressurize the whole system. This is not necessary, he said, but is sometimes installed as a precaution. Manual valves may also be used during maintenance when it's necessary to isolate certain valves in the system.

Automatic valves are activated electrically or hydraulically by the controller.

"All valves are hydraulic," Vinchesi said in reference to their mechanics. "It's their activation that is different." Some are activated hydraulically, while others are activated electronically.

Electric valves are activated by sending 24 volts of power to the valve. It's easier to troubleshoot systems with electrically activated valves, said Vinchesi, but hydraulic activation is more suitable if the area is prone to electrical storms.

There are different types of hydraulically activated valves. Most common are open- and pin-type valves.

Open valves are normally used for dirty water systems — systems using an outside water source such as a pond. The water goes through a pilot valve assembly in the controller.

The pilot valve is separated by chambers and each station has its own valves. A small amount of water is discharged station by station, relieving pressure and allowing each station to turn on.

In a pin-type system, the valve supplies its own water, Bulmer said. This system has a constant discharge or drip as long as the valve is running, making it necessary to have a discharge gravel pit to collect the water.

A foot valve is used only for systems that pump water from a lake or a pond. It's located in the bottom of the pump's suction line to hold the pump's prime, Vinchesi said. Like a check valve, it keeps water from draining when the system isn't running.

Placed at low points in the system, drainage valves allow the water in a system to drain each time the system runs, Bulmer said. Gravel pits are needed to catch the water. This practice wastes water, but allows users to avoid blowing

out the system every winter.

Drainage valves are generally not cost-effective for residential systems, Vinchesi said, because they involve sloping the piping.

In addition to being harmful to plants, overwatering or improper drainage practices may result in mold, runoff or erosion.

A check valve is a "little plastic part," said Bulmer, that goes in the bottom of the head. It is used when there are elevation differences to prevent the water from reversing and coming back through the pipe.

Traditionally, valves were constructed out of brass, but today the only difference separating brass valves from their more recent plastic counterparts is price, according to Vinchesi.

There used to be a cheap connotation with plastic, Bulmer agreed, but the mentality is changing today with the onset of "engineering plastics" and other materials such as glass-filled nylon.

"Brass is heavier," Bulmer said. "If someone has one of each, it's tempting to choose the brass, but that is changing."

"There are probably 20 plastic valves sold for every brass," he said adding that a plastic valve costs about one-third the price of a brass valve. — *Jyll Johnston* ■

The author is a Staff Writer for Lawn and Landscape Maintenance magazine.



Garbage Crisis

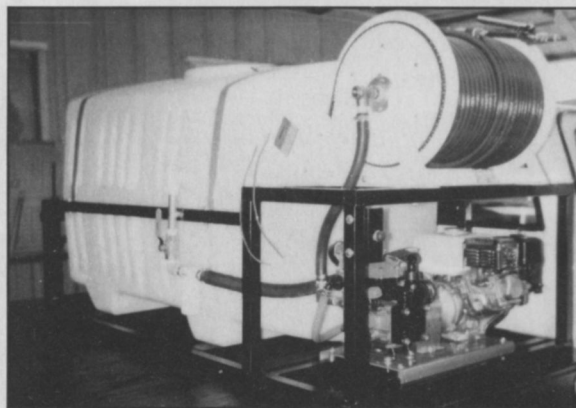
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Jim adds that there's another reason he can't afford to make too many callbacks. “When you have to go out and do a respray, you're taking a chance on losing that customer.”

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IMPROVING SURVIVAL CHANCES OF PARKING LOT LANDSCAPES

PARKING LOTS ARE OFTEN LANDSCAPED in hopes of masking their extensive pavement with masses of lush vegetation. Unfortunately, these plantings, like so many urban landscapes, often fail to grow and only add to the visual blight they were intended to correct.

A recent study conducted by Christina Pfifer, a graduate student at the University of Washington in Seattle, examined the horticultural problems of parking lot landscapes of four Metro Park and Ride Lots in the Seattle, Wash., area.

Design, installation practices, plant selection, site use patterns and maintenance requirements were investigated in plantings four- to eight-years old.

While many factors throughout each stage of development contributed to poor growth, adverse soil conditions were a major problem.

The parking lot soils examined in the



Parking lot trees grow better in clusters. Photo: Jeff Iles.

study were highly compacted. Construction specifications required that the pavement subgrade be compacted to a density of 95 percent. This left less than 5 percent pore space, and the vigor of most plants declines when the soil pore space falls below 30 percent. The compaction contributed to high plant losses where

grading overlapped into landscape beds.

Importing topsoil to these sites didn't necessarily improve matters. When "island" planters were cut out of the asphalt and filled with topsoil, the subsoil was so highly compacted that a container situation was created with limited rooting area. Because of the limited rooting area, trees growing in island planters had high irrigation and fertilization requirements.

While the general consensus is that plants in urban landscapes have shorter lifespans, no specific studies have ever been done to determine exactly how much shorter, said Jeff Iles, horticulture professor, Iowa State University, Ames, Iowa.

Generally, trees in urban settings suffer from elevated root and leaf temperatures,



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more sporadic moisture and a high chance of sustaining mechanical damage from cars and snow removal equipment.

Trees in urban and parking lot landscapes perform much better when there are more plants in an area, according to Iles. A synergistic relationship develops, whereas trees planted by themselves in large planters do much more poorly.

Iles advocates the creation and use of green islands — large areas with diverse plantings. These areas have a larger root volume which helps each plant. Creating an irrigation system is also much easier to do in such areas.

"Green islands are optimal because they look better, they're lush," he said. "They always look better than having trees in large planters at 30-foot intervals or so."

It's best for a landscaper to be involved in the design of parking lots so a good amount of space is set aside for the landscape, said Larry Koontz, horticulture professor, The Pennsylvania State University, University Park, Pa. Otherwise engineers will concentrate on parking and forget space for trees.

In addition, lots should be designed so melting snow runs into a drainage system rather than into the planting beds. Excessive water combined with salt is detrimental to the trees.

Choosing specific plant varieties is also significant. Varieties must be tolerant of the unusual growing conditions. They have to be able to withstand a higher concentration of pollution, the reflected heat from cement and spraying of salt during wintertime. Mixing varieties is desirable.

"In the past, people didn't mix and use a number of species in parking lot landscapes," Iles said. "That's a real problem if a disease like Dutch Elm comes in. If there isn't a variety, the whole area will be lost."

Each region of the country has different choices. Popular common species include the American Elm and Honey Locust, according to Iles.

In the Seattle study, when six inches of topsoil was placed over the existing subgrade, an interface was created between two distinct soil types. Since water resists movement across such an interface, this practice resulted in shallow planting soils which were poorly drained in the winter and droughty in the summer.

Drought stress was another key problem in the Seattle parking lots. In sites without summer irrigation, autumn coloration and defoliation occurred by August.

Trees in island planters displayed drought symptoms earlier than trees in perimeter beds. Damaged irrigation systems often interrupted water availability. In addition, irrigation was only installed as a temporary requirement in many of these sites.

Simply deciding to install an irrigation system is not enough, Koontz said. Before

actually doing so, specific arrangements including who will control the system and whether it will be an automatic or manual system have to be made. Without this planning, the system will be of little help.

The Seattle study concluded that the success of parking lot landscapes, and most other urban plantings, could be improved through the following soil management practices:

- Test soil aeration using bulk density measurements. As a guideline, the density should be no greater than 1.3 grams/cubic centimeter for fine soils to 1.4 grams/cubic centimeter for coarse soils.

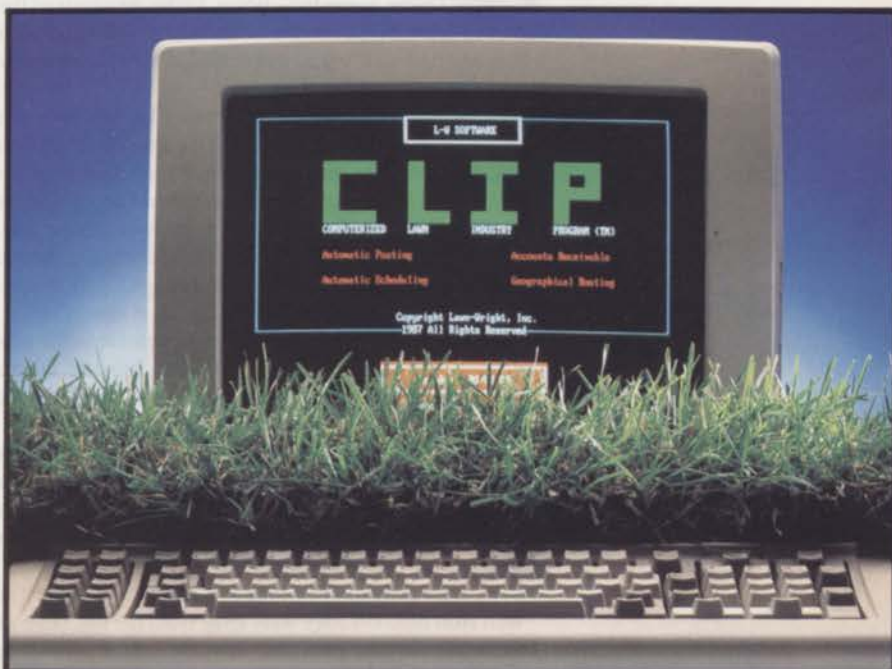
A good way to provide aeration is

through the use of perforated PVC pipes. Place them about two feet into the ground and extend them through the parking lot, Koontz said. Roots will grow and develop in areas where oxygen is present.

- Use larger planting beds or berms to increase the effective rooting area.

- Till imported topsoils into the existing subsoil. This will create a gradual transition layer instead of a distinct soil interface.

- Design permanent irrigation systems into all the plantings. Restricted rooting areas, reflected heat and dry summers create extreme drought stress in parking lot landscapes.



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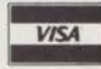
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Combined Strength Assures Maintenance Inroads

IN THE EIGHT YEARS THAT RON HUTT OWNED AND OPERATED Green Scape Inc., Boise, Idaho, he survived the lean, fundamental years; broke into the maintenance field with little to no advertising; and pulled off a deal that sold his \$500,000 company to Perma-Green, but retained his dream.

Now as director of landscape services for Perma-Green, Hutt, 37, will continue to direct Green Scape's growth as well as integrate maintenance services into Perma-Green's traditional lawn care program.

Because both companies have strong name recognition in the Boise area, Green Scape will maintain its name for at least a year, operating as a sister company to Perma-Green. Maintenance services will be available to Perma-Green customers through Green Scape. Eventually, all accounts will be consolidated under one name.

"The deal makes both of us more competitive in the marketplace," Hutt said. "Hopefully it will allow us to increase the maintenance end of these sales and generate a lot of revenue that Perma-Green may not have had."

At perhaps the height of his career, Hutt decided to return to the company which gave him his start in the lawn and landscape maintenance industry with a grand plan to build his fledgling maintenance business.

"I thought if I'm going to do this, I'm going to ask a premium price and walk away from this thing knowing that I'm a winner," Hutt said. "My business at that point in time was the most profitable it's ever been."

Well Hutt didn't exactly walk away from the business, and his firm promises to be more profitable than ever under his new relationship with Perma-Green.

With Perma-Green's larger commercial customer base, Hutt said, Green Scape has already realized significant growth.

"Just by picking up contracts, we're growing like crazy, and we're not even on the lawns yet," he said. "We've already secured three rather large accounts, and we're looking at doing quite a bit more volume than I did in my business just this first year under Perma-Green."

Hutt estimated that 160 to 200 mowing accounts would be added

this year to Green Scape's current 160 maintenance accounts. "We'll double in accounts and more than double in volume very easily," he said.

In all, the company handled about 3,500 accounts in 1989.

Green Scape began in 1982, when Hutt decided to leave Perma-Green to start a business of his own. The company he opened was similar to what he left behind, but operated in areas not strongly covered by

GREEN SCAPE INC.

Headquarters: Boise, Idaho.

Founded: 1982 by Ron Hutt.

Owners: Perma-Green acquired Green Scape at the end of 1989. Green Scape now operates as a division of Perma-Green.

Primary Services: Maintenance services including mowing, tree and shrub pruning, light landscaping, sprinkler installation and repair as well as lawn, tree and shrub care.

Employees: 8 year-round, 18 during peak season.

1989 Sales: \$500,000.

Perma-Green. Revenues after the first year totaled \$53,820 — a number he duplicated in one month in his third year of business.

Hutt had obtained moderate success by 1984, but found his company losing accounts to small one-truck businesses who weren't concerned with profit. Those operators, traditionally offering straight mowing services, would slowly work in related services, gradually pulling at Green Scape's customer base.

"I got to thinking how ridiculous it was that we didn't offer maintenance services," he said. "Even if we didn't make money on it, it would prevent the spin-off to those accounts."

Almost imperceptibly, Green Scape began offering mowing services. Without any hands-on experience to speak of, Hutt and his commercial manager initiated a mowing service through on-the-job training.

"I basically began looking around and asking questions about what other maintenance companies were doing," he said. "I knew that the maintenance end of the business was very labor intensive, so I was going to be really careful."

Hutt was more concerned with getting his feet wet than with advertising — a theory that later paid off. In one year, Green Scape picked up 50 to 60 accounts — enough to tell him that it was an area that could be lucrative if properly run.

As the maintenance business increased, experienced workers were brought on board. At the end of 1989, the maintenance business represented 15 percent of Green Scape's total volume — about \$75,000. The division should reach \$200,000 by the end of 1990.

Hutt never had any intention of selling his steadily growing eight-year-old business, but agreed to entertain a buy out offer from Tru Green Corp. to determine the market value of his business.

"It wouldn't have been fair to myself to negotiate with one company. Since Perma-Green was kind of an old flame in my heart, I went to them and told them what I was up to," he said.

Hutt still maintained he wasn't interested in selling, but when negotiations became heated four months later, Perma-Green came up with an offer he couldn't refuse.

"Full service lawn maintenance opens up more avenues for us and for our customers who may have been going to two or three firms



As owner/operator of Green Scape, Ron Hutt started a maintenance division four years ago. Now as Perma-Green's director of landscape services, he will integrate mowing and landscape maintenance services to a new customer base. Photo: Warren Faubel.



Perma-Green's lawn care customers will get the opportunity to receive mowing maintenance services through Green Scape. Photo: Perma Green.

for tree and shrub care and lawn care," Hutt said. "We hope to acquire a tremendous amount of commercial business from those customers who are already receiving our (Perma-Green) spraying service."

Residential customers constitute the majority of Green Scape's customer base, but the firm was beginning to make a move into the commercial market when the buy out took place.

"We're just looking at building a good strong base in the first year or two and from then on, maybe taking it into other markets or making the position that we've got in this marketplace much stronger," Hutt said.

As successful as he's been in the lawn maintenance industry, Hutt never intended to enter the field. Just short of obtaining his teaching certificate, Hutt said, he was sitting on a bus one day when kids came pouring out of the school. He looked at them and suddenly thought this isn't what he wanted to do for a living.

He was discovered working in a chemical supply house by Jim Marria, the late founder of Perma-Green. Marria offered him a job, but Hutt turned him down. Several months later he changed his mind and began working at Perma-Green.

In the following interview, Hutt shares his insights on Green Scape, its recent merger with Perma-Green and the growth the company hopes to achieve in the maintenance field.

Q: What advice do you have for operators thinking about adding mowing and maintenance services?

A: I will recommend to anyone who's just starting to be staffed and prepared before you do it. What I'm basically saying is don't go out and get the business first and rush into it.

I've seen companies go in, advertise and come out with 150 to 200 accounts and they just couldn't handle the growth. It's not like lawn care companies who can service 600 to 850 accounts with one truck. It just doesn't happen.

One mowing crew can only service about 60 to 70 residential mowing accounts. If you jump into it with a lot of advertising the first year, it's just too difficult to

manage.

In addition, I recommend to anyone just getting started to get your feet wet first. Learn the principles, learn the maintenance and the equipment that you need. Learn what you have to do with your labor, your outside people and then build on that after the first year.

Don't jump into it and try to do \$500,000 in sales the first year because you won't be able to handle it.

Q: What are some of the main principles operators need to be aware of?

A: Know your costs. Know what the market can do. You need to know what your competition is charging for an average size lawn and commercial account. Don't go in and try to buy the maintenance market with low prices. You'll only survive for a year that way.

A lot of people, like we've experienced here in town, came in at a very low rate to basically acquire as many accounts as they could. You can't do it that way because the field is so labor intensive that if you come in at a low price structure, with that type of attitude, you're not going to make a profit and you won't be in the business very long.

You charge the price that's going to make you a profit, and don't expect large growth the first year.

Q: Is there an average cutting price for a home lawn?

A: In town here, our average is about \$19 for about 5,500 square feet. That's just basically for a mow, trim and go.

Q: What kind of equipment did you use to get your maintenance division started?

A: When we first started, of course, we had to have a trailer to carry the equipment and a second trailer to handle debris from our outside pruning and landscaping services.

We already had all the pruning equipment we needed, so we bought a large commercial Snapper 36-inch walk-behind mower and three 21-inch mowers — a Snapper and two Hondas. We had two straight shaft trimmers, plus all of the paraphernalia including

gas cans and blowers to blow the grass clippings off the sidewalks.

There was an investment of about \$6,000 just to get into the maintenance field. That's a small scale investment; just what we needed to get by the first year, with the small number of accounts we had.

Q: As the division grew, how did you increase your equipment supply?

A: We've separated our crews — a commercial crew for commercial work only and three residential crews. All the residential crews have three 21-inch mowers. In addition, each crew has some spare equipment — mainly used mowers. Plus all the crews have blowers, trimmers and miscellaneous supplies.

The commercial crew has three 36-inch mowers, blowers and five 21-inch mowers.

To give you an idea, we have 14 21-inch mowers and three 36-inch mowers all together. We also have five blowers, five weed-eaters and snow removal equipment. We probably have between \$10,000 and \$15,000 worth of equipment right now.

Snow removal is one of those things that's a necessary evil. If you're going to get commercial contracts you have to be able to remove snow off sidewalks. We even have one truck now that we blade snow with.

I don't enjoy that type of work, because it's awful hard on employees and very difficult to bid. Snow is very hard to forecast, so you either make a lot of money or you stand to lose a lot of money if you have a bad snow year.

The commercial accounts are typically set on a monthly basis. For snow removal, that's what can kill you.

Q: How do you avoid down time?

A: Lots of maintenance. To give you an idea, last year we only had one large mower go into the shop and it was on its second year. All of our new equipment, however, did not see the inside of a shop last year because of the people we have maintaining it.

We sharpen mower blades daily. Every two to three days, depending on the time of year, we'll change the oil and every third day

we'll check bolts and cables. Filters are changed every month.

We put a lot of maintenance into the equipment that a lot of companies probably don't.

Q: How much money does that cost the company?

A: A lot. But when I say a lot of money, compared to replacing the equipment it's cheap. When you're looking at an average cost of a Honda 21-inch at \$750 to \$800, and \$50 to \$60 a season just in routine maintenance, it's worth it.

That equipment, if properly maintained, should last. If instead you neglect it, you'll end up putting it in the shop and having a \$150 bill slapped on it.

Q: Do you buy or lease your equipment?

A: The thing about mowing equipment, unless you're buying a truck or a trailer that can be depreciated, the life span is very short. For instance, a 21-inch mower will normally last for two full seasons, but probably won't make it the third. As a result, we basically just expense them all off. Leasing wouldn't justify some of the equipment that we use.

We've got a 36-inch mower right now that's going on its third year. It'll make it through its third season, but the thing you have to look at is that every year you use it, the mower will reach out and start grabbing money for repair and maintenance. So I don't think the life span of a 36-inch mower is going to be more than three years before it's just too expensive to keep any longer.

Q: How do you respond to claims that mowing is too intensive for an add-on service? Can anyone go into mowing?

A: It's very labor intensive and that's why you can't afford to go in and discount it, but to answer your question, anybody can mow a lawn. You can always tell when there are construction slow downs or layoffs because there's a heck of a lot of people running around with mowers in their pick-up truck.

We don't want to compete against those types, and I think that's been the weakness of a lot of large lawn care companies who

(continued on page 28)

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have gone into maintenance. They've tried to be competitive with the out-of-the-house type mowers. They're going to get their market share, but what we want to do is set our pricing so that we can make some money, and then do top-quality work and let those people know that we are going to be here the next week and the next year.

And a lot of the out-of-the-house, out-of-the-pick-up type mowers, very rarely will be seen again the next year. As soon as the construction gets back up or they find another job, they're out of the business.

Q: How do you work around them?

A: If they come in with prices that we consider improper, we just don't compete with them. We let them have the work and we tell our customers that we're not in here to compete with your neighborhood boy, we just can't do it.

Then we remind our customers that we have one phone number they can call that will provide them with tree and shrub services, lawn fertilizing, mowing, pruning, the whole works. That's something that we're concentrating on and that's what's going to differentiate us from the guy who just runs the mower out of his pick-up.

We have the flexibility to provide just about any service you need to have done to your outside landscape.

Q: How do you ensure a profit in your pricing?

A: That's the question the small businessman has asked himself for hundreds of years. We went out and got bids and estimates from other maintenance people and took an average low and an average high. Then I told myself this is what I have to make if I'm going to make a profit. It scared me to death.

I was thinking to myself that I'm not going to make money this year, because I won't have any accounts at the price I'm going to charge, but we found there are people out there who want to make sure their lawn is going to be mowed weekly and every year when they need

the service. So there's a market for just about any price as long as it's within reason.

I went into mowing knowing that I had to charge a higher price and that I may bite the bullet with fewer accounts, but I would be more profitable with those accounts I had.

Q: Were you ever tempted to lower your pricing?

A: Many times. As a matter of fact, during this takeover, Mike (Spicer, president of Perma-Green) told me the company offers discounts on all our services and he wanted to know what kind of discount we could give with the mowing. I told him we couldn't.

Maintenance cannot be discounted, period. That's why people fail in it. They try to be competitive with the lower end of the market and when they do so they take money out of their pockets. You just cannot discount mowing, period.

Q: What qualities do you look for in maintenance employees?

A: That's a tough question. With the market the way it is right now, it's really tough to get a lot of people to come in and apply for a mowing position. It's not a real glamorous type situation, but we've been lucky. We've picked up a couple of good people that were relatives of people that work for me and they have stayed.

I've got several people who have been with me for four or five years and now one's a site supervisor. They're actually cross-trained in their jobs. Basically, all my good people just came in and applied, or had been recommended and then stayed.

I see a real problem down the road with labor though. With the increase in minimum wage and the labor shortage that we have in Boise; as a matter of fact we just don't have a market for labor any more, it's going to be much more difficult to bring people on and to keep them with the type of wages that are usually paid for maintenance work.

Q: What's the average salary at Green Scape?

A: The high end of the scale for hands-on service people is \$6 to \$6.50. So I've got a couple peo-

ple that are working under me that are making \$18,000 to \$20,000.

This year we're going to bring on some general outside labor which usually starts around the \$5 range; tops will be \$6 to \$6.50. It's average pay as far as maintenance companies are concerned. When it gets any higher than that you're just not profitable.

Q: How do you explain Green Scape's low turnover?

A: That's a fact because we don't lose them. Every once in a while, you do lose one or two, but we've only lost one guy this whole year in my maintenance division and that's because he had to go home to Minnesota. I think they enjoy their work and it's important to them.

It's also the atmosphere we've developed around there. At Green Scape, we weren't a very large corporation, but everybody knew everybody and it was a very comfortable atmosphere to work in.

Q: How many acres do your three residential crews cut per day?

A: They average between 1 1/4 and 2 1/2 acres a day. Depending on what area of town they're in. The commercial crew will do probably 3 to 4 acres a day.

Normally, we'll try to promote all the other maintenance services in the spring and fall because we just don't have the manpower to do it all in the summer.

Q: Are most of your properties irrigated?

A: We have cool-season grasses so most of our lawns are sprinkler irrigated. If they're not watered during the summer they'll go dormant.

Boise only has nine inches of rainfall a year. So cool season grasses have to be watered almost daily in the summer to keep them actively growing.

The annual rainfall here is such that it doesn't allow us not to water every other day. Sometimes it's daily.

Q: Is the issue of grass clippings disposal a problem in Idaho?

A: It isn't now, but it may be down the road. We're starting to

take a look at a couple of different things with the disposal of these clippings. One of them is the development of a special mulch. We're looking at mixing it with leaves, calcium and some other types of fertilizers. Then mulching it and using it in beds like a soil aid. We'll be able to put it into areas that actually use it for feeding trees and shrubs, and not have to worry about its disposal. Right now we take it to the landfill, but it's going to be a concern that we have.

Now we've got a two-ton truck in which we throw our bagged clippings. With the two-ton truck, we only have to go up to the landfill every fourth or fifth day. So we only have one cost to go there, instead of a daily dump fee.

The only time we pass that cost on to our customers is when we're pruning and we have a lot of debris to dump. The dump fees are added right on the cost of the job. However, we're trying to find ways to change that.

Q: What other issues do maintenance operators need to be aware of in the 1990s?

A: Safety. For instance, exposure to dust from grass clippings, noise pollution problems and constant exposure to sun.

Right now we require people to wear ear protection and goggles for their eyes, but we haven't gone to the point where we're forcing them to use filter masks for the dust.

As far as the sun, all we can do right now is tell our employees to be careful out there. Remind them they're in the sunlight all the time and tell them to cover their head and to use sunscreens. That's about all we can do right now.

It's just going to be one of those things that you don't want to have backfire on you. Someone may come back and claim they're hearing impaired because he used to work for you mowing lawns. Those are things that companies are going to have to look at with all the litigation that goes on now.

Q: How do you teach your maintenance employees to mow lawns?

A: We're developing videos showing our employees how to start on a lawn, how to finish it
(continued on page 77)



For thousands of softball addicts, sun worshippers and assorted nature lovers, your park is their backyard. What makes you think you can handle a turf test this tough?


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Experts Predict Mild Weather Conditions for 1990

EVERYBODY TALKS about the weather, but nobody really does anything about it. That is unless you're a lawn and landscape maintenance professional who has to deal with what the weather has wrought.

The weather is on people's minds perhaps even more than usual these days, and for good reason. Take the last two years: the Drought of 1988 led to devastating consequences throughout the country; but by contrast in 1989, several areas were hard hit with excessive rains, hurricanes and earthquakes. Long range concerns about the global warming effect also continue.

"The 1989 hurricane and earthquake disasters had a really negative effect on business," said Art Wick, vice president of research and development, LESCO, Rocky River, Ohio. "When people are cutting through debris with a chain saw they have little concern for their lawn or landscape, and rightly so."

However, in less than disaster conditions, the situation can be reversed. "The service industries are heavily involved in correcting the problems brought about by the weather," Wick said. "Good weather decreases business and bad weather increases it. A good analogy is that the rug cleaning business would never make any money if people's rugs didn't get dirty."

WEATHER EFFECTS. Jim Byrnes, advertising manager for Jacobsen, Racine, Wis., reported the drought had a positive rather

than negative impact on renovation equipment such as aerators, seeders and turf rakes.

In addition, excessive rains generated more interest in three- and four-wheel drive units and fine cut flail mowers for negotiating slippery turf and for the even distribution of clippings, respectively.

Two operators, Russell Frith, president, Lawn Doctor Inc., Matawan, N.J., and Bill Davids, vice president of operations, Clarence Davids & Sons, Chicago, Ill., explained how wet and dry weather extremes can have both negative and positive effects on business.

"Excessive rain caused more fungus problems which definitely delayed production, in some cases causing skips or cancellations of services," Frith said.

Rains reduce the need for fertilizer and pest control, but can lead to increased mowing. Whether the operator mows or doesn't mow, and whether he's paid by the hour or by contract affect profitability.

"Drought is obviously damaging to a business with employees and an ongoing cost structure for there are customer skips, postponements or canceled services," Frith said. "However, a back end opportunity then arises which can mitigate, or even turn to an advantage, these losses." Davids said his firm works on five-year bidding cycles to even out weather fluctuations. "Either rain or drought can lead to more work," he said.

"The Drought of '88 significantly affected the volume of our landscaping division because people held off on fall work. Yet the following spring we were running 50 percent to 75 percent more than what we had the previous spring. It's hard to really get a

grasp on it, but it does seem to even out."

As a result of the Drought, Davids purchased a half dozen 1,000- to 12,000-gallon water wagons to pull materials from an on-site lake to keep plant material healthy for one major account. The equipment also came in handy during a mild drought at the end of the 1989 season.

Bob Tracinski, division manager, public relations, John Deere, Moline, Ill., said bad weather can have a negative psychological effect on customers.

"Typically, we've found that there's that one nice day in April or May when people get into the spring spirit and our dealers are inundated with trading," he said. "However, a lot of rain in the spring can delay a kickoff. If you have a continuing drought, people lose interest in their lawns. I would think the same psychology would apply to people who use lawn and landscape maintenance services."

INSECTS & DISEASES. Joe Vargas, professor of botany and plant pathology, Michigan State University, East Lansing, Mich., said excessive dry weather results in two main diseases: necrotic ring spot and summer patch, and two breeds of insects: billbugs and chinch bugs.

"These can be managed through a daily light watering of about one- to two-tenths of an inch," he said. Excessive moisture is much less of a problem, especially with home lawns although there are boundaries.

"There is an upper limit, obviously," Vargas said. "The biggest problem with excess rain is that it tends to push out oxygen, requiring aeration which can't be



The 1988 Drought restricted maintenance services nationwide. Photo: Barney Taxel.

done very well if the lawn is sopping wet without breaking down the soil structure."

While a drought can have a serious impact on trees and ornamentals, turfgrass regenerates quickly as soon as the lawn is renovated, said A.J. Powell, turfgrass specialist, University of Kentucky, Lexington, Ky.

"These grasses have adapted themselves to a quick response to rainfall and irrigation. They are shallow rooted and easily accept the water that is applied."

Seed companies aren't spared adverse affects from weather fluctuations, according to Tom Stanley, marketing manager, Turf Seed Inc., Hubbard, Ore.

"The recent years of drought have increased consumption to an artificially high level," he said. "Seed companies have increased production to meet this demand, but now that production is in place and the weather is returning to more normal patterns, prices will probably soften until acreage can be readjusted."

This means that there will be more choices and probably lower prices for turfgrass seed, Stanley explained.

"Though we're in a saturated situation relative to ryegrasses and bluegrasses, I feel that the better marketed varieties will sell out, while the new varieties that aren't as well-marketed will probably go wanting for buyers," he said.

PREDICTIONS. How has the weather changed over the past few years, and what will the result be for 1990?

The year 1988 was most worrisome because of the drought.

Unlike the previous year, many regions were inundated with rain in 1989. Photo: Poulan Pro.



But in 1989 some areas of the country completely reversed themselves. For instance, the East Coast saw 30 inches above average rainfall.

In some areas, such as Ohio, Kansas, Missouri and Iowa, there was so much rain it was difficult to mow. Spotty areas of drought remained, especially in southern Florida.

Other dry areas, such as the Texas panhandle, Colorado and New Mexico are typically dry anyway. The far West had a good weather year.

Another factor is the winter of 1989-90.

"We're having a fairly open winter, without a tremendous amount of snow. If it stays very cold, without that snow blanket of insulation, then there will be damage to existing turf because of freezing," said John Glattly, director of turf, Northrup King Co., Minneapolis, Minn.

Not only the severity, but the apparent length of the winter can be just as damaging, Powell said. "The reserve energy in the plant can run out before spring."

But a bad winter for the homeowner can be good news for the lawn maintenance professional in terms of spring renovation. "One man's problem is an opportunity for someone else," Glattly said.

Overall, the weather patterns of 1989 (except for the hurricanes and earthquake) appeared to be much more normal than those of 1988. As for 1990, no one is really comfortable in predicting the weather. Even the National Weather Service is reluctant to predict more than three months in advance.

But meteorologist James Wagner, prediction branch, climate analysis center, National Weather Service, Camp Spring, Md., said that based on variable patterns in the summer, he does not foresee any extreme pattern persisting through 1990.

"The Outdoor Power Institute, representing the equipment manufacturers, projects an up year," Tracinski said. "It's really not future weather, but rather inventory which may have been affected by past weather, which drives how many units will be manufactured."

Byrnes added, "We don't make any changes or accommodations for the weather. What's more



Inventory levels weren't seriously affected by last season's weather extremes.

significant is the local economy in various parts of the country. If the economy is good, people will want to maintain their lawns, even when the weather conditions are bad. If there is an economic slowdown, the first thing to be cut back is lawn care, no matter what the weather is."

Barry Troutman, director of education, Professional Lawn Care Association of America, Marietta, Ga., said he doesn't foresee any major trends one way or another.

"There certainly have been some unusual weather conditions recently. But has weather ever been completely normal? Just go back to '84 and '85 in the Southeast. Temperatures dropped below zero in Atlanta and to 16 degrees in most places of Florida. There was a tremendous amount of ornamental plant damage.

"And then there have been a couple of really hot summers. Weather is just an issue we have to deal with."

ADAPTING TO CONDITIONS.

Changes in the weather will always be a given in the profession. Even though the patterns for the coming year appear to be more even than the past couple of years, the recent weather extremes still have an impact on the coming year.

"The extreme weather conditions have brought to light how they can create problems for the lawn maintenance professional in that the customer has certain expectations for the appearance of his lawn," said Drew Effron, vice president, marketing, Aquatrols, Pennsauken, N.J.

"If the professional doesn't communicate the limits of his

responsibility and ability to control conditions there are potentials for misunderstanding."

For example, Effron said, one of the best ways to protect a lawn against drought stress is to cut it slightly above its usual height. Even if the professional is not responsible for the cutting, he should communicate the technique to the customer.

"If he doesn't and the lawn goes because it has been cut too short repeatedly, the customer is apt to ask, 'why didn't you tell me?'" Effron said. "A professional should make recommendations for a good lawn even in those areas for which he's not personally responsible."

He also said that the recent drought has made people much more conscious of saving water. Even in those areas of the country where water supplies have never been an issue, people are starting to think about it.

"Some areas were devastated by the drought, others were merely inconvenienced, but almost everyone was affected," he said.

Effron added that this increased awareness has translated into an interest in water absorbants and soil wetting agents.

Water absorbants hold the available water and increases the water-holding capacity of the soil. Wetting agents reduce surface puddling or water loss through evaporation or runoff and moves the water into the soil uniformly.

According to Troutman, the PLCAA's main concern is not the weather, per se, but rather the closely related one of water supply.

"I think that water will probably be our greatest issue in the 1990s," Troutman said. "The National Water Well Association has

assured us that water will not be in short supply, but the pumping capability of municipalities to meet our needs will be."

Troutman explained that the green industry has the critical problem of being the most visible user of water during times of shortage, and is the first, along with car washes, to suffer from water bans or restrictions.

"What we have to do as an industry is become proactive. Don't wait until a drought occurs, but get out and talk to county and water officials. Show that we are a viable industry, that we have needs and that we may be able to reduce, but cannot eliminate the use of water when shortages occur," he said.

"We don't have a whole lot of control over the weather, but we can hit pretty heavily the issues or the availability of water use, alternatives to water, more effective irrigation systems, how to troubleshoot irrigation problems and promoting the most current technologies on drip or emitter types of irrigation," he said.

If water availability is a long range concern for the 1990s, an even longer range issue is that of global warming.

Vargas represents one end of the spectrum: "The best I can tell from the scientists I've read is that there is no warming effect, that what we've seen is simply a part of the normal changes we see every 25 to 50 years."

On the other hand, Glattly said, "Based on the reports I've seen from the technical publications and on TV, I personally believe there is evidence that the earth is warming, ever so slightly. It's a long-term process, but one we should be aware of."

Glattly said that Northrup's research program is looking at low maintenance and drought tolerant varieties, as well as adapting warm-season grasses into the normal climates.

"My opinion is that by our actions we've been raising temperatures, but I believe if we take other actions we can mitigate or reverse what we've done to this point," Frith said. "We in the green industry can be a major positive force in protecting our environment." — Michael Major ■

The author is a free-lance writer based in Port Townsend, Wash.

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Operators Turning to Franchising More Frequently

IN A BUSINESS ENVIRONMENT where more than 50 percent of all start-ups fail within two years, franchising is making more sense to a lot of people.

Buying a company that has an already established name with regional, and possibly national recognition, as well as a proven system of operating seems to provide a better assurance of success.

The perception of franchising success is relatively true. Most companies who franchise lawn care operations claim success rates of more than 90 percent.

But the success rates can be somewhat deceiving, taking into consideration only those franchises that have shut down completely, not those that were re-sold.

Another appealing factor in franchising is the amount of money needed to start the business — about \$10,000 in some cases.

After initial fees, the willingness to work hard and put in longer hours than if you worked for someone else are the most important aspects of a profitable franchise, according to successful franchisors.

In recent years, the franchise field has seen an ever increasing number of people leaving middle-level management positions in corporate settings to start franchises. The reason most often given for becoming a franchise owner is the freedom involved in running their own business.

But one must remember that owning a franchise is not synonymous with independence. Franchising is not the right endeavor for a true entrepreneur.

Buying a franchise should in no way be viewed as guaranteed success. Green industry consultant Clifford Kraft, Kraft Associates/ODA Inc., Exton, Pa., said

he advises clients to do a thorough check of the company before agreeing to buy a franchise.

"You want to be sure that your goals and concerns match theirs," he said. "You especially want to know what the controls are. What you can and cannot do."

One of the best ways to learn about a company is to contact present franchise owners. Ask them about their business. Did they get all the support they were promised? How quickly does the company respond when you have a question?

Kraft also suggests shopping around to compare companies. Know why you're interested in a franchise, and make sure those concerns will be addressed. Will the company train you in areas you need to develop?

Be weary if a company seems more interested in getting your

money than in finding out about you.

Expect a thorough screening process that assesses your goals, accomplishments and financial situation. Beyond the initial franchise fee, you need enough money to survive at least several months without an income.

Lastly, before signing anything, have an attorney and accountant look over the contracts. A company that is unwilling to give you this time is definitely a company you don't want to buy a franchise from.

Being a franchise owner still calls for falling in line and abiding to someone else's system and theory of running a business, but does inevitably include much less direct supervision.

The ideal franchisee, according to recruiters, is a person who likes to be independent on a day-to-

THE SPRING-GREEN CREED

Spring-Green is a dynamic business enterprise dedicated to providing a reasonable return on the investment made by our employees, franchise owners and stockbrokers. We are in the service business; therefore, serving our customers/franchise owners to the absolute best of our ability is our primary objective. Our success is dependent upon our ability to deliver a profitable success system to our franchise owners.

We are committed to the highest standards of personal integrity and will always pursue the personal and professional development of our employees and franchise owners. Whether confronting problems or opportunities, we shall always conduct ourselves in a professional manner.

Creativity, Innovation, and Flexibility are entrepreneurial traits that are essential to our future success. Through constant nurturing of these traits we shall grow as people and as a company. Additionally, by adding faith, persistence, and desire to all that we do, we will have the opportunity to achieve the ultimate life goals of Health, Happiness, and Wealth.



Photo: Spring-Green.



U.S. Lawns employees ready the landscape by planting flowers (above left) and pruning and raking (above right). The firm, based in Maitland, Fla., is the only one in the country which franchises maintenance services.

day basis, but still wants support for developing an overall plan or vision for running a business.

LAWN DOCTOR. With 290 total franchises — 15 opened in 1989 — Lawn Doctor Inc., Matawan, N.J., is consistently rated as the No. 1 lawn care franchisor by *Entrepreneur* magazine.

A franchise since 1972, the company's approach to marketing targets people who have no background in lawn care, according to Ed Reid, national franchise sales director. Finding people with business and marketing background is more important for ensuring the growth and success of the operation.

"We think with our patented equipment that it is much easier to take someone who already has a knack for business and teach him about lawn care," he said. "We think we get the most success when we take a person from accounting or engineering or wherever and put him in our environment."

A vigorous screening of all potential franchise owners is vital.

Making sure the buyer's goals match the company's is most important.

"What we're most interested in is making sure this person is serious," Reid said. "Buying a franchise is in no way a guarantee of making money overnight. It takes time and hard work. We have to discern immediately who is looking at it as a hobby or taking a whimsical approach, and tell them it won't work."

Eliminating those people as soon as possible is important to both parties. It keeps the company from having a poor franchise and it prevents the potential buyer from parting with money that could have been more suitably invested.

The screening process includes personal interviews that determine potential buyers' goals and the amount of determination to make the endeavor work. The company also requires complete financial disclosures including the person's worth, current salary and outstanding debts.

The number of people coming to Lawn Doctor from manage-

ment and corporate backgrounds has been increasing over the last several years, Reid said. They also have more business savvy than their counterparts from 10 years ago.

"A lot of people are coming to us from companies that have been taken over or merged with others," he said. "They don't want to deal with the corporate rat race anymore or realize that they're being passed over for younger and cheaper employees."

SERVICEMASTER. Rick White, vice president, lawn care, ServiceMaster, Memphis, Tenn., takes a different approach to franchise sales.

"A middle level manager or someone doing technical work in the lawn care field," is what he is looking for. "The industry has hired and trained some good talent. Our typical buyer is essentially someone who enjoys the industry, but is interested in getting more involved in the strategic planning and management of a business."

The company, selling fran-

chises since 1985, also has a philosophy about the size of a lawn care business. White said his experience has shown that franchises are best run as small operations, run by a key man with annual sales of up to \$300,000.

"In this situation the owner is close to everything going on," he said. "Better service, his personality, his personal commitment and desire to do a good job come through to customers. That's typically difficult to do as a branch manager where often the only stake is a pay check."

Starting a franchise with ServiceMaster requires about \$10,000 to \$15,000. Of that, \$7,000 is a down payment and the rest should be used as a safety net for three to six months living expenses until the franchise develops a cash flow. The royalty fee is 8 percent.

Besides the obvious advantages of being in a franchise system — lower costs for insurance, equipment and advertising — ServiceMaster has a marketing twist different from other franchisors.

The twist includes pest con-

STOCKBROKER GAINS SATISFACTION FROM GREEN INDUSTRY

MANY LAWN DOCTOR OPERATORS DON'T FIT THE common characterization of most lawn care companies. They come to the firm from management positions, the teaching profession and careers as accountants and stockbrokers.

The firm also tops the list as the lawn care franchisor with the most women and minority owners. What motivates these people to leave already established careers to start a Lawn Doctor operation?

John Clarkeson certainly had the wrong impression of lawn care about seven or eight years ago.

"I used to drive by the former owner's house and see the truck in the yard," he said. "I'd think: I don't believe some guy thinks he can make money doing that. Who would pay for lawn service?"

His attitude has taken a 180-degree turn since then. Six years ago he left his job as a stockbroker to buy an existing Lawn Doctor franchise in Massachusetts.

"Back then I just couldn't believe there was a market for lawn care," he said. "I enjoyed doing it myself and assumed everyone else did too."

The decision to go into business for himself came from eight years as a stockbroker watching other people become successes owning their own businesses. He grew bored of being an observer.

He started investigating franchise opportunities and seriously talked to four companies before choosing to go with Lawn Doctor.

"Primarily I chose Lawn Doctor because it was the only franchisor that gave me a list of other owners up front," he said. "They invited me point blank to talk to other owners."

"I talked to a lot of franchise owners before making my decision. The Lawn Doctor owners were the most enthusiastic. If a franchisor is good, it's going to be the owners, the folks out in the field, who convince a newcomer. And I was convinced."

While he took over where someone left off, the condition of the company was poor. The previous owner was bored with the franchise and it showed in sloppy work, Clarkeson said.

"That first year was tough. The major problem we had to deal with was the unhappy public and the bad image the franchise had gained," he said. "It was a tough road. We had to convince people that we weren't in business just for a cash flow, that we were there to provide a dependable service and make their lawns look good."

The first year was a learning experience for Clarkeson.

"I know I would have never been able to learn as much in a year if I had been on my own without a support network to turn to," he said.

He must be satisfied with Lawn Doctor and the lawn care field. After six years, the business is pretty stable. So last year, he bought a second franchise and plans to spend this year establishing it.

"It's never easy to start a new business, but this should be a little easier than my first year," he said. "I know a lot more than I did then."

trol services by Terminix, maid services through Merry Maids and guaranteed insurance for the maintenance of home systems and appliances by American Home Shield.

Combined customers from all the franchises total 2.5 million.

At every visit, operators leave brochures including an 800 telephone number about the other services available through ServiceMaster. So if a maid service customer is interested in starting lawn care, all the person has to do is call.

The program was instituted in October. White didn't have exact numbers on how many new customers have been signed up, but he did say the number of inquiries continues to increase every month.

"We're tying our network together and serving the varied needs of our customers, he said. "At the same time we're creating goodwill under different trade names — which will hopefully bleed over to one another."

ServiceMaster also has a vigorous screening process. The central concern involves assessing the person's motivation and potential. Also examined is the person's psychological aptitude and his wherewithal and determination

to survive the developing period when cash flow is low or non-existent.

The rewards of owning and running a successful franchise are plenty, however, one area many people overlook when considering the purchase is the equity the business develops.

Though it's not a steadfast measure, White said, franchises earn about 50 cents of equity for every dollar of revenues. A franchisee with yearly revenues of \$100,000 could assume he has amassed about \$50,000 in equity.

"That amount, of course, is not taxed until the business is sold," he said. "It's a good way of creating a guaranteed savings."

SPRING-GREEN. This Plainfield, Ill., company prefers to find people with an understanding of business and teach them about the lawn care field. Most important to Joe Nubie, director of franchise development, is a strong marketing background.

Because the company seeks people without lawn care service background, it has an extensive training program. The first stage is a 30-hour prestudy course including books and videos designed to be used by the new owner at home.

The learn-at-home concept has not seen any glitches.

"These people just bought a business and went through our screening process," Nubie said. "We know they're serious and that they will use the books and videos."

The next step in training is a week spent in the field with another Spring-Green operator. Here they are exposed to all facets of the business including initial sales calls, applications, billing and handling customer complaints.

The final step is returning to set up an office. On-site training continues for the first week. The operator and trainer go over each aspect of the business.

"The important aspect is for them to start analyzing everything they do so they understand the reasons rather than just perform the steps," Nubie said.

Training visits continue through the first year. Their frequency is dependent on how much support the person needs.

While they don't make up a major portion of owners, Nubie said, a couple of the company's best franchisees are recent college graduates.

"Younger people are more enthusiastic and aggressive and

tend to do better," he said. "The overall key is providing a good and timely product and having the marketing skills to sell it to people."

Another trend he has noticed recently are husband and wife teams buying a franchise, with one of them keeping their job to create a safety net while they establish the lawn care operation.

The \$17,500 package it takes to start a Spring-Green franchise includes the down payment on a 300-gallon fiberglass tank sprayer, a supplies package and an initial computer system.

Nubie also advises the owner to have at least \$8,000 for an operating budget. This is to cover expenses from licensing and application fees to leasing office space and furniture.

The company maintains a two-tiered royalty fee. It starts at 9 percent of sales. As the franchise develops more business, it drops to the permanent 6 percent level.

While expanding to full service has been a trend in the past couple years, Nubie said mowing and lawn care don't seem to be compatible services to franchise.

Mowing is much more expensive. It is both labor- and equipment-intensive. Equipment costs

(continued on page 38)

Spray herbicide directly over the top of your established shrubs and ornamentals? Go ahead. Surflan® lets you spray with complete confidence.

All you'll see are the bright colors of your landscape or lawn. No crabgrass. No oxalis. No chickweed. And no prostrate knotweed and 50 other grasses and weeds, either. You won't see them for six to eight months, in fact, when you spray Surflan preemergence herbicide.

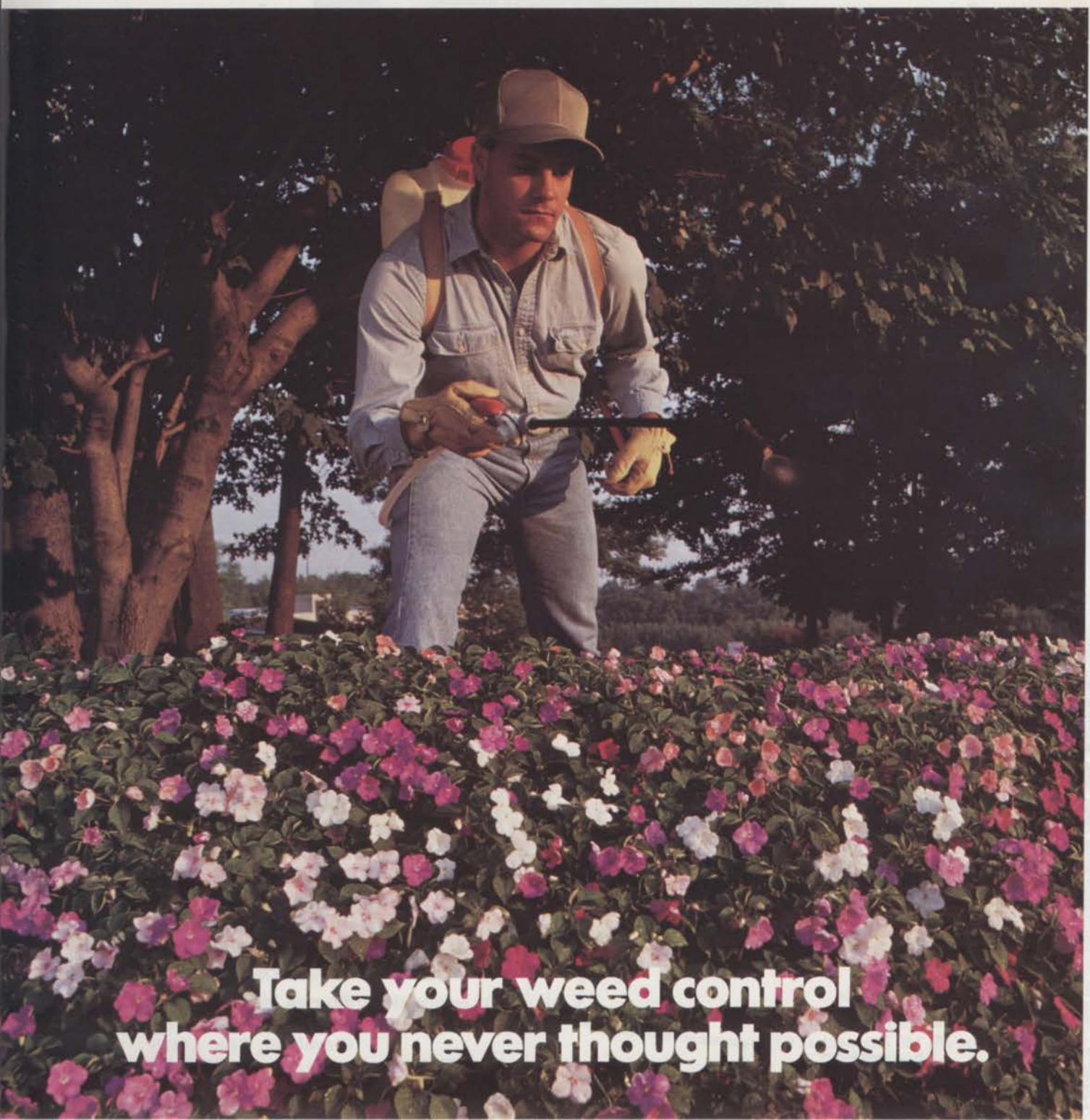
You'll also see Surflan is more stable on soil surfaces. It'll wait three weeks for water. Then it stays put,

even in heavy rainfall, to provide outstanding weed control. Yet it's gentle enough to spray over the top of 175 different ornamentals.

So go ahead. Fill up with Surflan and take your weed control where you never thought possible. Over the top of your ornamentals without injury. See your Elanco distributor. Or call toll-free: **1-800-352-6776.**

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Indianapolis, IN 46268 U.S.A.
Surflan® — (oryzalin, Elanco)

Circle 4 on reader service card



**Take your weed control
where you never thought possible.**

Franchising

(continued from page 36)

are much higher, and because it's much more strenuous work, the employee turnover is much higher.

The cost also holds back lawn care operators from getting into mowing.

In business since 1977, Spring-Green has 137 franchises in 22 states and operates three branches. The company went nine years without any failed franchises. Today its success rate stands at about 94 percent.

U.S. LAWNS. One person who certainly disagrees with the assessment that mowing and maintenance services cannot be successfully franchised is Tom Oyler, founder, U.S. Lawns, Maitland, Fla.

The company began franchising landscape maintenance businesses in 1986 and currently has 14 franchises. Basic services provided include mowing, trimming, edging, pruning and sheering. One service that Oyler advises



Lawn care is one of several services offered by ServiceMaster.

owners not to get involved in is new construction installation because it's much more capital intensive.

The company is the only one in the country franchising maintenance services.

"There is a definite market out there for these services," he said. "Lawn care was the same way in that it used to be dominated by

small local sprayers, but Chem-Lawn measured the market and found out there was a fantastic amount of business to be had. We're doing the same thing."

According to Oyler, maintenance is the fastest growing segment of the green industry with annual sales of at least \$7 billion.

The decision to franchise came when his former maintenance

company, Oyler Brothers, grew too large. He was getting requests for service that stretched far from his home office. He was faced with making the decision of opening branch offices or franchising.

"I knew that people in an owner/operator position work harder than others," he said. "So I had to decide whether I wanted to use my own capital to grow and have mediocre workers or have a franchisee use his capital and my know-how to become a success."

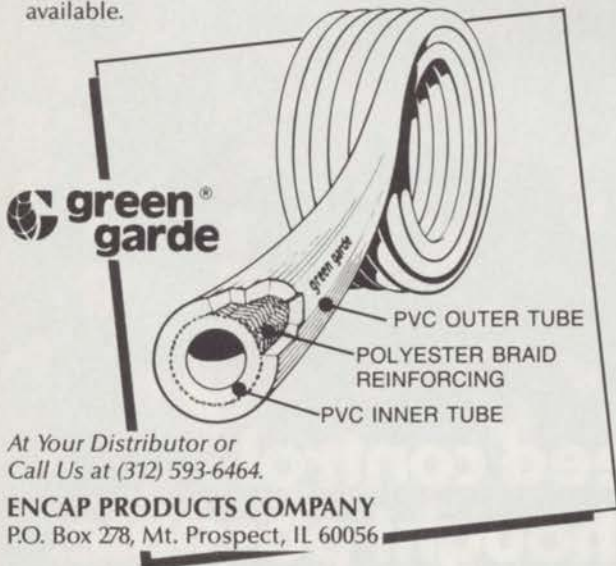
Receipts from a maintenance franchise are much higher than in lawn care, he said. Depending on the area and the customers, a maintenance operator can be servicing accounts with an average monthly billing of \$1,000, whereas having a \$100-a-month customer in lawn care is rare.

The franchise fee ranges from \$15,000 to \$40,000 depending on the area. Royalty fees are relatively low at 4 percent.

Oyler concedes labor is going to be the toughest issue his company faces this decade. Addressing that concern will be company

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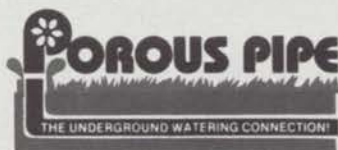
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It's Tee Time[®] with TEAM[®].

president Cabot Jaffe, a human resources specialist.

"Our game plan is toward human resource management," Oyler said. "Owner/operators will be educated in how to manage people. We've developed a road map for managing and staying close to employees, a policy for salary and incentive for people to stay in one job description for a lengthy amount of time."

The ideal size business he'd like to see his owners aim for is about \$1.5 million to \$2 million a year and under 40 employees. When Oyler Brothers grew to the point of \$5 million a year, he said he didn't know many of his employees.

"About 25 to 40 is the optimum range," he said. "People who will walk over hot coals for you as long as you treat them well and pay them premium rates."

BAREFOOT GRASS. This Worthington, Ohio, based company attributes its sound track record to the fact that most of its franchises are sold to people familiar with the company.

Buyers are usually employees working in one of the company-owned branch offices or as a se-

cond or third operation to an already established owner, said John Dunham, vice president of franchising. The firm has been in business since the mid-70s.

Important criteria for becoming a Barefoot franchise owner is a working knowledge of agronomics as it relates to lawn care.

"We're not like a McDonald's — although I'm sure they have extensive training," he said. "Once you learn to fry a hamburger, there probably aren't that many other ways of doing it. That's not true with lawn care where you're dealing with living organisms. We like our franchisees to be independent. We can't rush a guy out to them everyday to teach them about this disease or that pest. We prefer they know that coming in."

The company takes advantage of the fact that it has about a 50/50 split of company-owned units and franchises.

"We think a big part of our success is that someone can come in and work in a company branch for a year or so to see if they like the industry — dealing with customers, providing the services, learning the technical side," Dunham said. "Then they can move

on to buying a franchise. That's a real good opportunity because they can determine whether this is the business for them before making the investment and long-term commitment."

The company tends to keep company-owned branches in major cities and franchises in secondary cities. It doesn't break a city into regions when it sells franchises. So while the company sold only four franchises last year, that would be many more for another company.

"For example, another company might break a city like Lexington, Ky., into four or five franchises because they sell a certain number of customer base potentials," he said, "but we sell it as one franchise."

The company's main objective with franchises is to help them develop to a point where operation is not completely dependent upon the owner. For the best effectiveness, a franchise has to grow beyond a one-man, one-truck operation.

"We think a one-truck operation has an incredibly high risk

to accidents and illness," he said. "If he breaks his ankle or just gets sick for a couple days, who's going to run the business? By becoming larger, there are people there to pitch in and help out during those times."

Even though the last decade saw a proliferation of lawn care companies, Dunham said, he doesn't consider any market to be saturated.

Dunham wouldn't provide a specific amount of money necessary to start a franchise with the company. He said it varies depending on the size and number of potential customers within the area. Likewise, he remained vague about the company's royalty fee, only saying that it was between 5 percent and 10 percent.

As is true with the others, Barefoot has turned people down for a franchise because they did not have enough capital.

"We're not talking huge amounts of money," he said. "But we also have to be sure he's not down to only pocket change

(continued on page 77)

With The Andersons choice of Tee Time fertilizers plus TEAM, you get to have it your way!

Put results-getting Tee Time fertilizers together with the proven performance of TEAM pre-emergence herbicide and you've got a high-quality combination product that provides active double duty in a single application.

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How Much Should Firms Promise Their Customers?

WHILE THE LEGAL battle continues to drag on between New York and ChemLawn Services Corp. over the company's advertising, many in the lawn and landscape maintenance industry say they have responded to the shift in Americans' attitudes by changing what they include in their advertising.

The most prevalent change has been a move toward addressing lifestyle issues such as increased leisure time customers enjoy if someone takes care of their landscape for them.

Also in the last couple years, companies have replied to the public's concern about the environment, as well as long-term care of lawns.

.....
As soon as someone starts defending safety, there's a whole group of people ... who will ask why you brought it up if it's not an issue.

The question of whether some companies go too far with their advertising became an issue when New York Attorney General Robert Abrams began investigating the professional lawn care industry in 1985.

Abrams claimed that ChemLawn provided false and misleading information about the safety of pesticides to its customers through a series of public affairs brochures.

A verbal dispute continued between the two until 1988 when lawsuits were filed first by ChemLawn and then the attorney general's office.

According to Abrams, ChemLawn literature claimed that the company's applications were:

- Safe and free from risk of harm.
- Safe or safer than use of common household products such as baby aspirin or coffee.
- Do not cause harm to non-target plants or animals.

The case has been lingering on now for more than two years. In

that time ChemLawn has not felt threatened to change its brochures. They have been updated, but with only minor changes.

Roger Yeary, ChemLawn's vice president for health and safety, said the company has continued to use the brochures because they haven't received any negative feedback from customers — the intended audience.

"The brochures were designed to answer questions customers often asked and we think they did that," Yeary said. "But the New York Attorney General got hold of them and started taking only snippets and twisting the information. We stand by what was printed because it is all based on scientific fact."

According to Yeary, New York is exceeding its area of jurisdiction because the issue of unreasonable and adverse risk is supposed to be addressed by the Federal Insecticide, Fungicide and Rodenticide Act.

The case was brought against ChemLawn because the New York Attorney General's office thought that some of the statements contained in the brochures were false, said Ann Goldweber, assistant Attorney General for the state.

She said the case originated in response to a number of letters and calls received by the office from consumers in the state.

The case was scheduled for a summary judgment hearing in the state supreme court last month. The state was asking for summary judgment restricting ChemLawn from using these points in their advertising:

- The claim that ChemLawn did not in the past and will not in the future use known and probable human carcinogens.
- The claim that PCDD, a dioxin, was never part of lawn care

services.

• Claims of selective toxicity. The whole issue of claiming safety of lawn care in advertising will always backfire, said Jerry Faulring, president, HydroLawn, Gaithersburg, Md.

"It's defensive thinking," he said. "As soon as someone starts defending safety, there's a whole group of people who have never considered it. They're going to ask why you brought it up if it's not an issue. You'll end up backed into a corner."

While many state and local legislatures and regulatory boards are preoccupied with initiating posting and prenotification regulations, one state has included some direction on industry advertising.

A provision in the new Colorado Pesticide Act and Pesticide Applicators Act prohibits applicators from using the terms "safe," "harmless" or "non-toxic" in advertising referring to pesticides — even when used exactly according to the label instructions.

The stipulation should cause only "slight problems," according to consultant Steve Day, Landscapes Plus, Wheat Ridge, Colo.

Colorado applicators are not alone in that they have steered away from using such terms. It has become a national trend in addition to discussing more than just applications in advertising.

"I don't especially like using the term holistic, but people have definitely moved toward making their advertising more complete," he said. "They're including the whole picture, from talking about the health of the landscape to more in-depth areas concerning soils, turf and the long-term good health of their landscapes."

Because of the rampant growth of lawn and landscape maintenance

Lawnmark Calling!

SPRING 1989
(Volume 3 Issue 1)



We Encourage Responsible Regulation



Dear Valued Customer, Spring is almost here, and all of us at Lawnmark and Spray-A-Lawn look forward to helping you maintain and enjoy a healthy, beautiful lawn this season. This is our job. Like most businesses, we have been doing long-range planning. It's particularly important now due to the fact that our industry is being increasingly regulated by government. Also, our industry has been discovered by large companies capable of investing a considerable amount of money. Out of this planning, we have decided to maintain our focus on being the premier provider of lawn care in the cities we serve and to concentrate on the residential market. We are now and will successfully compete with the big companies here, and as it turns out, not they only business as it is for Lawnmark. We have built our business one lawn at a time and each Customer Service Rep is recommended in 1989 to provide quality, individual attention to each neighborhood customer.

As far as regulation is concerned, we have been in the forefront of encouraging responsible regulation. We support mandatory licensing of applicators, complete submission for mandatory licensing of products for use, and extensive training. It is the customer, responsible, or conscientious operator that can cause problems. Responsible regulation promotes professionalization, which is important to maintain quality standards. Unfortunately, we have had to contend with a small group of well-intentioned people who would like to see all control of well-maintained products removed. This isn't going to happen because the vast majority appreciate the color and benefits of well-maintained lawns, and our efficient food production for that matter. Farmers, athletes, structural pest control, lawn care professionals, and others have had to work together in the political arena to make sure that the rights of the majority are well-guarded.

The fact that one group seeks to regulate professionals but

What At La

You helped record year 40,000 hours our Earth's seasons of report on ing new operati traini late

marked "PREP postage."
"But Customer on any of co you want to send a hardy service, we'll send you a Check out updated listing Lawnmark representatives on the not the largest user of control prod one of those "Customers" from that divides to explore. I hope you like this issue of La much here for you to see. We're for you and do our darndest to pe come to expect from Lawnmark. Enjoy the Spring and the pos Thanks again for your business. Sincerely, J.M. P...

Featuring dry, granular fertilizers.



My Dad will make your lawn as soft and green as ours.



CHEVALAWN

A Generation of Experience



nance companies in the Denver area coupled with several years of a poorly performing economy and declining housing starts, operators are forced to be creative in their advertising just to retain their present customer base, Day said.

But such a slump shouldn't discourage operators or cause permanent alarm.

"This is a viable industry and I think people will be willing for many years to come, if not forever, to spend money for their lawns to look nice," Day said.

The level of service and attention given to customers is an area not to be overlooked when trying to improve your company's image. Because operators for the most part provide the same services and purchase their products from the same suppliers, this is really the only area that can distinguish one company from another.

Being flexible and going out of your way to comply with customer requests is critical to develop a "client-friendly" rapport,

Day said. Extending office hours until about 7 p.m. so customers can call without taking time out of their work day, and assigning one technician to an area so customers have the opportunity to get to know and trust them are relatively inexpensive ways to establish that atmosphere.

"You have to be creative in the little value-added services you provide," he said. "Always keep them (customers) in mind and how you like to be treated as a customer."

For actual advertising it's best to stay away from hard sells, Day suggested. Above all else, do not get involved in pricing wars. Make no attempt to match prices when a start-up operation moves into the area and begins to underprice your services.

That type of company typically doesn't last. Some of your customers may migrate to that operator, but probably won't be satisfied. It should become apparent to the customer that the operator is more interested in

money and not following through with good, quality services.

Be assured that if he is underpricing you, the quality is not going to be the same.

Martin Erbaugh, president, Lawnmark Inc., Hudson, Ohio, has been in the business a number of years. His experience has shown him that a certain amount of customers changing companies is simply a part of the business.

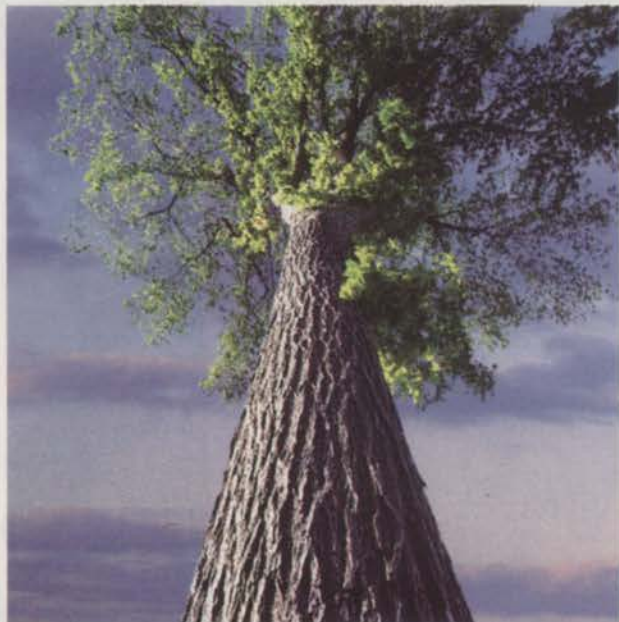
They will leave your company, sign up with three to four others and then drop the service completely, electing to take care of it themselves. It's not something to wring your hands over and fret about. Steps should be taken, however, to keep customer attrition under control.

The best way to accomplish that is with the added services and personal touch that the low-ball competitor cannot and will not provide. The objective is to make it difficult for people to leave, even if they are concerned you're more expensive.

Instead, Day said, advertising

(continued on page 44)

Tall ones.



Short ones.



The tall trees are the old friends of the forest, standing like sentinels. They have seen the forest grow and change, and they are the only ones who have seen it all.

The tall trees are the old friends of the forest, standing like sentinels. They have seen the forest grow and change, and they are the only ones who have seen it all. They are the ones who have seen the forest grow and change, and they are the only ones who have seen it all.

The tall trees are the old friends of the forest, standing like sentinels. They have seen the forest grow and change, and they are the only ones who have seen it all. They are the ones who have seen the forest grow and change, and they are the only ones who have seen it all.

The short trees are the new friends of the forest, standing like sentinels. They have seen the forest grow and change, and they are the only ones who have seen it all. They are the ones who have seen the forest grow and change, and they are the only ones who have seen it all.

The short trees are the new friends of the forest, standing like sentinels. They have seen the forest grow and change, and they are the only ones who have seen it all. They are the ones who have seen the forest grow and change, and they are the only ones who have seen it all.

The short trees are the new friends of the forest, standing like sentinels. They have seen the forest grow and change, and they are the only ones who have seen it all. They are the ones who have seen the forest grow and change, and they are the only ones who have seen it all.

The short trees are the new friends of the forest, standing like sentinels. They have seen the forest grow and change, and they are the only ones who have seen it all. They are the ones who have seen the forest grow and change, and they are the only ones who have seen it all.

Thin ones.



Fat ones.



All shapes and sizes qualify for our PAGEANT.

Nothing's worse than slimy worms crawling on your shrubs, ugly beetles munching on your pines and nasty borers blemishing your birches. That's why you need new PAGEANT® DF in your tank.

Any other insecticide has to settle for first runner-up. PAGEANT DF is the only tree and shrub insecticide that gives you the active ingredient chlorpyrifos in a dry, flowable formulation. Its long residual keeps protecting the beauty of trees and shrubs long after other insecticides have left the scene. And studies show that chlorpyrifos is gentle to both applicator and environment.

What's even more attractive is its broad spectrum of control. You can control everything from beetles to borers to worms—all with a single insecticide.

Since it's a dry, flowable formulation, PAGEANT DF also has minimal odor and less chance of phytotoxicity. Plus, it goes into solution beautifully—no more

clogged nozzles, or undissolved clumps. Your applicators can mix without dust. And without the splashing caused by liquid insecticides.

So much talent in such a beautiful package. Almost seems unfair. PAGEANT DF not only works better than the competition, it also looks better. But that cube-shaped container offers more than good looks—it's specially designed for easier handling and disposal.

Each container holds five full pounds of insecticide. At a mixing ratio of 1-2 pounds per 100 gallons of water, PAGEANT DF is ideally packaged for larger spray tanks.

Why not judge for yourself how well PAGEANT DF protects the beauty of trees and shrubs? Then send a clear message to the insecticide you're presently using: hand over the crown. To find out more, call 1-800-373-2DOW.



*Trademark of The Dow Chemical Company.

Circle 10 on reader service card

should be kept on a more low key level. Successful advertising emphasizes the company's longevity, commitment to customers and the city or town. It also includes information about monitoring for spot problems rather than broadcast applications.

"The days of 'We give you five applications a year' are over," Day said. "For one reason, it doesn't suggest individual attention and it can lead to the perception of not being concerned about the environment."

That doesn't mean broadcast applications are unsafe or harmful, but it can create an image of irresponsibility — that no matter what's wrong, the answer is a full application, he added.

In addition, try to find another advertising avenue other than telemarketing.

As use of this technique grew, people grew tired of receiving these calls.

"The public is sick and tired of telemarketing calls," he said. "Everyone you talk to says it's an invasion of their privacy and that they are sick of it."

In many cases people will simply agree to a service to get the telemarketer off the phone. These are not the type of customers that will stay with the company long and take on additional services. They weren't all that interested in the first place.

But telemarketing doesn't have to be scrapped completely. For it to be effective, it has to be refined and personalized, according to Rick Steinau, president, Greenlon Lawn Care Services, Cincinnati, Ohio.

Greenlon uses the company's technicians to make "internal" telemarketing calls — calls to the firm's established customers. People they're already familiar with.

"There's no script and it isn't a hard sell," Steinau said. "The technician just talks to them, mentions that he sees they don't have this service or that one and asks if they're interested in starting."

This method has proved quite effective. During the first month with only one technician making calls, an additional \$88,000 in sales was realized, Steinau said.

As for a general plan for advertising, smart operators will re-



The bottom line in advertising is being truthful.

frain from talking about the products they use.

"We de-emphasize the products," Steinau said. "We all buy from the same sources. Those companies that try to compare products are really deceiving the customers. They're wise enough to realize we get our products from the same sources."

Steinau is also staunchly opposed to radio advertising. Even though it is relatively inexpensive and reaches a large market, he said it can lead to confusion.

Greenlon once ran 18 radio spots per week on six stations in the Cincinnati area. But at the same time, three other smaller lawn care companies were running ads.

These companies ran about 12 spots a week combined. Listeners garbled the message. They were hearing 30 spots a week, but with four different names attached. It led to confusion and not many responses, Steinau said.

But there are times when competitors' advertising is helpful.

"I love when ChemLawn does national advertising," Steinau said. "When ChemLawn goes on TV, my phones ring off the hook. Anyone aware of marketing knows that."

Another area that has potential for bringing in new business is offering present customers incentives for referrals. The method has a good amount of critics but, Day said, it's a viable alternative and is worth checking out.

Incentives could range from a small discount on services to a free service for a customer who refers several new customers. The latter can be used as a subtle sales tool if the service provided is a recent add-on that most customers

aren't using yet.

While newspaper advertising is often considered ineffective because the audience is too broad, Swingle Tree Co., Denver, Colo. ran a fairly successful newspaper series last summer.

The ads were small — about twice the size of a business card — and ran throughout the paper. They appeared in sports, entertainment, lifestyle and news sections, hoping to blanket the paper's readership.

Repetition is also important in communicating a message. Some ads appeared on consecutive pages in the exact same spot. Others had colors reversed so the background was black and the print white.

The ads were simple. They offered such things as an aeration special, 10 percent off for new customers and a combination fall fertilization and aeration.

"It turned out to be quite effective," said Dave Dickson, president. "It was very smart placement and the size kept the price down, but a lot of people saw it, and usually more than just once."

Dickson advised caution when offering discounts on services to attract customers.

"It's a risk because you have to realize you're borrowing revenues," he said. "You're losing dollars to get customers. It brings in money for the short term, but you have to hope to sign some of those people up for additional services or you'll end up losing money in the long run."

Dickson is one of the critics of the incentives for referrals.

"About 50 percent of our new customers come from referrals and we don't offer our customers anything," he said. "If they're

satisfied with the service, they're naturally going to tell their friends and neighbors. I think by offering something for a referral you're badgering your customers into being salesmen for you."

A new, unconventional outlet for advertising that Swingle has received good response from is on National Public Radio. An announcer says "This portion of All Things Considered is brought to you by Swingle Tree Co. More than just a tree company."

"You know NPR listeners are dedicated and loyal people," Dickson said. "I've had people stop me and say: 'I didn't know you were a supporter of public radio. That's great.'"

Aside from the obvious of not using "safe" in advertising copy, Dickson said, cutting down or even mentioning competition is never a good approach to advertising.

"People get confused and aren't sure who's advertising," he said. "They end up paying attention to the battle and not what's being advertised."

The bottom line in advertising is being truthful. Making claims you can't or won't follow through on will not only hurt the company's reputation, but it's also illegal.

One issue that concerns Erbaugh is the current fascination with organic and biological control.

"A lot of people are talking about it and getting on this organic bandwagon," he said. "They start singing the song to look good, and they're not using the product. That'll end up creating a lot of confusion. You should be comfortable with what you're doing and not mislead people about it."

Faulring's best advice is to keep your eye on what the competition is doing.

"Watch their advertising, discern what their underlying strategies are," he said. "Determine the general atmosphere of their advertising and how they're trying to attract customers. Is it through pricing or their technical experience or the fact that they're a big company or a small company?"

"Then make sure you don't do stand out from them." — David Westrick

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

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CoRoN 28-0-0, slow release
clear liquid fertilizer is
your leading source of
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lawn and turf
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compatibility with turf protection
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Release Nitrogen for all your growing needs.

The Leading Force In Controlled Release Nitrogen For:
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Circle 18 on reader service card

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Competition Increases Need for Insightful Bidding

THE CONTRACT FOR building his spacecraft went to the lowest bidder — that was Alan Shepard's foremost thought just before the historic lift-off making him our first man in space. Luckily, the specifications for our first manned spacecraft were not left to the discretion of "uninformed" personnel.

However, many lawn and landscape maintenance contracts have been known to fizzle out on the launching pad because of poor bid specifications and even worse interpretation by the prospective contractor.

BIDS. The process of bid preparation can constitute a considerable expense where large acreage is concerned. There are phone calls to suppliers, chemical representatives and regulatory agencies, not to mention the time spent surveying and inspecting the grounds.

Therefore, the bid specifications should first be screened for legitimacy and validity before proceeding further.

Bid considerations can include:

- Does the bid accurately reflect the client's needs?
- Are specifications vague or non-descript?
- Will bid specs allow equal opportunity for all competitors?
- Are bid specs consistent with state and local regulations?
- Is it possible or reasonable to honor bid guarantees?

If it appears that a bid contains disparities, good conscience and good business sense dictate that a grievance be lodged with the client. Although the contractor stands to gain, the client may be the ultimate beneficiary of such an action.

Be well equipped to substantiate a grievance with impartial, documented evidence. Such evidence might include government codes, rules and regulations, chemical labels, university bulletins, research reports or even a petition comprised of others vying for the contract.

With complicated bids, face value of a specification often misrepresents the client's actual objective. A true meeting of the minds between contractor and client might instead be achieved

through what is merely implied by the bid specifications.

Bids failing to convey the client's intent are often characterized by specifications that are too broad. Any number of options could satisfy them. This creates an even greater disparity in service costs.

Consider selective weed control in turfgrass. Costs can fluctuate greatly depending upon the weed species involved and the desired longevity of control.

For instance, the need to use either a pre- or postemergent herbicide for the intended effect can in itself constitute a 200 percent cost discrepancy.

In addition, the cost differential for weed control strategies can skyrocket even further when control longevity and applications per season are considered. By merely specifying the predominant weed species and the need for season-long control, the bid will rapidly narrow down the options available to would-be contractors.

To avoid such problems, bid specs should be as generic as

possible yet reflect the client's intention. Specifications for each aspect of service should be reduced to the most basic, elemental unit.

Competitors are free to devise more efficient, innovative programs while clients can usually expect an equivalent benefit at lower cost.

An example would be the provision to fertilize grounds with only one specific brand of a 26-3-3 blend at 200 pounds of actual fertilizer per acre. Based on the formula and desired rate, a less costly, yet equivalent fertility program need only deliver: 200 pounds of elemental N per acre (comprised of 1.5 percent Ammoniacal N and 24.5 percent Urea N), 5 percent to 7 percent P205 per acre and 5 percent to 7 percent K20 per acre.

To the other extreme, "fertilize as needed" on a bid specification can correspond to a naive client, a poorly fertilized landscape or a temporarily successful contractor. Standardized bid specifications can serve to avert open-ended bid interpretations.

Often bid specifications will be



Maintenance bids should accurately reflect the specifications and needs of the client to successfully complete the project.

borrowed from other similar bids. Aside from the chance of it being inapplicable to current needs, these bids may specify chemicals or procedures inconsistent with label registrations. Specified products sometimes may even be unavailable.

Prospective bidders should always consult current product labels and investigate the accessibility of products beforehand. Pay particular attention to regional and local registrations.

The responsibility for finding such bid discrepancies often is left to the prospective lawn and landscape maintenance contractor. While challenging a bid specification may seem presumptuous, it needs to be done.

PROPOSALS. Proposals provide an open forum by which clients can evaluate the insights of prospective contractors. Proposals promote equal consideration of competitors based on cost-to-benefit attributes rather than total cost alone.

Clients are better assured that actual need can be satisfied at the lowest possible cost. Even those



Maintenance firms should lead their clients through the bid in a logical manner. It's necessary to carry that order through so operators can fulfill the firm's obligations.

rejected lawn maintenance proposals can become valuable documentation of alternative options should the selected program falter.

Lawn and landscape maintenance firms should construct their proposals to lead clients through the reasoning process in a logical manner. The technical depth of the proposal often indicates the firm's expertise and comprehension of the subject. However, the proposal should be composed with an easy to follow format.

Highly technical terms should be augmented with common terms. As with bid specifications, proposals should address such subjects as: burdens of liability, acts of God, guarantee provisions, approximate schedules, special instructions and precautions. Proposals should also include license identifications, special certifications and other credentials.

GUARANTEES. Any warranty or guarantee contained in contract specifications should be fair and

equitable to both parties. Failing to explore the full ramifications of a guarantee clause can reduce a maintenance operator's profit margins.

In general, guaranteeing the performance of a service should correspond to the degree of program control given the contractor under the bid. Those that rigidly prescribe methods, materials and schedules should relieve the contractor from an effectiveness warranty.

In such a case, contractor warranty should be limited to properly executing the specifications of the bid.

To the other extreme is the contractor being responsible for the landscape's ultimate quality. A turnkey situation arises when a maintenance firm assumes total control over all aspects, and places its expertise on the line by specifying the rationale, approach and methodology of a grounds maintenance program.

A more likely scenario involves in-house maintenance controlling a portion of the maintenance (mowing and/or irrigation) while the contractor provides weed control, fertilization, pest control and aeration.

Although there is a division of maintenance responsibility, cooperation between the two is crucial to the contractor fulfilling the bid

specifications.

If the contractor is permitted control over in-house activities, adequate cooperation between operations is not necessarily assured. To provide a fair contract guarantee in the face of poor cooperation, written proof that instructions were adequately communicated to in-house crews can shift the burden of liability away from the contractor.

By their nature, lawn and landscape maintenance operations are particularly susceptible to natural acts of God. An untimely rainfall can wash away literally thousands of dollars in herbicide or pesticide. Or the lack of rainfall can render expensive photodegradable preemergents useless as they waste away on the soil surface.

A popular alternative has been to equally divide the liability of authorized retreatment. The contractor is usually held harmless for any ineffectiveness because of the ill-fated application. An appropriate guarantee for the unforeseeable circumstances should be defined in the bid contract.

PRICING CONSIDERATIONS. Basic to determining overhead and operating costs is assessing the account's physical dimensions and acreage. Although bids typically specify these parameters, they are often in error.

Take note of any plans, construction or disruptive activity that could add to the account. This can include the planned extension of turfgrass areas or installation of ornamentals. Any disparities should promptly be brought to the attention of the client and other competitors so bid equivalency is maintained.

The bidder should also determine if additional capital invest-



Photos: Environmental Industries.

ment (mowers, vehicles, spray equipment, etc.) is justified for the contract.

A projection of cash flow is also a prime consideration in maintaining consistent service for

larger accounts. Funds must be available for meeting payrolls, purchasing materials in a timely manner and covering overhead. Maintenance schedules and payment schedules are prime con-

siderations here.

The actual expenses involved with servicing "jumbo" accounts will most certainly exceed the obvious costs. To develop a competitive edge, empirical costs cal-

culated for labor, materials and overhead must usually be added for unique aspects of the contract.

Additional cost considerations

(continued on page 74)

COMPETITIVE BIDDING STRATEGIES TO CLOSE THE SALE

AS COMPETITION CONTINUES TO GROW IN THE LAWN and landscape maintenance industry the initial sale will become harder to close. Customers in the 1990s want to compare shop.

This customer could be your largest corporate customer and their purchasing agent, or the single parent down the street trying to get the most for his dollar.

If you are one of three companies chosen to bid on a project, how can you have a 200 percent better chance than your competitors?

Most likely they will submit one bid for X amount of dollars per month. However, something that has worked effectively for me is submitting a three-price bid. My bids usually follow this format:

you will do what they want, such as — "We will be happy to complete any portion of our proposal that best suits your needs."

Never forget you are a service business, meeting customer needs will make your profits grow.

You've spent time looking at the property, talking to the customer, preparing and delivering your bid. Do you just sit back and hope they call?

No. If you don't hear in a couple of days call them. You have a lot invested, they will understand and appreciate your interest. Keep it simple, but be open to opportunities to close your deal on the phone.

I basically bid residential and commercial work the same way, except I always include insurance information in a commercial bid. As everyone's awareness of liability risks increase, you should probably include insurance information in every bid.

Unless you are bidding a large project, I don't feel it's necessary to be exact in information such as the size of your crew or what equipment you are going to use.

A general statement such as "Our crews usually consist of two or three men during the mowing season" will suffice. If you say we will use a three-man crew and you send two men, some people are going to call you and tell you that you are slighting them. Again good communication will help keep pressure off you.

Some areas require special equipment to be used. For example, there is a mobile home community in our town that permits only the use of electric mowers. You should specify that you will be in compliance with local zoning laws and regulations.

If you are bidding an account with a lot of mowing involved, it would be a good idea to explain — either in your

bid or in your initial sales call — what type of equipment you will be using.

Nobody will feel like they are getting their money's worth because you have a man out there with a 20-inch rotor mower roaring all day. Again in your description keep it fairly simple.

Concerning spraying information, most chemical companies will provide you with hand-outs explaining effectiveness, safety and the best time to apply your preemergents and postemergents.

If your customer wants that information, be sure they have it, but don't try to write everything into your bid. Instead include the chemical company hand-out.

Remember to keep your bid clear and concise. If you put a bid in their hand that looks like an encyclopedia they may not even read it.

Remember effective communication is understanding what the customer wants, don't take it for granted. — *Michael Blake*

The author is co-owner of the Cloverleaf Golf Club, Delmont, Pa. and has previously owned a tree and lawn service.

Dear Mr. Harper:

Sept. 29, 1989

In accordance with our discussion of Sept. 28, we wish to submit the following proposals.

PLAN A:

1. Mow your grass each week throughout the 1990 growing season.
2. Apply chemical fertilizer once in the early spring and once in the late spring.
3. Spray to kill weeds twice early in the growing season — spot kill throughout the season.
4. Apply organic fertilizer once a month through September 1990.
5. Trim the shrubs and foundation plantings twice during the season.
6. Begin a three-year plan that would prune all of your trees in that time.
7. Remove leaves each week during the fall.
8. Come by each week during the dormant season and pick up any limbs in your yard, as well as sweep the walks and driveway.

PLAN B:

1. Mow same as in Plan A.
2. Apply chemical fertilizer once in the spring.
3. Apply organic fertilizer twice in the summer.
4. Spray once to kill weeds.
5. Trim shrubs once per season.
6. End of season leaf clean up.

PLAN C:

1. Mow as in Plan A and B.
2. Fall leaf clean up.

The cost of these plans are as follows.

- Plan A — \$400 per month
Plan B — \$300 per month in season
Plan C — \$250 per month in season

You have now submitted three bids to your competitors' two bids.

Your bid should also contain information such as "We have been in business for 14 years combining hard work, common sense and the latest in professional lawn maintenance products and information. As a result, we have grown an average of 22 percent per year, a rate that keeps our business healthy, yet the quality high."

If your customer is interested in Plan A be prepared to give him a drawing of their property and a schedule of your tree work. These drawings will help understanding and communication better than five trips trying to explain what you are doing.

If you are relatively sure they will buy Plan A, enclose the drawing with the original bid. The more drawings you make the easier they become.

If tree maintenance is part of your proposal, explain your pruning techniques. To some people a tree is pruned when it has a chainsaw flat top. Pruning is done to remove dead wood, shape the tree and make it typical of the species.

Always include a statement that assures your customer that



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Mobile Mole Crickets Often Elude Control Measures

MOLE CRICKETS ARE THE MOST DAMAGING INSECT pest of turfgrasses in the southeastern United States.

Last year more than \$40 million was spent in Florida and more than \$15 million and \$7 million in Georgia and Alabama, respectively, for control of mole crickets.

Why are these "six-legged creatures" so difficult to control? Because these pests are extremely mobile. Although there is only one generation a year in most regions (except south Florida), flights occur twice a year — mating flights of the overwintered individuals in the spring and dispersal flights of the "new generation" adults in the fall.

How far can mole crickets fly? Some fly several miles; two to five miles at least. As a result, areas in which control measures have been effective can become quickly reinfested.

Mole crickets spend most of their lives in the soil, although they are known to move to the surface. They usually are active in the top one inch of the soil, but can move deeper — two to three feet or more



The Life Cycle of a Mole Cricket

Eggs laid in sub-surface chambers in late spring to early summer hatch as the soil warms in May and June. Adults die after mating and egg laying.

Hatched nymphs move toward the surface, tunneling through the top 1 to 2 inches of soil and feeding on grass roots all summer long.

INJURIOUS INSECT PESTS

ORIGINALLY LIMITED TO FLORIDA, mole crickets have annually extended their range — and damage — northward along the Atlantic Coast and westward to Texas.

Damage estimates are approaching \$100 million a year.

Because mole crickets were introduced into the United States, they have few natural enemies. Chemical control is considered the only method to effectively limit their damage.

Mole crickets cause damage in two ways: By tunneling through the top one to two inches of soil, causing exposed roots to dry out, and by feeding on the grass roots and damaging the plants.

One mole cricket can tunnel up to 20 feet in a single night, leaving behind spongy soil surfaces and large areas of brown, dying grass. — Rhone-Poulenc.

— during extreme temperature or moisture conditions.

Another reason mole crickets are difficult to control is that they are introduced pests, and as such do not have naturally occurring pathogens, parasites or predators that limit their number to any great extent.

Birds, raccoons, skunks and armadillos feed on mole crickets, but their digging damages the turf.

Recently, the introduction of nematodes in selected Florida turf areas has shown promise in infecting and destroying mole crickets.

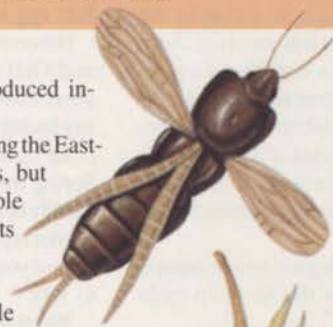
In southern Florida, a parasitic wasp was introduced that has reduced mole cricket populations in localized areas. The search continues for effective biological control agents.

ORIGINS. By most accounts, the three mole cricket species originated in South America, and were introduced into the Southeast around the turn of the century.

The southern mole cricket, introduced at several points along the Eastern and Gulf coasts, is a predator on small soil organisms, but occasionally damages newly sprouted seed. Southern mole crickets damage turf primarily by tunneling up grass plants which dry out and die.

These tunnels are a smaller version of those produced by moles, hence the name mole cricket. Southern mole crickets are found from the Carolinas southward through Georgia and the Gulf States westward into Texas.

Illustration: Rhone-Poulenc.



Damage becomes acutely visible in August and September.

Some nymphs reach maturity by fall and fly to new areas. Others will winter underground and mature the next season.

Adults fly to new areas in both spring and fall, but mate and lay eggs only in spring.

Tawny mole crickets, introduced at the port city of Brunswick, Ga., also damage turf by tunneling. These mole crickets, however, feed on all parts of the grass plants.

They destroy roots underground, and may emerge on the surface to cut off stems and leaves and drag them into their tunnels.

Although bermudagrasses and bahiagrasses are preferred, other grasses may also be damaged. Tawny mole crickets are responsible for sudden severe turf loss in infested areas during late summer and are, therefore, the major mole cricket problem in areas they infest.

This species continues to expand its range westward through the Gulf states and northward into coastal North Carolina.

The short-winged mole cricket is also a plant feeder. However, its spread has been slow and damage localized because it's unable to fly. Its short wings never become functional for flight.

The northern mole cricket, a fourth species, is native in the southeastern quarter of the country and is not considered a pest. However, recent reports from Oklahoma, Alabama and Georgia have suggested that localized populations of northern mole crickets can damage turf by tunneling.

Little biological information is available for the northern mole cricket.

LIFE CYCLES. The life cycles of mole cricket pest species are similar. As a result, a knowledge of these life cycles is important for determining proper timing and effectiveness of insecticidal controls.

Mole crickets are most active in moist soil during early evening to midnight hours. Therefore, pretreatment irrigation and applications made late in the day are recommended.

Granular formulations and some sprays must be irrigated after application. Toxic baits and certain spray formulations, however, should not be irrigated after application.

Mole crickets overwinter as adults or large nymphs. Tunneling activity may occur during warm periods of winter.

Overwintering individuals, however, become most active in



Soap flushes done weekly in the spring and early summer reveal current mole cricket populations.

late winter and early spring — March and April — as mating flights of adults occur.

Reinfestation of turf from unmanaged pastures or other grass areas can take place at this time. In places where migration is restricted to local populations (such as offshore islands or where turf is surrounded by non-host plants) spring treatments may help reduce cricket populations before egg laying.

However, in many areas of the mid-Gulf states, flights into turf areas from unmanaged sites and egg laying and egg hatching continue from March through May. Spring treatments in these areas usually help control tunneling, but cannot replace treatment directed toward young nymphs in late May to July.

Warm-season grasses, if managed properly, usually outgrow spring mole cricket damage.

It's possible in the spring to identify areas of tawny mole cricket activity (in March and April), and target residual treatments in June to these areas.

The turf will have recovered by treatment time, but young mole crickets will be controlled before damage is visible in the grass. We have successfully mapped mole crickets at a site in north Mobile County in Alabama for the last two years. Dr. Leon Stacey has also been successful in mole cricket mapping along Georgia's coastal areas.

YOUNG TARGETS. Results of studies throughout the South continue to indicate the need for turf managers to monitor mole cricket populations. In most areas, the most effective immediate insecticidal controls are directed to

young nymphs.

Hatching varies from region to region. For example, mole cricket hatching in the mid-Gulf states begins in late May or early June. Throughout June it's fairly common to find tawny mole cricket females that contain undeposited eggs, although some years there are more than others.

Along the eastern coast and farther south in Florida, hatching occurs somewhat earlier. Mole crickets can be flushed to the surface using soapy water — a gallon of water plus an ounce of lemon-scented dishwashing liquid poured over a one-to-two-square-foot area.

Soap flushes done weekly during the spring and early summer reveal the status of current mole cricket populations.

Most control efforts are directed at young nymphs. Tests in Alabama with residual insecticides such as Mocap 5G have indicated that treatments applied at first hatching or treatments applied to young nymphs several weeks after first hatch were more effective than those applied in early April, eight weeks before first hatch was observed (during overwintering cricket activity).

Toxic baits such as Dursban 0.5 percent Cricket Bait are most effective when nymphs are present and feeding voraciously (mid-July through mid-September in the mid-Gulf states). Residuals such as Turcam and Oftanol and the shorter residual Sevimol, are more effective in controlling young nymphs than older crickets.

High pressure liquid injection, a new technique by which insecticides can be forced into turf without slicing, shows great

promise for controlling mole crickets in young stages and serving as a residual treatment.

Our June and July tests in Alabama for the past three years indicate that two pound ai/acre chlorpyrifos, (Dursban 4E) or one or two pound ai/acre isozophos (Triumph 4E) injected at 1,500 to 2,000 psi, provides six weeks or more residual control of mole crickets. In addition, surface residues were greatly reduced.

Mole cricket nymphs continue to grow during the summer months. As they increase in size, damage again becomes obvious. By September and October, the larger, more mobile crickets become more difficult to control.

Grass growth slows down, so repair of damaged areas declines. Control at this time is most difficult. Fall dispersal flights further complicate control measures, and reinfestation often occurs.

Orthene 75S, a short residual spray, has been an effective knockdown treatment for reduction of spring and fall tunneling. It's most effective in summer about four to six weeks after first hatching.

Triumph 4E is registered federally for professional use on home lawns and by some states for additional sites. Triumph works well as a residual treatment for control of young nymphs, but may also be effective on older stages.

In summary, mole crickets remain the most serious insect pests in the Southeast. Although biological controls look promising, the backbone of control strategies is still insecticidal.

The timing of treatments may be equally as important as the selection of insecticide. More essential than ever is the need for turf managers to monitor mole cricket populations, and to control moisture levels when possible in infested/treated areas. — Patricia Cobb ■

The author is an extension entomologist and professor in the Department of Entomology, Auburn University, Ala. She is actively researching the new technique of high pressure injection and is a regular contributor to Lawn and Landscape Maintenance magazine.

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Crabgrass, Goosegrass Control in Warm-Season Turf

CRABGRASS (*Digitaria spp.*) and goosegrass [*Eleusine indica* (L.) Gaertn.] readily infest bermudagrass (*Cynodon spp.*) and other warm-season turfgrasses during the spring and summer months (Figure 1). If not controlled, these weeds interfere with turfgrass growth and reduce turf quality.

Crabgrass control with preemergence herbicides in turfgrasses has generally been effective during the 1970s and 1980s, whereas goosegrass was not effectively controlled until oxadiazon was registered.

This doesn't mean that weed control will be acceptable each and every year from these herbicides. Each of us has experienced a weed control failure. Failures can occur from any herbicide, at any given time.

The number of failures can be reduced by applying the herbicide at the correct date, followed with a good management program. Regardless of the management practices used, however, the performance of herbicides continues to vary. It's desirable for a herbicide to effec-

tively control weeds, but not injure the turfgrass.

Several weed control and turfgrass tolerance experiments were conducted from 1985 through 1989 at the University of Georgia, Georgia Station, Griffin, to evaluate and determine the performance of several new turfgrass herbicides.

The chemicals represent either a new herbicide developed for turfgrass or an older herbicide previously used on other crops. Some of the herbicides included in this report have yet to be registered.

The weed control experiments were conducted on weedy common bermudagrass areas. Crabgrass and goosegrass were evaluated either together or in separate plot areas depending on the weed population throughout the five-year period.

All turfgrass tolerance experiments were conducted in weed-free plots to eliminate competition from weeds. Herbicides were applied to weeds and turfgrasses the same time each year on about March 1 plus or minus one week. All herbicides were applied at active ingredient per

acre rates.

Bermudagrass and zoysiagrass were mowed two to three times weekly at a 0.75- to 1.0-inch height. Centipedegrass was mowed weekly at a one and one-half to two-inch height.

WEED CONTROL. Control ratings from 90 percent to 100 percent will be referred to as excellent, 80 percent to 89 percent as good, 70 percent to 79 percent as fair and less than 70 percent as poor and not acceptable.

CRABGRASS CONTROL. A single application of several herbicides in the early spring resulted in excellent full-season crabgrass control when ratings were made late August or early September.

The herbicides were benefin plus oryzalin (XL) at 3.0 lb/A, dithiopyr emulsifiable concentrate (EC) at greater than or equal to 0.75 lb/A, oryzalin at 2.0 lb/A, prodiamine at 0.75 lb/A and pendimethalin applied as a sprayable or granular (G) formulation, or on a fertilizer carrier.

The results were similar from two applications of BAS 514H at 1.0 plus 1.0 lb/A and oxadiazon plus benefin at 3.0 plus 1.5 lb/A when the applications were repeated at eight-week intervals.

Crabgrass control varied with the herbicide and rates of applications. BAS 514H didn't control crabgrass as effectively from a single 2.0 lb/A application, compared with 1.0 lb/A applied twice. The control of crabgrass with BAS 514H was higher when applied as early postemergence rather than a preemergence application.

The control was also effective with oxadiazon G at 3.0 lb/A (73



Figure 1. Goosegrass growing in Tifgreen bermudagrass. Picture was made August 11.

ANNUAL WEED SEED GERMINATION

JAN

FEB

MAR

APR

MAY

JUNE

JULY

AUG

SEPT

OCT

NOV

DEC

CRABGRASS

GOOSEGRASS

ANNUAL BLUEGRASS

(Poa annua)

SPURGE

percent) compared to the wettable powder (WP) formulation at 0.75 lb/A applied in each of two applications (71 percent). There was no increase in crabgrass control for isoxaben and oryzalin when a single application was compared to two applications. The activity of dithiopyr on crabgrass was higher from the G formulation than EC formulation when each was applied at the same rate.

GOOSEGRASS CONTROL.

Most preemergence herbicides were less effective for goosegrass control than for crabgrass control. Dithiopyr EC applied as a single application at 2.0 lb/A, oryzalin at 2.0 plus 2.0 lb/A, and oxadiazon plus benefin at 3.0 plus 1.5 lb/A were the only herbicides that controlled more than 90 percent of goosegrass.

The control was good (81 percent to 85 percent) when treated once with dithiopyr G at 0.75 lb/A and pendimethalin G at 3.0 lb/A, and twice with oxadiazon WP at 0.75 plus 0.75 lb/A.

Control was acceptable (70 percent to 79 percent) when treated once with proflaminate at 0.75 lb/A, oxadiazon G at 3.0 lb/A and WP at 1.5 lb/A, benefin plus oryzalin at 3.0 lb/A, dithiopyr EC at 0.75 lb/A, and pendimethalin DG and fertilizer carrier at 3.0 lb/A and twice with oryzalin at 2.0 plus 1.0 lb/A. Isoxaben and BAS 514H provided little or no control of goosegrass.

No herbicide completely controlled both crabgrass and goosegrass in our experiments. However, control would be commercially acceptable (greater than 80 percent) for selected rates of dithiopyr, oryzalin, oxadiazon plus benefin, pendimethalin and proflaminate.

Therefore, a choice of herbi-



Figure 2. Delayed green-up of Tifgreen bermudagrass treated with oxadiazon WP at three times the recommended rate (12.0 lb/A). Treated plot is on the right and untreated on the left. Picture was made May 11.

cides can be made when both crabgrass and goosegrass are present. A choice couldn't have been made several years ago when only oxadiazon was available.

TURFGRASS TOLERANCE.

Herbicides applied in late winter for preemergence summer annual weed control can delay the spring green-up of warm-season grasses.

Although the response may change slightly between years, it's important for the turfgrass to fully recover within a short period. The injury to turfgrasses in the present studies was based on: 1 percent to 15 percent equals slight injury, 16 percent to 30 percent equals moderate injury and greater than 30 percent equals severe injury and unacceptable.

Rates of 1X equals recommended rate and 3X equals three times the recommended rate was used in the tolerance experiments.

BERMUDAGRASS. None of the 1X rates of pendimethalin, oxadiazon WP, oryzalin, oxadiazon plus benefin or benefin plus oryzalin delayed the spring green-

up of Tifdwarf bermudagrass during 1985 and 1986.

Green-up was severely delayed when each herbicide was applied at 3X rates in one of two years. Oxadiazon WP at the 3X rate severely injured the turfgrass both years (Figure 2). Tifdwarf bermudagrass treated with each herbicide recovered by mid-May except for oxadiazon WP at the 3X rate which recovered by mid-June. Oxadiazon WP applied at rates less than or equal to 3.0 lb/A, didn't delay the spring green-up of Tifway bermudagrass in 1987 or 1988.

The EC formulation of dithiopyr at 1.5 lb/A and the G formulation at 0.75 lb/A delayed the spring growth of Tifway bermudagrass slightly in 1988, but the turfgrass fully recovered by mid-May. Regardless of the rate or formulation, no herbicide delayed the spring green-up of Tifway bermudagrass in 1989.

The green-up of Tifway bermudagrass was not delayed in the spring when treated with BAS 514H at 0.5 lb/A. However, the growth was delayed in one of three years when treated at 1.0 lb/A and two of three years when treated

Graph: Fermenta Plant Protection.

at 2.0 lb/A.

Regardless of the rate of BAS 514H, the delay in green-up was temporary as the turf fully recovered by mid- to late-May.

ZOYSIAGRASS. At labeled rates, the spring green-up of Meyer zoysiagrass was not affected by pendimethalin, oxadiazon WP, oryzalin, oxadiazon plus benefin or benefin plus oryzalin. The turfgrass maintained a high level of quality throughout the spring and summer.

CENTIPEDEGRASS. Pendimethalin DG applied to centipede-grass in 1985 and 1986 delayed the spring growth of centipede-grass less than oxadiazon WP, oryzalin or benefin plus oryzalin. When oxadiazon WP, oryzalin or benefin plus oryzalin were applied at rates higher than recommended, turfgrass injury was higher.

In these instances turf required a longer period to recover than when herbicides were applied at recommended rates. Because of moderate to severe injury to centi-

pedegrass, oxadiazon WP should be applied to the turf for weed control.

Centipede-grass was injured by BAS 514H and the degree of injury was related to rates of application. When the grass was treated with the herbicide at 0.5 lb/A, the turf was injured moderately in one of two years.

When rates were increased to greater than or equal to 1.0 lb/A, centipede-grass was severely injured in 1987 and 1988. The grass recovered more rapidly in 1987 than 1988.

Due to the excessive turfgrass injury from BAS 514H, this herbicide should not be applied to centipede-grass.

At equivalent rates in 1988, dithiopyr G affected the green-up of centipede-grass less than the dithiopyr EC formulation. However, in 1989, dithiopyr G and EC did not adversely affect centipede-grass green-up at any rate evaluated.

CONCLUSIONS. Several pre-emergence herbicides were evaluated for control of crabgrass and

goosegrass and for the tolerance of bermudagrass, zoysiagrass and centipede-grass maintained under home lawn and fairway conditions.

• Crabgrass control was consistently higher from single applications of benefin plus oryzalin, dithiopyr, oryzalin, pendimethalin and prodiamine than with BAS 514H, isoxaben, oxadiazon plus benefin and oxadiazon.

• Excellent goosegrass control was obtained from a single application of dithiopyr, while the control was similar from two applications of oryzalin and oxadiazon plus benefin. Acceptable control was obtained with a single application of benefin plus oryzalin, oxadiazon, pendimethalin and prodiamine.

• Most pre-emergence herbicides will temporarily delay the spring green-up of warm-season turfgrass. Additionally, the environmental conditions vary widely from year to year in the southeastern United States.

It's not unusual for a pre-emergence herbicide to cause injury

one year and not affect early-season growth the following year. In most instances, early-season injury is higher when more than the recommended rate of the herbicide is applied.

For example, when these herbicides were applied at greater than recommended rates, severe injury occurred to: bermudagrass when treated with pendimethalin, oxadiazon WP, benefin plus oryzalin, oryzalin, and BAS 514H; and centipede-grass treated with oxadiazon WP and BAS 514H.

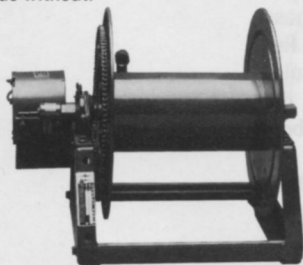
Zoysiagrass was tolerant to all herbicides included in this study, even at three times the normal recommended rate. — *B.J. Johnson and T.R. Murphy* ■

The authors are professor, department of agronomy and extension agronomist in weed science, respectively, at The University of Georgia, Griffin, Ga. This research was supported by state, Hatch and/or other funds allocated to the Georgia Agricultural Experiment Stations.

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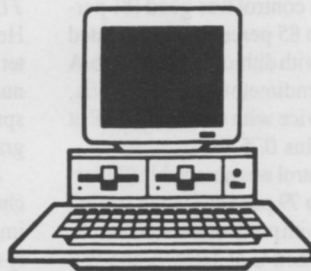


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SEEDING

CHOOSING BLENDS, MIXTURES TO MEET SPECIFIC NEEDS

THE OLD SAYING ABOUT THE BEST things coming in small packages can be easily adapted to turfgrass seed packages: Important information comes in fine print.

Certainly the picture on the lawn seed package is important. It stimulates interest in the end product, a beautiful residential landscape featuring a lush lawn. The firm marketing the seed is identified along with the brand name of the blend or mixture.

This is important information for it can be related to advertisements and other types of promotional and educational literature. Key words such as "shade," "fast growing," "sod forming," "wear resistant" and "tough" often tie in with the brand name.

But the truly critical information is found in small print on the seed label. Here the actual names of the varieties included are listed, accompanied by the amount contained and information on the

germination and purity. Any weed seed contamination is noted.

From the label, determine the amount of seed that is identified as proprietary or named seed. The more proprietary, the better the buy.

Many varieties of turfgrass seed are definitely superior when compared with the older, common varieties. This is even more amazing when we realize common turfgrasses are still good and account for at least 50 percent of the seed sold.

The common varieties have a broad genetic base, meaning each package contains slightly different types adapting easily to varying soil and climatic conditions. This natural type of turf seed will never be completely replaced by the new proprietary types.

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degree of uniformity over a longer period of time.

They provide more visual and functional satisfaction for the time and money spent to culture them. Their higher resistance to disease and insects lead to low maintenance demands.

Many develop roots which provide resistance to drought and good green color through the summer.

All of this has been achieved through the efforts of turfgrass geneticists and breeders over the past 30 years, while the most striking improvements have been realized during the last 10 years.

This research has been costly, both in terms of public funds budgeted for turf investigations at land grant universities and private funds for research and development at 25 or more seed firms in the United States and Canada. — *The Lawn Institute.*

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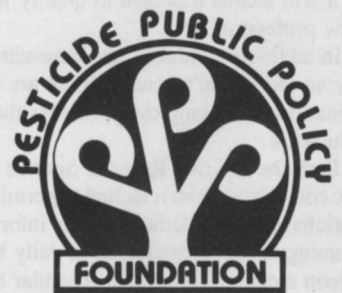
A powerful coalition of self-appointed "public interest" groups are using fear and misinformation to bring about the virtual elimination of pesticides.

If they succeed, the result will be a disaster for our health and our economy. And if pesticides or herbicides are part of your business, you just might be out of business.

If you share our concern about this trend, then join us in fighting for our rights. We are the Pesticide Public Policy Foundation (3PF). 3PF works closely with urban pesticide applicators

and their trade associations in the lawn, tree, PCO, golf course, right-of-way, and landscape industries. 3PF is an organization of people like yourself -- people committed to a reasoned pesticide public policy.

Your support is needed now! Mail the coupon or call toll-free **1-800-GET-PPPF**. We'll let you know what we are doing to protect your rights and how you can help. Act now! Time is running out!



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CONTINUING EDUCATION AND DEDUCTIBLE EXPENDITURES

EVERY LANDSCAPE CONTRACTOR or lawn maintenance business owner is aware — or should be aware — of the value of continuing education.

A number of available tax deductions and write offs make this beneficial education a lot more affordable, but there are restrictions.

Education expenditures are tax deductible as ordinary and necessary business expenses as long as the training maintains or improves the skills required by the person's job; or is required for a person to retain his job.

Even if the education meets one of these requirements, expenses are not tax deductible if the education is required as a minimum standard for qualification, or if it will enable a person to qualify for a new profession.

In addition to educational expenditures for an individual's benefit, there are complications if an employer provides the education.

Both the Internal Revenue Service and the courts have been reluctant to permit educational expense deductions for informal training sessions conducted at daily luncheon meetings or at other irregular times.

According to tax rules, employees of a maintenance operation are limited in the amount they may exclude from taxable income under the employer-provided educational assistance exclusion rules.

Prior to the passage of the Technical and Miscellaneous Revenue Act of 1988, up to \$5,250 of the amount paid by an employer for educational assistance could be excluded from an employee's taxable income, even if the education was not job-related.

Under the new rules, the exclusion will continue with a \$5,250 limit for the next few years, except that the exclusion will generally not apply to assistance related to graduate-level education.

Educational assistance in excess of \$5,250 is still tax deductible by the employer, but the assistance must be included in the gross income of the employee.

Amounts in excess of \$5,250 represents reimbursement of educational expenses that qualify as a business expense and may be treated as a reimbursed business expense and deducted.

Any employer may claim a tax deduction for qualified educational assistance payments. If the amount of that assistance exceeds \$5,250, the employee must include the excess in his or her taxable income.

With or without an educational assistance program, however, an employee may deduct the expenses of education required by his employer or is necessary to improve existing skills.

The self-employed maintenance contractor can deduct qualified educational expenses.

If an employee's educational expenses qualify as a business expense, Form 2106 (Employee Business Expenses) is completed and the educational expenses are claimed as a miscellaneous itemized deduction subject to the 2 percent of adjusted gross income limitations.

Self-employed maintenance contractors are permitted to claim their educational expenses that qualify as a fully deductible business expense on Schedule C of Form 1040.

One of the biggest controversies with the IRS involves whether specific education qualifies a contractor for a new trade or business. Even though education may maintain or improve existing skills, the expense of such education is not tax deductible if the education is part of a program that would qualify a person for a new trade.

The courts have consistently ruled that a change of duties doesn't constitute a new trade as long as it involves the same general type of work.

All maintenance related duties, according to the IRS, involve the same general type of work.

Once the education and the individual qualify, an unlimited number of educational-related tax deductions are available.

When it comes to deducting travel and transportation expenses, a maintenance professional may select the institution that best serves his needs. No one can be denied a deduction solely because attendance at the institution of his choice results in greater expenditures. This is true whether foreign or local universities are attended.

Expenses incurred going between the contractor's place of work and a place of qualified educational activity are deductible, but such expenses aren't tax deductible if the contractor is not employed.

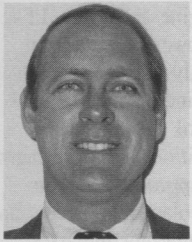
A maintenance professional can't deduct the cost of transportation from home to school on a non-working day.

— Mark Battersby ■

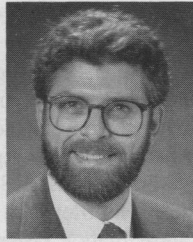


University turfgrass trials is a common form of continuing education.

PEOPLE



Nason



Boutillier

DANTON NASON IS THE NEW NATIONAL turf specialist at Great Salt Lake Minerals & Chemicals Corp.

His duties include providing technical and marketing support for the company's sulfate of potash turf fertilizing programs. He will work closely with turf management professionals nationwide.

Briggs & Stratton named **Jim Crunkhorn** vice president, international. Last year he was promoted to general manager, international after 11 years in the field.

He's now responsible for all interna-

tional original equipment manufacturers, corporately owned subsidiary distribution companies and independent distributors.

Previously, he handled company operations in the Phillipines and Australia.

LaVonne Husband joins the advertising department staff at Rain Bird Sales Inc. As an advertising assistant, her responsibilities include being a key customer contact for the company's "Promote the Professional" programs.

With the company since 1980, she most recently was a customer service manager.

Dewey Norton was appointed vice president, finance for Ransomes America Corp.

Norton previously worked for GKN, an international automotive products manufacturer headquartered in Great Britain.

Scott Boutillier is the new commercial marketing director for Ringer Corp.

Prior to joining Ringer, he was a marketing director for Nitragin (Lipha Chemicals Inc.) and a sales and product

manager for Rhone-Poulenc. At both companies, he concentrated on agricultural chemicals and biological products for specialty markets.

The Brownline Pipe Co. has appointed **James Foley** specification sales representative.

Foley will keep landscape architects, irrigation consultants, public agencies, contractors and builders updated on the company's latest products and applications.

His territory includes Los Angeles, Ventura and Santa Barbara counties in California.

Before joining Brownline, he served as a turf marketing and product manager for Rain Bird Sales International.

Aquatrols appointed **Phil O'Brien** technical sales representative. He will represent the company in a territory from Long Island to Virginia to Pennsylvania.

O'Brien has more than nine years of industrial sales experience through South Jersey and Pennsylvania. ■

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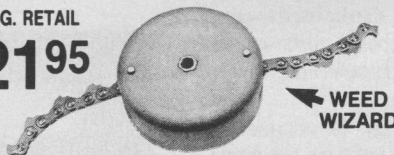
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Circle 43 on reader service card

PRODUCTS

LAWN-BOY RECENTLY INTRODUCED two commercial walk-behind mowers.

The two new models include the C21ZPR, a push mower with rear catcher and the C21ZMR, a self-propelled mower with rear catcher. Both are powered by the company's M engine designed with fewer moving parts.

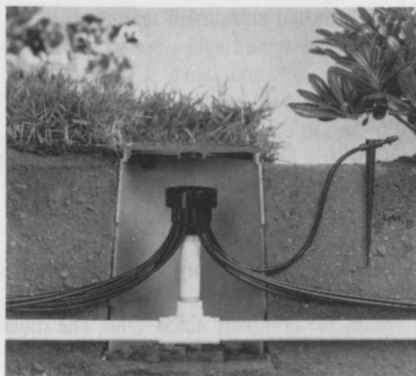


Both models feature a four-quart gas tank, aluminum channel handle hiding cables for protection, heavy-duty steel wheels and a three-speed all gear drive for extended transmission life.

Accessories include a mulching plate and side discharge chute.

Circle 127 on reader service card.

A "DRIP SYSTEM IN A HEAD" IS available from **Olson Irrigation Systems**. The Vibra-Clean™ EH-12 emitter head contains all the necessary components to



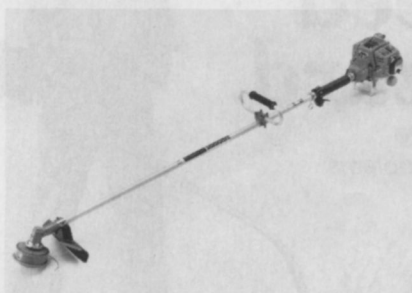
provide drip irrigation to as many as 12 locations.

Each emitter-outlet is individually pressure compensated to assure the same amount of water delivery even if elevation changes occur between outlets.

Installation is easy. Simply screw the head onto any 1/2-inch riser, lay out the distribution tubing to the areas to be watered, install stakes and bug caps and then turn on the water.

Circle 128 on reader service card

SHINDAIWA HAS IMPROVED ITS line of trimmers and brushcutters with the introduction of the T-27. The new trim-



mer has a 27.2 cc engine delivering 1.5-h.p. of high-torque power at 8,000 rpm.

It weighs just slightly more than 12 pounds and has a 60-inch shaft to eliminate stooping. Standard equipment includes: electronic ignition; TK diaphragm carburetor; U.S.F.S.-approved spark arrestor muffler with replaceable screen; an anti-vibration system that encompasses engine, grip and handle; automatic centrifugal clutch; and a fully automatic trimmer head.

Circle 129 on reader service card

ROOTS INC. HAS DEVELOPED **Roots™** and **iron ROOTS™** root growth enhancers for landscape and turf maintenance professionals. Both products are concentrated liquid biostimulants.

The enhancers are natural biostimulants containing peat humic extracts, marine algae extracts, intermediate metabolites and co-enzymes. The formulation pro-



motes root growth and stress tolerance during establishment and transplanting. Benefits include reduced transplant damage and loss, and quick establishment of new seedlings and ground cover.

Circle 130 on reader service card

PRODUCT SPOTLIGHT

BANNER® FUNGICIDE from **Ciba-Geigy** received Environmental Protection Agency approval to be used on all nursery (field) ornamental plants. The fungicide provides control of powdery mildews, rusts, leafspots, blights, anthracnose and other diseases.

The fungicide has been used for broad-spectrum disease control on turf since 1987.

In addition to the plants, diseases and rates on the label,

Banner can also be used to control non-labeled diseases on non-labeled plants after small-scale testing.

Ciba-Geigy is conducting large-scale research programs to expand the number of plants on the label.

The label now states that it may be used on all landscape and nursery settings, but has not been authorized for use on home lawns.

126 on reader service card



A 32-INCH MOWER HAS been added to **Encore Manufacturing's** PRO line of commercial mowers. The line also includes 36-, 48- and 60-inch mowers.

The new line is ideal for landscape maintenance professionals who work within fenced areas since its deck will pass through standard gates and entries.

The mower is available with a 12.5-h.p. Kawasaki or 12-h.p. Briggs & Stratton engine.

The front deck of every mower in the line carries a full lifetime warranty

against product workmanship and defective parts.

Circle 131 on reader service card

THE ROTO-HOE CO. MANUFACTURES the ReVac reducer vacuum that digests saplings, prunings and brush at the rate of 5 feet per second. Material is shredded then discharged.



The rear hopper takes limbs up to 3 inches in diameter while the optional hose kit makes fast work of leaves and other loose debris.

Circle 132 on reader service card

SOUTHERN FASTENER CO. INC. has introduced new copper battery terminals that have 10 times more conductivity than commonly used lead terminals.

Many people mistakenly blame battery failure on the battery itself, when the pro-



blem is actually with the connecting terminals. Conventionally used lead cables only have 8 percent to 10 percent conductivity compared to copper's 97 percent.

Circle 133 on reader service card

THE LATEST IN THE LINE OF DIXON Industries zero turning radius mowers is the ZTR 503 HG, a 50-inch cut commercial-grade mower with hydrostatic gear drive.

Powered by a twin-cylinder 20-h.p. Onan engine, the mower has two hand levers that independently control both the

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EXMARK, ENGINEERING—1989

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Exmark introduces the new Turf Tracer™ 1800 — the latest addition to our growing line of Exmark professional turf care equipment.

This power-packed unit sets new standards for walk-behind mowers. The Turf Tracer's unique 60-inch floating cutting deck actually "traces" the contours of uneven terrain ensuring a see-it-to-believe-it cut, every time. The Turf Tracer's lo-torq gear drive takes stress off the transmission, increasing transmission life. Convenient control panel puts electric start and electric blade clutch at your fingertips.

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steering and ground speed of the two drive wheels, providing unmatched maneuverability even with the 50-inch cut.

Circle 134 on reader service card

DEWEZE MANUFACTURING HAS added the MC144 diesel to its commercial mowing line. The new engine is considered the "big brother" to the MC70 gasoline powered, 70-inch cutting width mower.

The mower is powered by a 72-h.p. Cummins diesel engine, offers ground speed from 0 to 14 mph and provides a 12-foot cutting width. Transport or



roadings is 8-feet 6-inches wide.

Each unit offers the mowing operator both slope or level mowing and eliminates physical strain.

Circle 135 on reader service card

A COMMERCIAL EDGER BUILT TO meet the exacting quality standards of Scag Power Equipment Inc. is now being marketed by the company.



Powered by a 3.1-h.p. Kawasaki or 3-h.p. Briggs & Stratton engine, the lightweight, compact edger eliminates all springs, sliding booms and other "quick-to-fail" components.

Distance from the tire to the blade is fixed, so the edger can ride on curbs without needing adjustments.

Circle 136 on reader service card

(continued on page 66)

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Removable racks let you take loading chores by the horns. Rack sections are joined together by sturdy quick-release gate latches, and spring-loaded latches hold the stakes firmly in their pockets.

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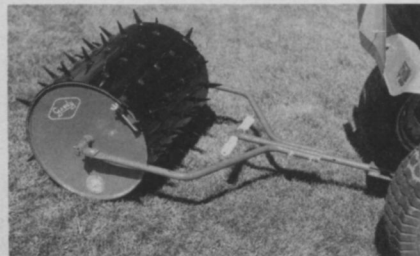
Reading Body Works, Inc. P.O. Box 14 Reading, PA 19603

Products

(continued from page 64)

NEW FEATURES ON GANDY'S DROP seeders include pneumatic tires for greater surface flotation and convenient hopper lift handles for assistance in lifting the spreader into a truck or transport trailer.

All Gandy Turf Tender models have stainless steel bottoms and slides that



snap off for easy cleaning and long-lasting service. Each model disassembles with hand tools and all parts are replaceable.

Gandy spreaders apply granular seed, fertilizer and granular insecticides or herbicides. With an optional set of internal jiggers that provide agitation from the internal rotors, granular lime applications can be made.

Circle 137 on reader service card

AQUATROLS IS OFFERING AQUAGro Injectable, a soil wetting agent formulation, created specifically for injection into landscape irrigation systems.

Injectable is a low-viscosity formulation containing 33 percent AquaGro soil wetting agent. The new formulation can be injected into irrigation systems using any commercial irrigation injection pump.

The wetting agent allows the user to easily adjust rates and application frequency to obtain the desired level of wet-



ting agent performance and economy.

Available in 55-gallon drums, AquaGro Injectable can be applied whenever necessary at a rate from one quart to six quarts per acre.

It will reduce runoff and evaporation while enhancing the performance of water soluble chemicals.

Circle 138 on reader service card



KUBOTA TRACTOR CORP. RECENTLY introduced the L5450 4W utility tractor with a new feature, the Ever Clutch.

Designed with hydraulic shuttle transmission with both forward and reverse hydraulic clutch pack, the two clutch packs reduce the use frequency required of a normal clutch and extends the clutch life to more than twice the normal expectancy.

The Ever Clutch depresses with a light touch, only one-fourth of the force needed to depress a conventional dry-type clutch.

The tractor features a 5-cylinder diesel engine with 49 PTO h.p. and an improved 3-point hitch and power take-off function. Other features include hydrostatic

(continued on page 68)

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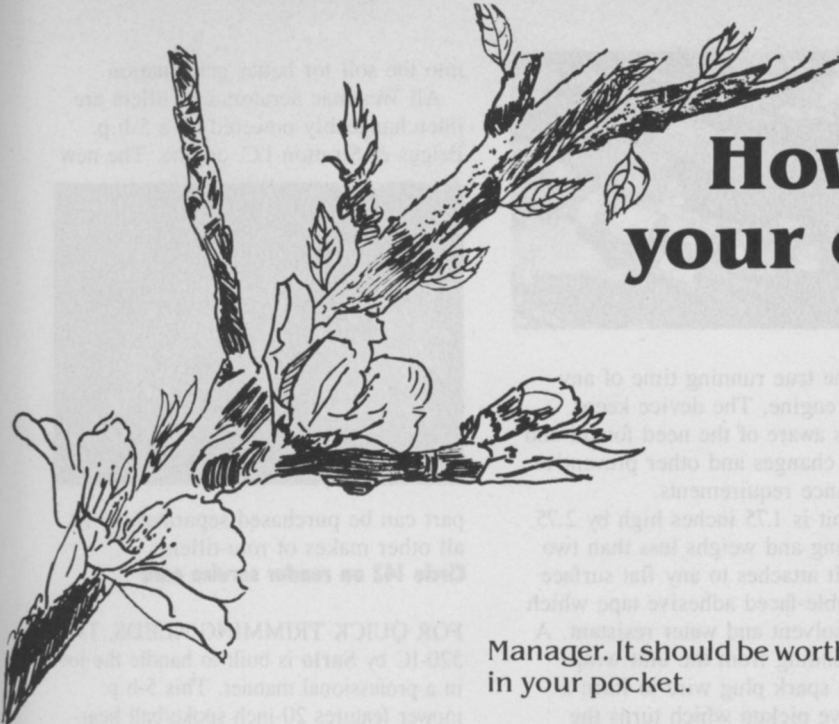
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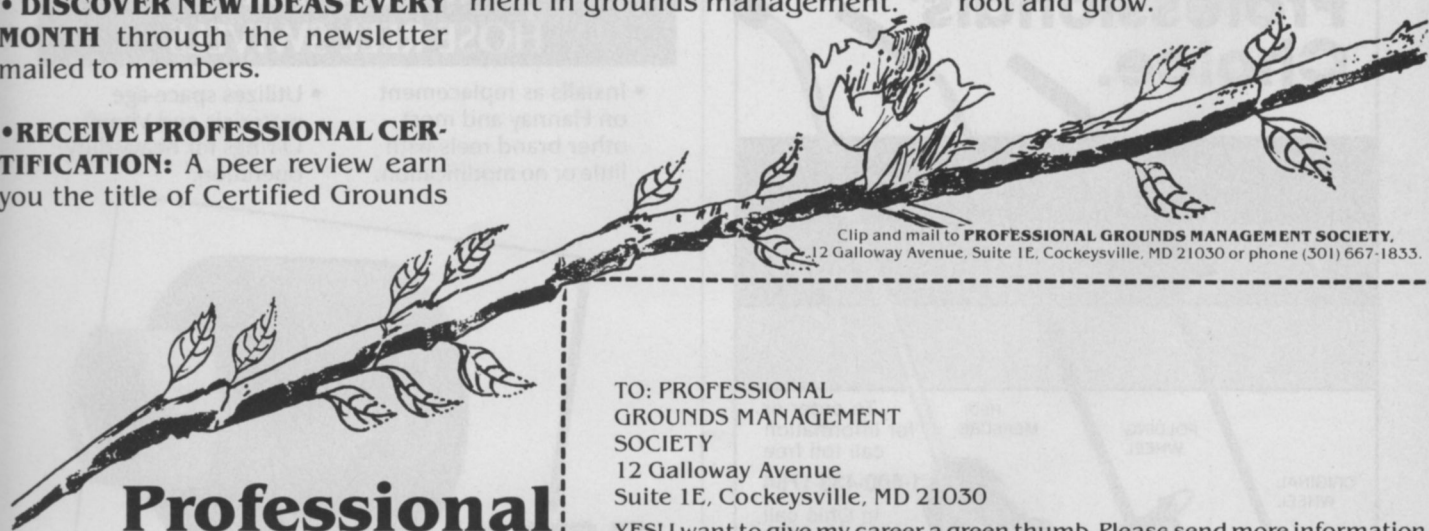
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Products

(continued from page 66)

power steering and partially synchronized hydraulic shuttle transmission with eight forward and eight reverse speeds.

Circle 139 on reader service card

AVAILABLE FROM **THORNTON Computer Management Systems** is a business management software package called SLICE.

All of the system's packages offer complete accounting functions based on standard accounting principles. Integrated with the accounting are specific green industry functions.

The system for landscape contracting handles all bidding and estimating, job costing, inventory control, sales analysis. New features include AIA invoicing, actual vs. estimated analysis reports and expanded shipping tickets.

Circle 140 on reader service card

IMAGINE ALL THE BENEFITS OF A piece of equipment that monitors actual running hours of any gasoline engine. **SIPAP Electronics Inc.** has developed such a device.

The company's Maintenance Meter is a digital readout meter designed to



record the true running time of any gasoline engine. The device keeps operators aware of the need for oil and air filter changes and other preventive maintenance requirements.

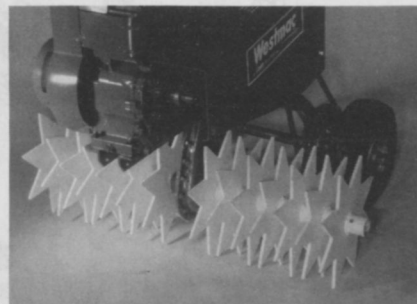
The unit is 1.75 inches high by 2.75 inches long and weighs less than two ounces. It attaches to any flat surface with double-faced adhesive tape which is heat, solvent and water resistant. A wire extending from the unit wraps around a spark plug wire to form a conductive pickup which turns the meter on and off.

Circle 141 on reader service card.

WESTMAC HAS INTRODUCED ITS new Seed Spiker to the present line of core aerators and roto-tillers. The Spiker has 112 spikes made of 1/4-inch thick steel that plants seed 1/4-inch deep

into the soil for better germination.

All Westmac aerators and tillers are interchangeably powered by a 5-h.p. Briggs & Stratton I.C. engine. The new



part can be purchased separately to fit all other makes of roto-tillers.

Circle 142 on reader service card

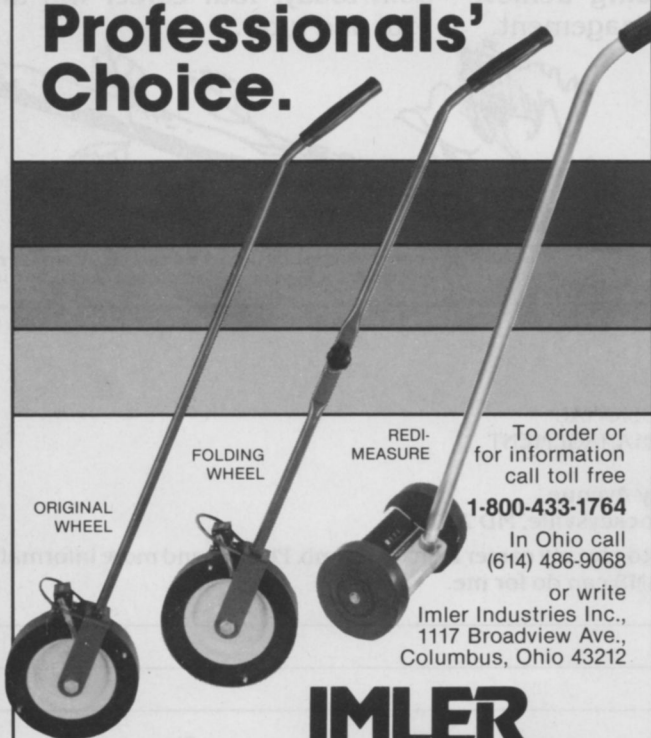
FOR QUICK TRIMMING NEEDS, THE 520-IC by **Sarlo** is built to handle the job in a professional manner. This 5-h.p. mower features 20-inch spoke/ball bearing high wheels for the utmost in control and easy maneuvering.

With a 21-inch cutting path, the model contains an adjustable cutting height ranging from 1 to 3 inches. This provides a consistently well manicured cut with a variety of grass heights.

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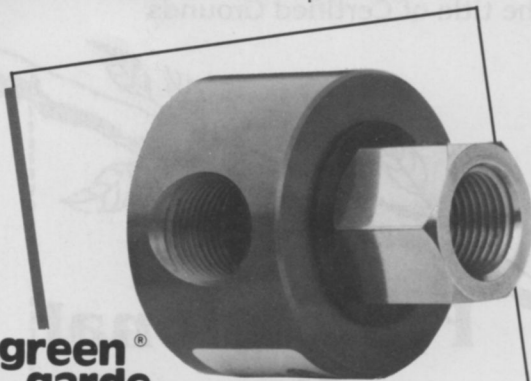
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leaves into the dungeon and throws away the key all season long.

Your customers won't be haunted by spurge. Or oxalis. Or white clover. Or 41 other tough broadleaves. And you'll be haunted less by costly callbacks.

Yet turfgrass has nothing to fear. New Gallery is actually more tolerant on your turf than other herbicides. So there's no risk of off-site damage to nearby ornamentals, gardens and trees.

Put an end to the horror of broadleaves. Instead of hearing "They're back," start saying, "They're gone." With new Gallery. See your Elanco distributor. Or call toll-free: **1-800-352-6776**.

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Circle 99 on reader service card

FOCUS ON: PRODUCT PROFILE

MANAGEMENT STYLE SETS COMPANY ON ROAD TO SUCCESS

MANAGEMENT AT GREEN LAWN Care Co. of Ontario is geared for growth. Business is booming again this year, on the heels of a 90 percent leap last year.

"We plan to keep growing," said John Kloosterhuis, who started the company with a 10-year-old pickup truck and two 50-gallon drums in 1979. Today the company has 30,000 accounts, which stretch as far as 70 miles from home base at Mississauga, near Toronto.

How does Kloosterhuis manage this big account load and produce \$5 million yearly after just 10 years in business? "We keep control," he said reviewing his management style. "We have 23 spray trucks. But we keep 36 drivers busy on rotating work schedules. Drivers don't require space. Trucks do.

"Our drivers work four-day weeks. Trucks are on the job six days each week. By going to a four-day week and 11 hour days, I get one-third more service out of each truck. With this system, three drivers need only two trucks."

Do employees like the system? "Definitely," Kloosterhuis said. "We pay each the same full week pay and he enjoys the same complete benefit package. Each driver is off three days — on a rotating basis. Monday and Tuesday are free days the first week, Wednesday and Thursday the next week and Friday and Saturday the final week.

"We also pay our employees year-round," Kloosterhuis said. "We can do this because we have back-up work available. Inclement weather during the season does not stop work. Drivers can drop the lawn spray schedule and go to an aeration job using a unit hauled on each truck."

The aeration unit mounts on a carry frame welded to the back of the truck, eliminating any need for the normal pickup truck to haul it.

Another important phase of management at Green Lawn is selection of these driver-sprayers.

"I pick carefully when I interview new prospects," Kloosterhuis said. "Character counts heavily. And once they are on the job, I never set the number of jobs they must do. I tell them to do their best. There is no pressure."

Even after picking the best, Kloosterhuis said, management is necessarily strict. "We have rules," he said, "and if they are broken, we issue three warnings.



Green Lawn employees aren't held to set spraying schedules.

With a fourth, the employee is separated."

Though the best people are hired, his experience is that careful tracking of schedules is mandatory because a driver enjoys a good deal of freedom on the job and plenty of company responsibility.

For this reason, each truck in the fleet is equipped with a clock card system. This clock charts movement of the truck second by second. It records mileage between calls, volume of spray used, length of time the pump was spraying, maximum and minimum speeds and times any stops. This kind of unit tracking is mandatory, according to his experience.

"Before beginning my own business, I drove transports for six years," he said. "I learned how truck fleets have to be managed." Clocks cost \$400 each, but "last a lifetime."

Kloosterhuis said a great help to management has been the industry's move to liquid fertilizer blends.

"We don't have to haul great tonnages when we use the liquids," he said. "It is more efficient and accurate. We tank mix our plant food and pesticides, and we save passes. We don't get complaints about fertilizer residue on sidewalks and in pools — which is common if granular is used. Using liquids is quicker; we save

employee time and mileage."

Kloosterhuis, who has used most of the liquid nitrogens, now uses CoRoN, a clear, sprayable product which supplies up to 70 percent of the nitrogen as controlled release.

"We've had three years experience with this liquid N, and specify it in all fertilizer blends. During hot periods when grass is stressed, we use a blend with 90 percent CoRoN," he said. "It produces green-up in three to four days without a surge flush and does not burn.

"We buy a 20-3-5. Depending on the weather we range from 50 percent of the N being CoRoN to 75 percent — then to 90 percent for extreme hot spells. Our basic package is four applications. In the spring, late March and early April, we only fertilize. At the end of May, we weed and feed. We summer fertilize

from early July until the first of September. We weed and feed for the fall treatment — September until November."

Kloosterhuis has settled on his present liquid N because of its low cost and its compatibility with other fertilizers and chemicals. It doesn't settle, separate or smell as some previous liquid products he used. It's ideally suited for the turfgrass manager because only one-third the normal water volume has to be carried.

"We use a spray volume of about four U.S. gallons (three Imperial) per thousand square feet. Our basic rate of N is one and one-quarter to one and one-half pounds per thousand square feet," he said. "However, in hot weather we reduce the rate to only one pound of N — 100 percent from CoRoN."

CoRoN is a liquid polymethylene urea CRN. It features a high concentration of slowly releasing amine modified polymethylene urea with a small amount of methylene diurea and monomethylolurea to provide 70 percent of the nitrogen portion.

Very little urea is present — only 30 percent, with no ammonia. It can be used to supply high amounts of nitrogen on grass and ornamentals during stress periods when a low burn potential is needed.

Circle 150 on reader service card ■

CALENDAR

FEB. 12-13

Athletic Turf Management Seminar, East Lansing, Mich. Contact: National Institute on Parks and Grounds Management, P.O. Box 1936, Appleton, Wis. 54913; 414/733-2301.

FEB. 14-16

The American Sod Producers Association Midwinter Conference and Exposition, The Hilton at Walt Disney World Village, Orlando, Fla. Contact: ASPA, 1855 Hicks Rd., Rolling Meadows, Ill. 60008; 708/705-9898.

FEB. 15-16

Athletic Turf Management Seminar, Jacksonville, Fla. Contact: National Institute on Parks and Grounds Management, P.O. Box 1936, Appleton, Wis. 54913; 414/733-2301.

FEB. 16-18

American Landscape Maintenance Association National Conference/Expo, Bay-

front Arena, St. Petersburg, Fla. Contact: ALMA Expositions, P.O. Box 223218, Hollywood, Fla. 33084; 800/992-ALMA.

FEB. 20-22

Western Pennsylvania Turf Conference and Trade Show, Pittsburgh Expo Mart/Radisson Hotel, 101 Mall Blvd., Monroeville, Pa. Contact: Thomas Watschke, Department of Agronomy, 405 Agriculture Administration Bldg., University Park, Pa. 16802; 814/863-1613.

FEB. 22-23

1990 Landscape Industry Conference and Trade Show, John Q. Hammons Trade Center at the Holiday Inn I-70 East, Denver, Colo. Contact: Diane Matt, executive director, Associated Landscape Contractors of Colorado, 3895 Upham St., Suite 150, Wheat Ridge, Colo. 80033; 303/425-4862.

FEB. 23-24

The Association of Professional Landscape Designers Second Annual Meeting, Bethesda Holiday Inn, 8120 Wisconsin Ave., Bethesda, Md. 20815. Contact: J. Lerner, APLD, 221 Morris Rd., Ambler, Pa. 19002; 301/652-1212.

FEB. 27-28

Northeastern Pennsylvania Turfgrass and Grounds Maintenance school, Luzerne County Community College, Prospect Street and Middle Road, Nanticoke, Pa. Contact: William Pencek, Lackawanna County Extension Service, 200 Adams Ave., Scranton, Pa. 18503; 717/963-4761.

FEB. 28

New Jersey Landscape '90, 13th Annual Trade Show and Seminar, The Stadium Club, Giants Stadium, The Meadowlands, E. Rutherford, N.J. Contact: S. Powers, 201/664-5228. ■

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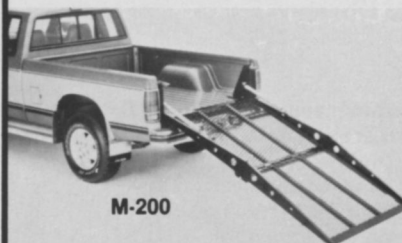
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Contract Bidding

(continued from page 48)

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- Additional office and postal expense.
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Most final price quotes are to some extent based on the following criteria:

- The number of competitors involved with the bid.
- A historical perspective of the competitors involved.
- The lowest acceptable margin of profit.
- Cost ceiling imposed by the client.
- Intuition.

CONCLUSION. The concept termed "privatization" recognizes that private industry is perhaps better equipped to grapple with the fast paced technology and logistics involved with modern lawn and landscape maintenance.

Ironically, the same maintenance complexities that provide this opportunity to the private sector often become a major obstacle in the bidding process essential for competitive equality.

Regardless if the job consists of five or 500 acres, the crux of maintenance bidding boils down to capturing the essence of the client's needs while preserving equal opportunity for all competitors. —
Jim Ware

The author is an agronomic consultant in Hobbs, N.M.

Coming Next Month

In the March issue of *Lawn and Landscape Maintenance* magazine, we'll bring you the fate of 2,4-D, the status of the international maintenance market, keys to high profit mowing and a report on substance abuse in the workplace. We'll also reveal the recipient of the 1989 Professionalism Award.

SOMETIMES BIG ISN'T BETTER

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Accepted practice in the lawn maintenance business has been to use the BIG commercial rider mower for open areas and walk-behinds for trimming. Now maintenance operators all across the country are discovering a new, fast efficient way to mow landscaped areas...for many jobs the maneuverable MID-SIZE WALKER MOWER does the whole job saving time, labor, and equipment investment. And Walker offers high productivity without sacrificing a quality cutting job, sure to please the most discriminating customer.

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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.

LANDSCAPE COMPANY

Profitable granular fertilization (60 percent) and landscape company. Management in place. Computerized. Owner attending Harvard Business school September 1990. \$275,000 revenue with consistent growth. \$150,000 Main Line, Philadelphia. John 215/565-6895.

TREE FARM

Mature, developed tree farm for sale. 65,000 trees, 80 acres in field and container trees. To 25 feet in height. Ornamental. Near Disney and Orlando, Fla. Phone George Turner, manager 904/429-3639.

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.

GOVERNMENT POSITION

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.

SUPERVISOR/SALES

Growing Twin City contractor needs Landscape

Maintenance Sales/Supervisors. Hort degree, two years experience minimum. Fax resume/salary requirements, 612/454-8183 or mail to: *Landscape Management*, P.O. Box 21-071, St. Paul, Minn. 55121.

MANAGERS

Premiere Commercial Full Service Landscape Maintenance Firm seeking career-minded, aggressive individuals interested in management and training positions. Positions are available in the following divisions:

- Grounds Maintenance Division
- Ornamental Plant Care Division
- Landscape Installation Division
- Tree/Shrub Care Division

Applicants must have a minimum of two years field experience in supervisory capacity. Great working environment, excellent salary and benefits. Relocation and temporary housing negotiable. Send resume, salary history and references to: Lasting Impressions, Landscape Contractors Inc., P.O. Box 1581, Bowie, Md. 20716.

FOREMAN

Expanding Northeast Ohio Maintenance and Construction company has openings at the foreman level. Fulfill your career goals with a \$6 million company that is still growing. Send your resume and salary requirements to Mr. Herrmann, P.O. Box 438, Painesville, Ohio 44077-0438.

LANDSCAPE FOREPERSON

Landscape Contracting foreperson wanted for a growing company on Eastern L.I., N.Y. Ambitious, highly motivated individual with good communication skills and management capabilities required to take charge of day to day operations. Salary range \$32-38,000 plus benefits. Send resume to: Grimes Land Design, P.O. Box 2072, Montauk, N.Y. 11954.

GARDENER

Full-time estate gardener. Beverly Hills area. Experience with vegetables, annual color and water gardens. References 818/993-0200.

PRODUCT ASSEMBLY

ATTENTION: Easy work. Excellent pay. Assemble products at home. Details (1) 602/838-8885 Ext. W-13,758.

Franchise

(continued from page 39)

before the season begins."

Barefoot's franchise success, according to Dunham, is taking people already familiar with the industry and familiarizing them with the business side.

"We have a formula for what works," he said. "We can sit a guy down and say: 'You don't want to buy three trucks; you won't be able to pay them off' or 'That advertising isn't as cost effective as this type of advertising' or 'Don't buy from that vendor. This one has better prices.'"

CHEMLAWN. The major difference that sets this Columbus, Ohio, company apart from other lawn care franchises is the amount of money it expects an incoming franchisee to have.

When a new franchise is sold, the company is looking at a three-year plan for developing that operation, said Bruce Fowler, general manager of franchising. The company generally wants interested buyers to have about \$100,000 in liquid assets. The company began franchising in 1977.

"I don't want it to seem as though

we're saying other franchisors are just after a person's money," he said. "I don't think that is true. But we want to make sure our buyers are fairly comfortable and will be able to make it through three years with an uncertain income."

The company has about three times as many company-owned branches than franchises. Of the franchises it does sell, about half of the buyers are current employees. Good business skills top the list of desirable qualities in the buyer.

All new owners — whether they have a lawn care background or are current employees — go through a four-week training period. They are put in the field at a branch operation and exposed to all aspects of the business.

"This is important because even if they are familiar with lawn care, we want them to learn the ChemLawn way of doing business," Fowler said.

He characterized the franchising agreement as a "marriage contract." It is quite detailed regarding the responsibilities of an owner. The length and detail of the circular sent to people who express an interest in buying a ChemLawn operation quickly sorts out those who are more curious than serious about buying.

The company realizes the first year or

two are the leanest for owners. So the royalty fee starts out low and grows with the business. The fee for the first year is 6 percent; it increases to 8 percent for the second year; then is raised to 10 percent in the third year, where it remains for the rest of the contract period.

Another way of easing the financial burden during the developing stage is allowing the owner to buy equipment and supplies through ChemLawn's purchasing department. Franchisees are not required to do so, but they are required to use the company's standard design for equipment. The company has benefitted from the general shift in attitudes about franchising as a business venture.

"As a business venture, franchising has gained some respect, moved up a couple notches," Fowler said. "People coming in are more business oriented."

But as is true with almost everything, perfection has not been completely attained. The company has had to buy back several franchises or find others to buy them because they were doing poorly and the owners did not live up to expectations. — *David Westrick*

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

Green Scape

(continued from page 28)

and how to use the equipment safely. Eventually, most of our training will be video training — all before they even get on a lawn.

The videos are going to be much better for training purposes. I think it's very hard for a person to understand what good work is just by throwing them out and saying this is how you do it.

Instead, if you can look at it and learn from experienced people what it's supposed to look like when you're out there mowing, then they've got an idea and I think they'll be more productive quicker.

Q: What are some of the frustrations of the lawn maintenance industry?

A: One frustration is that customers in general are now starting to get price-oriented and not quality- and loyalty-oriented.

I think the trend is leaning now toward who has the lowest price not necessarily the best service or the most loyalty. And that's frustrating to me when you offer a good quality service and somebody decides either to discontinue or decides not to take your service over a few cents. So that's one frustration; there's just no more loyalty. — *Cindy Code*

The author is Editor of Lawn and Landscape Maintenance magazine.

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*Denotes regional advertisement.

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

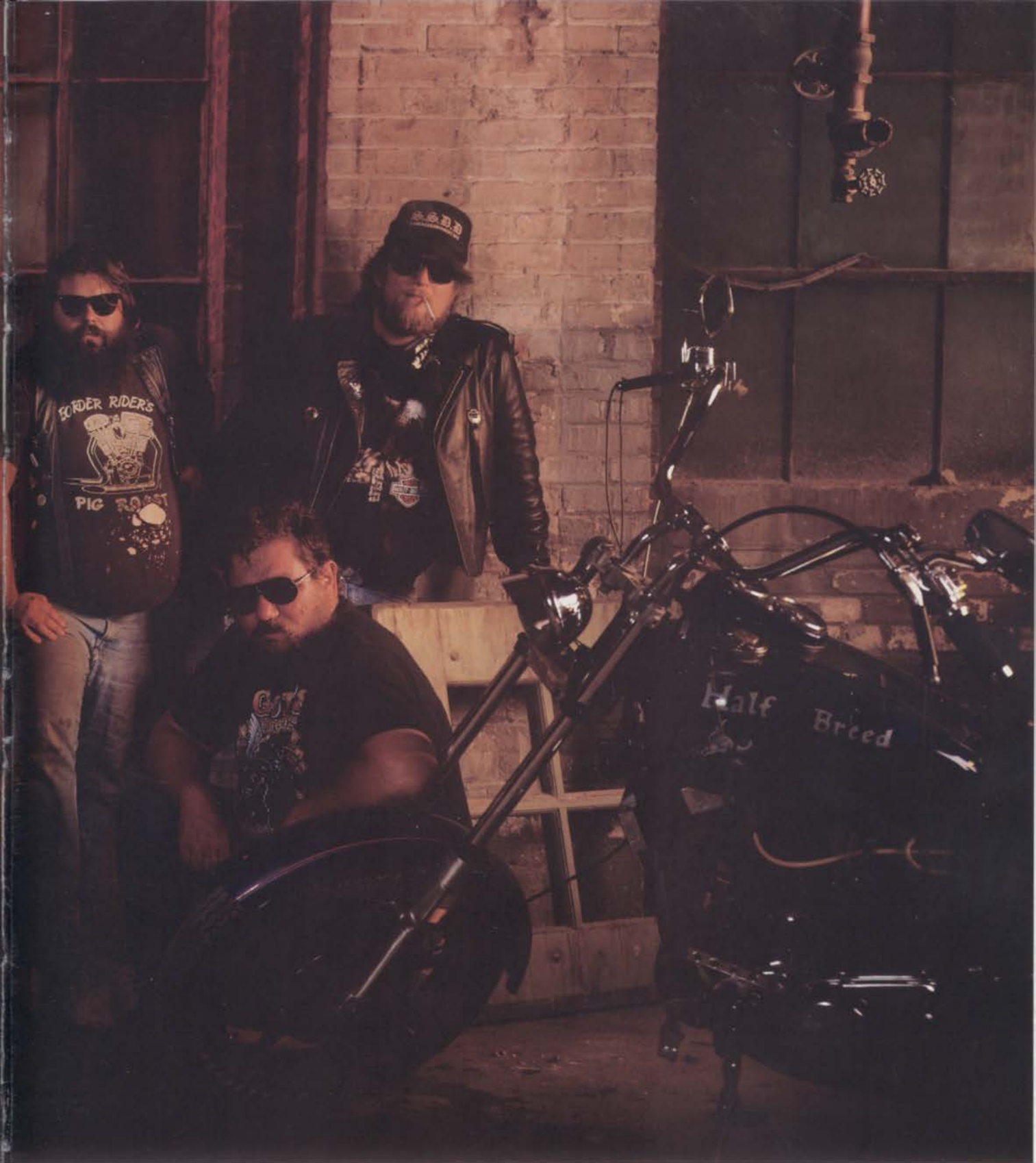
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