Pro Show 87
EXHIBITORS · EVENTS · PAGE 37

TODAY'S TURF
PROF. JOE VARGAS OFFERS NEW IDEAS ON WATERING
PAGE 20

San Antonio PLCAA/87
EXHIBITORS, EVENTS PAGE 31

LAWN CARE INDUSTRY

Serving lawn management and chemical lawn care professionals

VOLUME 11 NUMBER 11 $2.50 AN HBJ PUBLICATION NOVEMBER 1987

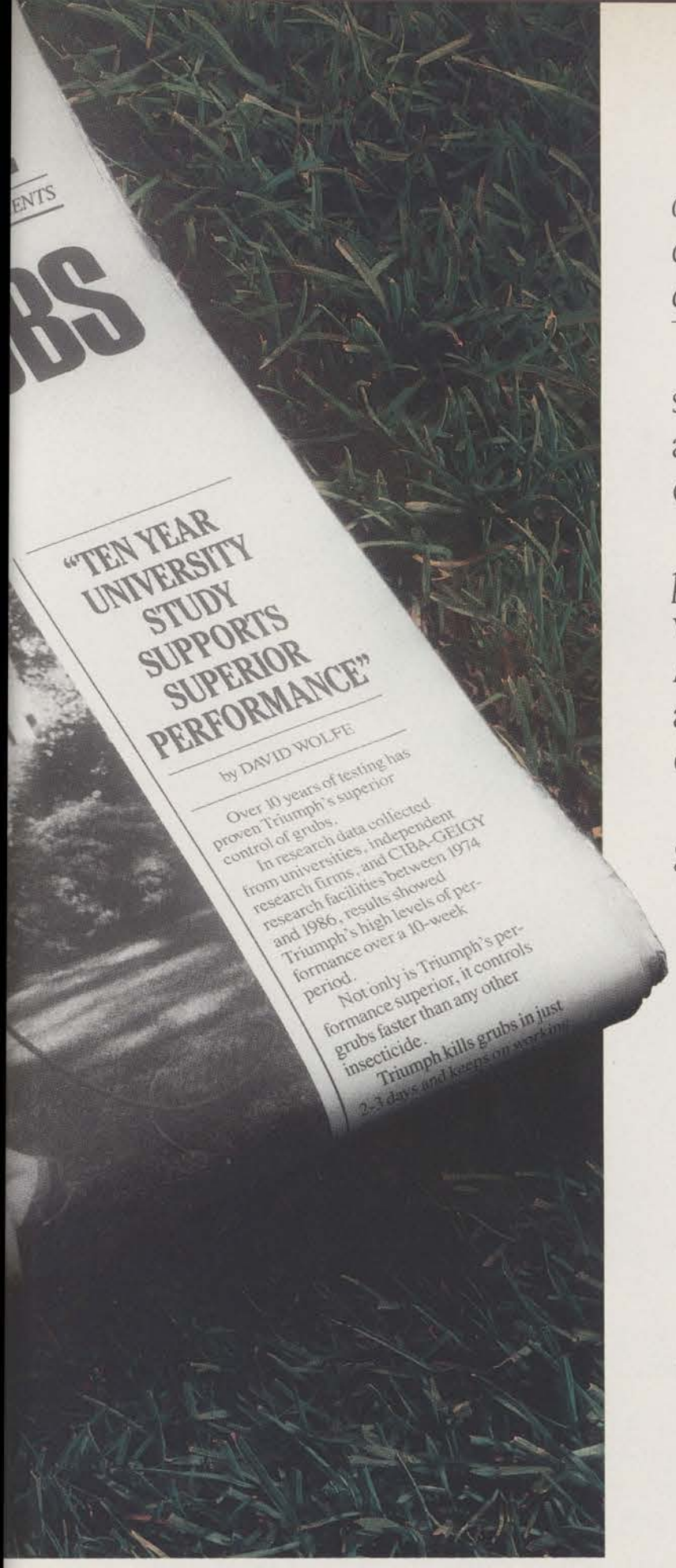
SPECIAL REPORT

PAGE 8

INTE

THE BEST NEWS TO

© 1987 CIBA-GEIGY Corporation. CIBA-GEIGY Turf and Ornamental Products, Box 18300, Greensboro, NC 27419. Always read and follow label directions. Triumph is a restricted use pesticide and is not for use on sandy soils. For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator certification.



New Triumph®, from CIBA-GEIGY, provides, on average, over 90% grub control in just two to three days. And there are over 10 years of major university and CIBA-GEIGY trials to prove it.

Triumph offers broad spectrum control of surface feeders like chinch bugs, sod webworms, army worms, chionodes, plus sub-surface mole crickets and annual bluegrass weevils.

Application in late summer to fall can *prevent* turf insect damage by eliminating grubs when they're small, before they can damage roots. And if grub damage appears in spring and summer, application of Triumph quickly stops further damage.

When your customers call you with a grub problem, they want results fast. And that's what they get with Triumph. And, because Triumph is restricted to lawn care applicators, your customers can only get it from you.

CIBA–GEIGY

ODUCING TRIUMPH.
IT LAWNS IN YEARS.

The Tall Fescue Trend
REBEL II Leads the Way

Rebel II. . . the attractive, low-maintenance turfgrass:

- ☐ Requires less fertilizer than Kentucky bluegrass or Bermuda grass
- ☐ Excellent shade adaptability
- ☐ Greater disease resistance than most other turfgrasses
- ☐ No thatch build-up
- ☐ Outstanding performance in heat and drought
- ☐ Fine, dense growth
- ☐ Excellent dark green color

Get with the tall fescue trend. Try Rebel II. Tests are proving it will meet all your needs, and surpass your expectations.

LOFTS

Lofts Seed Inc.

World's largest marketer of turfgrass seed

Bound Brook, NJ 08805 (201) 356-8700

Lofts/New England
Arlington, MA 02174
(617) 648-7550

Lofts/Great Western
Albany, OR 97321
(503) 928-3100 or
(800) 547-4063

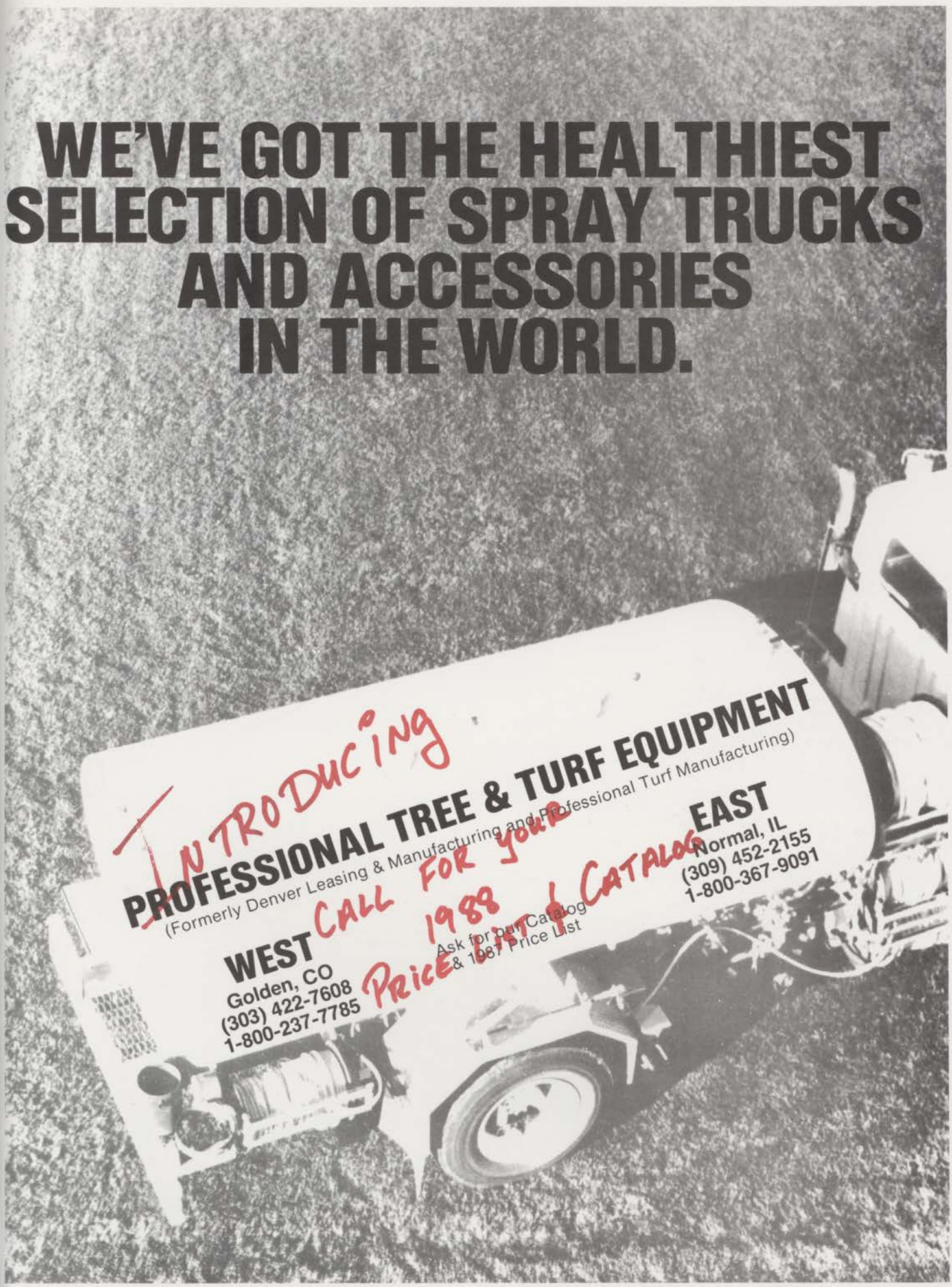
Sunbelt Seeds, Inc.
Norcross, GA 30071
(404) 448-9932 or
(800) 522-7333

Lofts/Maryland
Beltsville, MD 20705
(800) 732-3332
(800) 732-7773 (MD)

To locate the Lofts' distributor nearest you, call
(800) 526-3890 (Eastern U.S.) (800) 547-4063 (Western U.S.)

Circle No. 120 on Reader Inquiry Card

WE'VE GOT THE HEALTHIEST SELECTION OF SPRAY TRUCKS AND ACCESSORIES IN THE WORLD.



Denver Leasing and Manufacturing and Professional Turf Manufacturing have just merged to create the largest supplier of spray trucks and accessories in the world.

It made sense.

We were two companies manufacturing different truck styles and accessories in the field of lawn, tree, shrub care and pest control.

Now we're one company that has everything, from spray gun parts to 1,600 gallon stainless steel elliptical tank trucks.

And we don't just warehouse and distribute parts. We try to find better and easier ways for you to run your business.

Things like ground-level tank loading, so you don't have to climb on top of the truck to load your chemicals.

We introduced elliptical tanks to the lawn and tree care industry. They give the truck an overall lower center of gravity and shorter cargo length, making it much easier and safer to drive.

We have the most extensive quality control procedure in the business. Because your equipment should be working for you. Not being worked on or repaired.

And when you buy something from us, we don't go off and hide in the weeds. We have a warranty program. Complete customer service. And training classes to show you the best ways to use the equipment.

We'll ship any part in stock within 24 hours. And we'll deliver a truck right to your doorstep.

So if you need something, anything, for your lawn, tree, shrub care or pest control business, more than likely it's in this catalog.

If it isn't, call anyway. We pride ourselves in being able to take your ideas and make them work for you. So we'll build or find whatever you're looking for.

PROFESSIONAL TREE & TURF EQUIPMENT

WEST - 1-800-237-7785 **EAST - 1-800-367-9091**

We introduced a new shape to the lawn care industry.

We've been building spray trucks and equipment in the Colorado area since 1975. Our willingness to design, engineer and build whatever our customers needed has given us a reputation as an innovator.

Three years ago we realized something.

The elliptical tanks popular in the oil industry would work pretty well in the lawn care industry. So we set out to design an elliptical tank truck for our business.

The results are the DL600 and DL1300. Two of the most productive trucks around.

The elliptical tank is made of stainless steel, a superior material over mild steel.

The elliptical design gives the truck a lower center of gravity, making the truck easier and safer to drive. At the same time, the elliptical shape will hold more chemical over a shorter wheelbase. So you're stopping at accounts instead of stopping for more chemical.

Such an innovative idea needed an innovative truck built around it.

We attacked the biggest maintenance problems in the industry by minimizing the use of parts like belts, chains and pulleys. We've designed a more reliable pumping system that uses the best hoses and leak-free fittings available.

We introduced the hot-shift power take-off that automatically engages to pre-set levels with a push of a single button.

To keep your feet safely on the ground, we developed ground-level loading for filling the tank. This design also spawned jet mixing, a system that insures even mixing of chemicals, even when working from the ground up. And without any damage to your pump.

Both the DL600 and DL1300 can run on economical diesel fuel and shift through a reliable automatic transmission.

Once underway, fully hydraulic agitation makes the last application of the day the same as the first.

We developed intake devices that prevent materials from plugging hoses after overnight settling.

The high-maintenance flatbed has been eliminated on the elliptical tank truck.

And to keep your dry sacks of chemical dry and safe on the truck, we built a lockable dry storage area right into the back of the tank.

The IPM Unit
The Integrated Pest Management Unit, developed in cooperation with the F.A. Bartlett Tree Expert Co., provides an alternative to blanket spraying for diseases and pests by allowing the operator to mix chemicals on site. Mounted on a 1-ton Isuzu cab forward diesel, the apparatus is a 4-pump, 4-mix chamber, 4-reel, selective pesticide and fertilizer application device. The operator can mix chemicals in any of the four chambers, and he can select the appropriate strength and quantity for the situation. Applicators can deliver four different solutions in quantities from 1 ounce to 150 gallons.

10% discount on all spray systems ordered before 12-15-87

DLM1300
The truck shown has tree-spraying capabilities with the use of the optional multiple compartment tank, multiple reels, rollers, pumps and jet mixers.

The most popular truck in the world.

PTM600 Lawn Sprayer
This truck is optionally-equipped with hose rollers, backpack sprayer holder and chock block.

Professional Turf Manufacturing has been the industry leader for ten years. With satisfied customers across the U.S. and Canada.

We stay ahead by always improving every aspect of what we sell, from spray gun nozzles to entire trucks. We've been copied often, but never duplicated.

We offer the round tank truck in almost every size imaginable, from 600 to 1,500 gallons. And with all the equipment available, you can order a truck exactly the way you want it.

We make the tank out of stainless steel, baffled and butt-welded together to make sure there are no leaks.

To make the chassis bed last longer, we specially treat the wood to resist chemicals and bad weather. We also enclose the channel bedframe to minimize rust and corrosion.

The dual stage centrifugal pump is not only reliable, but can pump powder blue and other wettable powders. So you're not limited to what you can sell your customer. Or how you can make money for your business.

Electric hose reels and remote throttles that let you accurately set the application pressure make for smooth stops all day long.

The round spray truck has been around for two decades. And we keep improving on it each and every year.

We've got the pickup tank system you're looking for.

There's plenty of you who have your own truck but don't have a tank or spray system.

We haven't forgotten you.

In fact, we'll put together exactly what you need, ranging from low-volume pest control units to high capacity tree spray systems. Right down to the spray gun nozzle.

We take as much pride in designing a 170 gallon mini-pickup unit as we do designing a DL1300 multiple pump tree sprayer. Because no matter what the size, our equipment has to work for you the first time you use it. And every time after that.

If you have an idea of what you're looking for, but you're not sure what's available, give us a call. We'll listen to what your needs are and recommend the correct tank system.

If you're new to the business, we conduct training classes throughout the year.

We'll come to you and train you and your staff in equipment operation, maintenance, troubleshooting and safety. All to get you going in the right direction for a successful business

And everything you buy from us comes complete with a customer service plan and a written warranty.

Whatever your needs, give us a call. We've got something that'll fit right in your own backyard.

PTM300-SM-Poly Spray Unit
This spray system also has tree-spraying ability with use of optional 25 GPM high pressure pump and 11 HP Honda engine. Other options shown include second tank and reel and hose rollers.

We've taken the headache out of owning a tank.

Mild steel tanks have caused many headaches over the years. Leaks, rust and corrosion to name a few.

That's why we offer both our round and elliptical tanks out of stainless steel.

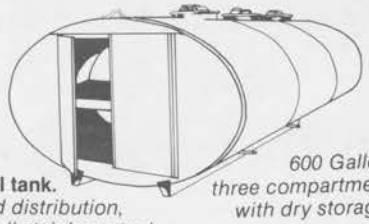
Stainless steel can handle just about anything you can dish out. And last years longer than any tank made of mild steel.

And with stainless steel, you're not restricted to available molds or current models. A stainless steel tank can be custom designed to fit your exact needs.

With this type of control over your tank construction, you'll never need auxiliary or torpedo tanks stacked on your flatbed.

We'll build lockable storage compartments for bulk chemicals, tools and equipment right into your unit. So everything stays where it belongs. On the truck.

To help keep insurance costs down, we can equip every tank with Department of Transportation approved manholes. They give you the best protection against spills in case of a rollover accident.

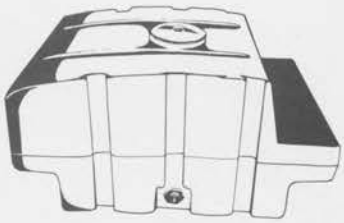


600 Gallon three compartment with dry storage.

Stainless steel elliptical tank. *Low profile, better load distribution, shorter length loads, full stainless steel skids, vent and drain fitting, sight gauge fittings, baffled, dry storage available, 300 to 1,600 gallons.*

We also offer tanks that'll fit any truck. And any budget.

Made out of Tuflex or polyethylene, these tanks are available in square, round or loaf shapes.



170 gallons

We have 170 to 500 gallon tanks for mini, midsize and full size pickups.

And Tuflex tanks for one and two ton chassis.

We can even get you a 6,000 gallon storage tank for your fertilizer.

With tank sizes from 55 to 6,000 gallons, we know we have something that'll do a lot more for your business.

And give you a lot less headaches.

We put you in control.

Our manifold systems are right where you need them.

We've placed all the controls at the ground level and within easy reach. So you don't have to have rubber arms to adjust your valves and pump pressures.

When you add the options of jet mixing and ground-level loading, all of your work is right at your fingertips.

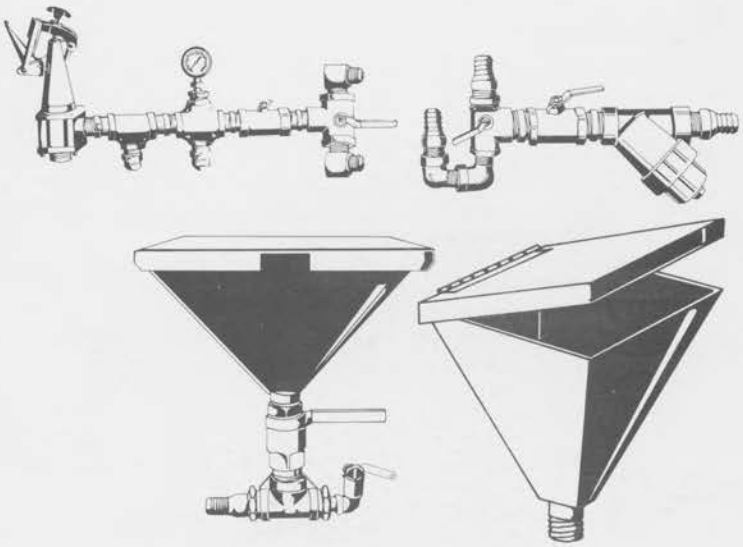
The jet mixer is designed to load and mix wettable powders and liquids from the ground level. So you don't have to climb on top of the unit to do your loading and mixing. You can also use the jet mixer to circulate your hoses each morning.

And if you need a portable jet mixing system at your plant, we can do that, too.

Our manifold system allows fluids to be pulled from both compartments. We use stainless steel 304 pipe fittings wherever possible. Suction 'Y' strainers and provisions for ground-level loading are standard. As are stainless steel King nipples, Gates acid/chemical suction hose, reuseable hose couplings and wire-braided rubber covered hose.

All the necessary gauges, valves and regulators are there. Optional check valves in load lines, valves and fitting materials are available.

In short, we've done everything to keep your maintenance costs under control.



Now that we've shown you everything, here's everything else.

All of our parts and accessories can be ordered any way you like, from one bushing to twenty stainless steel elliptical tanks.

Just let us know when you see something you like. We'll be ready to ship or deliver it to you.

SPECIAL PRICES - Good till 12-15-87

General Accessories

Illustration	Code	Product Name/Description
	MW	**Measuring Wheel.** Sturdy welded construction and protected counter. We also have replacement parts.
	SPR	**Spreaders.** All spreaders are designed for commercial use. Variety of models available from Cyclone, Spiker and Earthway. Comes with pneumatic tires, aluminum or steel construction available.
	AP	**Soil Probe 12".** Special heavy duty construction with removeable handle for storage.
	SP	**Backpack Sprayer.** Quality constructed unit from SPI. This sprayer has a four gallon capacity and is made of lightweight polyethylene, it only weighs 9.9 lbs. 70 PSI is created by a durable diaphram pump. Brackets are available.
	S	**1.6 Gallon Sprayer.** Also from SPI. This sprayer can be backpacked or hand-carried. 120 PSI, brackets are available.

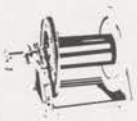
5 yr WARRANTY

$ 32.95 IN QUANTITIES

EARTHWAY STARTING AT $ 99.50

$ 7.85

Reels and Swivels

Illustration	Code	Product Name/Description
	RAI	**Reels.** Available from ½" to 1½" hose diameters. We have them capable of handling pressures as high as 3000 PSI. In manual or electric rewind from Hannay, Scott or American Nordic.
	EL	**Push Button Switch.** For use with electric reel motors.
	RP	**Reel Motors.** We have ⅓ and ½ HP units that'll run on 12 volts.
	EL	**Circuit breaker.** 40 AMP.

AS low AS $ 299.00

Reels and Swivels (Cont.)

Illustration	Code	Product Name/Description
	SL	**Solenoid.** 12V DC.
	SWI	**Swivels.** Come in a variety of materials such as brass, plated steel, stainless steel and nylon from Aeroquip, Deublin and Green Garde. We also carry replacement parts.
	RP	**Hose Roller Assembly.** Utilizes stainless steel rollers for long life. Mounting bracket available. 32x3.

Spray Guns

Illustration	Code	Product Name/Description
	RP	**Gun Holder.** Designed to hold ChemLawn, Green Garde and GNC guns.
	SG	**Chemlawn Green Gun** Completely assembled with ½" hose adapter and 4 G.P.M. (white) nozzle.
	SGA	**Turbo Tree Gun** Lightweight, tip sizes from 1.5 mm to 7 mm, 700 PSI, 19 G.P.M. Easily adjustable from fan to stream while spraying, swivel connector.
	SG	**High Pressure Spray Gun.** Made by FMC, this gun is capable of applying at 48 GPM and 800 PSI. Replacement parts are available.
	SG	**High Pressure Spray Gun.** From Hypro, this gun can move up to 25 GPM at 850 PSI. We carry replacement parts.
	SG	**JD-9C Spray Gun.** Made by Green Garde, this gun can be easily adapted for spraying lawns, trees, rootfeeding and pest control. Replacement parts are available.
	SG	**Rootfeeder.** Also from Green Garde, this gun comes in two or four hole. Sturdy construction and replaceable tips.

$ 16.50

LOW AS $ 59.

NEW ITEM

$ 73.25

$ 89.95

Truck and Safety Accessories

Illustration	Code	Product Name/Description
	TRM	**Literature Holder.** Keeps all of your paperwork in one place. Designed to slip over seat back with ties. Vinyl construction.
	IN	**Engine Hour Meters.** Help keep your maintenance schedule right on time.
	EL	**97 Decibel Back-up Alarm.** Lets everyone know when you're in reverse. Easy installation.

Don't WASTE valuable LITERATURE $ 35.00

Truck and Safety Accessories (Cont.)

Illustration	Code	Product Name/Description
	TRM	**Chock Blocks.** These heavy duty cast iron chock blocks are painted safety orange. Retention chains are available.
	SA	**#5 ABC Fire Extinguisher.** Refillable, comes with truck bracket.
	SA	**First Aid Kit.** Nine unit kit in steel case. Includes eyewash.
	SA	**Triangular Flares.** Three reflective triangles in handy plastic case. Department of Transportation approved.

Hose Cutters $8.75

Hose and Fittings

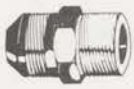
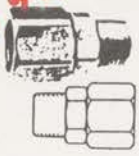
Illustration	Code	Product Name/Description
	H	**600 PSI White or 800 PSI Lime Green Spray Hose.** Both from Green Garde. Each hose is ribbed covered, braid reinforced and resists kinking, weather and chemicals. Works well on pest control, lawns and tree spraying. Available in ¼", ⅜", ½", ⅝", ¾" and 1".
	H	**800 PSI Thermo AG Spray Hose.** Made by Gates, this hose has a smooth yellow cover, plus excellent resistance to chemicals, abrasion, weather and kinking. Braid reinforced and flexible in cold temperatures. Burst Pressure is 3200 PSI. Available in sizes from ¼" to ¾". Excellent for pest control, lawns and trees.
	H	**Thermo G/P Pressure Hose.** This Gates hose is of braid reinforced PVC. It is both abrasion and chemical resistant. Comes in sizes up to 1" with 250 PSI ability.
	H	**C5R General Purpose Wire-Braided High Pressure Hose.** Great to use to plumb equipment to insure leak-free connections. Easier to run than piping. Gates makes this hose in sizes up to 2".
	H	**Suction and Transfer Hose.** The "Masterflex" by Gates is thermoplastic, lightweight and flexible. Green in color with sizes up to 6". 30" HG and 100 PSI to 2".
	H	**Clear Vinyl Sight Gauge Tubing.** 1/16" or ⅛" wall thickness available. Diameter sizes up to 1". Nylon compression fittings are available.
	HFR	**Re-useable Hose Ends.** Comes in either male pipe thread or female. JIC/SAE so no clamps are needed, also field repairable.

½" 800 P.S.I. 89¢/ft.

49¢/ft. ½" – 10,000 ft. min.

New!! Gates G.P.X. 300psi ½" 33¢/ft. 800 ft. roll

Hose and Fittings (Cont.)

Illustration	Code	Product Name/Description
	HFR	**Straight Adapter.** Comes in both plated steel and brass. Available with either MPTxJIC or SAE threads.
	HC	**Male and Female Quick Disconnect Couplers.** Makes disassembling and reassembling a breeze.
	PFS	**Coupling and Half Coupling Pipe Fittings.** Come in stainless steel, brass, forged steel, black iron and Schedule 80.
	PFS	**Machined King Nipples.** These are made of stainless steel by Dixon.
	HCL	**2 Bolt Plated Clamps.** Also by Dixon, these clamps work great on suction hoses.
	C	**Banjo Camlock Fittings.** The precision molded construction makes these fittings chemical resistant and rust proof. Handles are made of stainless steel. Sizes available up to 3".
	MSC	**Teflon Tape.** Thread sealant, ½"x520".
	PFB, HFP	**Hose Menders and Hose Barbs.** Take care of your leaks with these menders and barbs. They come in both brass and nylon.
		**Swivel Connectors to 1000 P.S.I.** ⅜" Male x Female Viton 900-6F6M-() ½" Male x Female Viton 900-8F8M-()

Hose Swivel $7.98

Valves, Strainers and Gauges

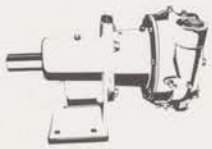
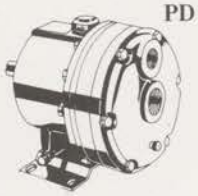
Illustration	Code	Product Name/Description
	VBB	**Ball Valve.** This two piece ball valve by Apollo can handle 600 PSI. Brass with chrome plated ball and teflon seats. Comes with adjustable stem packing nut. Also made with stainless steel ball and stem or all stainless steel. We also have bar stock valves in sizes up to 2". Repair kits are available.
	VBB, VST	**3 Way Brass Ball Valve.** Also from Apollo, this valve comes with chrome plated ball, teflon seat and adjustable stem packing nut. Available with stainless steel ball and stem or all stainless. It can handle up to 400 PSI. We also stock repair kits.

Valves, Strainers and Gauges (Cont.)

Illustration	Code	Product Name/Description
	LS	**Banjo Polypropylene Y Strainers.** This "Y" strainer is both precision molded and fiberglass reinforced to make it corrosion resistant. Comes with nylon or stainless steel screens, it's available in ½" to 3" sizes. Replacement parts are available.
	LS	**Line Strainer.** Made by Hypro, it's available in sizes from ½" to 1¼". This strainer can handle 150 PSI using type 6 nylon housings and bowls. Viton gaskets, stainless steel screens, 20 to 100 mesh available. We also carry replacement parts.
	IN	**Pressure Type Gauges.** You can order your gauge either dry or glycerin filled. You can also get dampened gauges. And they're available in sizes up to 3000 PSI and ¼" NPT.

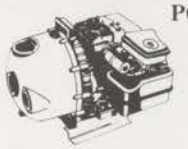
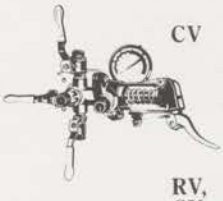
15% off

Pumps and Regulators

Illustration	Code	Product Name/Description
	PC	**2C95 2 Stage Centrifugal Pump.** Made by Meyers, this heavy-duty pump will operate up to 175 PSI at 150 GPM. Designed for rugged use where low pressure is needed, it also works well with sparge agitation. Replacement parts are available.
	PD	**Low Pressure, Semi-Hydraulic Diaphram Pump.** This pump from Hypro is excellent for use below 250 PSI, plus it can move up to 62 GPM of chemical. Self-priming it can run dry without incurring any damage. Also available from Udor and Bertolini. Replacement parts are in stock.
	PD	**High Pressure Diaphram Pump.** From Hypro, this pump's fully-hydraulic design gives it quiet operation tree spraying capabilities. 850 PSI attainable at 51 GPM. It is self-priming and can run dry with no damage. Udor and Bertolini pumps also available. Replacement parts are available.
	PD	**High Pressure Diaphram Pump.** From Hydracell, this pump is fully-hydraulic which gives it the ability to pump up to 1000 PSI. Comes in two sizes, 10 and 25 GPM. Very quiet operation, it's also self-priming and can run dry with no damage. We have replacement parts.

$775.00

Pumps and Regulators (Cont.)

Illustration	Code	Product Name/Description
	PC	**Banjo 2" Self-priming Transfer Pump.** Comes with either three or five horsepower engine and 1½" or 2". It can pump up to 160 GPM. Attains 26 PSI at 100 GPM.
	CV	**Controller.** 15 GPM, 550 PSI capabilities from Hypro. Comes complete with gauge valves and hose ends. It is fully-adjustable with ½" inlet and outlet.
	RV, CV	**Controller.** Also from Hypro, this controller has the ability to move 40 GPM at 800 PSI. It has a ¾" inlet and a 1" return. It can be ordered with manifold that includes valve gauges and safety valve. This unit is fully-adjustable. Repair kits are available.
	RV	**Relief Valve.** Made out of brass with stainless steel ball and spring from Hypro, this valve has 400 PSI ceiling.

$350

Briggs 3 h.p. $99.00

Engines, P.T.O. and Drives.

Illustration	Code	Product Name/Description
	E	**Honda Auxiliary Engines.** Available in sizes from 2 HP to 11 HP. Overhead valve, oil alert and electronic ignition make Honda engines one of the most popular engines in the industry. Other engines available to 100 HP from Onan, Deutz, Kohler, Cummins and Kubota. Replacement parts and safety shutdown systems for all engines are available.
	PTO	**P.T.O. Systems.** From both Chelsea and Muncie, we have them in either single or double gear, light or heavy duty arrangement, manual or powershift. Overspeed and cable controls are available. We'll build the tubular driveline to your exact specs, and we carry replacement parts for all P.T.O. systems.

D-10 (Cast head) 299.95 (in Quantity)

Call us for Spraying & Flowje

For complete price list and parts available, please call...

PROFESSIONAL TREE & TURF EQUIPMENT

ALL QUANTITIES Limited & subject TO AVAILABLE STOCK

6803 Joyce Street
Golden, CO 80403
(303) 422-7608
1-800-237-7785

1801 Industrial Park Road
Normal, IL 61761
(309) 452-2155
1-800-367-9091

For more information circle no. 143

Wilkinson to head green industry lobby

PROVIDENCE, R.I.—James F. Wilkinson, president of the Professional Lawn Care Association of America, has been named executive director of the Pesticide Public Policy Foundation. He succeeds David Dietz, whose contract with 3PF was discontinued due to an auto accident.

Wilkinson's tenure as president of PLCAA ends in mid-November.

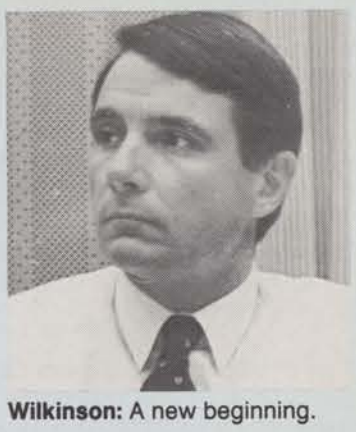
The foundation lobbies regulatory agencies on behalf of the pesticide industry. It monitors regulatory activity at the local, state and federal levels.

The board of directors for 3PF offered Wilkinson the position after considering him and a few other candidates. "He posesses the unique capabilities that make him eminently qualified," said Erik Haupt, board chairman. He noted Wilkinson's Ph.D. in agronomy, his experience running a lawn care company, and his working with regulatory agencies in his role with PLCAA.

The foundation will continue to contract Washington, D.C. attorney Robert Kirshner for lobbying activities, Haupt said.

"The opportunity to work for 3PF interested me

See **3PF** Page 41



Wilkinson: A new beginning.

LAWN CARE INDUSTRY

Serving lawn management and chemical lawn care professionals

VOLUME 11 NUMBER 11 $2.50 AN HBJ PUBLICATION NOVEMBER 1987

OSHA calls for more training

By James E. Guyette
Managing Editor

WASHINGTON, D.C.—LCOs and lawn management contractors using chemicals will be required to enact employee training programs under new regulations from the Occupational Safety and Health Administration.

Previously these training programs were required only of pesticide manufacturers—not pesticide users.

The training programs have to be in action by May 23, 1988.

Most members of the Associated Landscape Contractors of America are making plans to adhere to the law, according to Martha Bradford, coordinator of public relations for

See **OSHA** Page 21

Another state falls in line

MARYLAND—Professional pesticide users in Maryland will have to post markers on lawns and provide customers with product information next season. The Department of Agriculture is in the process of fine-tuning the requirements, which take effect Jan. 1, 1988.

Signs will be posted 48 hours after application, said Dave Shiver, chief of pesticide regulations. The department is presently determining how large the signs will be and what product information customers will be provided.

Representatives from the lawn care and landscape industries, along with regulatory and environmentalist groups, have offered their suggestions on the signs, Shriver said. The

See **POSTING** Page 42

2,4-D substitutes show good control

KENT, OHIO—Field tests conducted this summer by the Davey Tree Expert Co. showed phenoxy and non-phenoxy herbicides give comparable weed control

The company's research division examined the performances of several different products and product combinations.

Most showed comparable control.

Non-phenoxy herbicides included in the study were Break-Thru, Turflon Amine, Turflon Ester, Banvel and clopyralid. Clopyralid is from the Dow Chemical Co. and has not been introduced to market yet.

Phenoxy products tested were Triamine II, Trimec 899, MCPA/MCPP and Trimec 900.

"We realized we can get excellent control with a combination of Turflon and clopyralid," says Greg Mazur, the company's staff agronomist. "The two materials are non-phenoxies and don't contain dicamba." New York State prohibits mixing dicamba with fertilizers for application.

Davey conducted the study because of the growing public concern over the use of 2,4-D.

The test site was heavily infested with broadleaf weeds including dandelion, violets, buckhorn plantain, white clover, black medic, broadleaf plantain, oxalis, mouse ear chickweed and ground ivy.

See **STUDY** Page 22

DAVEY

14 total treatments
Mixtures applied June 4, July 21
Plots evaluated
June 26, Aug. 14

Earthquake no cause for alarm, contractor says

LOS ANGELES—Earthquakes make great headlines, but they're no big deal to landscape managers in Southern California.

Don Caron, Los Angeles project manager for Valley Crest Landscaping, says earthquakes cause virtually no damage to landscapes. He says damage primarily afflicts old buildings that aren't up the the city building code.

"We've had no damage in any of our jobs," Caron says. His firm serves properties near the areas hit by the eathquake that struck in early October.

Earthquakes have been known to cause minor damage to landscapes, Caron says, such as cracks in exterior walls or knocking down a tree.

Sometimes there is debris from a broken building that needs to be cleaned up. LCI

INSIDE

MARKET
The oil slump has hurt business, but contractors find lots of benefits working in San Antonio. 32

COMPUTERS
Tips for selecting a new system. 42

CLASSIFIED
See what's for sale, miscellaneous items. 47

LATE NEWS

Elanco announces new herbicide

FRESNO, Calif.—Calling it a "chemical breakthrough," Elanco Products Co. has announced Isoxaben, a pre-emergent broadleaf herbicide for turf and ornamentals. The company expects to have U.S. Environmental Protection Agency registration by the fall of 1988.

"It will be labeled for 110 species of ornamentals and all basic turf species," said Roger Foulks, manager of market planning and communications. He said the compound gives pre-emergent control to more species than any the company has ever seen.

Isoxaben is a "brand new family of chemistry that has been nonexistent before," Foulks said.

It will be sold in two mixtures, for turf and for ornamentals. The ornamentals mixture will be marketed under the trade name "Snapshot" and the turf under "Gallery."

See **ELANCO** Page 42

LAWN CARE INDUSTRY (ISSN 0160-6042) is published monthly by Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising Offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130, 111 East Wacker Drive, Chicago, Illinois 60601 and 3091 Maple Drive, Atlanta, Georgia 30305. Accounting, Advertising Production and Circulation Offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: $25 per year in the United States; $35 per year in Canada. All other countries: $70 per year. Single copies (pre-paid only): $2.50 in the U.S.; $4.50 in Canada; elsewhere $8.00; add $3.00 for shipping and handling per order. Second class postage paid at Duluth, Minnesota 55806. Copyright © 1987 by Harcourt Brace Jovanovich Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. POSTMASTER: Send address changes to LAWN CARE INDUSTRY, P O BOX 6200, Duluth, Minnesota 55806. Date: December 11, 1986

MEMOS

Look for LESCO, Inc. to introduce a new line of rotary, riding and reel mowers. The Rocky River, Ohio-based supplier of lawn care products will have 36- and 48-inch walk-behind mowers next spring, says Jeff Mack, equipment sales manager.

"We're also developing a zero turning-radius machine," Mack says. Still another project in the works is a 60- and/or 70-inch rider.

The Professional Lawn Care Association of America has doubled its membership to 1200 in the last two years! The association recently released an addendum to its 1987 membership directory which includes 275 members who joined since Jan. 1, 1987.

With this year's new membership goal of 300 well within reach, PLCAA will shoot for 500 new members in 1988, says Bob Parmley, chairman of the membership committee.

Fisons PLC, a British conglomerate, is keeping an eye on the U.S. lawn care industry. The Ipswich-based company was among those that bid on ChemLawn before it was sold to Ecolab, Inc. this year.

Mike Davey, finance director for Fisons' horticulture division, would not say if the company is considering any other U.S. lawn care firms. But it has joined the PLCAA.

Fisons' horticulture division supplies turf chemicals to the retail and professional markets in the United Kingdom, and peat and compost to the American horticultural market.

In memoriam: Bob Lederer, executive vice president of the American Association of Nurserymen, died in late September from complications following open heart surgery. He was active with the association for three decades, forging ties with other green industry organizations.

Contributions can be sent to the Robert and Ramona Lederer Research Fund of the Horticultural Research Institute, 1250 I St. N.W., Washington, D.C. 20005.

The Garick Corporation ranked 256 on *Inc.* magazine's 1986 list of the 500 fastest growing, privately-held companies.

The Cleveland, Ohio company is a wholesaler of lumber and landscape products throughout the eastern United States. LCI

NEW from GREEN PRO'S

THE TRIDENT
(pictured without truck signs)

The most versatile skid mounted sprayer. The three 200 gallon main tanks may be filled with specific mixes for custom programs. The side-mounted 50 gallon tank allows for special applications and curbside mixing. Trident can be used for lawns or trees and shrubs. Complete with electronic flow meter, locking cabinets and truck signs which conceal the tanks for a non-threatening appearance. Does the work of three sprayers on a single 12' flatbed. Available on an Isuzu NPR Diesel. Leasing available.

LEASING PLANS AVAILABLE

GREEN PRO SERVICES
800-645-6464
N.Y.S. (516) 538-6444

COME SEE US IN SAN ANTONIO AT ISLAND 823
Circle No. 113 on Reader Inquiry Card

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.

Walker Mfg. Co., 1839 E. Harmony Road, Dept. GM, Fort Collins, CO 80525 · (303) 226-1514

Circle No. 141 on Reader Inquiry Card

LAWN CARE INDUSTRY

ELLIOT MARAS Editor
JAMES E. GUYETTE Managing Editor
ROBERT EARLEY Group Vice President
RENEE LANG Production Manager
CAROL LANDSTROM Production Supervisor
FORREST PLESKO Graphic Design
JOAN SCHUMACHER Circulation Supervisor
GAIL KESSLER Reader Service Manager
LINDA WINICK Promotion Director
JOHN PRESSELLO Graphics Manager

MARKETING/SALES

Midwest Office:
JON MIDUCKI
(216) 243-8100 ext 422
National Sales Manager
7500 Old Oak Blvd.
Cleveland, OH 44130

MARSHA DOVER
(216) 243-8100
Regional Sales Manager
7500 Old Oak Blvd.
Cleveland, OH 44130

DICK GORE
(404) 233-1817
455 E. Paces, Ferry Rd.,
Suite 324
Atlanta, GA 30305

KEN KUHAJDA
(216) 243-8100
Regional Sales Manager
7500 Old Oak Blvd.
Cleveland, OH 44130

Northwest Office:
BOB MIEROW
(206) 783-0549
1515 N.W. 51 Street
Seattle, WA 98107

Classified
DAWN NILSEN
(218) 723-9349
1 E. First St., Duluth, MN 55802

Please send advertising materials to:
LAWN CARE INDUSTRY
120 W. Second St.
Duluth, MN 55802
218-723-9418

HARCOURT BRACE JOVANOVICH PUBLICATIONS

ROBERT L. EDGELL, Chairman
RICHARD MOELLER, President
LARS FLADMARK, Executive V. Pres
ARLAND HIRMAN, Treasurer
THOMAS GRENEY, Senior V. Pres.
EZRA PINCUS, Senior Vice President
JOE BILDERBACH, Vice President
JAMES GHERNA, Vice President
GEORGE GLENN, Vice President
HARRY RAMALEY, Vice President

LCI ADVISORY BOARD

JERRY FAULRING
Hydro-Lawn
Gaithersburg, MD

RON KUJAWA
KEI Enterprises
Cudahy, WI

A. J. POWELL
University of Kentucky
Lexington,KY

Lawn care makes the environment safer

ELLIOT MARAS
EDITOR

I felt a flash of inspiration the other day during a game of chess.

I was playing my friend Sid, a bearded fellow who regularly opposes me on the lawn care issue as well as the chess board. He is a strict environmentalist because he is allergic to many things, including pesticides.

When I see Sid enter the coffeehouse, I immediately put out my cigar for fear of offending him.

He was sneezing vociferously the other day, knocking over the chess pieces. It was his allergies. Allergies in October? What allergies? Ragweed.

Ragweed? Was Sid the Environmentalist actually allergic to a plant natural to the Ohio soil?

I thought of the lectures he had given me on the unnecessity of professional lawn care—he says the benefits are purely aesthetic and serve no other purpose. Such benefits, the orthodox environmentalist reasoning holds, are worth no amount of risk to public health.

Most of you have confronted that argument. Answering it hasn't been easy.

Pest control operators and farmers have been able to point to obvious health-related benefits from their use of pesticides. Not LCOs.

The time has come for the lawn care industry to recognize and promote the non-aesthetic benefits it provides modern society.

First, consider Sid and his allergy. He wouldn't be sneezing as much and knocking over as many chess pieces if the ragweeds in his neighborhood were better controlled.

Next, consider the children playing on the lawns. We've heard a lot about the threats pesticides pose to these children. What about the dangers posed by hard soil beneath the turf?

Researchers are currently studying the relationship between hardness and injury rates of athletic fields. Some are proposing hardness standards, covering shock absorbing characteristics, of athletic fields and playground surfaces.

Lawn care services, such as aerating and using name seed varieties to provide a dense ground cover, have been proven to lessen the impact of a fall.

These studies, prompted by an interest in turf-related injuries, deal with athletic fields. But face it—lawns are athletic fields as far as your customers with kids are concerned. (For summaries on this research, order copies of the two athetic turf reprints published by *Landscape Management* through our Business Information Services at 216-826-2839.)

Last but not least, consider the benefit lawn care provides in reducing water runoff from lawns.

Research by Thomas Watschke, Ph.D., a professor of turfgrass science at Pennsylvania State University, shows a thick, healthy lawn reduces water runoff considerably.

By reducing water runoff, Watschke says, the amount that would otherwise be lost has the potential to recharge groundwater. Since the water does not run off, it infiltrates and percolates through the soil.

This is a point to consider in these times of critical water supplies.

Watschke further notes there has been a lot of conjecture that the amount of water running off lawns is substantial, carrying nutrients and pesticides into water collection systems.

Watschke's research has shown that high quality lawns have minimal runoff.

(Watschke's research is funded by the university, the Pennsylvania Turfgrass Council and the lawn care industry.)

All of these points illustrate the fact that lawn care is an environment-enhancing, safety-enhancing activity. The benefits are less obvious than for other pesticide using industries, but just as real.

By being cognizant of these benefits, LCOs can present their services in a more positive manner than they have in the past. Reducing allergies, injuries and enhancing groundwater make excellent marketing points.

Elliot Maras

Sorry, crabgrass. Sorry, goosegrass. You won't be checking in here this season. Not on turf areas treated with Team preemergence herbicide.

Only one group has reservations. Your turfgrass. Even bentgrass can relax, Team is that gentle.

That means you can take a 20-week vacation from weeds. From disgruntled golfers. From callbacks. And costly reapplications.

Application is easy and accurate. Team gets to the ground where you want it. It won't leach out, even in heavy rainfall. Once activated, it forms a zone of protection that shuts the door on weeds for up to 20 weeks.

Team is widely available on dry fertilizer from leading formulators, and in granular form from your distributor.

So if weeds are planning to visit your turf this season, tell them sorry. You've booked Team for the season. See your Elanco distributor. Or call toll-free: **1-800-352-6776.**

Elanco Products Company
A Division of Eli Lilly and Company
Lilly Corporate Center
Dept. E-455, Indianapolis, IN 46285, U.S.A.
Team™—(benefin+trifluralin, Elanco)
Refer to the Team label for complete use directions.

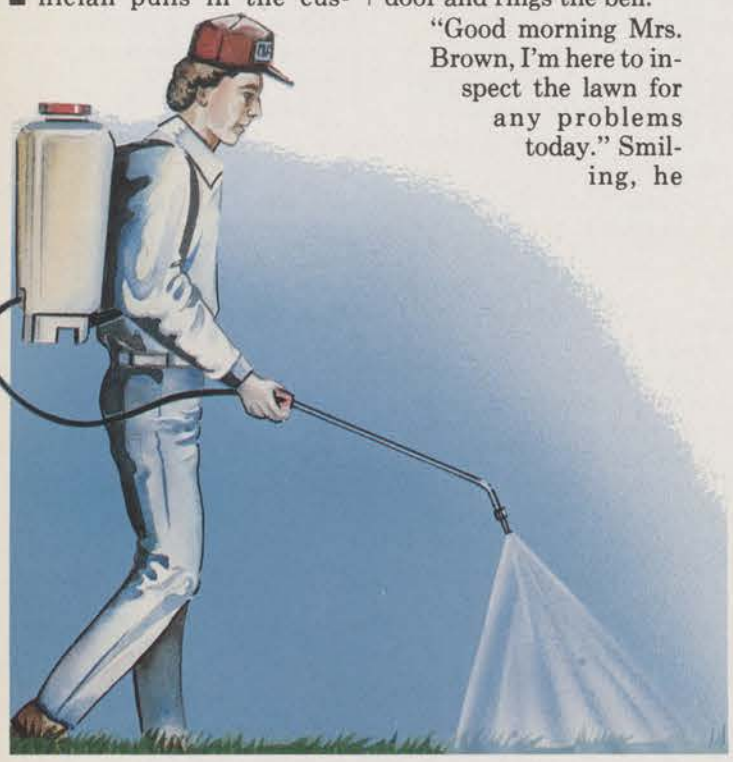
Circle No. 108 on Reader Inquiry Card

With Team™ on your turf, weeds won't check in for 20 weeks.

A NEW ERA FOR EXCELLENCE AND PROFESSIONALISM

By Elliot Maras
Editor

It is Monday morning, June 1, 1995. The lawn care technician pulls in the customer's driveway in a miniature pickup truck bearing a corporate logo on the side. He gets out, pad and pen in hand, walks to the front door and rings the bell.



"Good morning Mrs. Brown, I'm here to inspect the lawn for any problems today." Smiling, he tips his cap, his pressed tan uniform reflecting the early morning sun.

He walks across the lawn, filling out the bimonthly report card. Then he goes to the truck, gets out a hand-held sprayer, returns to the lawn and sprays a small patch of annual bluegrass.

"Your lawn is looking good, Mrs. Brown, just a few weeds today." He hands her a copy of the report card, signed with his certification number at the bottom. "And don't forget, if you need any carpet cleaning, bathroom cleaning or indoor pest work, you've got our brochure."

Lawn care in the 90s: personal and professional. Recognized as a specialty service with high technical standards, and at the same time part of a multi-faceted home services industry.

The technician in the above scenario has several years experience in the field, has attended dozens of seminars on agronomy and customer relations, and has nearly doubled his starting salary. He enjoys a generous benefits package which includes an employee stock ownership plan.

In the 1990s, lawn care will be recognized as a profession in the truest sense of the word. Thanks to the very hardships the industry is experiencing today.

Advances in technology, ongoing regulatory pressures and the involvement of high-powered conglomerates spell big changes for the way lawn care will be provided. Since only the best-run companies will survive these changes, most observors foresee a uniform, high level of professionalism.

Enter the giants

The involvement of conglomerates—the one development that has the industry in a tizzy today—will be the greatest force for change. Many industry observers feel that four or five conglomerates will control most of the residential lawn care market.

In the past year, Ecolab, Inc., Waste Management, Inc. and CDS Holding Corp. have entered the lawn care industry. The Hawley Group, Ltd. and Rollins, Inc., meanwhile, have expanded their lawn care involvement. And British-based Fisons PLC is looking at the market.

The capital these corporations bring into the industry will help companies meet new regulatory requirements, market their services successfully in highly competitive regions, and provide the more customized service that consumers will demand.

"They'll give discipline and leadership to a fragmented industry," says Marty Erbaugh, president of Peninsula, Ohio-based Erbaugh Corp. "They'll clean up the acts of a lot of people they're acquiring." They'll also analyze operations and identify the importance of employee and customer retention, Erbaugh says.

"I think it's going to help operations considerably," agrees Tim Doppel, president of Atwood Lawncare, Sterling Heights, Mich.

The large, sophisticated companies will realize the need to pay employees more, Doppel says, and they will raise the pay scale. The poorly-run companies, on the other hand, won't be able to compete for the labor. "It's going to be much more of a hassle for them (poorly run firms) to keep going the way they have been."

More sophisticated information management will also be necessary because new regulations will include more paperwork. Companies will find it impossible to meet these requirements without computers.

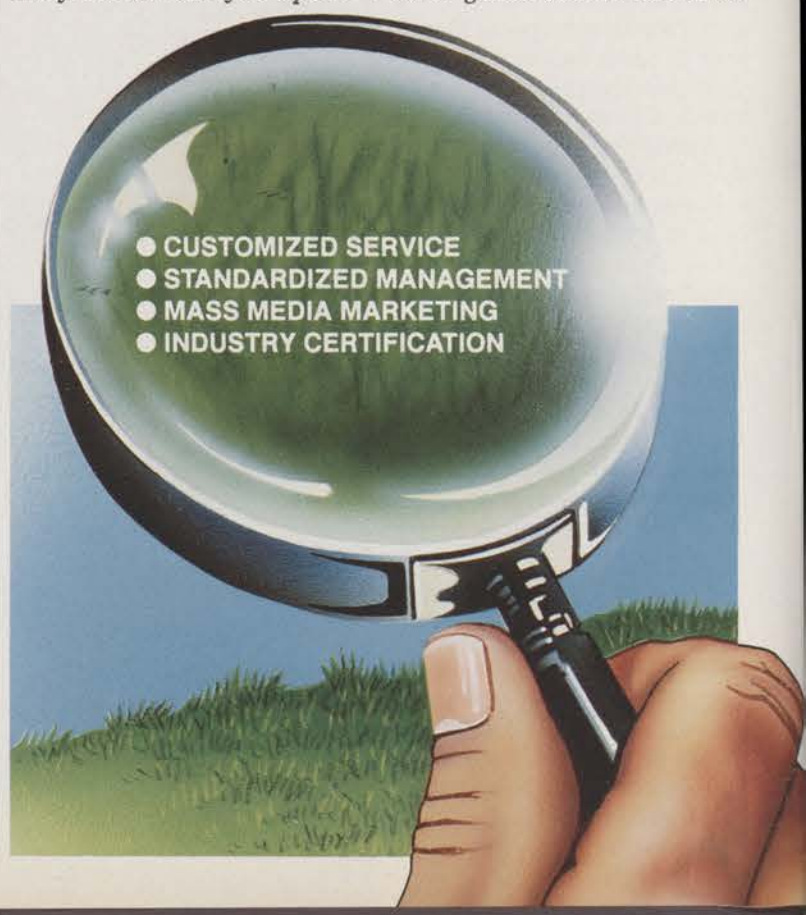
Better marketing

The biggest change will probably be in marketing. The congolmerates are expected to employ more sophisticated marketing programs that will serve to upgrade the industry's image.

"We'll see a higher degree of sophistication," says Jerry Faulring, president of Hydro Lawn, Inc., Gaithersburg, Md. New marketing strategies will include more elaborate customer incentives.

"I think you'll see some tremendous marketing efforts because of the resources they have," agrees Jim Mello, president of Romeoville, Ill.-based Nice'N Green. These efforts will include more mass media advertising to boost public awareness of the value of the service.

Ron Gagne, commercial sales manager for O.M. Scott & Sons, Marysville, Ohio, offers a note of caution. "If a conglomerate looks to its lawn care subsidiary only as an income generator...it would be



GRASSHOPPER

The easy-money savers.

Zero turning radius.
Zero geargrinding.
Zero pedalpumping.
Zero push mowing.

Tough. Powerful. Downtime free. Grasshopper — the professional front-deck line with true zero-turning-radius maneuverability — is all that. Plus the one thing you want a mower to be.

We're *easy*.

Starting with the unique drive lever system that lets you turn 360° circles with fingertip ease. While Grasshopper out-front torsion-action decks ease against and under obstacles.

What's more, Grasshopper PTO-driven accessories save you time all year round.

That, in a nutshell is your next mower: Grasshopper. For a test drive, see your Grasshopper dealer or rep, or call us. Today.

The Grasshopper Company
Box 637, Moundridge, KS 67107 • Phone 316-345-8621

We're easy. GRASSHOPPER

Circle No. 115 on Reader Inquiry Card

Circle the Reader Service numbers of those items of interest to you.

For rapid response, use the peel-off label from the front cover

NAME _____

TITLE _____

FIRM _____ PLACE COVER LABEL HERE

ADDRESS _____ PRINT PHONE NUMBER BELOW

CITY _____

STATE _____ ZIP _____

PHONE ( ) _____

101	116	131	146	161	176	191	206	221	236	251	266	281	296	311	326	341
102	117	132	147	162	177	192	207	222	237	252	267	282	297	312	327	342
103	118	133	148	163	178	193	208	223	238	253	268	283	298	313	328	343
104	119	134	149	164	179	194	209	224	239	254	269	284	299	314	329	344
105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345
106	121	136	151	166	181	196	211	226	241	256	271	286	301	316	331	346
107	122	137	152	167	182	197	212	227	242	257	272	287	302	317	332	347
108	123	138	153	168	183	198	213	228	243	258	273	288	303	318	333	348
109	124	139	154	169	184	199	214	229	244	259	274	289	304	319	334	349
110	125	140	155	170	185	200	215	230	245	260	275	290	305	320	335	350
111	126	141	156	171	186	201	216	231	246	261	276	291	306	321	336	351
112	127	142	157	172	187	202	217	232	247	262	277	292	307	322	337	352
113	128	143	158	173	188	203	218	233	248	263	278	293	308	323	338	353
114	129	144	159	174	189	204	219	234	249	264	279	294	309	324	339	354
115	130	145	160	175	190	205	220	235	250	265	280	295	310	325	340	355

LAWN CARE INDUSTRY

NOVEMBER 1987
This card void after Jan. 15, 1988

1. CHECK BELOW YOUR PRIMARY BUSINESS AT THIS LOCATION:

A. LAWN CARE COMPANY: Read each choice before answering.

10 ☐ Chemical lawn care company
20 ☐ Mowing/management lawn care company and/or landscape contractor
30 ☐ Both chemical lawn care company and mowing/management lawn care company and/or landscape contractor

B. SUPPLIER

50 ☐ Chemical and equipment dealer and/or distributor

C. OTHER (specify) _____

2. WHAT IS YOUR TITLE? _____

_____

I would like to receive (continue receiving) LAWN CARE INDUSTRY each month: Yes ☐ No ☐

Signature: _____ **Date** _____

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 665 DULUTH, MINNESOTA

POSTAGE WILL BE PAID BY ADDRESSEE

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

READER SERVICE DEPARTMENT

LAWN CARE INDUSTRY

POST OFFICE BOX 6080
DULUTH, MINNESOTA 55806-9780

GET MORE FACTS

White: Multi-servicing ahead.

Erbaugh: New sophistication.

Faulring: Better marketing.

Clayton: Certification coming.

bad for lawn care service." Conglomerates must, he says, recognize the service aspect of lawn care.

The conglomerates are also expected bring about the cross marketing of services—companies will offer lawn care in conjunction with other home services like cleaning and pest control.

Officials for Oakbrook, Ill.-based Waste Management, Inc., recently mentioned possibilities for marketing their trash collection services to lawn care customers, and vice versa. The company recently acquired Atlanta, Ga.-based Tru Green Corp.

Cross marketing of services is one way to build customer loyalty, notes Rick White, vice president of Chicago-based ServiceMaster LawnCare. Other ServiceMaster divisions offer cleaning services, disaster restoration and indoor pest control.

But will there be a place for the smaller lawn care companies? Most certainly.

Place for small guys?

Small companies have two important advantages. One is the more personal service they can provide. The other is the ability to expand into more ancillary services, which translates into an ability to tackle the booming commercial (as opposed to single-family residential) lawn care market.

Most companies, including the larger ones, are expected to offer aeration, seeding and overseeding. But the more labor intensive services like mowing and installation are economically unfeasible for the larger firms.

Recognizing the fact that commercial clients favor full service lawn management, some of the major lawn care companies are trying to establish partnerships with smaller firms that can provide the extra services. They are doing this on a region-by-region basis.

"Our company is extremely enthused about these people (who are) taking care of the contracted properties," says Hal Dickey, advertising manager for PBI Gordon Corp., Kansas City, Mo. He sees a growing demand by office, multi-family and public grounds accounts.

Attesting to that is Dave Amorose, president of Buckeye Landscape Services, Worthington, Ohio, a full service firm. "I think there's tremendous growth in this industry, more growth than we've ever seen."

Amorose particularly refers to the amount of new office space and the number of municipalities that want professional lawn management services.

More training, regs ahead

Companies large and small will be required to upgrade their employee training programs. Two reasons: more customized lawn care programs (see article on page 20) and more regulations.

States, if not the federal government, are expected to enact stricter pesticide applicator licensing requirements.

"Those of us that are going to survive in this industry will have to become more sophisticated in terms of regulatory compliance," says James F. Wilkinson. Wilkinson is outgoing president of the Professional Lawn Care Association

Blazon®
SPRAY PATTERN INDICATOR
By Milliken Chemical

Take the guesswork out of your spraying!

Blazon® Spray Pattern Indicator, from Milliken Chemical, is a colorant which, when added to a pesticide spray solution, identifies the sprayed area. Regardless of your spraying needs, accurate application of the pesticides you use is the key to the quality of your spray program and your success as an applicator.

Landscape contractors, gardeners, mowing services, full service residential and commercial lawn care companies all have opportunities to use herbicides, fungicides, insecticides and growth regulators to complement their services. It is important from a COST, PERFORMANCE, and SAFETY standpoint that these applications be made correctly the first time. They can be when Blazon® is included.

Blazon® is a transparent blue colorant which gives green foliage a darker green appearance. You can apply your chemicals accurately and safely without drawing undue attention to the sprayed area. Blazon® can eliminate costly overspraying, and it enables you to quickly and easily detect missed areas. With Blazon® you can see spray drift and protect non-target areas. This significantly raises the safety level of making chemical applications, and greatly reduces retreatment time and costs.

Blazon® is non-toxic and environmentally safe – it will not harm birds, animals, fish or humans. Blazon® is inert and water soluble – it will not affect the performance of even the most sensitive chemicals. Blazon® does not permanently stain hands, clothing, or equipment.

Blazon® is a liquid which readily goes into solution. In hand held and backpack sprayers, add ½ to 1 ounce per gallon. For broadcast spraying, the application rate will vary from 16 to 32 ounces per acre, according to the height, color and density of the target foliage.

When you make Blazon® a part of your spray program, you increase the efficiency and accuracy of each application. Whether you are making spot treatments with a backpack sprayer or spot gun, chemical edging applications, or broadcast sprayings...

Blazon® By Milliken Chemical
Shows you the way!

Blazon® is approved by the Office of Pesticides and Toxic Substances of the United States Environmental Protection Agency for use on non-crop vegetation. Not intended for application to edible crops.

MILLIKEN CHEMICALS Milliken Chemical, P.O. Box 817, Inman, South Carolina 29349, (803) 472-9041, (800) 845-8502

Circle No. 122 on Reader Inquiry Card

of America and newly-named executive director of the Pesticide Public Policy Foundation.

Wilkinson's view is shared by many, the main reason being public concerns about groundwater contamination. While the lawn care industry has not been affected by laws governing the disposal, transport and storage of pesticides, that is expected to change.

How strictly the industry will be regulated could depend on how well it polices itself. Which is why many LCOs want to see a national certification program.

"Certification of applicators is something that has got to be looked at," says Jim Champion, president of Riverdale Chemical Co., Chicago Heights, Ill. "If not, it'll be mandated on a state by state basis. The sooner they (industry) can get a program together and encompass as many states as possible, the better off they're going to be."

Gary Clayton, PLCAA technical services director, says PLCAA will have a certification program in place in the next decade. "We're developing it," he says, "When you're trying to make something meaningful, you can't say you'll make it available by Dec. 15. It's a program we are sharing with all the regulatory agencies as we are building it."

LCI

Amorose: More potential than ever.

Mello: Better management to come.

Dickey: Commercial work promising.

Service to be more customized

By Elliot Maras
Editor

The standard weed and feed program will no longer be standard, LCOs say as they look into their crystal balls. They say today's standard lawn care program will be replaced by more customized fertilization and pest control practices.

Customized treatments, for one thing, give better turf results. For another, they allow the LCO to get the greatest use of the products, many of which are getting more expensive.

"I believe there are going to be products brought to market that are going to allow us to fertilize less frequently and get the same results," says Jerry Faulring, president of Hydro Lawn, Inc., Gaithersburg, Md. He predicts the same for pesticides.

Cultural practices such as watering and aeration will become more important too as the trend to customization continues. LCOs also expect to get more involved with seeding and renovation.

Ron Gagne, commercial sales manager for O.M. Scott & Sons, Inc., Marysville, Ohio, identifies controlled-release fertilizers as the key to customized lawn care. He says it gives the LCO more flexibility in his use of pesticides.

Besides, Gagne says, many are beginning to see excessive thatch buildup in lawns due to quick-release fertilizer. "Aeration will be more of a necessity," he adds.

Tim Doppel, president of Atwood LawnCare, Inc., Sterling Heights, Mich. agrees. "I think more companies will be using more slow-release," he says. "When they see the results as to the condition of the lawns, they'll be completely sold on it."

Doppel points to two advantages of controlled-release fertilizer: less burn potential and less of a tendency to cause pest problems.

And what about the higher cost of controlled-release? Marty Erbaugh, president of Peninsula, Ohio-based Erbaugh Corp., says the higher

cost is outweighed by the greater customer satisfaction.

LCOs are less agreed on whether they will use more liquid or dry fertilizer formulations.

Many are quick to point out that the dry formulations are less expensive and can be applied with greater uniformity. "I think that a lot of the fellows are finding out they can deliver granular at less cost—they're not hauling that water around," says Erbaugh.

"The economics there is really hitting home," adds Bruce Augustin, director of technical support for LESCO, Inc., the Rocky River, Ohio-based supplier of lawn care products.

But Jim Mello, president of Nice'N Green, Inc., Romeoville, Ill., offers another view. "In my opinion, the benefits of applying liquid for efficiency, being able to inject other materials (into the sprayer), is the number one benefit that will keep people from going dry."

With a customized spraying device, Mello notes he has the ability to make fertilizer and pesticide applications in one trip across the lawn.

Selective spraying

Cost conscious LCOs are anxious for ways to use pesticides more selectively.

Peterson: New products ahead.

Besides being able to use less pesticide, they say selective use will enable them to save on vehicle costs. The smaller tank trucks are less expensive and more maneuverable.

"There's no question the trend (to smaller trucks) is evolving and will continue to evolve," Faulring says.

Manufacturers say they are working on new products with these concerns in mind.

"The new products might be narrower spectrum, highly active pesticides," says Rob Peterson, a product marketing manager for Dow Chemical Co., Midland, Mich. That means the products will have less active ingredient, but yield more selective control.

"I see the business going towards equipment that puts less, but more active product down," he says. "Maybe more controlled application. And there probably will be more mixing with other products to broaden control."

Peterson specifically expects more non-phenoxy herbicides to be introduced. He notes that the non-phenoxies give better selective control of weeds than 2,4-D, but not as broad-spectrum control in single units. "Those (non-phenoxy) products will have to be either tank mixed or premixed," he says.

The new pesticides will be reformulations of existing compounds used in the agricultural market, manufacturers say. There will not be a lot of new chemistry designed just for the lawn care market due to the high cost of registering such compounds.

"These basic manufacturers have got an awful lot of stuff sitting on their shelves," says LESCO's Augustin. He adds that they are looking for new markets to tap since agriculture is in a slump.

Manufacturers agree that the products that will be introduced will be costlier due to rising registration fees. Notes Jim Champion, president of Chicago Heights, Ill.-based Riverdale Chemical Co.: "They (the Environmental Protection Agency) are trying to push forward (with charges) in every way they can."

Augustin, meanwhile, questions whether non-phenoxies will replace the phenoxies, considering their higher costs.

More selective use of pesticides will require more thorough irrigation practices by homeowners.

More homeowners will have irrigation systems installed as the systems become more affordable, says Bill Brocker, sales and marketing manager for PBI Gordon Corp., Kansas City, Mo.

"Lawn irrigation for the masses right now is very unsophisticated," notes O.M. Scott & Sons, Inc.'s Ron Gagne. But, "water is becoming a more precious commodity. Timed, measured rates will become more popular."

Adventures in seeding

Seed suppliers say LCOs are becoming a growing portion of their clientele as they grow cognizant of the need for good turf species. The suppliers agree with those LCOs who say seeding will become a staple part of professional lawn care.

"You're really not going to get the full quality out of your lawn care program unless you have something (a good grass type) to work with," says Rich Hurley, research director for Loft Seed Co., Bound Brook, N.J. "This turf type renovation...you're going to see a tremendous increase in interest in doing that."

Says Dave Nelson, executive secretary of the Oregon Seed Council, Salem Ore.: "The lawn care industry is going to have to become more involved in establishing new

This new and patented nitrogen source has low urea. And that means less nitrogen lost to the atmosphere.

Here, at last, is the one and only triazone nitrogen source with low urea. Which means you no longer have to make excuses for poor fertilizer response due to urea volatilization—or loss to the atmosphere. Or worry about angry call-backs and lost dollars.

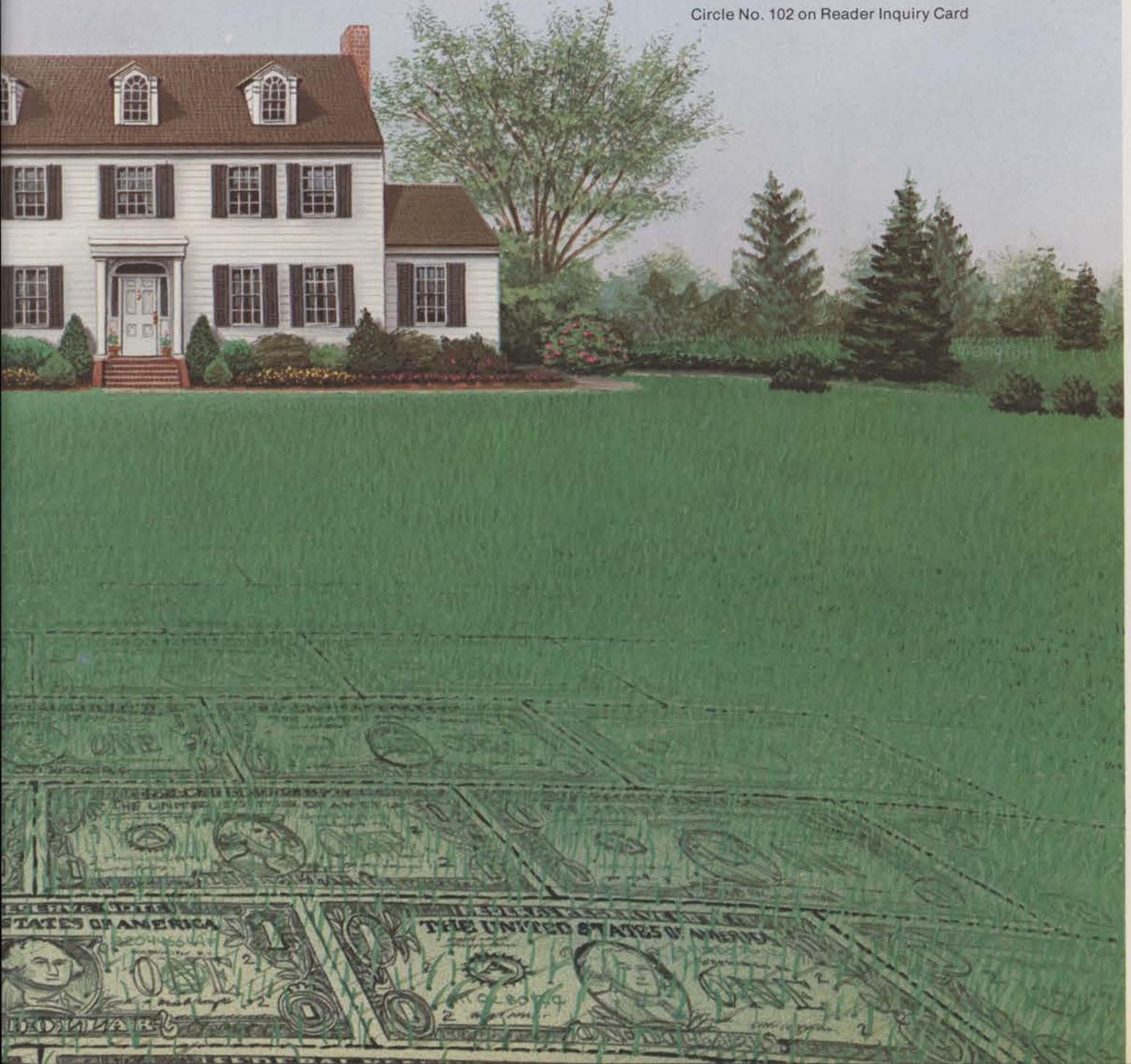
That's because new N-SURE from Arcadian is the unique slow-release, non-burning nitrogen source that contains the new technology of triazone nitrogen. With its high concentration of triazone and low urea, there's not only far less chance of burn, but no plugged nozzles or clogged screens. You get a more consistent green over time because N-SURE provides a nitrogen release pattern that's ideal for custom lawn applications. What's more, you get a product that's stable, storable for the long term, and compatible with most commonly-used herbicides, insecticides and fungicides.

N-SURE is perfectly suited for low-volume applications. So less water and less handling are required. And that translates into greater efficiency, easier application, more lawns per man per day which means lower labor and equipment costs.

Best of all, because N-SURE works like no other fertilizer you've ever used, it means better plant nutrition. Nutrition that stays where you put it rather than losing it to the atmosphere and that's the kind of nutrition that can green up a lot more than lawns. To learn more about N-SURE and the new technology of triazone, write or call Arcadian Corporation, One Gatehall Drive, Parsippany, New Jersey 07054 1-800-524-0135.

ARCADIAN CORPORATION

Circle No. 102 on Reader Inquiry Card



Introducing Pendimethali

Our introduc
real crow

Next spring there's going to be a lot of very unhappy weeds.

That's because more turf professionals will be switching to granular Pendimethalin Plus Fertilizer from UAP.

You already trust Pendimethalin for superior control of annual grasses, spurge, oxalis, chickweed, henbit and fall panicum. With our special granular formulation, you can start your program earlier. Early application means better performance.

The unique combination of Pendimethalin and a high quality fertilizer means there are no mixing delays. Pendemethalin Plus Fertilizer from UAP is formulated

Unless you're p

Plus Fertilizer from UAP.

tory offer is a
d pleaser.

for smooth, even applications leaving yards more uniform in color and growth.

And right now we're offering a special introductory early order discount on Pendimethalin Plus Fertilizer. Just place your spring order at the UAP Booth, #722-724, during the PLCAA conference November 12-15. Or for more information, call toll free 1-800-228-0096. In Nebraska 1-800-642-8873.

With our quality Pendimethalin Plus Fertilizer at a special introductory price, you have everything to gain and nothing to lose.

Except a few weeds.

UAP

SPECIAL PRODUCTS

Your Source for Keeping America Green.™

7-3157

Circle No. 140 on Reader Inquiry Card

art of this crowd.

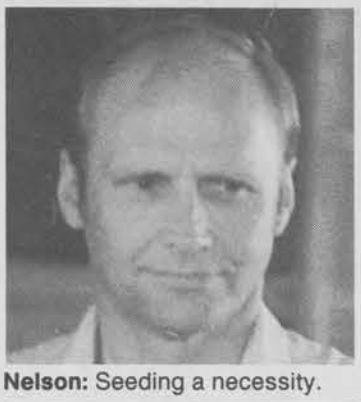
Gagne: Irrigation to boom.

Stalford: LCOs learning more.

LAWN CARE IN THE 90s

SPECIAL REPORT

Hurley: More LCOs to seed.



Nelson: Seeding a necessity.

lawns or improving existing lawns—they can't create (good) materials with a crummy turf."

"Each year, they (LCOs) are getting more and more knowledgeable of the characteristics of the different varieties and the importance of new varieties," notes Harry Stalford, product manager for International Seeds, Inc., Halsey, Ore.

Gayle Jacklin, domestic representative for Jacklin Seed Co., Post Falls, Idaho, says: "With a decreased use in chemicals, I see an increased use of proprietary grasses having better overall disease and insect resistance."

Seed breeders are presently working to introduce the endophyte fungus to various grasses to make them more insect resistant.

"I think we can make continual improvements in disease resistance on all of the open pollenated grass species," meaning all species except for bluegrass, says Bill Meyer, vice president of research for Turf Seed, Inc., Hubbard, Ore. For bluegrasses, he says composite varieties are being developed, which have the genetic bases of various varieties. **LCI**

"THE LAWN SOLUTION"

State-of-the-Art
Lawncare Management
Software

PC SUPPLY COMPANY
24175 TELEGRAPH ROAD
SOUTHFIELD, MI 48034

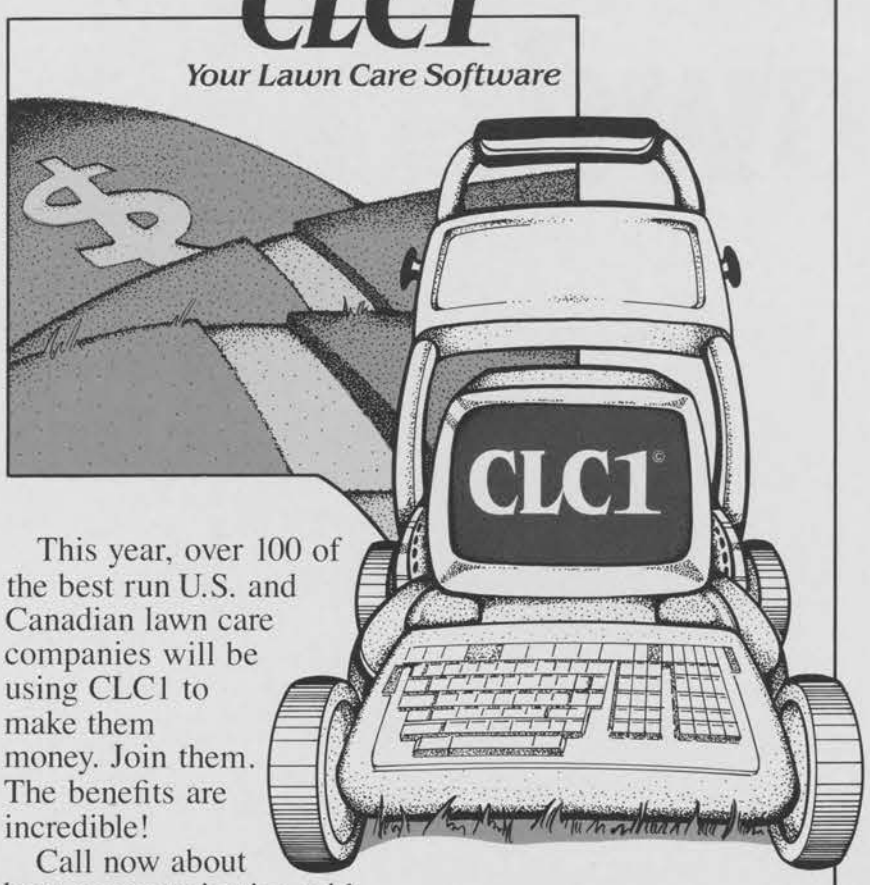
For More Information
Call 313-353-0351

See Us at PLCAA/87 Booth #535

Circle No. 129 on Reader Inquiry Card

Trim Your Costs With CLC1©

Your Lawn Care Software



This year, over 100 of the best run U.S. and Canadian lawn care companies will be using CLC1 to make them money. Join them. The benefits are incredible!

Call now about how computerization with CLC1 can make *your* lawn care business operate more profitably.

CLC1 operates on single or multi-user PC's and larger mini computers.

dmsi Distribution Management Systems, Inc.
11823 Arbor Street
Omaha, NE 68144
(402) 330-6620

See us at the PLCAA Trade Show, Booth #634 and 636.

Circle No. 105 on Reader Inquiry Card

Custom-made tank trucks built to your specifications.

Graham Lawn Equipment, Inc.
8878 Bright Star Road
Douglasville, GA 30135
(404) 942-1617

Circle No. 112 on Reader Inquiry Card

NO CRAB
NO MESS
NO PROBLEM

Spring Valley
Producers of quality turf fertilizers

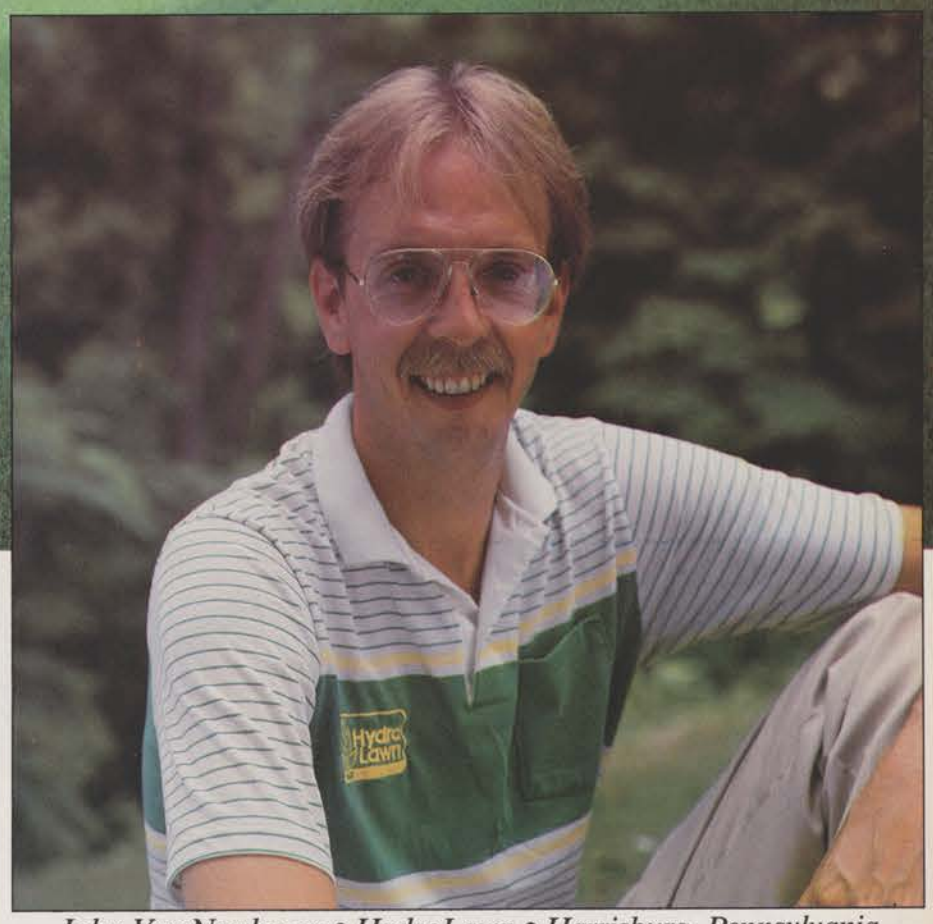
SPRAYABLE FERTILIZER + Team
GRANULAR FERTILIZER + Team

Call for Quote
414-677-2273

Spring Valley
TURF PRODUCTS
1891 Spring Valley Road, Jackson, WI 53037

*Team and the diagonal color bar are trademarks of Elanco Products Company

Circle No. 138 on Reader Inquiry Card



John Van Newhyzen • HydroLawn • Harrisburg, Pennsylvania

"It takes a long time to build a customer base. I wouldn't trust my business to anything less than Lebanon quality."

Quick green-up. Dense growth. Rich, rich color. The benefits of healthy lawn care management.

Professionals like John Van Newhyzen know that a healthy lawn—and a healthy business—depend on the premium quality of Lebanon Professional Turf Products.

Quality you can trust, because we back our blends with over 40 years of consistent optimum performance. Plus, Lebanon offers the industry's widest choice of quality fertilizers and chemical control products—economical SCU blends, premium homogeneous granular fertilizers, custom and standard liquid fertilizers for rapid and controlled release—and now, new sprayable and injection type fertilizers for special applications.

Dependable effectiveness makes Lebanon Professional Turf Products a superior value and that helps you earn a lot of that real green—and still maintain your competitive edge. Why should you trust your business to anything less?

For more information on our Professional Turf Products, call our Greenline at 1-800-233-0628, 1-800-852-5296 (PA only) or 1-717-273-1687.

Lebanon
TOTAL TURF CARE
A division of Lebanon Chemical Corporation
P.O. Box 180 • Lebanon, PA 17042

PLCAA

Circle No. 118 on Reader Inquiry Card

A look back

Fuel oil dealers led lawn care industry

By Elliot C. Roberts

It's almost 30 years now since a Master of Science thesis at the University of Massachusetts entitled "Comparison of Liquid and Solid Fertilizer for Turf" was completed by Norman H. MacLeod.

Just three years earlier, a group of fuel oil dealers had met in my office to find out how they could clean up their trucks so that tanks might be used to spray liquid fertilizer on lawns during the "off season" of late spring, summer and early fall.

From these rather humble beginnings in the mid 1950s has developed a lawn care industry based on high technology and the research that has solved practical tank, pump, spray nozzle, fertilizer formulation, pesticide application and agronomic and horticultural problems related to lawns and landscape plants.

MacLeod, in his early research, was interested in answers to four questions:

1) What response would be obtained on pure seedings and mixtures of bentgrass, bluegrass and fine fescue lawn turf treated with liquid fertilizers at the recommended rate and at rates higher and lower than this? (A 12-8-4 fertilizer was evaluated.)

2) What differences would be expected from the use of liquid and granular fertilizer formulations applied to previously well-maintained lawns in comparison with those poorly maintained?

3) Would use of liquid fertilizer applied more frequently than granular types increase or decrease populations of grasses and weedy plants in the lawn?

4) What is the relative effectiveness of foliar and root feeding of lawngrasses?

In general, the answers to these questions were favorable in terms of liquid fertilizer use on lawngrass response. The following seven observations were made concerning liquid formulations in root feeding of lawns:

- Liquid fertilizer applications will affect soil pH.
- Frequent applications of fertilizers will promote some species change and some weed invasion. The more aggressive grasses and weeds benefit most.
- Stimulation of vegetative growth will intensify minor element problems in poor soils. Supply of these nutrients is exhausted more rapidly.

Frequent fertilization may at times push grasses beyond their capacity to respond, resulting in waste or luxury consumption. Nutrient imbalances were most likely to occur.

- Drought damage due to overstimulated grasses will occur where irrigation is not possible.
- Rate and time of application and formulation of liquid fertilizer should vary with changing environmental conditions.
- Frequent applications of liquid fertilizers may lead to decreased iron availability in the soil.

Foliar applications of iron help prevent deficiency symptoms.

As far as foliar feeding is concerned, there were found to be three main limitations to the use of liquid applications in meeting lawngrass needs; i.e., the supplying power to the leaf, the efficiency with which needed elements can be distributed throughout the plant, and the essentiality of having a favorable soil environment for the growth of roots.

These conditions are better satisfied by feeding through a soil-root system. Thus, emphasis should remain on root feeding for the major portion of liquid plant food intake.

Foliar feeding

The value of foliar feeding comes from its use in getting small amounts of elements in short supply in the soil (either because of complete lack or because of being unavailable) quickly to the plant interior.

For instance, magnesium applications to the soil will generally take far longer to be absorbed than they will through the leaves. Iron runs a much greater risk of being fixed before uptake from the soil than when absorbed through the leaves.

Signs of chlorosis from lack

About the Author

Elliot C. Roberts, Ph.D., is director of the Lawn Institute, Pleasant Hill, Tenn.

© 1987 O.M. Scott & Sons Co.

What The Average Person Considers Big Trouble.

We're not ones to walk away from trouble. But, like you, we do everything we possibly can to avoid it.

So, with a lot of feedback from our Tech Reps, we found a simple, effective way to stop weeds before they even start. Our versatile pendimethalin preemergent weed control.

Its combination of broadspectrum action, control effectiveness and residual is unsurpassed. And we offer it in dry and liquid applied forms, with or without fertilizer, for greater flexibility.

of minor elements can be greatly reduced by applications of the deficient element directly to the leaves. Small amounts of nitrogen can be applied in this way with a distinct improvement in color of foliage.

Thus, the early research was positive, but the patient fuel oil dealers' efforts to fertilize lawns died. That year turned out to be hot and dry in central and western Massachusetts. Nothing but water could make a lawn look good that year.

Those first lawn care clients thought that this new liquid fertilizer would perform miracles. They soon found that it wouldn't. In addition, the fuel oil dealers realized that cleaning tanks and changing and repairing pumps damaged by acid reacting fertilizers and keeping nozzles working properly was more trouble than it was worth.

The new venture never really got started. But the idea remained sound.

Quietly, research, both public and private, was directed on the development of special equipment for spray applications. New fertilizers—ureaformaldehydes and methylene ureas—and pesticides have been developed for efficient and effective lawn spray application.

We've come a long way in only 30 years when the first moves were made to change from granular to liquid lawn fertilization.

We are indebted to Norman MacLeod for his early research on lawn fertilizers. His thesis is on file at the University of Massachusetts Library in Amherst. **LCI**

EDITORIAL INFORMATION SERVICES CENTER (216) 826-2839

Copies available at a nominal charge.

OSHA

from Page 5

ALCA.

"I think the contractors recognize that this is something they have to do," says Bradford. She adds that some states already have similar regulations on the books.

Bradford notes that the larger firms most likely have programs in place now anyway.

"It will have some impact but not a major one because we already have a program," reports Bob Scofield, vice president of corporate relations at Environmental Industries, Inc., Calabasas, Calif. "I guess we saw the handwriting on the wall."

Will the regulations create a hardship for smaller contractors?

"I doubt it, because I think the smaller outfits won't pay attention to it anyway," Scofield points out. "There's a whole lot of contractors, I think, who will say, 'I'll just fit through the cracks.'"

The larger companies are more likely to be targeted for enforcement, Scofield maintains.

"It's not that difficult to comply with," says Dr. Roger Yeary, vice president for health and safety at ChemLawn Services Corp. "It's not that complicated or burdensome."

However, Yeary cautions that some of the material safety data sheets are "poorly prepared" and "uneven in their quality."

The sheets are prepared by each manufacturer, and some of them can be incomplete or confusing, Yeary observes.

Will ChemLawn have any trouble with the regulations?

"None whatever, we were already doing that," Yeary states.

OSHA has a list of chemicals it considers hazardous. For more information write to OSHA, Roy Gibbs, 200 Constitution Ave. NW, Washington, D.C. 20210.

According to OSHA, employers, who are defined as contractors or subcontractors, must:

- Develop, implement and maintain for each work place a written hazard communications program. The program must address criteria for labels and other forms of hazard warnings, material safety data sheets, and employee information and training.
- Maintain a list of hazardous chemicals known to be in the work place.
- Ensure that all containers are labeled, tagged or marked with the contents listed.
- Explain the methods that are used to inform employees about the hazards associated with non-routine tasks.
- Detail ways that the employer will supply other exposed workers with information on chemical hazards.
- Make available information and copies of the hazard communication plan to employees, their representatives and the U.S. Dept. of Labor.
- Maintain the material safety data sheets in a central location, and access must be available during each work shift.
- Maintain a copy of the written hazard communication program at each work site.
- Institute a general or specific employee program (program for specific chemicals or groups of chemicals) and give the program at the time of the initial work assignment or when hazards are present. **LCI**

What A Scotts Tech Rep Considers Big Trouble.

Most important, since pendimethalin is so cost-effective, your Scotts Tech Rep can tailor a preemergent program to both meet your needs and your budget.

So if weeds are threatening you, try our pendimethalin. It practically scares them away.

For more information contact your Scotts Tech Rep or simply call 1-800-543-0006. In Ohio call collect 513-644-2900.

Scotts ProTurf

Circle No. 125 on Reader Inquiry Card

Research shows value in light, frequent watering

By Elliot Maras
Editor

Research at Michigan State University shows light, frequent watering produces improved turf quality on cool season turfgrasses. The research, now in its third year under the direction of Prof. Joe Vargas, shows frequent, light watering yields better color and reduces leaf spot, necrotic ring spot, chinchbugs and billbugs.

Turf managers have traditionally favored heavy, infrequent watering, on the belief that it encourages deeper roots.

Vargas, professor of botany and plant pathology at MSU, doesn't deny heavy, infrequent watering produces deeper roots. He says his tests show the best turf results are achieved when the grass is watered a tenth of an inch a day.

Vargas compared three sets of plots: 1) plots watered a tenth of an inch a day; 2) plots watered about an inch when 80 percent of the water in a pan, five feet in diameter, evaporated; and 3) plots receiving no supplemental water at all.

"We noticed we had improved turf quality where irrigation was done daily," he says. The color was better and the pests listed above were virtually non-exsitent.

Nitrogen treatments had been placed in all the plots. Vargas says that only in the plots irrigated daily were the nitrogen blocks not discernible from where no nitrogen was added.

Plots also had muck sod, mineral sod or turf started from seed. "Certainly the muck sod and mineral sod showed drought stress much quicker than the seeded plot," Vargas says.

However, this was only true in the plots receiving no or infrequent irrigation. There was no change visible in the daily-irrigated plots.

"It means we need to rethink the whole program of irrigation," Vargas says.

Roots of cool season grasses come up in the summer regardless of how deep you water in the summer, Vargas says. "Especially for sodded lawns; they showed a lot worse disease symptoms. They really needed a more frequent irrigation program than where you had a seeded lawn."

Why does it work?

Vargas is presently trying to determine why the light, frequent watering gives better results. "I don't know if the disease disappears or if the symptoms disappear."

He is trying to measure the difference in microbial populations of the different plots. If you keep thatch and soil moist, do you have more microbial organisms that benefit the turf?

"Are we simply keeping more microorganisms alive that compete with fungi for food or produce pathogen-killing substances?" Vargas asks.

He also wants to determine if there is as much disease if wilting can be prevented in affected plants. This might affect the number of plants that get the disease. "Are you simply preventing the plots from wilting (by watering frequently and lightly) or have you actually reduced the amount of pathogens present in the soil?" he asks.

Vargas: Research continues.

Wehner: Be sensible.

Turf managers that have experimented with light, frequent watering attest to the benefits.

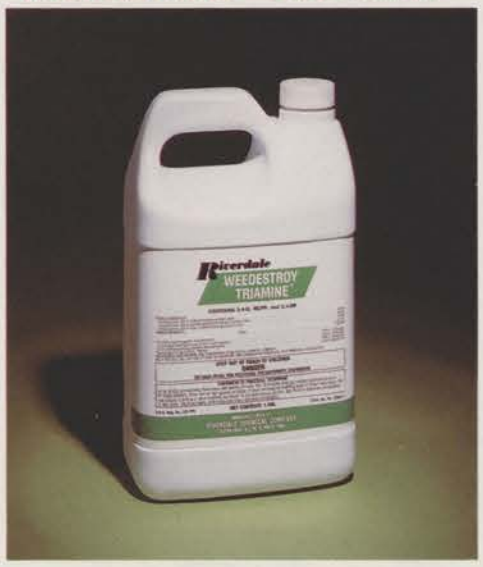
"I've been doing it on my lawn and there's an unbelievable improvement," says Brady Surrena, turf specialist for Fermenta Plant Protection Co., Painesville, Ohio.

Surrena, who has a 20,000 square-foot lawn at his home in Burlington, Iowa, waters his grass 25 minutes a day starting at 1:30 p.m. He has three varieties of Kentucky bluegrass. "The most important thing is you put on a tenth of an inch, no matter how long it takes to put on."

Surrena says his lawn previously had summer patch

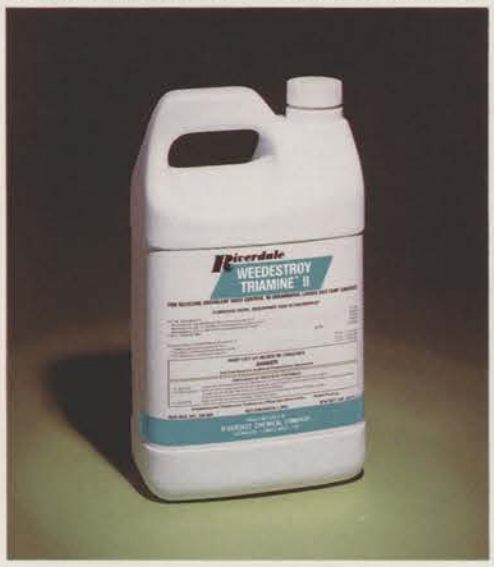
RIVERDALE CHEMICAL
THREE-WAY HERBICIDES FOR TH

WEEDESTROY® TRIAMINE™



The only three-way selective herbicide that features the amine salts of 2,4-D, MECOPROP and DICHLORPROP.

WEEDESTROY® TRIAMINE™ II



A new three-way selective herbicide that features the amine salts of MCPA, MECOPROP and DICHLORPROP.

TRIAMINES

Riverdale Triamine and Triamine II products give effective and dependable results in killing hard-to-control weeds like Oxalis, Ground ivy, Chickweed, Spurge, Clover, as well as most other broadleaf weeds in Ornamental Turf and Grasses.

Another benefit of Triamine and Triamine II is they can be used on both cool and some warm climate grasses all season long.

Both concentrated products have a usage rate of 3 - 4 pints per acre. This allows the lawn care professional to economically cover greater turf areas while using less base liquid per acre.

Riverdale Chemical Company contin
However, we have developed Triamine II and Tri-Ester
TRIAMINES and TRI-ESTER

FOR ADDITIONAL INFORMATION:
Contact Riverdale CHEMICAL COMPANY
425 West 194th Street Glenwood, IL 60425-1584
Ca
312-

problems, localized dry spots, general wilting and lack of vigor. "Everything has been better from a turf standpoint," he says.

The change is due to the fact that frequent watering enables the plant to conserve carbohydrates, Surrena says. By keeping the plant cool at a time of day when the plant is under stress, it reduces the draw on its carbohydrate reserves.

Bob Wellford, owner of M & S Lawn Service, Inc., Chicago, also believes in the daily irrigation program. He says 35 to 40 percent of his 400 customers have been following it; he can tell which lawns are and are not watering daily.

"Your overall production and use of materials is enhanced," Wellford says. "I'm just thrilled with it."

However, educating the customers isn't easy. "You're going to run into problems getting people to do it," he says.

Is it practical?

Other turf specialists who have studied water use question the practicality of light, frequent watering.

Robert Shearman, professor of turfgrass science at the University of Nebraska, has studied water use on tall fescues, ryegrasses, bentgrasses and bluegrasses.

Shearman: Water bans are real.

"With the light, frequent, irrigation, you tend to have higher water-use rates," he says.

But frequent watering is impossible in regions that have watering bans. "If you could predict you are never going to be faced with a water shortage, light, frequent watering won't be a problem," he says.

Dave Minner, extension turfgrass specialist at the Univeristy of Missouri, has also studied water use on turf. He points out that certain fungal spores use moisture to spread. You *never* do frequent irrigation if you're in a pythium condition, he says.

Minner agrees that light, frequent watering is good for controlling diseases like summer patch and necrotic ring spot; these diseases sporulate during the drying part of the moisture cycle.

Dave Wehner, associate professor of turfgrass science at the University of Illinois, says deep watering makes more sense in the spring and fall, when the root system is deeper. Heavy irrigation in the summer, on the other hand, is wasteful. **LCI**

Avoid RCRA, LCOs told

By Elliot Maras
Editor

CLEVELAND—State and federal rules governing the storage and disposal of hazardous wastes get longer every year. No wonder those who are regulated are getting more confused.

Sympathetic regulatory officials, like Mark Bergman of the Ohio Environmental Protection Agency, tell pesticide users to simply avoid falling under the regulations. Just make sure the amount of hazardous material you store at any given time is under the regulated minimum amount, Bergman said.

"Unless you are a giant lawn care company and unless you have a need for a storage facility, just avoid it (having a large pesticide storage area)," he told LCOs at the Cleveland regional Professional Lawn Care Association of America seminar.

He told LCOs to reuse chemicals as much as possible to minimize the amount they store.

Bergman, who works in the division of Solids and Hazardous Waste Management for the agency, outlined some of the new guidelines under the recently-enacted Resource Conservation and Recovery Act (RCRA). He said he has received several calls from LCOs who want information about the new rules.

All rules are listed in the "Code of Federal Regulations, Title 40," which is available through state EPAs, Bergman said.

Ohio, like most states, has simply adopted federal RCRA regulations.

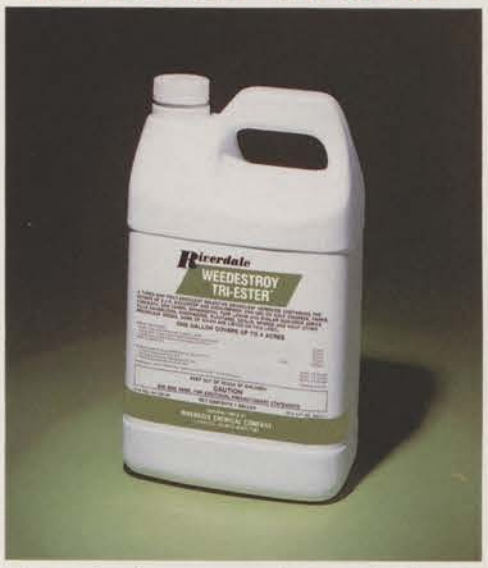
Storage and disposal of hazardous wastes are regulated only if the user has a minimum 100 kg (220 pounds—about half of a 55-gallon drum) on site per calendar month.

It is therefore important, Bergman said, to know how much waste you generate per month. An LCO could be regulated one month and not another.

RCRA defines a waste as hazardous if it: 1) is ignitable, such as paint wastes and degreasers; 2) is corrosive, such as acids and alkalies; and 3) undergoes rapid chemical reactions in contact with water or other substances. **LCI**

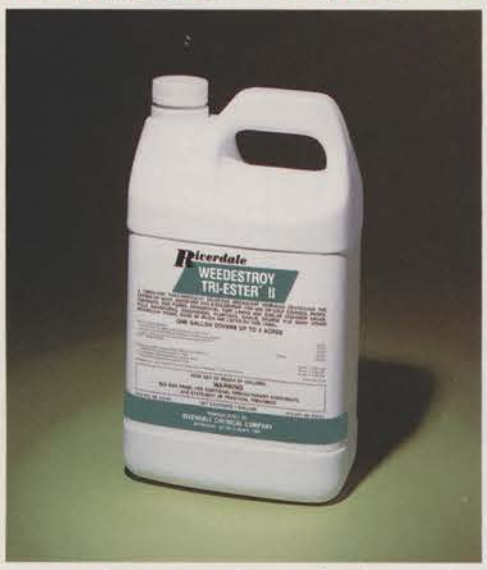
MPANY OFFERS FOUR
ISCRIMINATING PROFESSIONAL

WEEDESTROY® TRI-ESTER™



The only three-way selective herbicide that features the esters of 2,4-D, MECOPROP and DICHLORPROP.

WEEDESTROY® TRI-ESTER™ II



A new three-way selective herbicide that features the esters of MCPA, MECOPROP and DICHLORPROP.

TRI-ESTERS

Riverdale Tri-Ester and Tri-Ester II are emulsifiable concentrates with low volatility. They give the same effective and dependable results as our Triamine products. In addition, they give quicker control than amines in early spring and late fall when cooler temperatures prevail.

Tri-Ester and Tri-Ester II can be applied to roadsides, rights-of-way, drainage ditchbanks and sod farms as well as golf courses, parks and ornamental turf.

Application rates vary from 2-4 pints per acre for these two products. The amount to be applied will depend on the sites and weeds to be treated.

o support the sale and use of 2,4-D.
alternative products for customers who desire a choice.

NOT CONTAIN DICAMBA

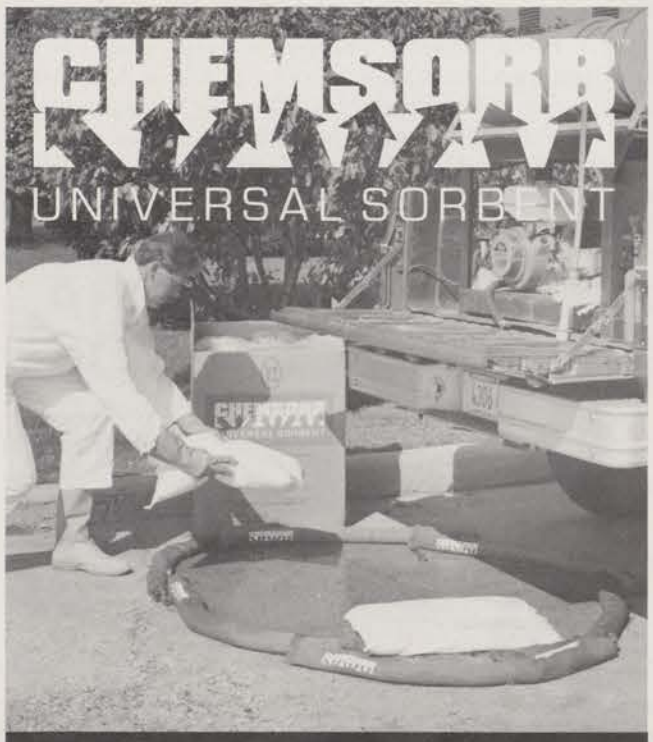
ect
330

Always read and follow label directions for use.
Weedestroy®, Triamine™, and Tri-Ester™ are Trademarks of Riverdale Chemical.
Triamines and Tri-Esters — Patents Pending

© 1987

Circle No. 136 on Reader Inquiry Card

Circle No. 126 for information on Cushman products



Be Prepared!

PRECISION LABORATORIES, INC.
P.O. Box 127 – Northbrook, IL 60065
800-323-6280 – 312-498-0800

Circle No. 133 on Reader Inquiry Card

STUDY

from Page 5

Each treatment was applied to three five-foot-square plots which were not adjacent to one another. Most plots were 40 to 50 percent weeds. The grass was primarily bluegrass with some ryegrass and fine fescue mixed in.

The turf area was maintained with a weekly mowing at a two-inch cutting height without fertilization, irrigation or pesticide applications.

Applications were then made using a sprinkling can adapted with Davey's lawn care spray nozzle. Manufacturer-recommended rates of the different herbicides were applied at a mix rate of three gallons of water per 1,000 square feet. The treatments were applied at one area on June 4 and to another on July 21.

The results were visually evaluated by four research staffers for percent of area covered by broadleaf weeds prior to application and approximately three weeks after application.

In the first test, the following herbicides and combinations gave comparably good control: Turflon Amine/clopyralid/Triton B-1956 (a wetting agent), clopyralid, Break-Thru, Turflon Amine/MCPA/MCPP, Turflon Ester/Break-Thru/Banvel, Turflon Amine/Cidekick (a wetting agent), Turflon Ester, Turflon Amine/Triton B-1956, Triamine II, Banvel, Trimec 899, Turflon Amine/MCPA/MCPP/Triton B-1956, MCPA/MCPP, and Trimec 900. **LCI**

CLIMBING
UP ON TOP
with the best in components design and servicing.

304 S.S. 600 gallon tank • dual stage centrifugal pump (100 GPM or 200 PSI) • sparger agitation • PTO drive • 12 volt electric reel • low to the ground work platform • Options: 5 gallon hand rinse tank & bracket • SOLO 425 (475) Knapsack Sprayer and stand

Westheffer

Westheffer Company, Inc.
PO Box 363, Lawrence, KS 66044
1-800-332-0003 In KS
1-800-362-3110 USA

WE ARE MASTER DISTRIBUTORS FOR:
Myers pumps & replacement parts
Call for quantity discounts 1-50
Hypro diaphragm pumps & parts
GPI digital meters
Hannay reels
HOSE 300' & 400' lengths
Accuflex, Green Garde, Goodyear
HANDGUNS:
Chemlawn, JD9-C, Hypro, Myers, stainless steel

Circle No. 142 on Reader Inquiry Card

SNAPPER®

INTRODUCING OUR HEAVY-DUTY AND MID-DUTY COMMERCIAL MOWERS

HEAVY-DUTY. Heavy Duty commercial mowers feature 32," 36" and 48" cutting decks, with engines available on various models from 8, 12, 12.5 HP to 14 HP. Four forward speeds and six cutting heights allow you to adjust to varying conditions. The 4 gallon fuel tank is a real time saver. Pneumatic tires are also standard. Options include a riding sulky and a 3 bushel catcher.

MID-DUTY. Mid-Duty commercial mowers use the 30" or 41" mowing decks and feature light touch steering. An I/C 8 or 12 HP engine is standard on the 30," with a 12 HP engine only on the 41." All models feature single lever cutting height adjustments, 5 forward speeds for ease of mowing and transporting, handles that adjust to 3 height positions, and no-tools blade belt adjustment.

41" Mid-Duty

48" Heavy-Duty

Snapper also offers 21" walk mowers, riders, tractors, trimmers, pluggers, power rakes and snowthrowers especially designed for commercial use.

Snapper Power Equipment, McDonough, GA 30253

Manufacturers of quality Lawn and Turf Equipment. A division of Fuqua Industries.

Circle No. 137 on Reader Inquiry Card

TIME IS MONEY
COMPUTERIZE NOW
WITH
CLASS

It takes about 5 minutes for an average typist to complete an invoice. CLASS can print more than 50 invoices in the same time — ERROR FREE!

With CLASS you can double your business volume without adding any clerical staff.

CLASS is the most complete accounting package designed for the lawn care business. CLASS is easy to learn and easy to use.

And CLASS won't cost you an arm and a leg.

Complete hardware/software systems start at $2495 — ready to go! Leases start at $100 per month. If you only want the CLASS software for your IBM PC or PC compatible, the software starts at $750. Software leases start at $30 per month.

Just write or call us for more detailed information and you will be on your way to increasing next year's profits.

Call: **(312) 668-0506**
or Write to: **GENERATED SYSTEMS, INC.**
104 E Roosevelt Road
Wheaton, IL 60187

We Accept Visa and Master Card

Circle No. 111 on Reader Inquiry Card

Ryan Professional Lawn-Care Equipment

RYAN®

BUILT TO LAST

The new Lawnaire® 28

The revolutionary Lawnaire 28 aerator combines the technology and precision of golf course aeration with the demands of lawn care maintenance. With reciprocating, crank-shaft mounted tine arms, the self-propelled, walk-behind aerator features a vertical coring action similar to larger Ryan aerators. The result is a cleaner, more professional-looking aeration job.

The Lawnaire 28 covers an aerating swath of 28 inches, and can cover up to 24,000 sq. ft. per hour. Coring depth is 2½″ , with ¾″ diameter tines, and a core pattern of 3½″ x 5″ . The unit is only 34″ wide overall, so you can get through standard yard gates easily.

An easy-to-use dog clutch releases the ground drive so the machine can be pulled backwards. Its unique tricycle front wheel provides unmatched maneuverability for the tight spots on residential and commercial lawns. Because of the unique Ryan tine linkage, the unit has a zero turning radius while aerating. For ease and performance, the new Lawnaire 28 simply can't be beat.

LAWNAIRE® 28 SPECIFICATIONS
Model 544874

Machine Type: Reciprocating self-propelled, walk-behind aerator

Engine: 7hp OHV Wisconsin Robin

Drive: V-belt and roller chain

Weight: 400 lbs.

Height: 41″

Length: 57″

Width at Widest Point: 34″

Engine Speed: 3600 RPM

Speed: Up to 24,000 sq. feet per hour

Aerating Width: 28″

Coring Pattern: 3½″ x 5″

Coring Depth: 2½″

Core Diameter: ¾″

Tine Arms: 4 arms with 2 tines per arm

Tines: ¾″ case hardened steel

Tires: Rear: 4.10/3.50-4
Front: 2.80/2.50-4

Features: Tricycle front for easy maneuverability. Rubber isolated handlebars and spring-assist lift for ease of use. Sealed, precision ball bearings at all locations in the tine arms and linkage for low maintenance and durability.

The Lawnaire® IV

Designed for the professional who wants to provide core-type aerification at a high rate of speed, the Lawnaire IV is the highest quality roll-type aerator on the market.

Self-propelled by a rugged 3-hp. industrial engine, the Lawnaire IV features a 38 lb. removable weight bar; a 55 lb. capacity polyethylene water drum; a convenient lift handle to raise and lower the machine in tight spots; and all the walk-behind speed and maneuverability you need to do a big job...fast.

For varying soil conditions, the Lawnaire IV can be tailored to meet your needs. Just add the weight bar and water to the drum for even penetration up to 2¾″. The Lawnaire IV's hole pattern of 3¾″ x 7″ across a 19′ aerating width does a more intensive job than any other walk-behind aerator.

All in all, you can't buy a more rugged, more dependable, more versatile, more value-packed core aerification machine.

LAWNAIRE® IV SPECIFICATIONS
Model 544863

DIMENSIONS:
Width: 28″
Aerating Width: 19″
Weight: Dry – 215 lbs. Water in drum – 270 lbs. (6.6 gallon capacity)

POWER:

Engine: 4-cycle, 3 hp. industrial with 6:1 gear reduction, dual air cleaner, with rotary on-off switch; low tone muffler

Clutch: Belt tightener

Drive: Primary: V-belt 4L-section to clutch idler
Secondary: #40 roller chain to tine assembly
Transport: #40 roller chain to barrel

Lubrication: 2 grease fittings in each axle hub

UNIT:

Penetration: Up to 2¾″

Aeration Pattern: 3¾″ x 7″ center to center

Speed: Operation: 225 f.p.m. Transport: 190 f.p.m.

Productivity: 21,000 sq. ft. per hour

Tines: ¾″ Coring-type, formed from .08″ thick heat-treated alloy steel, 30 tines per aerator

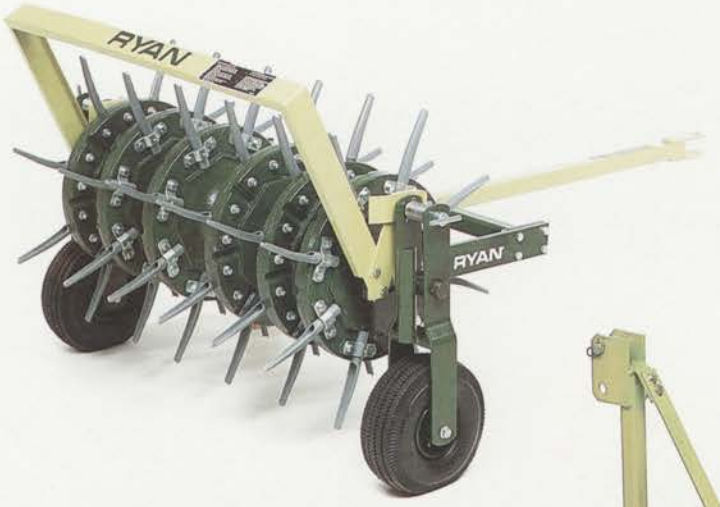
Tires: Two 8 x 2.25 semi-pneumatic with ball bearings

The Tow Lawnaire® and 3-pt. Hitch Lawnaire

For smaller grounds and turf areas, the tow-type and 3-pt. hitch Lawnaires are ideal. The towed models can be pulled by most tractors.

Also available is a 3-pt. hitch low-pressure hydraulic lift system that only requires 700 PSI for operation. That means the 3-pt. hitch Lawnaire can be operated by any tractor with a category "O" or "1" 3-pt. hitch capable of lifting 500 pounds.

For varying conditions, a choice of coring, slicing or open-spoon tines are available. The tow-type Lawnaire is offered with a choice of either hydraulic lift or manual lift.



TOW LAWNAIRE SPECIFICATIONS
Model 544860

Frame: 1½" sq. x 3/16" wall tube

Hitch: Clevis and pin type

Axles: Aerating wheel – 1¼" (32 mm) diameter
Transport wheel – ¾" (19 mm diameter

Aerating Wheels: Cast iron w/sintered bushing, pressure lubrication fitting, grooved for mounting aerating tines on both sides

Transport Tires: 4.10/3.50 — 4, 2-ply pneumatic tires w/ball bearings

Weight: 500 lbs.

Dimensions: Width — 46", Height — 31", Length — 68½"

Transport Lift: Wheels are pivotable about extended tine axle shaft using removable lever or 700 PSI hydraulic lift

Aerating Width: 36"

Aerating Depth: Up to 4" (102 mm)

Aerating Pattern: 6" x 6" (152 x 152 mm)

Towing Speed: 10 mph (16 km/h) maximum

Tines: 8 per wheel; one set standard, choice of coring (½" or ¾"), slicing (7½" or 6" overall length), or open spoon; wheels can be mounted with double set of tines

3 PT. HITCH LAWNAIRE SPECIFICATIONS
Model 544859

Frame: 1½" sq. x 3/16" wall tube

Hitch: Cat. "O" or Cat. "1"

Axles: Aerating wheel — 1¼" (32 mm) diameter

Aerating Wheels: Cast iron w/sintered bushing, pressurized lubrication fitting, grooved for mounting aerating tines on both sides

Weight: 475 lbs.

Dimensions: Width – 35", Height – 34½", Length – 27¾"

Aerating Width: 36"

Aerating Depth: Up to 4" (102 mm)

Aerating Pattern: 6" x 6" (152 x 152 mm)

Tines: 8 per wheel; one set standard, choice of coring (½" or ¾"), slicing (7½" or 6" overall length), or open spoon; wheels can be mounted with double set of tines

The Ren-O-Thin® III and IV

The Ren-O-Thin is perfect for breaking up cores as well as dethatching greens, tees and lawns.

It's always been a reliable worker...and we've made it even more dependable.

The Ren-O-Thin features a tough polymer rear-shield that's lighter, more durable and reduces noise levels appreciably; a simple-to-operate height adjustment control; heavier tubing on the handle assembly.

Add these improvements to our impressive line-up of product features (4L section V-belt drive; spring-loaded reel clutch control; three interchangeable reels; and a reversible handlebar for upmilling) and you have a piece of equipment that can provide years of service...and income.

REN-O-THIN IV SPECIFICATIONS
Model 544865

REN-O-THIN III SPECIFICATIONS
Model 544864

DIMENSIONS:

Cutting Depth: Reel adjustable from 1″ above ground to ⅞″ into ground

Width: 29⅛″

Aerating Width: 18″

Weight: Ren-O-Thin IV: 116 lbs. less reel
Ren-O-Thin III: 98 lbs. less reel

POWER:

Engine: Ren-O-Thin IV: 4-cycle, 7 hp. industrial, recoil starter
Ren-O-Thin III: 4-cycle, 5 hp., recoil starter, dual air cleaner

Clutch: Spring loaded belt tightener

Drive: Ren-O-Thin IV: Dual 4L-section V-belt from engine to reel
Ren-O-Thin III: Single 4L-section V-belt from engine to reel

UNIT:

Blades: Hardened, high carbon steel with carbide edges; available reels: flail-type ⅛″ at 1″ spacing; fixed-type 1/16″ at 1½″ spacing; 1/32″ at ¾″ spacing; and ⅛″ at 2″ spacing

Handlebars: Reversible for upmilling

Tires: 8 x 1.75 semi-pneumatic smooth tread, micro screw adjustment, floating axle to follow contours.

The Mataway® Overseeder

Ryan's new Mataway Overseeder is designed to be the most versatile product of its type on the market today. The Overseeder system allows you the flexibility to dethatch and overseed at the same time, up to 15,000 square feet per hour. By simply removing 4 pins, the overseeder attachment is removed and the Mataway becomes a true dethatcher.

The Overseeder's rate adjustment provides the proper seed flow for overseeding with many types of seed. The 2″ spacing makes it possible to overseed with one pass rather than two passes as with 3″ spacings you'll find on competitive models. And its unique micro-screw adjustment allows precise depth adjustment up to 1½″. A disc-type seed delivery system feeds the seed directly into the slits for uniform seed/ground contact resulting in maximum germination. Also, the transparent seed tubes allow the operator to continually monitor seed flow.

An added feature allows the seed flow to stop automatically when the Mataway Overseeder is lifted to cross sidewalks and driveways.

Mataway® Model 544283

SPECIFICATIONS:
Mataway Overseeder — Model: 544873
Mataway — Model: 544283

DIMENSIONS:

Cutting Depth: Up to 1½″ into ground

Width: 34½″

Aerating Width: 19″

Weight: 320 lbs. with reel
425 lbs. with hopper

POWER:

Engine: 4-cycle, 10 hp., cast iron block, recoil starter

Clutch: Spring-loaded belt tightener

Drive: 4L-section V-belt to front wheels by gear box and roller chain, triple 3V-section V-belts engine to reel

Lubrication: Oil splash in gear case; pressure grease fitting elsewhere

UNIT:

Micrometer Screw: Adjustment for any desired depth with 1½″ range

Blades: Carbide tip standard; reels available: Flail blade 1/8″ at 1″ spacing; fixed-type 1/32″ at 1/2″ spacing; 1/16″ at 1″ spacing; 1/16″ at 1½″ spacing; 1/32″ at 1″ spacing; and 1/16″ at 2″ spacing

Tires: 4.10/3.50 x 4 fully pneumatic 2-ply

HOPPER & METERING SYSTEM:

Capacity: 0.83 cu. ft.

Size: Height 13″; Width 8½″; Length 18½″

Seed Type: Rye, bluegrass, bermuda, fescue, bent

Seed Density: Fully adjustable for any type seed

ROTOR BAR AND METERING SYSTEM:
Easily removed for cleaning and servicing, neoprene rubber

Metering system: Stainless steel plates with triangular-shaped holes

Operation: Rotor Bar: Engages in lower reel position only
Seed Gate: Automatically shuts off when unit is raised

SEED DELIVERY SYSTEM:

Spacing between Seed Outlets: 2″

Number of Outlets: 10

Type: Disc Blade w/Scraper

Discs: Detachable: Remove 2 clevis pins and 2 hairpins to remove from Mataway

Seed tubes: Clear plastic

Seed Flow Control: Rotor bar stop and gate shut-off

The Jr. Sod Cutter and Tote Trailer

The Ryan Jr. Sod Cutter is the standard of the industry. With its tough 7-hp. industrial duty engine, you can cut up to 135 feet of sod per minute, up to 2½ inches deep, and either 12 or 18 inches wide.

For maximum traction and self-propelled action, 95% of the machine's weight is on the knobby tread drivewheel. You get good balance, easy handling and responsive turning.

A heavy-duty gearbox and belt idler drive add to its overall rugged construction.

The Ryan Jr. Sod Cutter is an indispensable tool for golf course maintenance, builders, sewer contractors, installers of automatic sprinkler systems, and the rental industry.

The Ryan Tote Trailer is designed specifically for the Ryan Jr. Sod Cutter and Lawnaire® III and IV. It saves time and labor by making quick work of transportation and loading. Standard equipment includes fenders and lights.

JR. SOD CUTTER SPECIFICATIONS
Models 544844 & 544845

DIMENSIONS:

Cut Width: 544844 — 12″; 544845 — 18″

Cutting Thickness: Up to 2½″

Weight: 544844 — 294 lbs.; 544845 — 338 lbs.

POWER:

Engine: 4-cycle, 7 hp., industrial, recoil starter

Clutch: Spring-loaded belt tightener

Drive: A-section V-belt, engine to gear case; double roller chain to blade eccentric shaft; gears and roller chain to traction wheels; transmission has separate dog clutches to engage cutting blade and traction drive

Drive Wheel: Two 8″ diameter knobby tread, rubber vulcanized to cast iron hubs

Lubrication: Oil splash in gear case; pressure grease fittings elsewhere

UNIT:

Speed: Up to 135 feet per minute

TOTE TRAILER SPECIFICATIONS
Model 544856

DIMENSIONS:

Length: 72″

Width: 56″

Weight: 135 lbs.

UNIT:

Tires: 2 pneumatic 4.80 x 8 load range B on steel rims with tapered roller bearings

Hitch: Heavy-duty stamped steel housing, fits 1⅞″ through 2⅛″ ball including safety chain

For more information or a free demonstration on your grounds at your convenience contact your local Ryan dealer:

or call toll-free 800-228-4444
FAX: 402-474-8522, TELEX: 484359

RYAN®
Lawn-Care
Equipment

OMC Lincoln
A division of Outboard Marine Company
Makers of Cushman®, Johnson®, Evinrude®, Lawn-Boy®,
Brouwer®, and OMC® powered products.
P.O. Box 82409
Lincoln, Nebraska 68501

Part No. E218020
Printed in USA
Specifications subject to change without notice.

PLCAA covers all the bases

SAN ANTONIO, TEX.—How to project a better business image. Managing equipment for the lowest cost. The biology of turf soils.

The eighth annual Conference and Trade Show of the Professional Lawn Care Associaton of America, Nov. 12-15 at the San Antonio Convention Center, addresses every aspect of running a lawn care operation.

Concurrent with most of the educational sessions will be a small engine clinic by Robert J. Kapsy, supervisor of service training, Briggs & Stratton Corp.

Following is a preliminary list of trade show exhibitors. See the program guide for a floor diagram and booth assignments.

A. S. C. MINERAL PROCESSING
AABACO INDUSTRIES
ACCUFLEX INDUSTRIAL HOSE
AM. ASSOC. OF YELLOW PAGES PUBL.
AMERICALIST/DIV. OF HAINES & CO.
AMERICAN GROUP MARKETING
AMERICAN LAWN APPLICATOR
AMERICAN PELLETIZING
ANDERSONS, THE
APPARELMASTER
AQUASHADE
AQUATROLS CORP. OF AMERICA
ARCADIAN CORPORATION
B & W SALES & MKTG./TREBOR
BASF CORPORATION
BILLY GOAT INDUSTRIES
BLACKBURN MFG. CO.
BRANDT CHEMICAL - CLAWEL DIVISION
BRIGGS & STRATTON CORP.
C & S TURF CARE EQUIPMENT
CADO COMPUTER SYSTEM OF CINCINNATI
CENTER FOR BUSINESS DEVELOPMENT
CHEVRON CHEMICAL CO. AGR. CHEM. DIV.
CIBY-GEIGY
CLARK SALES & SERVICE
CLASSEN MFG.
CLEARY CHEMICAL CORP., W. A.
COLORWAY, INC.
COMP-U-GREEN
CONTAINMENT TECHNOLOGY
CORDAGE PACKAGING
CORON
CREATIVE SALES
CUSHMAN-RYAN OMC LINCOLN
DEERE & CO.
DENVER LEASING & MFG.
DISTRIBUTION MGNT. SYSTEMS
DOGGETT CORPORATION
DOW CHEMICAL USA
EARTHWAY PRODUCTS
EIGHT DAYS A WEEK
ELANCO PRODUCTS CO.
ENCAP PRODUCTS CO.
ENVIRONMENTAL SAFETY SYSTEMS
ESTECH BRANDED FERTILIZERS
EXMARK MFG. CO.
F. D. KEES MFG. CO.
FMC CORPORATION
GARFIELD WILLIAMSON
GENERATED SYSTEMS
GEORGIA MARBLE CO.
GNC PUMP
GOLD NUGGET
GOLDWAITE OF TEXAS/TORO COMPANY
GRAHAM LAWN EQUIP.
GREAT RIVER ENTERPRISES
GREAT SALT LAKE MIN. & CHEM. CORP.
GREEN INDUSTRY BUYING GUIDE
GREEN PRO SERVICES
GROWTH PRODUCTS, LTD.
H. D. HUDSON MFG. CO.
HAHN, INC.
HANNAY REELS
HOECHST-ROUSSEL AGRI-VET CO.
HOTSY CORP., THE
HOWARD JOHNSON'S ENTERPRISES
ICI AMERICAS INC.
IMLER INDUSTRIES INC.
INDUSTRIAL SERVICES INTERNATIONAL
INGRAM KUT-MOR CO.
INNOVATIVE LAWN EQUIPMENT
INTERNATIONAL SEEDS
J. J. MAUGET COMPANY/ MARCOMM
JACKLIN SEED COMPANY
JAMES RIVER LIMESTONE CO.
JONATHAN GREEN
KNOX FERTILIZER
LAROCHE INDUSTRIES
LAWN CARE INDUSTRY/ LANDSCAPE MANAGEMENT
LAWN DOCTOR
LAWN SERVICING/GROUNDS MAINT.
LAWN TECH
LEBANON TOTAL TURF CARE
LESCO, INC.
LOFTS SEED
MAIBO, INC.
MARKETING COMMUNICATIONS
MCI AGSYSTEMS/MELAMINE CHEM.
MILLIKEN CHEMICAL
MILWAUKEE METROPOLITAN
MINNESOTA WANNER
MOBAY CORPORATION
MODERN WELDING COMPANY
MONSANTO AGRICULTURE CO.
MURRAY EQUIPMENT
NATIONAL ARBORIST ASSOCIATION
NATIONAL PEST. TELE-COMMUNICATIONS
NICE 'N GREEN PLANT FOODS
NOR-AM CHEMICAL CO.
NORTH AMERICAN MICRON
NORTHRUP KING CO.
NOVA ELECTRONICS & SOFTWARE
O. M. SCOTT & SONS
OLATHE MANUFACTURING COMPANY
OREGON TALL FESCUE COMMISSION
PALM INDUSTRIES
PBI/GORDON CORP.
PC SUPPLY COMPANY
PERFCO CORPORATION
PERMA-GREEN SUPREME
PICKSEED WEST INC.
PRACTICAL SOLUTIONS
PRECISION LABORATORIES
PRECISION TANK & EQUIPMENT
PRO POWER PRODUCTS
PSB COMPANY
PUBLISHERS FOR CONVENTIONS
PUMPING SYSTEMS
PURSELL INDUSTRIES
QUINTESSENCE COMPUTING
R. N. D. SIGNS
RAINBOW COMPUTER SALES
REAL GREEN COMPUTERS
REGAL CHEMICAL COMPANY
REUTER LABORATORIES
RGB LABORATORIES
RHONE-POULENC AG. COMPANY
RINGER CORP.
RIVERDALE CHEMICAL CO.
ROCKLAND CHEMICAL CO.
RUFFIN
SALSCO
SANDOZ CROP PROTECTION
SERVICEMASTER LAWN CARE
SIERRA CROP PROTECTION CO.
SOUTHERN MILL CREEK PRODUCTS CO.
SPECIALTY EQUIPMENT COMPANY
SPRAYING DEVICES
SPRING VALLEY TURF PRODUCTS
TERRACARE PRODUCTS
TEXAS FARM PRODUCTS
TUFLEX MFG. CO.
TURF SEED
TURFCO MFG/KINCO/NATIONAL MOWER
TYLER ENTERPRISES
UAP SPECIAL PRODUCTS
UNIROYAL CHEMICAL CO.
VAN DYNE-CROTTY
VAN WATERS & ROGER
WALKER MANUFACTURING COMPANY
WANNER ENGINEERING
WEED CONTROL SYSTEMS
WESTHEFFER CO.
WHEEL SPRAY CORPORATION

OTF Plan now to attend.

Dec. 7-10, 1987
The Ohio Center
Columbus, Ohio

The Ohio Turfgrass Foundation Conference and Show features lectures, workshops and more than 350 exhibits for lawn care, golf course, landscape and grounds maintenance professionals.

Golf Course

- Understanding Poa to Bent Conversion with TGR
- Experiences with *Poa annua*— Its Management and Control from a Plant Pathologist's Viewpoint
- Management of Localized Dry Spots
- The Pros and Cons of Disease Detection Kits
- Putting Green Management
- Insecticides — Recent Developments
- Golf Course Computers — Utilization and Cost
- Personal Financial Planning
- Stress Management
- Wildflower and Native Grass Renovation
- Chemical and Biological Control Strategies for Aquatic Management
- Greens Reconstruction — Making It Right!
- Bentgrass Fairway Management— Are We Headed in the Right Direction?
- Thinking Superintendent — Time and Money-Saving Ideas
- Soil Management — Facts and Fallacies
- The Black Layer — Sifting Through the Maze
- Greens Reconstruction
- Bentgrass Breeding
- Overseeding Turfgrasses
- PGRs for *Poa annua* control

Grounds & Athletic Fields

- Ground Covers — Alternatives to Grasses in the Landscape
- Wildflower and Native Grass Renovation
- Aquatic Management Strategies for Small Ponds
- PGRs as a Tool for the Professional Grounds Manager
- Annual and Perennial Selection and Care
- Turf-Type Tall Fescues
- Insecticides — Recent Developments
- Stress Management on the Job
- Selecting the Proper Aeration Equipment
- Pre-emergent and Post-emergent Herbicides — Recent Developments
- Soil Management in the Landscape — Facts and Fallacies
- Low Budget Athletic Fields
- Player Safety/Field Quality
- The Agronomics of Athletic Field Management — A Reevaluation
- Soil Management of Athletic Fields
- Experience with Turfgrass Aeration Equipment
- A Morning with George Toma

Lawn Care

- Ecology of Patch Diseases
- The Pros and Cons of Disease Detection Kits
- Patch Disease Research Update
- Why Pre-emergent Herbicides Fail
- Why Post-emergent Broadleaf Herbicides Fail
- Drift and Pattern Displacement of Pesticides
- Core Cultivation Effects on Pre-emergent Herbicide Efficacy — Another Look
- Considerations and Selection of Core Cultivation Equipment
- Soil Improvement and Management — Physical or Chemical?
- Pre-emergent and Post-emergent Herbicides for the Lawn Care Professional
- The Pros and Cons of Turf-Type Tall Fescues
- Reducing Pesticide Usage Through Agronomic Practices
- Experiences with PGRs in the Landscape
- Insecticides — Recent Developments
- Alternatives to Pesticides
- Maximizing Job Satisfaction

Workshops

- Insurance Liability — Insuring the Landscaping and Lawn Care Risk
- Guidelines for Estimating Maintenance and Landscape Work
- Annual and Perennial Flowers
- Understanding and Interpreting Water Quality Related to Irrigation
- Pesticide Safety and Use

Ohio Turfgrass Foundation

Anyone involved in turfgrass or ornamental management is invited to attend the Ohio Turfgrass Foundation Conference and Show. For complete information and a conference program, contact:

Dr. John Street
c/o Ohio Turfgrass Foundation
2021 Coffey Road
Columbus, OH 43210
(614) 292-2601

Circle No. 127 on Reader Inquiry Card

San Antonio MARKETPLACE

- Area, San Antonio .... 309.4 sq. miles
- Area, San Antonio Metropolitan Statisical Area (includes surrounding counties) .... 2,527 sq. miles
- Population, San Antonio 921,693
- Population, San Antonio Metro Area 1,268,809
- Median age, San Antonio 29
- Median household effective buying income (1986), San Antonio $20,649
- Median household effective buying income (1986), San Antonio Metro Area $22,587
- Average household size, San Antonio and Metro Area 2.97
- Largest employers, public sector .... U.S. Air Force, U.S. Army
- Largest employers, private sector .... H.E. Butt Grocery Co., United Services Automobile Assn.
- Unemployment rate .... 7.3 percent
- Median price of new house (1986) $85,200
- Housing units, single family, Bexar County (1986) 316,432
- Housing units, multi-family, Bexar County (1986) 135,412
- Average rents, Bexar County (1986) .... $350-$600
- **Irrigation contractors, per Yellow Pages 73**
- **Landscape architects, per Yellow Pages 38**
- **Landscape designers, per Yellow Pages 21**
- **Landscape contractors, per Yellow Pages 51**
- **Lawn Management firms, per Yellow Pages 117**
- **Most popular grass .... St. Augustine**

San Antonio requires service by appointment

By James E. Guyette
Managing Editor

With the possible exception of San Diego, San Antonio is home to more retired military people than anywhere in the United States. And that poses special challenges for LCOs and lawn management contractors.

These customers don't want precision service. They *demand* it.

And when it comes to chemical lawn care, they want that service *by appointment*.

"They want their money's worth," explains Lee Adams, president of Lawn Doctor of NE San Antonio. "They're handing out green and they want to see green."

Spit and polish work habits are required when it comes to keeping appointments. "If you tell them you're going to be there, you'd better be there," says Adams.

Even though Adams and other LCOs have to run tighter ships than most other lawn care companies in the country, he does't mind. "If it wasn't for the tourists and the military in this town it would be like a ghost town."

(The five bases here make the U.S. Army and U.S. Air Force the largest public sector employers. Each airman spends a portion of his or her training here, and Fort Sam Houston is headquarters for the Fifth Army. Tourism and conventions rank among the top private sector employers.)

Texan love song

"Even though they're (military people) demanding...they're easy to work with if you spell everything out," according to Frank Suarez, president of GreenGrass, a full-service firm.

"They certainly expect a lot of service and they tend to be demanding, but they tend to pay their bills on time and they tend to be loyal to you," reports Robert W. Jenkins, president of ABC Pest Control, Inc.

The firm has a lawn care branch.

"In pest control we've faced fussy customers forever. We learned a long time ago to work on an appointment basis," he says.

When ABC entered the lawn care business "we were too dumb to know you didn't do it that way," Jenkins laughs. "We didn't know (making and keeping appointments) was a problem until we read it in your magazine. That's been a way of life for us. The fact that the customer wanted to be home when we treat the yard—we could handle that."

Another reason for the appointment system is that 99.9 percent of the households have fences and dogs, according to Adams.

"In San Antonio it seems like everyone has a dog," agrees Jenkins.

Exact appointments are not made when it comes to mowing and other landscaping chores, says Suarez, but the customers do know which half of which day the crew will be on the scene so canines can be put in the house.

If the crew is delayed by bad

NITRO-26 CRN®
LIQUID SLOW RELEASE
FERTILIZER

GROWTH PRODUCTS®
P.O. Box 1259
White Plains, NY 10602
(914) 428-1316
Circle No. 114 on Reader Inquiry Card

weather or other problems each customer is contacted by telephone.

Many times the customers will leave the fence key on a nearby nail on the appointed day for service. Sometimes the foremen will carry a key with them.

"They'll work something out," says Suarez. "Each customer is different and the foremen know each of the customers."

King of the wild frontier

GreenGrass has another challenge that requires special attention. While the Alamo is the most famous of San Antonio's missions, the Spanish Franciscan friars established four others—and Suarez has the contract to tend the grounds.

As a guy on the tour bus said, "Those ol' Franciscans knew what they were doing." Indeed they did, as these sites have survived since the early 1700s.

The structures were made basically of stone and mud, which means great care must be taken when it comes to landscaping.

Suarez has a special crew to work on the mission properties and the 200-year-old Espada Aqueduct and Dam. "We don't just send anybody there," he explains.

The crew contains two certified pesticide applicators and a certified "nursery man." This is to ensure that rare and irreplaceable plants are not accidently killed because they are mistaken for a weed.

"The other people are highly skilled with mowers

Jenkins: Make appointments!

and weedeaters," says Suarez. "We have to be very careful with weedeaters and mowers by the stucco walls."

The crew is urged to "just be very careful not to destroy the fencing and native plants."

James Hardin, owner of Alamo Plantscapes, has similar concerns. He has the contract to tend the Four Seasons Hotel grounds, which border the historic King William Historic District.

(The district was home to successful German merchants. At one time there were more Germans in San Antonio than any other ethnic group.)

Several structures dating to the 1800s are on the Four Seasons property, and any major changes in the landscape are closely regulated. Hardin is the proud winner of the 1987 *San Antonio Home and Gardens* Exterior Grounds Maintenance Award.

(The hotel also has on its property the largest anaqua tree in North America. It was moved 40 feet to its current site in 1979 by digging a trench and dragging it to its new home.)

Hardin has six employees, and two of them are at the Four Seasons full-time.

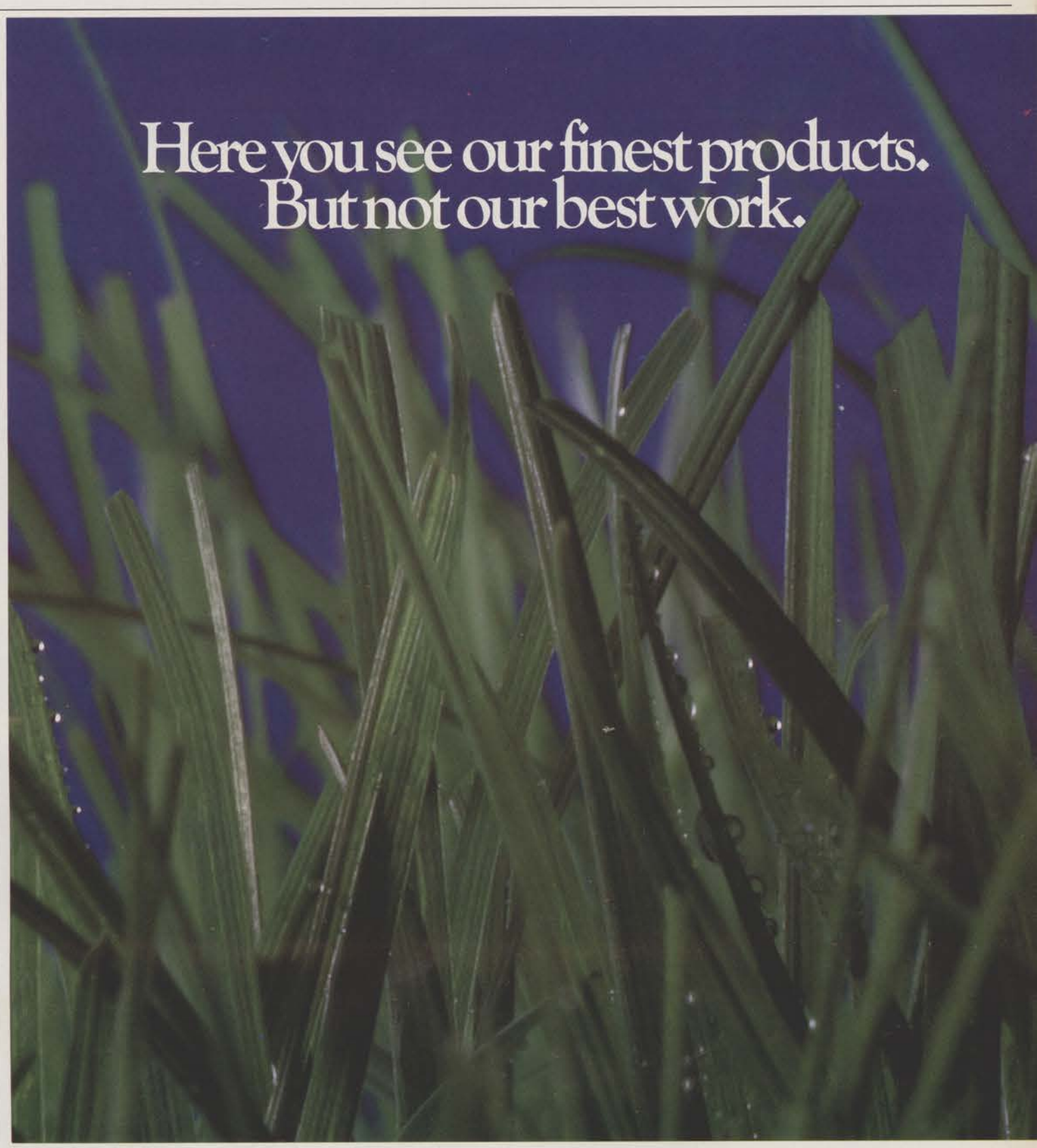
"I'm gearing my business toward this kind of location—large commercial accounts. I try to stay away from residential," he says, noting that he enjoys the precision of "perpetual care."

Like most of the grass in San Antonio, St. Augustine is the prevailing type at the Four Seasons. However, it also has a stand of Emerald Zoysiagrass. "It takes more care in that it should be verticut at least once a year to keep it from choking itself out."

A reel mower is used to cut it. "It should never be cut with a rotary (but) the reel just doesn't do the job on St. Augustine."

Asiatic jasmine is used in other areas. "The jasmine is the best groundcover for this hot weather. It loves the sun," Hardin says. **LCI**

Historic care: A member of the special GreenGrass crew skillfully trims at Mission San Juan Capistrano, which dates back to 1691.



Our finest products are lush, green, and vigorous. Our best work is knowing we can stand behind them.

Years of field experience. Continuous research. Nationwide testing. All these are hidden in every blade that sprouts from a Northrup King Medalist® Turfgrass Mixture.

Mixtures such as Athletic Pro® II, Medalist North, Premium Sod Blend, Landscape Pro, and the Medalist Winter Overseeding Products. And we never stop improving them.

For help with your toughest turf problems, contact us. Then we can show you more of our best work. Listening.

And answering with turfgrass mixtures that work.

MEDALIST TURF PRODUCTS

Northrup King Medalist Turf Products, P.O. Box 959, Minneapolis, MN 55440 ©1985 Northrup King Medalist TM

Circle No. 124 on Reader Inquiry Card

San Antonio
MARKETPLACE

Market looks rosey but oil slump hurts

By James E. Guyette
Managing Editor

Slumping oil prices have left much of the Texas economy high and dry, thus limiting the demand for lawn care and lawn management services.

However, in San Antonio the friendly people and pleasant environment gives "The Alamo City" a high quality of life.

"From a lawn care business standpoint it's a tough market, but it's a wonderful place to live," says Neel Brown, western zone coordinator for Lawn Doctor.

"It's very competitive," Brown reports as he describes the chemical lawn care industry in the nation's 10th largest city.

"Our building trade is down—period, but that's because the oil patches are down," reports Robert W. Jenkins, owner of ABC Pest Control, Inc. The firm also has a lawn care branch.

"You're lucky to see anything being built in San Antonio right now: It really took the bloom off the rose," he says.

San Antonio rose

"The economy in San Antonio is pretty stinky right now," Jenkins continues. But in the same breath he adds that his lawn care business has a 17 percent growth rate.

"We're the largest independent pest control firm in all of Texas," Jenkins notes. "We've got a built-in customer base" for gathering lawn care accounts.

He also credits a telemarketing program that began this year and a reputation for doing good work. "We pick up our customers on the second round when they've already tried a lawn care company. We're getting those who have tried someone else."

The minimum rate for a treatment by ABC is $26.50. It used to be more until national lawn care chains came in.

"We used to get $60 a treatment until the big boys came in and then we had to charge $19 a treatment," Jenkins recalls. "For a long time we had to sit back and figure out how to react to the big boys. We were sitting here flat-footed."

ABC jumped into the battle by buying larger spray trucks and implementing the previously mentioned phone sales program, which is handled by an outside telemarketing firm.

"There's heavy pricing pressure," agrees Lawn Doctor's Brown. Lawn Doctor of Northeast San Antonio charges $35 per treatment.

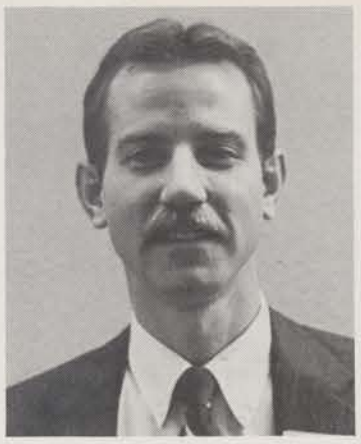
"There's probably some who are cheaper and there's probably some who are higher," points out Lee Adams, president of the local Lawn Doctor. The customers are "a lot more knowledgeable and results-oriented. They can afford to do that because of the competitiveness."

Adams says his secret for success is "being a friend to the customer" and "taking the time to do small things for our customers" such as moving backyard wading pools and performing other tasks.

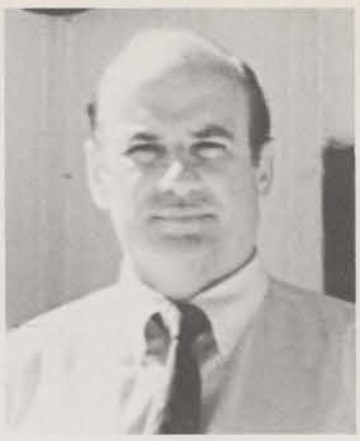
"Even though San Antonio is a big city it has a small town atmosphere," Adams comments, suggesting that the best way to do business here is to "make everyone feel that they are your only customer."

"Because of our economy there's been many Chapter 11s," says Frank Suarez, president of GreenGrass, one of San Antonio's largest full-service firms. It grossed $2 million last year.

Some of his small commercial and residential accounts have been reduced to paying "when they can. Sometimes we just have to walk away from them," he says sadly.



Brown: Competitive market.



Suarez: A fungus among us.

"Before we'd have properties we'd mow twice a week, now they're down to once a week."

Suarez attributes the slowdowns to "the oil situation and the domino effect." GreenGrass previously employed 65

people, but layoffs have reduced the staff to 51.

There is no doubt that Suarez, who has owned GreenGrass for 14 years, intends to be around for a while. "We're digging in for the long haul—1989. There are predictions that the price of oil will double by 1990," he explains, adding that his company is taking on additional mowing jobs. "We have started to do highway work right now."

East Texas blues

Some companies can't wait for the oil market to go up: It's too late. The number of advertisements in the Yellow Pages that now have disconnected phones indicates that a lot of firms have gone belly-up.

"One just called yesterday to ask me if I wanted to buy their equipment," reports Linda Altgelt, owner of Finishes, a full-service company.

"I think it will turn around simply because so many people went out of business," predicts A.J. Worthey, president of Landscape Gardeners.

Established firms have been undercut by refugees from the oil fields. "For a while everyone was starting a landscape company. People were coming from Houston because everything was so bad there."

Suarez knows all about it: "All these construction workers, they call themselves 'The Yard Man.' These station wagons with mowers hanging out of them are growing like fungus after a rain."

"They aren't in it for the long haul, many of them are supplementing their unemployment checks. It just keeps the average price down lower than we would like them to," says Worthey.

"He can work for 50 percent of what I can and think he's doing pretty good." Landscape Gardeners, founded by Worthey's father, has been in business 25 years.

Like Suarez, the younger Worthey is confident that the worst is over and that the future will be rosier. "I think things have bottomed-out now."

Lone star over Texas

Business operators interviewed for this story report that the new immigration law will have a limited impact because they don't hire illegal aliens.

Suarez is disappointed with the stricter law. "It was uncomfortable for us: Unfortunately we had a couple of fellows who could not provide the proper documentation. Due to the high unemployment in this area we were able to replace them."

Suarez adds that most of his employees speak both Spanish and English.

This can be an important consideration in the San Antonio marketplace because more than half of the city's residents are of Spanish descent. **LCI**

Augustine needed in hot climate

By James E. Guyette
Managing Editor

Hot summer days and lots of shady trees combine to make St. Augustine the most popular grass in San Antonio.

"It's the only grass that will take the shade in our climate," explains Frank Suarez, president of GreenGrass. "Northern grasses can't take our heat."

Bermuda and other grasses will grow in non-shady areas, but the wide-bladed St. Augustine doesn't look right when mixed with other types. "If you want an even texture you have to use St. Augustine," Suarez says.

However, ryegrass overseeding is beginning to pick up in popularity, particularly with commercial accounts. "People now are becoming conscious of keeping the lawn green during the winter," he notes.

"All our grass goes dormant here in the winter so overseeding is necessary if you want a green lawn in the wintertime—but not everybody does it," reports James Hardin, owner of Alamo Plantscapes.

A stand of Emerald Zoysiagrass is utilized in Hardin's award-winning landscape at the Four Seasons Hotel. The putting green-like area looks *nice*.

"It takes more care in that it should be verticut at least once a year to keep it from choking itself out."

A reel mower is used to cut it. "It should never be cut with a rotary (but) the reel just doesn't do the job on St. Augustine," says Hardin, explaining how two types of mowers are used on the job.

Pompas grass, banana trees and assorted ferns are used by the pool area. The pompas grass features large fluffy tops that seem to light up when bathed by the sun's rays.

Asiatic jasmine is used in other areas. "The jasmine is the best groundcover for this hot weather. It loves the sun," Hardin says.

Deep in the heart of Texas

San Antonio's location on the edge of the Gulf Coastal Plains (150 miles from Mexico) results in a modified subtropical climate.

There's an easier way to stop surface feeding insects.

It's called DURSBAN* turf insecticide. Not as satisfying, perhaps, as batting the bugs with a polo mallet—but a whole lot more effective.

Broad-spectrum control that lasts. DURSBAN insecticide is the most efficient way to control surface-feeding turf insects. It's labeled for use against a broad spectrum of pests that attack turf, ornamentals and shade trees. And its residual power keeps them under control for weeks. No wonder it's the favorite of leading LCOs across the country.

Part of the "hit list." DURSBAN is particularly effective against billbugs, chinchbugs, sod webworms, cutworms and armyworms, among others. And because it bonds tightly to turf as soon as it dries, DURSBAN stays where it's applied. Won't wash away with rain or sprinkling.

Packaging options. DURSBAN turf insecticide is available as an emulsifiable concentrate in 2.5 gal. plastic jugs and 55 gal. drums. If you prefer a wettable powder, you can get the same efficacy in DURSBAN 50W, now offered in water soluble packets, pre-measured for the simplest, quickest mixing ever.

Why horse around? Control surface feeding insects the easy, sure way. With DURSBAN turf insecticide. Talk to your distributor today.

Attention: Always read the label before use and carefully follow all label directions and precautions.

DURSBAN*
TURF INSECTICIDE

DOW*
*Trademark of The Dow Chemical Company

Circle No. 106 on Reader Inquiry Card

San Antonio
MARKETPLACE

Extremely high temperatures are rare, with the record being 107 degrees.

Mild weather prevails during much of the winter, with below-freezing temperatures on about only 20 days a year. Measurable snow occurs about once every three or four years, although 1985 did have a record snowfall of 13 inches in one day.

In 1985 the city received 41.43 inches of rain, about 12 inches more than the norm of 29. Much of the rain falls during May and September, and thunderstorms can result in large amounts of rain in short periods of time.

Skies are sunny to partly cloudy more than 60 percent of the time, and cloudy less than 40 percent of the time. The evening skies are bright with stars.

Average elevation is 107 feet above sea level. Soils are backland clay, silty loam and thin limestone.

"Our soils are really alkaline so we have to use a lot of iron and sulfur in our fertilizers," says Lee Adams, president of Lawn Doctor of Northeast San Antonio.

Several LCOs report that the biggest disease hassle is caused by a virus called St. Augustine decline.

"Then we have the grubs—they seem to really like St. Augustine," Suarez says.

"Then there's brown patch," Suarez adds. It's a big problem in the Alamo City.

"I've heard it said that the best way to view brown patch in the fall in San Antonio is to view it from an airplane," notes Neel Brown, western zone coordinator for Lawn Doctor.

Chinch bugs are another irritation, but fire ants are the most painful.

"You have to stay on top of the fire ants all the time," warns Hardin. "The entire south of Texas is taken over by fire ants."

On most properties "if you were playing a game of croquet you'd get stung. . .unless the yard is being treated," says Robert W. Jenkins, owner of ABC Pest Control, Inc. ABC has a lawn care branch, but Jenkins makes sure the PCOs exterminate the beasts instead of leaving it to the LCOs.

He maintains that specialized treatment is necessary, commenting on a lawn care company that tried unsuccessfully to offer fire ant removal: "They sure spent a lot of money learning that it doesn't work."

Most of the lawns that get professional care are irrigated. Built-in sprinklers are used by "everybody that can afford it," according to Clyda Haney, owner of Splash—an irrigation design firm. Her husband Nelson, an irrigation contractor, owns Sun Vally Services.

Xeriscaping—the conservation of water through creative landscaping—is beginning to catch on. "The customers appreciate it, I think, because when you water (normally) you lose so much of it down the street with the wind and everything," says Linda Altgelt, owner of Finishes, a full-service firm.

Some potential clients, though, need to be educated. "It's not really been that visible for that long, so a lot of people don't understand it," says Haney.

"They think it's *zero*scape instead of *xeri*scape," she laughs. "They think *desertscape*, like lava rocks and cactus."

Yellow rose of Texas

San Antonioans don't go for the desert look. They like lots of textures using lush plants, flowers and limestone. Long a big rock quarrying area, stonework has been a mainstay of local architecture since the 1600s. Even baseball field dugouts are constructed of stone!

Altgelt likes to use "river rocks" in her designs. "It's not that expensive, it fills up an area and it adds another dimension to the landscape." She's found that her customers like the "garden look," as opposed to a more formal appearance. LCI

Hardin: Keeps reel busy.

Ice machine is a real cool deal

SAN ANTONIO—When Frank Suarez conducts a tour of the facilities at GreenGrass, a full-service firm, he pauses to point out the ice machine.

"This is the best thing I ever invested in," says Suarez, the president.

Coolers are provided along with the free ice, thus allowing for more time being spent on the job.

"They do not stop at an ice house on the way there or on the way back," he explains.

Suarez subsidizes the coffee machine and also provides pop at cost. LCI

CoRoN®

A New Force In Lawn Care

CoRoN, a new slow release liquid fertilizer, is your new source of nitrogen for all your season long lawn care problems. CoRoN 28-0-0 concentrated formula is a controlled release nitrogen fertilizer with very low burn potential that promotes even turf growth over a longer period of time.

CoRoN is completely compatible with other available turf protection products, can be mixed with other fertilizer formulations, and is storage stable.

CoRoN's slow release formulation, developed by an industry recognized expert in slow release nitrogen, insures a continuous source of nitrogen, quick green-up and low atmospheric volatility.

CoRoN slow release nitrogen has been developed by a company with over 25 years of experience in the fertilizer industry. Nation wide manufacturing ensures easy and prompt delivery.

Join the "New Force" Today

Become part of a new and exciting team of CoRoN Dealers. Write or call for more information on this exciting new product.

CoRoN®

CONTROLLED RELEASE NITROGEN

Post Office Box 198 • Souderton, Pennsylvania • 18964 • Phone 1(800) 338-0836

PLCAA

CoRoN® is a Registered Trademark of The CoRoN Corporation

© 1987 CoRoN Corporation

Circle No. 123 on Reader Inquiry Card

Pro Show to address entire turf industry

LOUISVILLE, KY.—Pro Show 87, the Professional Landscape Contracting, Turf and Grounds Maintenance Expo, marks an effort to bring the entire turf care industry under one roof.

The trade show, Nov. 18-20 at the Dallas Convention Center, is sponsored by the Outdoor Power Equipment Institute.

Thirty-five educational seminars, starting Tuesday, Nov. 17 are planned as a preview to the show and will run through Nov. 20. Topics include equipment selection and use, soil compaction, soil cultivation, water conservation, plant growth regulators, turf disease management and topical versus subsurface irrigation.

Also on Tuesday, the American Association of Nurserymen will sponsor a computer fair. Owners and office managers will explain how they chose their computer software.

Show hours are Wednesday, Nov. 18, 9 a.m. to 3 p.m.; Thursday, Nov. 19, 9 a.m. to 5 p.m.; and Friday, Nov. 20, 9 a.m. to 5 p.m.

Exhibits will include horticultural chemicals and plant foods, irrigation equipment, landscape accessories and materials, maintenance supplies and services, and grounds management and installation equipment.

Participating associations include the American Association of Nurserymen, the Sports Turf Managers Association, the Engine Service Association, the Irrigation Association, the Associated Landscape Contractors of America and the National Landscape Association.

Registration for exhibits is free, as is admission to many of the semiars.

Following is a preliminary exhibitors' list.

For a complete list, floor diagram, booth assignments and program guide, consult the program brochure to be given at the show.

ALA MAGAZINE
AGRI-TEX, INC.
ALAMO GROUP
AMERICAN ASSOCIATION OF NURSERYMEN
AMERICAN EXCELSIOR CO.
AMERICAN HONDA
AMERICAN TRENCHER INC.
ARNOLD INDUSTRIES
ATWATER STRONG INC.
BCS MOSA INC.
BANTON, INC.
BILLY GOAT INDUSTRIES
BRIGGS & STRATTON
BROOKS PRODUCTS INC.
BUCKNER IRRIGATION EQUIPMENT
BUNTON COMPANY
CARLISLE TIRE & RUBBER CO.
CHEM-TAINER INDUSTRIES
CHRONAR CORPORATION
CLASSEN MANUFACTURING
COMMERCIAL LANDSCAPE SUPPLY
CONNALLY IMPLEMENT SUPPLY CO.
COUNTRY CLIPPER
CUB CADET CORPORATION
CUSHMAN/RYAN
DEERE & COMPANY
DEINES CORP.
DEW EZE MANUFACTURING, INC.
DIXON INDUSTRIES
DOSKOCIL INDUSTRIES INC.
E-Z RAKE, INCORPORATED
EARTHWAY PRODUCTS INC.
ENGINE SERVICE ASSOCIATION
ELANCO PRODUCTS COMPANY
EXCEL INDUSTRIES, INC.
EXMARK MANUFACTURING CO., INC.
GARDEN SUPPLY RETAILER
GIANT VAC MFG. INC.
GOVERNMENT PRODUCT NEWS
GRASSHOPPER CO.
GRAVELY INTERNATIONAL, INC.
GRAZER DIVISION, WILLSEY-D INC.
GREEN MACHINE/HMC
GROSOKE INTERNATIONAL
HP WHEELBURRO COMPANY
HAHN, INC.
HAKO WERKE
HARRY USA, INC.
HECKENDORN MANUFACTURING CO., INC.
HOWARD PRICE TURF EQUIPMENT
HUNTER INDUSTRIES
HYPONEX CORPORATION
IMPERIAL UNDERGROUND SPRINKLER CO.
INDUSTRIAL FILTERS
INDUSTRIAL SERVICES INTERNATIONAL
INGRAM KUT-MOR CO.
INTERLOCK INC.
IRRIGATION ASSOCIATION
JACOBSEN DIVISION OF TEXTRON INC.
KIFCO/AG-RAIN
KOHLER CO.
KUKER INDUSTRIES INC.
KUT-KWICK CORPORATION
LANDSCAPE & IRRIGATION MAGAZINE
LANDSCAPE MANAGEMENT & LAWN CARE INDUSTRY
LANDSCAPERS SUPPLY CORP., INC.
LAWN BREEZE INTERNATIONAL, INC.
LAWN SERVICING
LESCO, INC.
LITTLE WONDER, INC.
LOCKE MANUFACTURING
MAGIC CIRCLE CORP.
MARTIN WHEEL CO., INC.
MATHEWS COMPANY
MELROE COMPANY
MIDDLESWORTH ENGINEERING & MANUFACTURING
MOTOROLA INC.
NATIONAL EQUIPMENT-SERVICING DEALERS ASSOCIATION, INC.
NORTH AMERICAN GREEN
NORTH AMERICAN MICRON
OLSON IRRIGATION SYSTEMS
ONAN
PEPCO EXTRUDED PRODUCTS
POULAN/WEED EATER
POWER LAWNMOWER PARTS, INC.
PROMARK PRODUCTS INC.
PUBLIC WORKS MAGAZINE
RAIN MASTER IRRIGATION SYSTEMS
RANSOMES INC.
RINGER CORP.
ROBIN PRODUCTS GROUP
ROTO-HOE COMPANY
SALSCO INC.
SARLO POWER MOWERS INC.
SCAG POWER EQUIPMENT, INC.
SCHROER MANUFACTURING CO. (SHOR-LINE)
SCHWEISS INC.
SHINDAIWA INC.
SNAPPER POWER EQUIPMENT
SNYDER INDUSTRIES, INC.
SPORTS TURN MANAGERS ASSOCIATION
SPRAYING DEVICES INC.
STANMAR DISTRIBUTING CO.
STEINER CORP.
STIHL, INC.
STITSH DESIGNERS
SUFLEX TUBING AND SLEEVING PRODUCTS
SUNDSTRAND-SAUER
SUPERIOR CONTROLS CO., INC.
SWEEPSTER JENKINS EQUIPMENT CO.
TECUMSEH PRODUCTS CO.
TELEDYNE TOTAL POWER
TERRACARE PRODUCTS CO., INC.
THAYER INDUSTRIES, INC.
TORO COMPANY
TRAILMATE, INC.
WALKER MANUFACTURING CO.
WEATHER-MATIC
WHEEL HORSE PRODUCTS INC.
WOODS DIV. OF HESSTON CORP.
YAMAHA MOTOR CORP. USA
YARD & GARDER
YAZOO MANUFACTURING CO., INC.
ZABARTE TOOLS

Circle No. 131 on Reader Inquiry Card

"ONLY BETASAN® GETS SO DOWN TO EARTH."
Preemergence Herbicide

The unique Betasan® formula makes it more soluble than any other leading preemergent crabgrass control. Better at penetrating thatch. Quicker to get to the weed germinating zone. Where it attaches to the soil for longer-lasting protection.

BETASAN PENETRATES BETTER. ICI Americas Inc.

Last of a three-part series

Cash flow—crucial part of sale value

By Gary L. Conner

To get the right price for a lawn care or lawn management company, the seller must fully demonstrate to the buyer what cash will be available to operate the business.

Discovering cash flow is the focus of this, the last in a three-part series on how to sell a lawn care or lawn management firm.

In determining what earnings can be capitalized, you must help the buyer discover the "available cash" rather than let him focus on taxable income. Available cash for these purposes means the cash available for the benefit of the owner. So create a second income statement to show the buyer the cash available.

Cash available to the owner that looks like an expense on an income statement includes:

1) Salary and bonuses paid to the owner;

2) Pension or profit-sharing contributions made on behalf of the owner;

3) Depreciation;

4) One-time extraordinary expenses (e.g., attorney fees because of a recent lawsuit or incurred in preparing to sell the business, or a major repair item);

5) Car or travel expenses (which one assumes are legitimate business expenses) which may benefit the owner directly by reducing his or her out-of-pocket costs for car payments or travel costs. (Such costs might be discretionary and therefore can be avoided by the buyer);

6) Operational efficiencies ready to be realized. Have systems been instituted that will allow for fewer employees? Will the union contract be ineffective against the new owner?

7) Any item that need not be repeated in the future or which reflects a cost that the new owner could avoid—donations, memberships, or subscriptions. Have rental costs been eliminated by equipment

About the Author

Gary L. Conner is a partner in the San Francisco law firm of Shartsis, Friese & Ginsburg. He specializes in business and real estate transactions.

* U.S. PLANT PATENT NO. 3150

Adelphi* KENTUCKY BLUEGRASS

THE GREENER KENTUCKY BLUEGRASS™

For information contact:

J&L ADIKES, INC.
Jamaica, NY 11423

JACKLIN SEED CO.
Post Falls, ID 83854
Albany, OR 97321

NORTHRUP KING CO.
Minneapolis, MN 55413

VAUGHAN'S SEED CO.
Bound Brook, NJ 08805
Downers Grove, ILL 60515

ROTHWELL SEEDS LTD.
Lindsay, Ont. CAN K9V 4L9

Performance Plus

All★Star** PERENNIAL RYEGRASS

RESISTS CERTAIN INSECTS

For information contact:

J&L ADIKES, INC.
Jamaica, NY 11423

INTERNATIONAL SEEDS, INC.
Halsey, OR 97348

ROTHWELL SEEDS LTD.
Lindsay, Ont. CAN K9V 4L9

JACKLIN SEED CO.
Post Falls, ID 83854
Albany, OR 97321

VAUGHAN'S SEED CO.
Bound Brook, NJ 08805
Downers Grove, ILL 60515

** U.S.P.V.P. APPLIED FOR NO. 8300059

Circle No. 101 on Reader Inquiry Card

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

Statement required by the Act of October 23, 1962, Section 3685, Title 39, United States Code, showing the ownership, management and circulation of LCI, LAWN CARE INDUSTRY, Publication No. 01606042, published monthly at 1 East First Street, Duluth, St. Louis County, Minnesota 55802-2067, as filed September 15, 1987. There are 12 issues annually, the annual subscription cost is $25.00.

The address of the headquarters of the general business offices of the publisher is: 7500 Old Oak Boulevard, Cleveland, Ohio 44130.

The name and address of the Publisher is: Bob Earley, 7500 Old Oak Boulevard, Cleveland, Ohio 44130. The name and address of the Editor is: Elliot Maras, 7500 Old Oak Boulevard, Cleveland, Ohio 44130. The name and address of the Managing Editor is: James E. Guyette, 7500 Old Oak Boulevard, Cleveland, Ohio 44130.

Owner: Harcourt Brace Jovanovich, Inc., Orlando, FL 32887.

Names and addresses of individuals who are stockholders of the corporation which itself is a stockholder of the publishing corporation above when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock of the publishing corporation are: Walter J. Johnson, 19 Hewitt Avenue, Bronxville, NY 10708; Walter J. Johnson & Chemical Bank Ex u/w Thekla E. Johnson, 30 East 62nd Street, New York, NY 10021; Harcourt Brace Jovanovich, Inc. Employee Stock Ownership Plan, c/o Harcourt Brace Jovanovich, Inc., Orlando, FL 32887; First Boston, Inc., Park Avenue Plaza, New York, NY 10055; Cede & Co., c/o The Depository Trust Co., P.O. Box 20, Bowling Green Station, New York, NY 10274; Kray & Co., One Financial Place, 440 South LaSalle Street, Chicago, IL 60605; Joseph C. Sindelar, 794 Park Boulevard, Glen Ellyn, IL 60137.

The known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities are: None.

Average number of copies each issue during the preceeding 12 months, and actual number of copies of single issue published nearest to filing date, respectively, are as follows: Total number of copies printed (net press run): 15,626 - 15,548; paid and/or requested circulation (1) sales through dealers and carriers, street vendors and counter sales: None - None; (2) mail subscription (paid and/or requested) 13,686 - 13,690; total paid and/or requested circulation: 13,686 - 13,690; free distribution by mail, carrier or other means, samples, complimentary, and other free copies: 1,492 - 1,450; total distribution: 15,178 - 15,140; copies not distributed (1) office use, left over, unaccounted, spoiled after printing: 448 - 408; (2) return from news agents: None - None; total: 15,626 - 15,548.

I certify that the statements made by me above are correct and complete.

(Signed) Joe Bilderbach
Vice President/Circulation

If you are interested in obtaining any available or additional editorial research or reference materials published in this or previous issues, direct your inquiries to Kathleen Maciuszko at (216) 826-2839, ext 839.

purchases?

Other cash flow considerations

In reviewing cash flow, it is fair and important to look at the reasons why cash flow may not be reflected in the books but can still be fairly expected. If your business has been growing rapidly, it may be experiencing severe cash flow problems due to new hiring, equipment and space requirements.

I have one client right now who shows a $1 million income on an accrual basis for his most recent fiscal year, but only $130,000 on a cash basis because of recent expenses incurred during a high growth period. These kind of one-time expenses often reflect profit to be realized in the near future.

If the gross revenue continues and the expenses do not, then cash flow is good. Similarly, for a number of reasons related to scale, you may have a business that, although it has produced a sufficient income, has never realized the profit potential you believe is there.

Perhaps you do not have the capital necessary for the expansion needed to create the gross revenue that will in turn create the profit margin. Perhaps the market is too fractured or stratified in order for you to acquire the needed growth in revenues.

If, for such reasons, even after adjusting your income statement you can show little or no profit to a potential buyer, you obviously can't sell him your cash flow.

However, you may be able to sell him his. Since you have no net, sell the buyers your gross revenues. As I mentioned earlier, often a competitor or someone in the same or similar business outside your market area or market niche may be a good potential buyer.

For such a buyer, your gross revenues may be as good as net. The idea is that since the buyer will simply be able to add your gross revenues to his or hers, the buyer should realize substantial net revenues. The related marginal costs should be much less.

One question to ask yourself (and later the buyer) is what net revenue should be realized in this industry. Even a conservative number may produce more net revenue (cash flow) than you are currently producing. I recently had occasion to put this process to work.

Case in point

A client in the landscape business decided it was time to sell. The business was very well run and had some systems in place that were the envy of even much bigger competitors.

However, because of a series of nonrepeating events, including a costly lawsuit, the business had not shown much cash flow, except for a good salary for the owner for the past several years. The seller had in mind what his business was worth but could not justify it on an asset basis or by capitalizing cash flow.

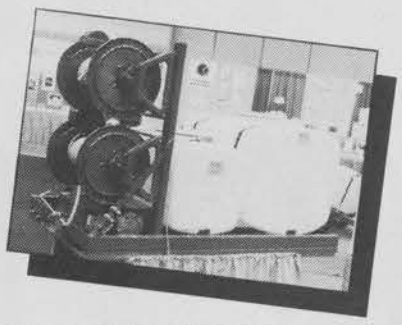
However, his most likely buyer was a similar but larger landscape company which knew of his systems and wanted an efficient entry into his market area.

We got the prospective

Finally—A Spray System That Won't Give You A Workout.

The ProTank Electric Spray System is the only true commercial electric sprayer on the market today. Instead of giving you the workout gas engines and other spray units do, it gives your customer's turf a workout and saves you valuable time. The ProTank Electric Spray System is equipped with a ½ horsepower motor capable of spraying 6 to 7 gallons a minute at up to 150 p.s.i. And all you lose are bulky pull-start engines, and the inconvenience of gas, oil, spark plugs, noise problems, and noxious fumes. The ProTank Electric Spray System will also take the crunch out of those expensive downtime repair bills. It's built by C&S Turf Care—leaders in rugged, reliable turf care equipment.

We can show you how you can spend more time building your client list, and less time building muscles. Call today for complete information on the ProTank Electric Spray System.



We offer a complete line of electric and gas spray equipment and can custom design a spray system to fit your specific needs.

(216) 453-0770
C&S Turf Care Equipment, Inc.
3425 Middlebranch Road, N.E.
Canton, Ohio 44705

Be sure to visit us at:
The PLCAA in San Antonio
The OTF in Columbus

Circle No. 103 on Reader Inquiry Card

CHAOS IN YOUR OFFICE THIS SPRING?

Practical Solutions has some good ideas that can help next spring be a little "greener." Our computerized Lawn Care System equips your company with a software management tool that will control costs and improve productivity. *See a complete demonstration at the PLCAA Trade Show in San Antonio, or the Ohio Turfgrass Conference in Columbus.

You've heard we're the best!

PRACTICAL SOLUTIONS, INC.
500 WEST WILSON BRIDGE ROAD
WORTHINGTON, OHIO 43085
614/436-9066

*Complete systems starting at $6950. (with software available for IBM, Burroughs and IBM compatibles)

Circle No. 132 on Reader Inquiry Card

Isn't it time we helped you?

National Arborist Association
174 Route 101
Bedford, NH 03102
(603) 472-2255

"ONLY BETASAN® WON'T DRY UP ON YOU."

Preemergence Herbicide

Unlike other preemergent crabgrass controls, Betasan® is essentially non-volatile. That means that during long dry spells, it keeps its punch while it stays on the surface. It's still available to stop crabgrass before it ever gets started.

BETASAN IS NON-VOLATILE. ICI Americas Inc.

Circle No. 117 on Reader Inquiry Card

buyer to acknowledge that a 5 percent return on gross was a very reasonable net income expectation in our industry, then came to price agreement based on the capitalization of a cash flow to be achieved by the buyer.

The price was several times the asset value of the business, and every bit of what the seller wanted.

Keep looking for ways to show the buyer value. Each buyer is different. The same concept could be applied to a prospective buyer who has sufficient cash to make the capital improvements or to do the marketing needed to take the next step up.

Even if you've never had any cash flow, you may have cash flow to sell.

Adding value

The fair market value of assets on a going concern basis plus cash flow reduces your business to a cash value. What additional matters may add value which are not reflected on the balance sheet? What can you do to add value or facilitate the sale?

Is your business easy to assume? Then emphasize those factors that make it easy. You may even want to assign additional dollar values to specialized software you have created, or costing data or controls.

If your business needs no improvements and you are presenting a turnkey operation, that should be worth something to the buyer (It at least makes you a more attractive target than someone else).

Are you willing to stay and train and provide other transitional services? You may want to consider staying for a short period without charge to facilitate the sale. Or you may want to assign an additional value to that service to enhance the price.

Are you willing to finance the sale? Seller financing increases your risk. However, it may increase value to a buyer. It certainly increases the number of potential buyers who may be able to afford the business. If you offer this service, be sure to do your own credit check and demand the buyer's financial statements.

You can make the deal look even more attractive with a lower than market interest rate. However, if you lend at a rate less than market, you are in essence simply reducing the purchase price. Make sure this kind of concession is well thought out.

This kind of term is more cosmetic than real. Furthermore, the IRS may end up recharacterizing some of the purported purchase price as disguised interest.

Does your organizational system simply make this business easier to run? Each of these items (and many more that you may think of) can add to the price and/or facilitate the sale. Experiment with listing them and assigning a value.

Total offering price

The reason cash flow is reduced by a manager's salary is because either the owner will pay it to another or will earn it through services.

It is also a rule of thumb to reduce the cash flow by a return on "hard" assets. They represent a direct investment which should produce its own return.

This purchase price can be further tested by some rules of thumb. Generally speaking, a buyer should be expecting a much better than market rate of return on the investment. After all, he or she could put

PART III

their funds in Treasury bills.

Depending on reasonable business stability and current rates of return on other "safe" investments, a 20 to 30 percent return will be expected.

Contingent purchase price

There may be a number of reasons why a buyer will be unwilling to pay what you may perceive to be a fair price.

Perhaps your earnings history, though good, is relatively short (i.e., less than five years). Perhaps there has been a recent strong upward trend and you want to sell based on the later years rather than the average. Perhaps you are basing cash flow on gross receipts that your buyer is unsure can be reduced to net income.

Don't be insulted—be creative. Your prospective buyer may be unwilling to pay now what you reasonably believe the business is worth. Let the price be adjustable.

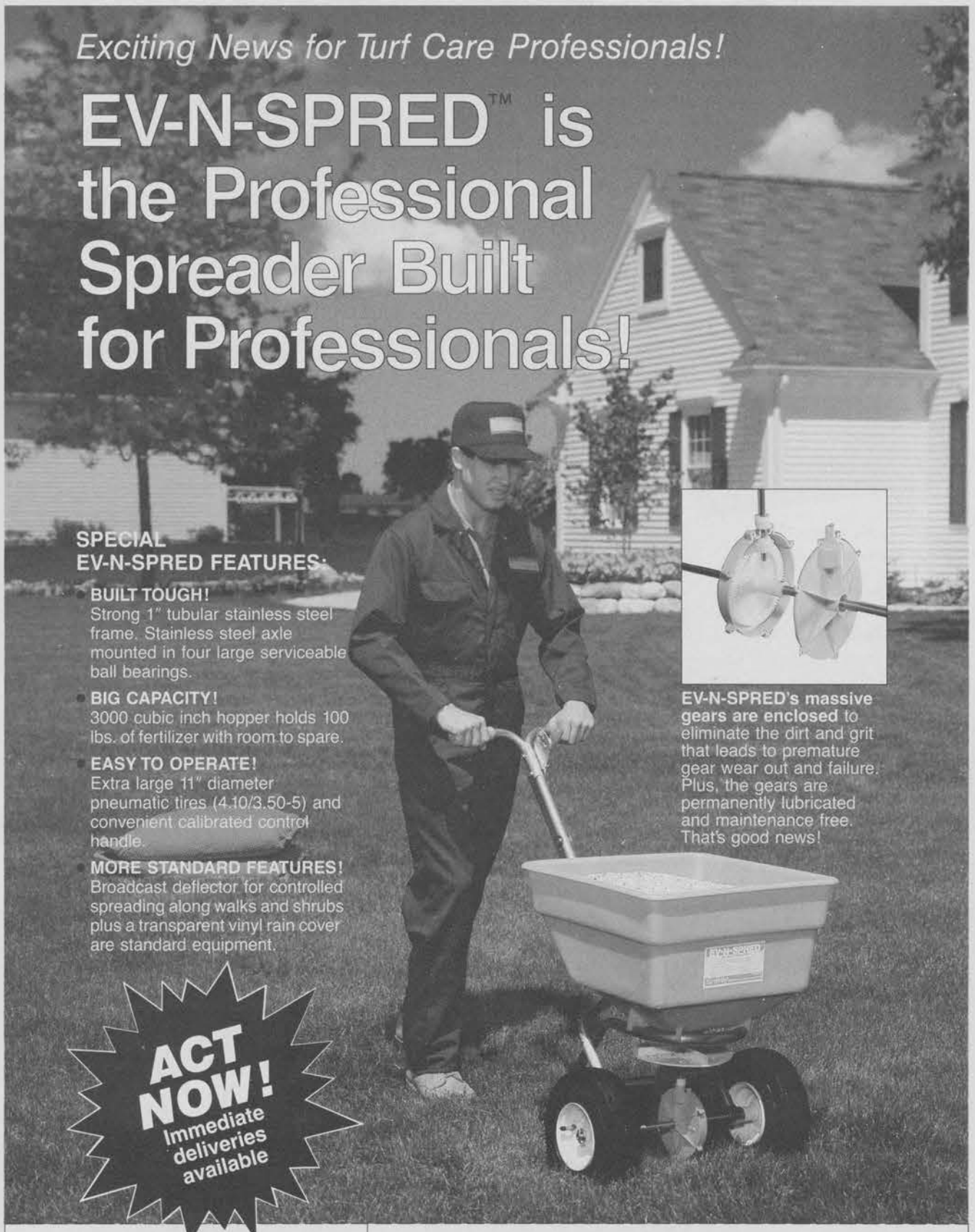
Perhaps the buyer can agree to pay now the value of all assets other than cash flow. Let the payment for cash flow depend on gross receipts actually realized, or gross receipts reduced by direct cost of sales.(You need some measure that is not subject to manipulation or your buyer's management ability.)

Of course, if the price is going to be contingent, you are taking some risk on the downside. You should try to both negotiate a floor below which the price cannot fall and avoid a ceiling above which it cannot rise.

That is, if you are taking an additional risk, you should have some opportunity to get a final price higher than your asking if things go better than you projected.

Selling the failing business

Despite your best efforts, the business may be failing.



EarthWay® PRODUCTS, INC.
Dept. No. 7LCEP11 PO Box 547
Bristol, IN 46507, PH 219-848-7491

Please rush me more information on the *new* EV-N-SPRED Commercial Quality Spreader.
Name_____
Company_____
Address_____
City_____ State_____ Zip_____
I am a ☐ Wholesale Distributor ☐ Dealer ☐ Turf Care Professional

Circle No. 107 on Reader Inquiry Card

The liabilities may exceed the assets. Perhaps it is the interest carry from the debt load which makes positive cash flow impossible. All is not lost.

If the business has accumulated a large debt, those creditors may be willing to settle those debts for a very large discount in return for cash now. A liquidation of assets will almost always bring much less than book value.

Something certain now may be much more attractive to the creditor than the risk, delay and expense that a creditor will experience in a liquidation.

Do a little projecting. What happens to net asset value and cash flow if the debts are eliminated? Arrange a deal contingent on debt relief.

Call a meeting of creditors. Explain to your creditors that they have a cholce. They can risk a liquidation or accept, for example, 40 cents on the dollar in settlement of their debt. Be prepared to show them some kind of compiled financial records. You then sell the "rehabilitated" business to the prospective buyer free of debt and may have a sizable return yourself.

There are a lot of more-or-less attractive workout structures for a failing business. The legal complications must be met head on. Do not give up hope.

In summary, do your homework, be creative, be flexible, be persevering and you will do your best.

If this kind of analysis, structure or negotiating is not your strong suit, find a professional who has these strengths. A few thousand dollars in fees may produce great dividends in selling price. You know now the elements of the process that will help you reap the fruit of your endeavors. Good luck. **LCI**

3PF

from Page 5

much," Wilkinson said. "I like the regulatory, environmental issues arena."

Wilkinson will work for 3PF as a consultant on a contract basis in Providence. He said he will probably seek other clients too.

The first order of business will be to solicit funds for 3PF, Wilkinson said.

The PLCAA and the National Arborists Association have been the primary supporters of 3PF.

Wilkinson said he will seek to better involve the golf course, nursery and structural pest control industries.

Wilkinson will no longer serve as general manager of Old Fox Lawn Care, Inc., Providence, where he's worked for the last seven years.

Replacing him is John Kenenski, who was formerly operations manager. **LCI**

NOV.

■ Professional Lawn Care Association of America 8th Annual Conference and Show, Nov. 12-15, San Antonio Convention Center, San Antonio, Texas. Contact: Doug Moody, PLCAA, 1225 Johnson Ferry Road, NE, Suite B-220, Marietta, Ga. 30068; (404) 977-5222.

■ Pro Show 87, Nov. 18-20, Dallas Convention Center, Dallas, Texas. Contact: Outdoor Power Equipment Institute, 101 N. Seventh St., Louisville, Ky. 40202; 800-654-0349. In Kentucky: 502-582-1672.

■ Charles Vander Kooi Landscape Estimating Workshop, Nov. 19-20, San Jose, Calif. (Also held in Denver, Dec. 7-8 and Boston, Dec. 10-11.) Contact: Charles Vander Kooi, P.O. Box 621414, Littleton, Colo. 80162; (303) 697-6467.

DEC.

■ 5th Annual Arbor Expo, Dec. 3-5, Pheasant Run Resort and Convention Center, St. Charles, Ill. Contact: Robert Felix, National Arborist Association, Inc., 174 Route 101, Bedford, N.H. 03102; (603) 472-2255.

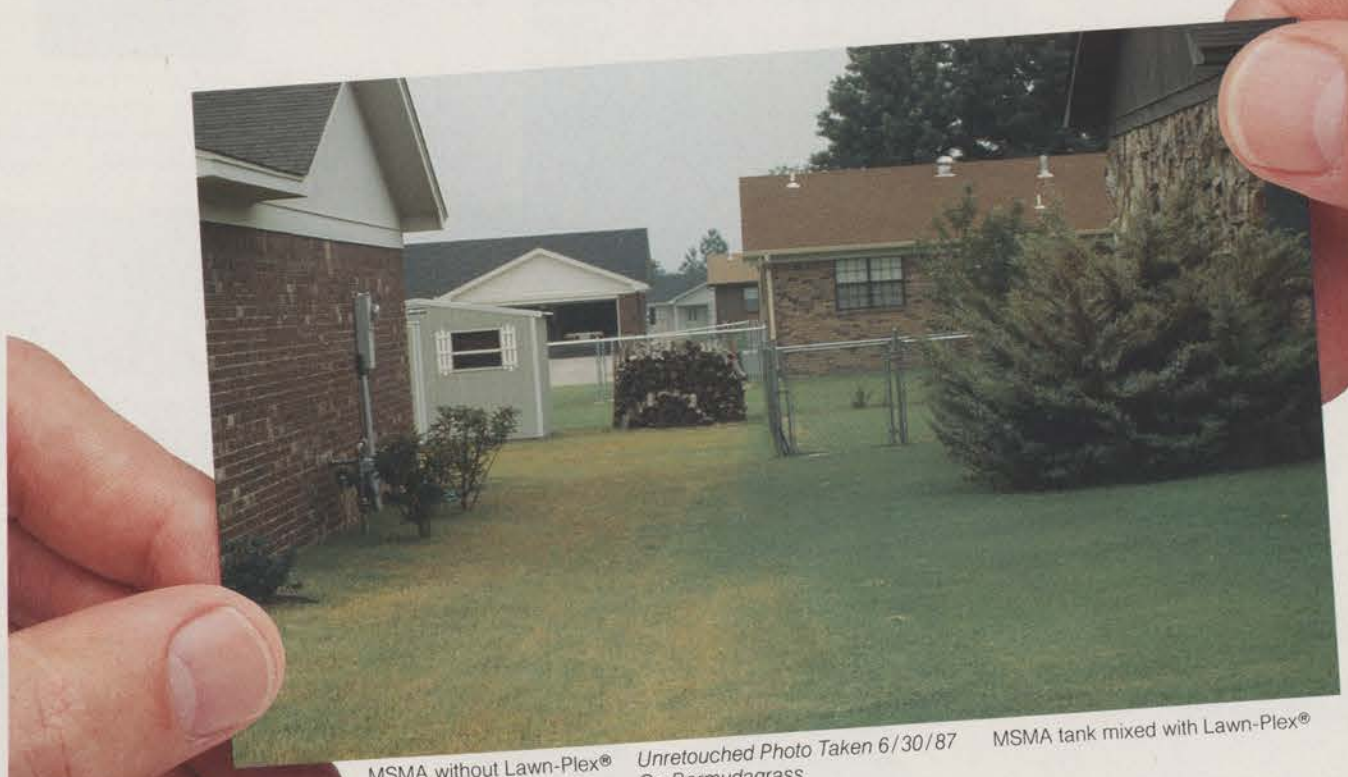
■ 18th Annual Georgia Turfgrass Conference, Dec. 7-9, Radisson Inn and Conference Center, Atlanta, Ga. Contact: Gil Landry, Jr., University of Georgia College of Agriculture, 2400 College Station Road, Athens, Ga. 30605; (404) 542-5350.

■ Ohio Turfgrass Conference and Show, Dec. 7-10, Ohio Center, Columbus, Ohio. Contact: John R. Street, Ohio State University, 2021 Coffey Road, Columbus, Ohio 43210-1086; (614) 292-2601.

■ Desert Turfgrass Conference, Dec. 16-18, Tropicana Hotel and Casino, Las Vegas, Nev. Contact: Bob Morris, Nevada Cooperative Extension Service, University of Nevada, 953 E. Sahara Ave., ST&P Bld., 207, Las Vegas, Nev. 89104; (702) 731-3130

"Hey Bill. Look at this photo RGB sent me... It shows what happened when Lawn-Plex® was applied with MSMA!"

"Wow, look at that green! I've heard great things about Lawn-Plex®. I'll use it in my next MSMA tank mix. No more brown lawns for me!"



MSMA without Lawn-Plex® — Unretouched Photo Taken 6/30/87 On Bermudagrass — MSMA tank mixed with Lawn-Plex®

Tired of getting burned? Lawn-Plex® fully chelated micronutrients provide a cost effective way to reduce stress and burn on lawns, fairways...all fine turfgrass. Similar results can be obtained by adding Agri-Plex® to ACCLAIM® tank mixes. Acclaim® is a registered trademark of Hoechst AG

Booth #306-308

San Antonio PLCAA/87

Unequaled Micronutrient Technology

RGB LABORATORIES INC.

Contact your local RGB Distributor or call:
1531 Charlotte St., Kansas City, MO 64108 (816) 474-3342

Circle No. 134 on Reader Inquiry Card

Checklist for a new computer system

As the lawn care industry becomes more sophisticated, information management becomes more important. In the past, large companies had computer systems that were too expensive for the smaller ones. But today we have a range of software products that are affordable for almost all LCOs.

There are several questions to ask before determining the right program and hardware:

1) What do you want the computer to do? The most common first use is accounts receivable and includes billing. Is this enough for you or should you get more?

2) Do you have a manual system that is usable on a computer? If your system is sound now, it will work on a computer. If it isn't, buying a computer isn't going to straighten things out.

3) What size computer system do you need? You want one that takes into account your growth but doesn't cost too much. You should generally project your customer count three to five years into the future to decide how large a computer you need.

4) What should it cost? The range, for a smaller company, will vary between $5,000 and $20,000. They can get much more expensive, but these numbers should get you a program you can use. Remember: you also need to buy hardware, the computer, printers and screens at the very least. These will add to the cost.

As you start to choose your programs, be aware of what support the computer company will provide the system.

Will they come to your site to teach you the system? Are they available by phone when you have questions? How can they help you use your new system to the fullest? Do they understand the industry?

The answers to these questions will help you measure the type of support you should expect to receive once you have purchased your new system.

One of the reasons people put off buying computer systems is "computer anxiety." People, particularly those over 21, may not have been introduced to computers in school.

To get over your worries about using a computer, talk to your children. They are using them in a variety of ways. This should indicate how simple these new machines and programs are to use.

By introducing the computer systems to your lawn care business, you will be taking a step forward in terms of control and efficiency. Computers don't work miracles, but can help you to be more profitable. **LCI**

McGary Wandtke
About the Authors
Rudd McGary and Ed Wandtke are senior partners with All-Green Management Associates, Columbus, Ohio.

POSTING

from Page 5

regulations will be finalized by Nov. 1.

"I think the law is reasonable at this point," said Ron Miller, president of Super Lawns, Inc., Bethesda, Md. "It hasn't made too much of a furor."

Miller is glad the law falls under the jurisdiction of the agriculture department as opposed to some other state agency. He also finds state regulation preferable to the local laws that have been proposed in the state.

The law does not apply to structural pest control operators or in-house grounds operations. Shriver said laws have been introduced requiring in-house grounds operations to post signs. **LCI**

ELANCO

from Page 5

Snapshot will be available in spray and granular formulations, Foulks said. Gallery will be in sprayable form and will be mixable with fertilizers.

The product is safe on non-target organisms such as earthworms, noted Bill Cobb, Ph.D., an Elanco researher.

Cobb further noted that 50 to 60 percent of the product stays in the soil four to six months after application.

Snapshot and Gallery are expected to carry EPA "caution" labels.

The announcements were made at Elanco's San Joaquin Valley research farm. **LCI**

Circle No. 128 on Reader Inquiry Card

Take Aim on Crabgrass and Goosegrass with

ACCLAIM!® 1EC Herbicide Brings High Technology Down to Earth!

Acclaim is the only truly selective postemergence herbicide that eliminates warm season grassy weeds in cool season turf grasses.

New Chemistry for Superior Performance!

Acclaim translocates from the site of contact to the heart of weed growth – cleanly decomposing the entire weed after 21 days. Acclaim has no residual soil effect, and avoids the turf injury problems associated with other postemergence herbicides.

Hoechst-Roussel Agri-Vet Company
Route 202-206 North • Somerville, New Jersey 08876

The name and logo HOECHST are registered trademarks of Hoechst AG.
The name and logo ROUSSEL are registered trademarks of Roussel Uclaf S.A.
SH8703017 Copyright 1987

San Antonio PLCAA/87 NOVEMBER 12-15, 1987

Circle the Reader Service numbers of those items of interest to you.

For rapid response, use the peel-off label from the front cover

NAME

TITLE

FIRM PLACE COVER LABEL HERE

ADDRESS PRINT PHONE NUMBER BELOW

CITY

STATE ZIP

PHONE ( )

101	116	131	146	161	176	191	206	221	236	251	266	281	296	311	326	341
102	117	132	147	162	177	192	207	222	237	252	267	282	297	312	327	342
103	118	133	148	163	178	193	208	223	238	253	268	283	298	313	328	343
104	119	134	149	164	179	194	209	224	239	254	269	284	299	314	329	344
105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345
106	121	136	151	166	181	196	211	226	241	256	271	286	301	316	331	346
107	122	137	152	167	182	197	212	227	242	257	272	287	302	317	332	347
108	123	138	153	168	183	198	213	228	243	258	273	288	303	318	333	348
109	124	139	154	169	184	199	214	229	244	259	274	289	304	319	334	349
110	125	140	155	170	185	200	215	230	245	260	275	290	305	320	335	350
111	126	141	156	171	186	201	216	231	246	261	276	291	306	321	336	351
112	127	142	157	172	187	202	217	232	247	262	277	292	307	322	337	352
113	128	143	158	173	188	203	218	233	248	263	278	293	308	323	338	353
114	129	144	159	174	189	204	219	234	249	264	279	294	309	324	339	354
115	130	145	160	175	190	205	220	235	250	265	280	295	310	325	340	355

LAWN CARE INDUSTRY

NOVEMBER 1987
This card void after Jan. 15, 1988

1. CHECK BELOW YOUR PRIMARY BUSINESS AT THIS LOCATION:

A. LAWN CARE COMPANY: Read each choice before answering.

10 ☐ Chemical lawn care company

20 ☐ Mowing/management lawn care company and/or landscape contractor

30 ☐ Both chemical lawn care company and mowing/management lawn care company and/or landscape contractor

B. SUPPLIER

50 ☐ Chemical and equipment dealer and/or distributor

C. OTHER (specify) _____

2. WHAT IS YOUR TITLE? _____

_____

I would like to receive (continue receiving) LAWN CARE INDUSTRY each month: Yes ☐ No ☐

Signature: _____ **Date** _____

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 665 DULUTH, MINNESOTA

POSTAGE WILL BE PAID BY ADDRESSEE

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

READER SERVICE DEPARTMENT

LAWN CARE INDUSTRY

POST OFFICE BOX 6080
DULUTH, MINNESOTA 55806-9780

GET MORE FACTS

Computer system has access by several users

Distribution Management Systems, Inc., Omaha, Neb., is introducing a multi-user version of its CLCl computer package.

CLCl is designed for LCOs. It offers total control over invoice processing, production, routing, billing, customer history and service, cash receipts and other aspects.

With the new program more than one user can access data at the same time. It works on an IBM PC or compatible computer. **LCI**

Circle No. 201 on service card.

Yamaha riding mower sitting on top of line

The Yamaha Outdoor Power Equipment Division is seeking dealers for its new top-of-the-line YT3600 Lawn Tractor.

The machine has a 12-hp Yamaha engine and a high efficiency drive train.

Other advantages listed by the company include a heavy-duty frame; electric power take-off; anti-scalping mower deck; wide floor platform for additional leg room; adjustable high-back seat; easy-to-reach, color-coded controls; large capacity rear-mounted fuel tank; pinion and sector steering; tight turning radius; extra wide turf tires; and a large muffler.

Interested dealers should contact Joe Stahl. **LCI**

Circle No. 202 on service card.

Middlesworth mower has zero-radius steering

Middlesworth Engineering and Manufacturing, Inc., Greentown, Ind., is introducing a steering wheel controlled zero-turning radius mower.

The optional system can be used in place of the standard lever controls on any of the Middlesworth C out-front mowers.

The steering wheel option uses a foot pedal to control the ground speed and direction.

The steering wheel increases or decreases the individual wheel speed to provide the steering. **LCI**

Circle No. 203 on service card.

Authors offer tips on managing service firm

"Managing Service for Success" brings together eight experts in the lawn care and pest control industries under the leadership of senior author John R. Beck. The book provides advice on how to operate a service firm successfully.

Areas covered include financing, hiring and firing, insurance, operations management, and marketing. The softcover book costs $25 (plus $3 postage/handling) and can be ordered from International Pest Management Consultants, Inc., 1631 W. Pasasdena, Phoenix, AZ 85019. **LCI**

Circle No. 204 on service card.

DIXIE CHOPPER

The World's Fastest Mower Outcuts All Others ...and You Can Take the Difference to the Bank

Professional lawn maintenance contractors depend upon speed, efficiency and reliability to make a profit, and Dixie Chopper will put more profit in your pocket faster than any other. Dixie Choppers are the most powerful, most efficient, productive and cost effective machines you can buy. They give you the combined benefits of speed, cutting quality, operator comfort, reliability and ease of service. These compact 6 ft. long units with 50" or 60" mowers are easier to transport, and the zero turning radius for operation around trees and tight corners can cut trimming time by up to 85%. Mowing speeds up to 6.5 mph with heavier, heat-treated blades that turn at over 200 mph tip speed, combined with 18, 20 and 24 H.P. motors that provide more torque, give unmatched cutting performance.

MAGIC CIRCLE CORP.
RR1 BOX 345, COATESVILLE, INDIANA 46121
In Indiana 1-800-231-2472 - Outside Indiana 1-800-233-7596

TAKE THE DIXIE CHALLENGE
Make us prove what we say. We'll give you a Free Demonstration (against any machine you wish). Call or write today. Free literature available.

Circle No. 121 on Reader Inquiry Card

First plastic sprayers now made in America

The world's first all-plastic backpack sprayers—Solo, Inc., models 425 and 475—are now being manufactured in the United States.

The sprayers were previously imported from Solo Kleinmotoren GmbH in Sindelfingen, West Germany. They are now made by Solo in Newport News, Va.

Both sprayer models feature a four gallon-tank and can be applied to a number of spraying applications. **LCI**

Circle No. 205 on service card.

New weedkiller is a blend of fatty acids

A new herbicide available from Safer, Inc., Wellesley, Mass. contains no synthetic chemicals.

Safer's TopGun is a blend of fatty acids—naturally occurring substances—that when sprayed on a weed disrupts cell membranes.

The fatty acids are biodegradable, allowing for replanting of grass or seedbeds within 48 hours after application. **LCI**

Circle No. 206

EC HERBICIDE

One Application Does It!

When applied thoroughly to non-drought-stressed grassy weeds from 3 leaves to 3 tillers in size, chances are once is all you'll need!

Apply to fine or tall fescue, perennial ryegrass, and Kentucky bluegrass.

Take Aim on crabgrass, goosegrass, barnyard grass, foxtail species, Panicum species and Johnson grass.

Reseeding and Mowing Convenience!

Fescues and ryegrass can be overseeded immediately following Acclaim application. Bluegrass can be overseeded after 21 days. And mowing just 24 hours after Acclaim application won't reduce efficacy.

Great Turf Deserves Acclaim!

As a professional, you take pride in having and maintaining lush green turf throughout the season. Acclaim can help you get the acclaim you deserve!

For information, contact your distributor or your local Hoechst-Roussel Agri-Vet Company representative.

Hoechst
Roussel

Circle No. 116 on Reader Inquiry Card

John Deere introduces quiet backpack blower

The latest blower being introduced by John Deere features quiet operation.

Model 5E registers 70 dB(A) at 50 feet, and it has a 43.9-cc engine.

The machine delivers 388 cubic feet per minute of air volume and 180 mph of air speed.

Other features include locking blower tubes, a heavy-duty air cleaner, electronic ignition and a 50.7-ounce fuel tank. It weighs 19.8 pounds. **LCI**

Circle No. 207 on service card.

Pickups become dumps with manual dumper kit

The Roll-n-tilt Manual Dumper will convert a pickup truck into a dump truck in minutes, according to McKee Enterprises, Glen Ellen, Calif.

The steel liner bed, which is mounted on a tracking system of sealed bearings, rolls half way out over the tailgate—where dumping action is controlled by a pair of shocks.

Available in four configurations, the Roll-n-tilt fits most pickups and utility beds. It also fits Diahatsu turf trucks.

Optional equipment includes a clamping system, tail gate, front screen and side boards. The clamping system enables the unit to be installed without drilling holes.

Fork lift pockets are standard, although the product is light enough to be lifted by hand, according to the company. Its load rating is one ton. **LCI**

Circle No. 208 on service card.

Skid sprayers can mix on Isuzu diesel truck

The three 200-gallon main tanks on the Trident skid sprayer, made by Green Pro

Services, Hempstead, N.Y., may be filled with specific mixes for custom programs.

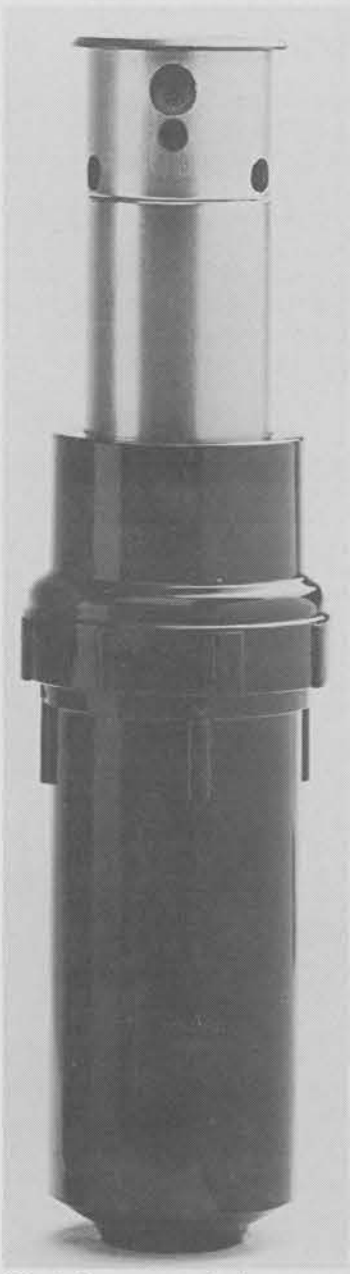
The side-mounted 50-gallon tank allows for special applications and curbside mixing.

The Trident is available on an Isuzu NPR Diesel, and leasing can be arranged.

It can be used on lawns, trees and shrubs. The Trident comes with an electronic flow meter, locking cabinets and truck signs.

According to the company, Trident can do the work of three sprayers on a single 12-foot flatbed. **LCI**

Circle No. 209 on service card.



Stainless steel sleeve for Toro rotary sprinkler

Toro's model 610 gear driven rotary sprinkler is now available with a stainless steel sleeve for added durability.

The 610, constructed of Cycolac and stainless steel, can be installed up to 1/2-inch below the grade and it has a surface diameter of 2 3/8 inches.

It also features a powerful stainless steel retraction spring that assures positive pop-down and resists prying up by vandals, according to Toro's Irrigation Division, Riverside, Calif.

The company says the gears, a combination of brass and plastic, provide smooth, quiet operation along with the strength to withstand high pressure surges.

The seal, designed to seal tight against a non-rotating surface, requires less flush to keep out debris and helps eliminate stick-up problems in virtually any soil condition. **LCI**

Circle No. 210 on service card.

Kioritz soil injector sticks it to insects

Insect pests that damage ornamental trees can in many instances be controlled all season long with the Kioritz soil injector, according to the Wilbur-Ellis Co., Kent, Wash.

Soil injections are made within the drip line, where Metasystox-R2 is absorbed by the root system and translocated throughout the tree.

The injector is easily calibrated, is sturdy and lightweight, and is built with special anticorrosive components, according to the company. **LCI**

Circle No. 211 on service card.

Snapper rear-tine tillers come in three models

Snapper Power Equipment, McDonough, Ga., makes three models of rear-tine tillers.

Available in 5- or 8-hp, they feature a 20-inch tilling width, forward and reverse tine rotation and two-way tines.

The machines have four forward speeds and one reverse speed.

The three-position side-to-side handlebar can be adjusted up and down.

The tillers feature options such as the hiller/furrower for creating seed beds or raised beds. The cultivator helps keep gardens weedless and there is a dozer blade for light snow.

Snapper tillers carry a two-year limited warranty. **LCI**

Circle No. 212 on service card.

Cordless new sprayer carts five gallons, hose

Broyhill's new Item 2330-5CS is a five-gallon, 12-volt cordless cart sprayer with a 110-volt AC charger, spray gun and 12 feet of hose.

Options include a solar panel swivel mounting bracket and an electric wire with alligator clips for remote battery operation.

The rechargeable/cordless units operate for two to three hours under constant use, according to the Dakota City, Neb., company. The centrifugal pump operates at 2 psi and draws less than 2 amps.

The sprayer will shoot a straight stream 25 to 30 feet. **LCI**

Circle No. 213 on service card.

Measure soil pH with Scotts portable meter

LCOs can now keep track of soil pH in the field by using the Model 100 Portable pH Meter by O.M. Scott and Sons, Marysville, Ohio.

The solid state unit is the most compact portable meter on the market, according to the company.

All controls are located on the front panel. The battery lasts for 300 hours. The device weighs less than 2 1/2 lbs. **LCI**

Circle No. 214 on service card.

LATE NEWS

Scotts offers new all-soluble preemergent combination

MARYSVILLE, OHIO—The O.M. Scott & Sons Co. has introduced an all-soluble, fertilizer-based pendimethalin product, 20-5-5 Fertilizer Plus Preemergent Weed Control.

The new formulation contains about four times more particles per square inch than typical blends, the company claims.

The product delivers 1.5 pounds of pendimethalin per acre at 0.8 pounds of nitrogen per 1,000 square feet, allowing users to apply higher rates of active ingredient in areas of heavy weed pressure without simultaneously applying too much nitrogen.

For more information about 20-5-5 Fertilizer Plus Pereemergent Weed Control, call Scotts toll free at 800-543-0006. In Ohio, 513-644-2900.

Dow to survey showgoers on customer retention

MIDLAND, MICH.—The Dow Chemical Co. plans to survey LCOs attending the Professional Lawn Care Association of America's annual conference and trade show at the San Antonio Convention Center about customer retention.

Survey forms will be available at Dow's exhibition booth.

"We want to learn what LCOs are doing to retain their customers and reduce callbacks and cancellations," says Rob Peterson, turf product marketing manager. "We plan to share that helpful information with the industry."

Survey participants will be eligible for a prize of five free cases of either Turflon II herbicide or Dursban 50W insecticide. The drawing will be held the last day of the show. **LCI**

CLASSIFIED

RATES: 75 cents per word (minimum charge, $25). Boldface words or words in all capital letters charged at $1 per word. Boxed or display ads charged at $70 per column inch,1X; $65, 3X; $60, 6X; $55, 12X (one inch minimum). Agency commissions will be given only when camera-ready art is provided by agency. For ads using blind box number, add $5 to total cost of ad. Send ad copy with payment to: Dawn Nilsen, LAWN CARE INDUSTRY, 1 East First St., Duluth, MN 55802. (218) 723-9200.
BOX NUMBER REPLIES Mail box number replies to: Lawn Care Industry, Classified Ad Department, 1 East First St., Duluth, MN 55802. Please include box number in address.

FOR SALE

LAWN SERVICE CO. FOR SALE

Central N.J. Well managed, long established, profitable 3,500 plus customers; Gross - $700,000 plus. Great expansion opportunity.

Write to LCI Box 182

PEST CONTROL AND TERMITE COMPANY, serving Maryland, Washington, D.C. and Virginia. Over 40 years old. Excellent reputation, highly organized and totally computerized. Gross revenues over $1 million and rising. Residential and commercial. Very Profitable. Interested parties must be financially able to make cash deal. Write J. Hushon, 1050 Connecticut Avenue, N.W., Washington, D.C. 20036-5339. 11/87

SEEDING EQUIPMENT. (2) Olathe Aero/Seeders. Very good condition. $1100 each. (1) Spike Seeder. Excellent condition. $750. Marty, 201-838-4620. 11/87

COMPUTER SOFTWARE—For the Lawn & Tree Care Industry. Software package contains, A/R and A/P modules all designed specifically for your needs. Specific reports include: Customer Master Lists, Sales Tax Reports, Service Information, Inventory, etc. Completely menu driven. Designed to eliminate those bookkeeping hours to minutes. Priced at $675.00. For more information calll or write: Lawns Beautiful, 625 Dianne Street, Seaford, NY 11783, 516-735-1831. 11/87

STAINLESS STEEL TANK BODY - 1200 gallon (4 pot), 4 reels, 2 - 12hp Kohler pony engines, 1 - 9200 Hypro, 1 - D-10 Hydro Cell with dry storage ready to mount on your truck. As is $8,500 or offer. Call Jim Doll (301) 840-5500. 11/87

STAINLESS STEEL TANK BODIES available. 4 pots each, 800 gallon and 1,000 gallon with dry storage to mount on your chassis. $2,000-$3,000 or offer. Call Jim Doll (301) 840-5500. 11/87

SPRAY TRUCK - 3 Chev. 1981 C-60D Chassis, auto trans, stainless steel tank body, 1200 gallon (4 pot) with 4 reels, 2 - 12 hp Kohler pony engines, 1 - 9200 Hypro, 1 - D10 Hydro Cell with dry storage capability and 2 Chev. 1983 C-70D, auto trans. with body and equipment stated above. As is $14,500 or offer. Call Jim Doll (301) 840-5500. 11/87

Stainless Steel Tank - 1982 Stainless Steel Tank and pump. Tank has 1000 and 200 gallon chambers. All plumbing included. Ready to be mounted on truck. Best offer. Call Steve at (312) 543-7998. 11/87

FOR SALE—Lawn service in Raleigh, North Carolina. Established business, excellent growth potential. Charlie Campbell, P.O. Box 33427, Raleigh, NC 27606. 919-834-8004. 11/87

SPRAY TRUCK: 1985 International. With 1000/250 gal. tanks, Meyers pump, 2 Hannay reels, each with 400 ft. hose, very well maintained, professionally serviced, excellent condition. Has bedrails, spreader brackets, hand-sprayer holders, new paint. Call 203-372-3511, Tony or Bob. 11/87

SPRAYERS: New Skid-mounted 300 Gallon Fiberglass Tanks. Electric Reel with 300' hose and gun. Unused - List $3,470.00. Will take Best Offers. (216)656-4200. 11/87

'84 Ford F-350 Diesel. Myers pump, electric reel, 300 hose, 600 gal. Tank—Great Northern equipped. Excellent condition. 100 gal. FMC skid mount sprayer, diaphram pump, electric reel, 200 ft. hose and guns. Briggs 5 H.P. engine. New. 219-722-5296. 11/87

FOR SALE

FOR SALE: 1984 to 1986 Chevrolet C-60's with V8, 5-Speed Two-speed or auto transmission. Most have four wheel disc brakes, tinted glass, AM radio, undercoated and rustproofed, with 1000 to 1200 gal. stainless or fiberglass tanks. 100 gal. saddle tank, dual reels, Hydro cell on Bean 2020 pump, PTO, material storage racks, Lesco spreader mounts, ready to service your customers, from $16800 to $21900. Call Jim; (314) 928-3728. 11/87

NATIONAL LAWN SPRAYING FRANCHISE. Excellent growth potential. Rochester, NY. 1-716-254-1980. 11/87

For Sale: Ryan Lawn Air III, $350. Lesco Aerator, $350, both, $650. Toro Fairway Unit, $1,000. Clean Lawn—814-255-2189. 11/87

SPRAY TRUCK: 1978 Ford F-700, excellent condition only 28,000 miles, all new tires. 1300 gallon jet agitation, tank and rear body of truck are complete of fiberglass. Call Terry Duffy, (713)741-3165. 11/87

1200 GALLON SPRAY TRUCK - 1984 Ford Diesel. Excellent condition - 47,000 miles - must sell. Jerry Amstutz 216-682-8866. 11/87

USED CHIPPERS, BUCKET TRUCKS, BOOM TRUCKS: Stump grinders, stake bodies, tree trucks and dumps. New Morbark and Woodchuck Chippers. Rayco stump grinders at discount prices. We also buy trucks and equipment. Opdyke, Inc., Hatfield, PA (Phila. area) 215-721-4444. 11/87

FOR SALE—Chemical Lawn Service Company, 16 years old, large clientele, fully computerized routing, billing, and follow-up. Trucks, holding tanks, spreaders, turnkey operation. Apply: P.O. Box 581, Owings Mills, MD 21117. 12/87

Lawn Spray Trucks for Sale: 1971 1200 gallon tank - $3200. 1974 1500 gallon tank - $4500. 1978 1200 gallon tank - $4500. Good condition ready to spray. $11,500 for all three trucks. 309-691-8257. 1/88

HANNAY HOSE REELS: New in the box. E1526's and E1530's - **$339.00**. We will ship and pay freight anywhere in the U.S.A. and Canada. Immediate delivery. Other size reels and parts available at fabulous savings! Call 313-543-2200, in Michigan. Outside Michigan - **1-800-843-LAWN.** TF

COMPUTER SOFTWARE AND COMPUTERS: Call to find out why we are the choice of people who compare computer systems for lawn and tree care. Real Green Computer, 2775 Haggerty Rd., Walled Lake, MI 48088, 313-669-1118; 800-247-3128 (outside Michigan). TF

CLOSEOUT SPECIAL! Save your back issues of LAWN CARE INDUSTRY and save money at the same time. We're closing out our line of permanent binders at the special low price of *two for only $7.50!* (This is a $7.00 savings over our regular price plus postage and handling.) Orders will be filled as long as our supply lasts - quantities are limited. Order your binders today from: Book Sales, HBJ PUBLICATIONS, One East First Street, Duluth, MN 55802. TF

HELP WANTED

NATIONWIDE LAWN CARE DISTRIBUTION COMPANY is looking for aggressive Sales Reps who are ready to go to work. Send resume and work history to: Sales Manager, P.O. Box 1467, Fremont, NE 68025. 11/87

I.P.M. SALES & SERVICE: A knowledgeable person interested in continuing a small but successful I.P.M. Program. The potential is unlimited for the right person. Please send complete resume listing experience and education in greens industry to Antietam Tree & Turf, 405 N. Burhans Blvd., Hagerstown, MD 21740, Attn: J. R. Finn 301-791-3500. All replies strictly confidential. 11/87

GROUNDS MAINTENANCE SUPERVISOR: 2,000 acre Planned Residential Community in Pinellas County Florida seeks experienced Grounds Maintenance Supervisor. Complete knowledge of southern turf, bed care, ornamentals, and irrigation planning, installation and maintenance. Horticulture degree desired. Successful candidate will have already demonstrated successful management skills in high visibility operation for minimum 3 years. Budget, personnel management essential. Send resume to LCI Box 187. 11/87

HELP WANTED

SALES. Tyler Enterprises, a Midwest fertilizer formulator is seeking an individual with sales experience in the green industry. Knowledge of fertilizers, chemicals, and grass seed is required. Send resume to Tyler Enterprises, P.O. Box 365, Elwood, IL 60421.

TREE & SHRUB MANAGER: Come to Virginia Beach. Position now open for experienced manager. Candidate should be a self motivated individual and be completely knowledgeable in all aspects of ornamental care. Prior management experience helpful. Salary, bonus, benefits and company vehicle. Send resume to Lustre Lawn Ltd., Box 9814, Norfolk, VA 23505. 11/87

Top Firm Needs Top Person: Quality conscious, Texas based landscape management firm has immediate opening for detail oriented Operations Manager and/or Business Manager. If you have outstanding professional, managerial 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: LCI Box 188. 11/87

LANDSCAPE MAINTENANCE SUPERVISOR: Expanding landscape management firm seeking individual with supervisory ability and a minimum of two years experience in maintenance and/or installation. An agricultural related background or degree would be beneficial. Send resume with salary requirements to: Maintain Inc., 16008 Boss Gaston, Richmond, TX 77469, Attn: Branch Manager. 11/87

MANAGEMENT

Ever-Green Lawns Corporation, a division of the multi-national Hawley Group, Ltd. interested in discussing management opportunities with lawn care professionals looking for a change. Please respond in writing only to:

Corporate Recruiting Manager
Ever-Green Lawns Corporation
1390 Charlestown Industrial Drive
St. Charles, MO 63303

ASSISTANT MANAGER - An exceptional opportunity for a self-starting, ambitious, hardworker with a young but prominent lawn and tree care company. The ideal candidate will have supervisory experience; also an aptitude for learning the technical aspects of lawn and tree care, and be willing to learn and grow with us. A personable manner and well developed communication skills a must. Experience in urban forestry, ornamental horticulture, turf management or sales a plus. Excellent salary and benefit package. Send resume to Spring-Green Lawn Care, P.O. Box 72105, Roselle, IL 60126. 11/87

ASSISTANT BRANCH MANAGER: Lawn Medic of the Triad is currently seeking an individual with good communication, service and leadership skills. Only experienced turf grass people need apply. Reports directly to Branch Manager. Please send resume to Lawn Medic of the Triad, P.O. Box 769, Kernersville, NC 27285. 11/87

Lawn Spray Technician — With experience in commercial lawn spray and chemical application for one of the largest Landscape Contractors in Florida. Must have golf course and/or tractor experience. Position offers excellent growth potential, good salary and full company benefits. Call Oyler Bros. Company, Orlando 305-295-2921 Sharon. 11/87

Landscape Maintenance Crew Foreman - Commercial & Residential Contractor seeks knowledgeable and hard working experienced crew leaders. Excellent career opportunity for responsible, ambitious and self-motivated individuals Horticultural Degree and mechanical ability a plus. Excellent salary, benefits. Send resume to Sharon Adams, Oyler Bros. Company, 1930 Silver Star Rd., Orlando, FL 32804. 1-305-295-2921. 12/87

CAREER OPPORTUNITIES: ChemLawn is now accepting applications for the positions of Lawn Specialist in our expanding Florida markets. Join the Nation's Leader in Lawn Care. Send resume to LCI Box 181. TF

San Antonio
PLCAA/87
NOVEMBER 12-15, 1987

WANTED

Thinking of Selling Your Business? Let's talk about your future opportunities. Contact Douglas Baker, President, Leisure Lawn Inc., P.O. Box 73, Dayton, OH 45449. 11/87

Ever-Green Lawns, a division of the Hawley Group Ltd., an international service company doing in excess of a billion dollars in sales, wants to acquire lawn care companies of all sizes. All inquiries strictly confidential. Please contact:

Steve Hirshmugl
Director of Finance
and Acquisitions
Ever-Green Lawns Corp.
1390 Charlestown Industrial Drive
St. Charles, MO 63303
314-946-9700

QUALITY LAWN SERVICE FIRMS SOUGHT

Hydro Lawn, Inc., desires to acquire quality lawn service firms in the Northeast and Mid-Atlantic regions. We are very flexible as to form and terms. We will encourage current owner continuing equity positions and also entertain 100% buy outs. Strongly desire a continuing relationship with current management (not necessarily owner) and staff that includes an excellent program of incentives. Seeking firms with minimum annual sales of $3-$500,000 and up. We will engage discussion in a highly professional, no-nonsense manner. If a mutually beneficial transaction can occur, we will move quickly and decisively.

Hydro Lawn offers a 16 year history of lawn service industry leadership and a strong financial position from which we can direct your current and future wealth building opportunities. Reply in total confidence. Phone or write:

JERRY FAULRING, PRESIDENT
HYDRO LAWN, INC.
7905 AIRPARK ROAD
GAITHERSBURG, MD 20879
(301) 840-5500

WANTED TO ACQUIRE

Lawn care companies in eastern half of U.S. being sought by national corporation. Complete buy out or stay and grow with us. If interested, please call me directly:

John Hayes
Executive Vice-President
TRU GREEN CORPORATION
(404) 442-8700

STRICT CONFIDENTIALITY MAINTAINED

TRU GREEN®

SERVICES

CONSULTING SERVICES: Grow your business with someone else's experiences. **PROGRAM DEVELOPMENT, TRAINING NEEDS, OPERATION START UP OR EXPANSION AND LEGISLATIVE PROBLEMS.** Over 10 years experience with the industries' leaders. Please contact: Philip E. Catron, M.S., 26548 Haney Avenue, Damascus, MD 20872. 301-253-5652. 11/87

BUSINESS OPPORTUNITIES

Tree Service for sale - well established good clientele, $250K + annual gross income (40% spraying - 60% tree work). Located prime North Shore Community "Goldcoast" - Western Suffolk LI., NY. Price $60,000 plus any trucks and equipment. Terms available. Respond (516) 696-1021. 12/87

Established granular chemical lawn care business with excellent reputation in affluent Bergen County, NJ, which offers a variety of programs including aerating and seeding. Average annual contract $330. Owner looking to retire but will train. Terms available. Write to LCI Box 189. 12/87

Tired of working 12 hours a day for someone else's bottom line? Be your own boss! Earn your own profits! For as little as $6800 down you can join the Lawn Care professionals at Service Master. Call (312)964-1300 ext. 2242 to receive information on how to get started. 12/87

Come Grow With Us

LAWN CARE DATA MANAGEMENT WITH THE PROFESSIONAL TOUCH

comp-u-green

513-733-0969

3718 Antioch Ct.
Cincinnati, OH 45241

Circle No. 104 on Reader Inquiry Card

ChemLawn names vice presidents

COLUMBUS, OHIO—ChemLawn Service Corp. recently elected three vice presidents: Dave Mulbarger, Bill McKinney and Rick Arquilla.

Mulbarger was elected vice president/national sales manager and is responsible for commercial, bid and residential sales as well as the lawn care and tree and shrub care service lines.

He was previously vice president of sales for the Eastern Great Lakes region for Ecolab, Inc., ChemLawn's parent company.

McKinney was elected vice president of purchasing and real estate and is in charge of all raw material, supply and capital asset purchasing, the fleet, parts distribution and real estate activities.

He was previously director of purchasing and administrative services for Ecolab, Inc.

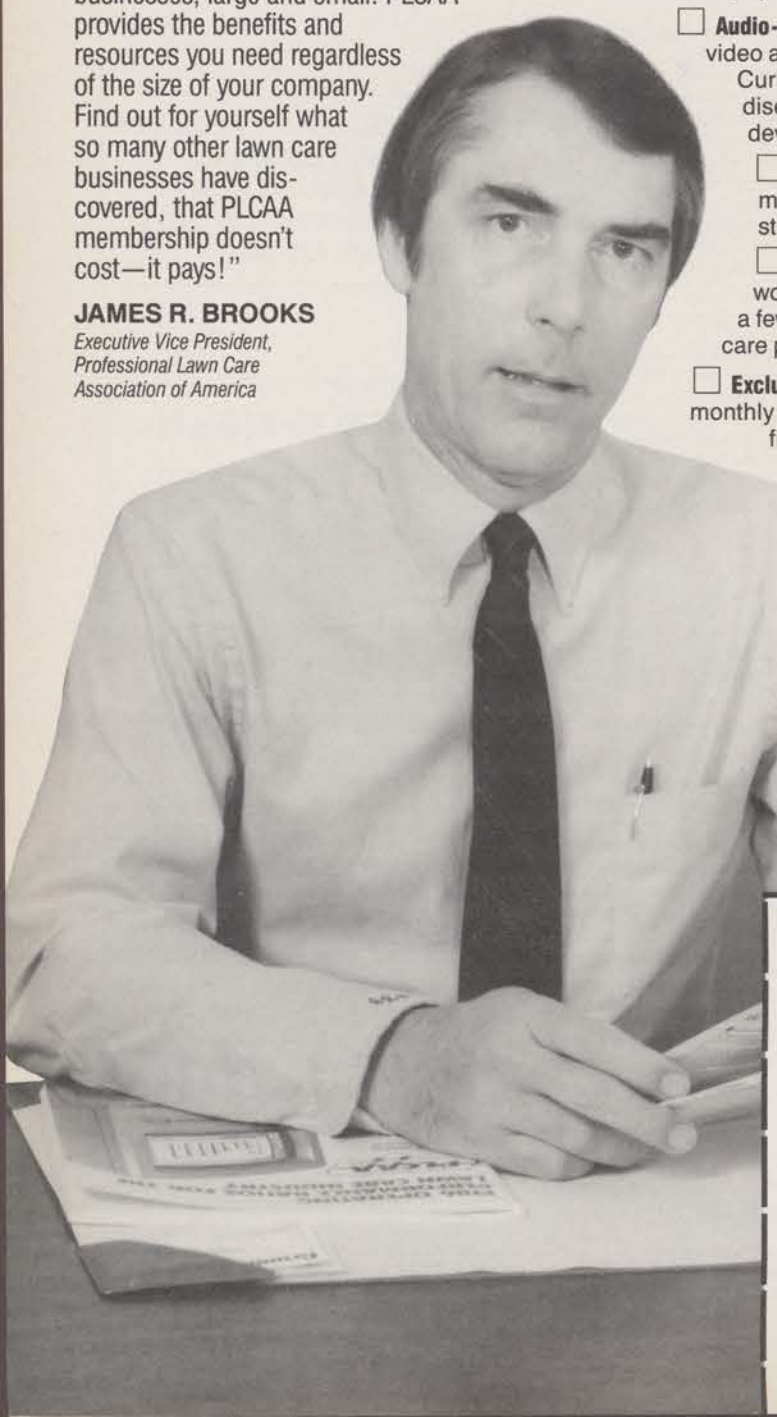
Arquilla was promoted to vice president of the commercial services division. Arquilla, who has been with ChemLawn since 1983, was previously general manager of the commercial services division. **LCI**

"Now is not the time to go it alone."

"If you're like so many other lawn care companies, you have more than crabgrass to contend with. Sure, your sales are up—but so are your problems. Cash flow worries. The need for more employee training. The threat of growing regulation. The exploding costs of insurance and health benefits. These are only a few of the realities of running a lawn care business in the '80s."

That's where the Professional Lawn Care Association of America can help. PLCAA is the ProSource for over 1,000 businesses, large and small. PLCAA provides the benefits and resources you need regardless of the size of your company. Find out for yourself what so many other lawn care businesses have discovered, that PLCAA membership doesn't cost—it pays!"

JAMES R. BROOKS
Executive Vice President, Professional Lawn Care Association of America



Check the PLCAA benefits...

☐ **Technical Resource Manual**—Our 110-page resource guide for running a cost-effective, professional lawn care service.

☐ **PLCAA Safety Manual**—A step-by-step guide for training applicators and technicians.

☐ **Management Monograph Publications**—Booklets that cover critical business subjects like getting a loan, developing a marketing plan, hiring and firing practices, and more.

☐ **Group insurance and health care**—PLCAA offers health and life insurance plans for companies with as few as two employees—and at attractive group rates.

☐ **Collection services**—A results-producing collection service to help members with slow-paying accounts.

☐ **Audio-visual training programs**—Comprehensive, inexpensive video and slide programs for in-house training of your employees. Current subjects include insect and weed identification, turf diseases, and pesticide handling, with additional topics under development.

☐ **Regional seminars**—Each year PLCAA brings the latest in management and technical training, plus equipment demonstrations, direct to a location near you.

☐ **Annual Conference and Show**—Exhibits, educational sessions, workshops, and an outdoor equipment demonstration are just a few features of PLCAA's popular annual gathering of lawn care professionals.

☐ **Exclusive publications**—Stay current with *Turf Talks*, PLCAA's bimonthly newsletter. Members also keep in touch with tax, labor, financial and regulatory information through our periodicals, the *Legal Update* and *Environmental Update* bulletins.

And that's only part of the advantages PLCAA members enjoy. If you want to know more, just drop the coupon below in the mail, or give us a call at toll-free **1-800-458-3466.**

Symbol of Good Practice
PLCAA
PROFESSIONAL LAWN CARE ASSOCIATION OF AMERICA

Circle No. 130 on Reader Inquiry Card

I'm interested...tell me more!

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE (____) _____

FILL OUT AND MAIL TO: LCI

James R. Brooks
Professional Lawn Care Association of America
1225 Johnson Ferry Rd., NE, Suite B 220,
Marietta, GA 30068

ADVERTISERS INDEX

NO.	ADVERTISER	PAGE
101	Adelphi Kentucky/All*Star Ryegrass	38
102	Arcadian Corporation	12-3
103	C & S Industries	39
	Ciba-Geigy Corp	2-3
104	Comp-U-Green	48
105	Distribution Mgmt System, Inc	16
106	Dow Agricultural	34-5
310	Dow Agricultural	50-1
107	Earthway Products Inc	40
108	Elanco (North-Team)	7
109	Elanco (South-Surflan)	7
111	Generated Systems, Inc	22
112	Graham Lawn Equipment	16
115	Grasshopper Co	8
113	Green Pro Services	6
114	Growth Products	32
116	Hoechst Rousell	42, 45
117	ICI Americas (formerly Stauffer)	37, 39
118	Lebanon Chemical	17
119	LESCO	52
120	Lofts Seed Co	4
121	Magic Circle Corp	45
122	Milliken Chemical	11
123	Moyer and Son	36
124	Northrup King Co	33
126	OMC Cushman Ryan	23-30
125	O M Scott & Sons	18-9
127	Ohio Turfgrass (Reg)	31
128	Oregon Tall Fescue Commission	42
129	P C Supply Co	16
130	PLCAA	48
131	Perma-Green Supreme	37
132	Practical Solutions	39
133	Precision Labs	22
134	R G B Labs	41
135	Rhone-Poulenc Ag Co	49
136	Riverdale Chemical	20-1
137	Snapper Power Equip	22
138	Spring Valley Turf	16
139	Tyler Enterprises (Reg)	31
140	U A P	14-5
141	Walker Mfg Co	6
142	Westheffer Co	22
143	Professional Tree & Turf (formerly Denver Leasing)	4 A-H
NEW PRODUCTS		
201	Distribution Mgmt Systems/CLCI	45
202	Yamaha/lawn tractor	45
203	Middlesworth Eng & Mfg/C-mowers	45
204	Int'l Pest Mgmt Consultants/book	45
205	Solo/sprayer	45
206	Safer Inc/herbicide	45
207	John Deere/blower	46
208	McKee Enterprises/manual dumper	46
209	Green Pro/skid sprayer	46
210	Toro/rotary sprinkler	46
211	Wilbur-Ellis Co/soil injector	46
212	Snapper Power/tillers	46
213	Broyhill/sprayer	46
214	O M Scott & Sons/meter	46

Convention time—adjust the body clock

JAMES E. GUYETTE
MANAGING EDITOR

November is here already—and you know what that means. Yep, it's when the convention season shifts into high gear.

The PLCAA show. The Pro Show. The Green Team Show. And lots of regional shows.

For many of you, this means flying to some distant city. Here are some helpful hints for convention-going.

First, avoid reading your horoscope in the newspaper before you leave. Seeing statements like "keep your feet on the ground" or "stay close to home" can ruin a trip faster than you can say "Geronimo."

Don't let it throw you when you see people reading Bibles aboard the planes. Try not to think, "I wonder what they know about this flight that I don't."

I always try to carry on my luggage. This habit started when I was flying from San Francisco to Duluth, Minn. My bags were a day late in finding me, and I never did learn where those rascals had been. (If only luggage could talk!)

Lots of people use garment bags, but no matter what you do your clothes will have wrinkles. Therefore, I prefer a soft duffel bag-like thing that can be shoved and punched into the overhead compartments.

When packing, take the batteries out of your travel clock. This avoids unpleasant situations at the gate involving ticking luggage.

If you run into somebody famous, try to avoid acting like a meatball. See if you can follow the lead of Jerry Roche, editor of LANDSCAPE MANAGEMENT. He was cool as ice when he met the esteemed actress Barbara Eden.

"I'd ask for your autograph but I'm afraid we'd attract a crowd," Jerry said, protecting the lady's valued privacy.

I probably would have said something like, "Wow, do you realize who you are? How did you used to fit in that little bottle? Too bad you got canceled."

I've never met anybody famous in an airport. But once while hustling to catch a plane in Chicago I heard someone behind me doing a horrible Jimmy Stewart imitation as I was buying a postcard for a friend.

After making my purchase I turned around to find myself up close and personal with a guy who looked exactly like Jimmy Stewart! I was too stunned to say anything. And besides, I thought he was one of those stars who had already died.

Good thing I didn't say something like, "Gee Mr. Stewart, I thought you were dead. What's Johnny Carson really like?"

There are other precautions to take, too. You folks on the West Coast will want to make sure convention programs in the East start at a reasonable hour. An 8 a.m. EST meeting starts at 5 a.m. PST. Whoa! That's starting the day awfully early.

I've been told that when going east through time zones one should expect to need one day to adjust for each hour lost—or is it gained?

Traveling west through time zones has its hazards, too. When I first started attending seminars I couldn't understand why I'd get desparately hungry at 11 a.m.

It didn't take too long to figure out that while it was only 11 a.m. Central Time, it was noon Real Time (Eastern). The solution to such a predicament is to tuck a bag of airline peanuts into your pocket. It does the trick.

Then there's the question of how to properly watch your watch. I've found that its best to keep it on Real Time when heading westward.

When you're getting hungry at a meeting, you can look at your watch and say to yourself, "It's noon—time to eat—but we don't eat here until one o'clock. I can hold out until then. . .maybe."

However, on trips to the west coast (particularly those lasting longer than three days), you'll find it better to switch to local time.

It can drive you crazy subtracting (or is it adding?) three hours from (or is it to?) the clock every time somebody asks you for the time.

James E. Guyette

CHIPCO 26019 fungicide stops more lawn diseases… for more days…for more satisfied customers.

In today's lawn care industry, you've got two ways to make more profit. Go out and get more customers. Or get more business from the customers you already have. CHIPCO 26019 fungicide helps you do both.

CHIPCO 26019 fungicide controls most major lawn diseases, including Helminthosporium Leaf Spot and Melting Out, Fusarium Blight, Brown Patch, Dollar Spot and Red Thread. And unlike some other fungicides, CHIPCO 26019 fungicide stops these deadly diseases **before** they get started.

Better yet, CHIPCO 26019 fungicide provides the month-long protection it takes to get you from one scheduled round to the next. That cuts down on customer complaints and costly call-backs.

You'll also like the fact that CHIPCO 26019 fungicide now comes in a convenient flowable formulation as well as wettable powder. Plus, CHIPCO 26019 fungicide is low in toxicity, for added protection to applicators and homeowners.

So don't stop with just feeding and weeding your customers' lawns. Discover how better disease control can add up to bigger profits with CHIPCO 26019 fungicide.

Rhone-Poulenc Ag Company, CHIPCO Department, P.O. Box 12014, Research Triangle Park, NC 27709.

CHIPCO® 26019
FUNGICIDE

RHÔNE-POULENC AG COMPANY

Please read label carefully and use only as directed.
CHIPCO® is a registered trademark of Rhone-Poulenc.

Circle No. 135 on Reader Inquiry Card

UNITED
Van Lines
North Star
Van & Storage
Milwaukee, WI
MATLOCK
MATLOCK
FRAGILE
MELCHER

Some cancellations even TURFLON can't prevent.

When your customers move away from you, the best herbicide in the world can't make them stay. But when more than 24% of LCO customer losses are due to poor weed control—as cited in one recent study—then it's time to take a look at your herbicide.

TURFLON*: Superior control. For outstanding control of a wide spectrum of broadleaf weeds, there's nothing like TURFLON herbicide. It even gets the stubborn Hard to Control weeds—oxalis, ground ivy, wild violet, spurge and the like—that other herbicides often miss. So your customers stay happy...and stay with you. And you have fewer complaints, fewer costly callbacks, fewer cancellations.

New herbicide chemistry. The active ingredient in TURFLON, triclopyr, is the first new herbicide chemistry to come along in years. It stays where it's sprayed, won't migrate through soil to harm ornamentals and other off-target species. It's safe to established cool-season turf, and has a proven safety record for humans and animals.

Proven in use. TURFLON herbicide performance has been thoroughly proven...in years of testing and in day-to-day use on LCO route trucks across the country. Operators who have used it find that often one treatment with TURFLON does what other products fail to achieve in two or more treatments.

Choice of formulations. Whatever you need, there's a TURFLON formulation for you. Choose an amine for broadcast use, or an ester for spot application. Whichever you select, TURFLON herbicide gives you outstanding performance, every time.

You can't keep your customers from moving away. But you can keep them from moving to your competition because of poor weed control. Keep them, and keep them happy, with TURFLON herbicide.

TURFLON*

Fewer weeds, fewer cancellations.

DOW*

*Trademark of The Dow Chemical Company

7002

Circle No. 310 on Reader Inquiry Card

Contains pendimethalin.

LESCO PRE-M® 60DG Herbicide

is the new standard for pre-emergent weed control.

It's easy to understand why.

- active ingredient pendimethalin provides broader spectrum weed control
- registered for use on both northern and southern turfgrasses
- application flexibility permits programming to control both early and late germinating weeds
- increased profitability due to lower product cost
- convenient packaging requires less storage, simplifies shipping and handling

And LESCO understands the lawn service business. That's why we offer an innovative selling program with terms designed to improve first-round cash flow.

LESCO PRE-M 60DG Herbicide. The pre-emergent weed control standard. Order today.

(800) 321-5325 NATIONWIDE (800) 362-7413 IN OHIO

LESCO

LESCO, Inc.
20005 Lake Road
Rocky River, Ohio 44116
(216) 333-9250

Circle No. 119 on Reader Inquiry Card