scape and recreational turfgrass varieties or sites. In fact, with the 80% water-soluble powder formulation, you can even spray flowers, shrubs and trees and get first-class control of ornamental insect pests.

DYLOX is a low-odor compound and is also available in a 6.2% granular formulation. To find out more, contact Bayer Corporation, Specialty Products, Box 4913, Kansas City, MO 64120. (800) 842-8020.

And get fast grub control signed, sealed and delivered.

10,000 sq. ft. for Grubs and

Webworms For Control of lite Grubs Crickets Webworms

Nole Sod

Crickets freats 15,000 sq

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## PLCAA to offer free seminar at Expo 96

The Professional Lawn Care Association of America (PLCAA) will officially participate in the 13th annual International Lawn, Garden and Power Equipment Expo (Expo 96). pation will bring an increase in this percentage. Expo brings PLCAA members an excellent market with 87 percent of the exhibiting companies being manufacturers of commercial equipment. So this is an ideal fit for PLCAA

and for Expo."



"We are happy to have the PLCAA aboard," says Dennis Dix, CEO of the Outdoor Power Equipment Institute, which sponsors Expo 96. "About 22 percent of the Expo visitors are lawn and landscape professionals. It is hoped that PLCAA's partici-

12

Ann McClure, executive vice president of the PLCAA, says her association is inviting Expo attendees to a free seminar on Monday, July 29, 8-10:30 a.m. during the show. Titled "High-Powered Hiring-Tools of Success," the session will feature Tom Diederich, vice president of government relations for Orkin Lawn Care. He will explain how to slash employee turnover costs through dynamic hiring strategies. "This seminar

is for anyone responsible for hiring good workers, especially in the lawn and landscape industry," says McClure.

Six hundred top manufacturers and suppliers will introduce more new products than ever. Indoor exhibits will cover 240,000 net sq. ft. in the Kentucky Exposition Center's East Wing, East Hall and South Wing. Again this year,

560,000 net sq. ft. outdoors will be used for hands-on demonstrations.

About 25,000 dealers, retailers, commercial end-users, rental equipment dealers, distributors, mass merchants, manufacturers' reps and exhibitors are expected to visit.

Lawn and landscape professionals who attend the event will have the option of attending a series of Professional Landscape Seminary (PLUS seminars) designed especially for them:

## SUNDAY, JULY 28

2-4 p.m. Landscaper Panel Discussion: "Ask the Pros." Attendees will benefit from a diverse panel of landscapers and cutters at different stages of business development.

**5 p.m.** Networking Reception sponsored by *Pro* magazine.

## MONDAY, JULY 29

2-4 p.m. "Growing People Who Grow Your Business." Tom Winninger, Winninger Resource Group, will teach management techniques with a common sense approach. This is an intensive seminar on the art of building a more productive self-sufficient team. **TUESDAY, JULY 30** 

IUESDAY, JULY 30

7:30-8 a.m. Continental Breakfast sponsored by *Pro* magazine.

8-10:30 a.m. "Tech Tools: Technology You Can Use to Grow Your Business." Technology expert Steve Epner, B.S.W. Consulting, will give advice on making the most of today's technology—voice mail, fax on demand, and more. He'll also make recommendations of sophisticated software developments for bidding and planning.

Also, Chuck Daly, former head coach of the NBA's Detroit Pistons, will talk at an Early Bird Buffet Saturday, July 27 at 6 p.m. The Outdoor Power Equipment Aftermarket Association will sponsor the function, which will include a cash bar and buffet dinner. Tickets can be purchased for \$28.50 each. To order, call (202) 775-8605.

Special reduced air fares, discount hotel rates and free shuttles are being offered.

LCI Travel, Expo's official travel agency, has pre-negotiated special airfares. Travelers will get 5 percent off the lowest published airfare, even during fare wars... plus a chance to win two free tickets anywhere United flies in the continental U.S. Questions and reservations can be directed to LCI Travel, (800) 381-2453 or (714) 680-6375 between 8 am and 5 pm Pacific Standard Time.

Expo 96 is free to those who pre-register. To receive an Expo 96 brochure, which includes PLUS seminar registration information, contact Expo 96, 550 S. Fourth Avenue, Suite 200, Louisville, KY 40202; call (800) 558-8767 or fax (502) 562-1970. In Kentucky or outside the U.S. call (502) 562-1962.  $\Box$ 

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## >HOT TOPICS

# Dr. Bill Knoop joins LM team as technical editor

Dr. William E. Knoop, extension turfgrass specialist at Texas A&M University for more than 16 years, is LANDSCAPE MANAGEMENT's new contributing technical editor.

Knoop, a resident of Mt. Vernon, Texas, is a nationallyknown speaker, author and turfgrass expert. Last year, he received the Texas Governor's Award for Environmental Excellence. He also received a Special Citation from the Professional Lawn Care Association of America in 1985, and a Superior Service Award from the U.S. Department of Agriculture in 1991.

A Certified Professional Agronomist, Knoop will advise the magazine's staff on agronomic matters. He will be responsible for writing monthly articles, including the popular spring



"Guide" series to fertilization and weed, insect and disease control. Dr. Knoop will also represent the magazine at trade shows and will work on custom publishing projects.

"It's an honor to serve as a technical resource, for both the sales and editorial staff of LANDSCAPE MANAGEMENT," says Knoop. "I also want to be available as a technical resource to all our readers. It's our intention to provide more useful educational materials to the industry as a whole in the future."

A new guide series and annual digest, coordinated through LANDSCAPE MANAGEMENT's parent company, Advanstar Communications, is also in the works.

"Dr. Knoop is going to be a wonderful addition to our already-experienced editorial staff," notes LM Editor-in-Chief Jerry Roche. "He provides that special turfgrass expertise that can only help our product, especially on a technical level."

Knoop is a graduate of the University of New Hampshire (Ph.D.), the University of Florida (M.S.A.) and Iowa State University (B.S.). □

# L.A. Council, actors help ban blowers

Los Angeles City Council voted 9-4 on May 14th to draft an ordinance to ban gas-powered leaf blowers from residential areas. The actual vote on the

ordinance is due this month.

The law would effectively ban backpack, gas-powered blowers within 500 feet of residential properties.

This was the third attempt in the last 10 years by L.A. to legislate against the blowers commonly used by landscapers. The two previous attempts in 1986 and 1991

failed outright.

But anti-power blower interests brought out the "heavy hitters" this time: actor Peter Graves (of TV's "Mission: Impossible") and actress Meredith Baxter (of TV's "Family Ties").

"Leaf blowers are bad. They blow other things around," Graves was quoted as saying in a Los Angeles *Times* front-page article May 15th. "Are we going to put masks on our kids?"

Baxter told the council that using power blowers "flies in the face of all rational thinking." She cited what she considered the dangers of gas-powered blowers before being cut off by Council President John Ferraro.

"The implications of this are apparent to the entire industry," says Robin Pendergrast of International



Marketing Exchange, who has been carefully monitoring the situation for Echo, Inc., a major manufacturer of power blowers. "While this ordinance was actually a modification of the original, there appears to be an attempt to legislate all lawn and garden equipment."

After the council meeting ended, a lengthy discussion initiated by Councilman Marvin Braude followed. "Both proponents and opponents [of the law] cited what appeared to be fabricated health issues and undocumented numbers of cities that apparently had legislated the product," observes Pendergrast. □

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## >HOT TOPICS

## Wage hike will 'ripple' into green industry

The "ripple effect" is alive and on the prowl. The green industry should feel higher labor costs, maybe as early as next season.

That's Ben Bolusky's read on Pres.Bill Clinton's push, and the decision of Congress to raise the minimum wage from \$4.25 to \$5.15 starting in 1997, a 21 percent jump.

"There are those who believe that because their firms"

## **Maxxing** out the minimum

The federal minimum wage has grown steadily since it was first established in 1938. It was last raised in 1991 to \$4.25 per hour. President Clinton proposes another increase, possibly as high as \$5.15.



pay scales are above the minimum, a minimum wage hike

will not impact their business operations. I believe they're wrong," says Bolusky, director of government affairs for the American Association of Nurservmen and its 2.300 members.

Blame the so-called ripple effect.

Bolusky, shown above, explained that green industry businesses generally pay their newly-hired employees at a scale starting a dollar or more above the minimum wages in their markets. That difference gives them a hiring advantage over minimum-wage employers.

"If the starting wages are increased at the bottom by 21 percent, then there is often an expectation by other workers that their wages should be similarly increased," says Bolusky.

Even without the federal wage hike, higher labor costs seem inevitable. As of mid-May, at least 29 states were considering ballot initiatives or legislation to raise the minimum wages within their boundaries.

"In order to attract qualified workers, the green industry needs to do a better job of offering attractive wages and benefits. It is really that simple," says Bolusky, who spoke at the annual meeting of the Turf & Ornamental Communicators Association in Washington D.C. recently. □

# Industry swallows fuel hikes

When gasoline and diesel prices jumped 15 to 20 cents a gallon across the nation early this spring, the green industry was hardly affected.

Golf course superintendents and grounds managers paid little attention because fuel is such a small part of their overall budgets. And-apparently-few lawn/landscape service providers raised prices because of it.

But the extra cost is not insignificant. A quick calculation shows about \$70 in extra fuel costs per vehicle for each 10cent jump in fuel prices; that's for a service vehicle averaging 15 miles per gallon, driven 10.000 miles in a season.

Bill Clutter says that none of his lawn care customers "are running out and offering to make up the difference." Nor did he ask or expect them to.

The owner and operator of the Turfguard Company in Dayton, Ohio, points out that when fuel prices took a similar climb several winters ago he took that into consideration when he raised prices.

"Of course, we didn't refund the surplus to our customers when the prices came back down," points out Clutter.

The timing of this recent fuel price rise kept lawn and landscape service deliverers from adjusting prices.

"We sign people to our service at the beginning of the year, and we can't go in and raise the price," says David Harris, Liqui-Green Lawn & Tree Care in Bloomington, Ill. 🗆

## Correction

The photo on page 21 of our may issue was not that of Ewald Astaldt. LAND-SCAPE MANGEMENT apologizes for any incovenience this may have caused.



Be

Most People Are Ecstatic At How Effective Confront Is At Making Their Broadleaf Weeds Disappear.



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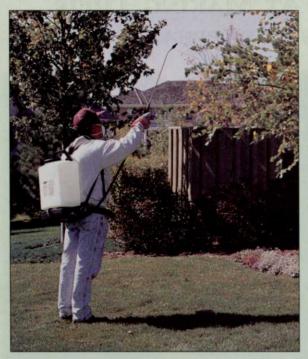
dandelions and clover to oxalis and ground ivy, Confront is the one herbicide that won't let you down.

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and follow label directions.



## LM REPORTS



Echo's MS-5 is a 5-gallon tank with interchangeable pump handle for left- or right-hand operation.

# SPRAYING EQUIPMENT

## by TERRY McIVER / Managing Editor

A wide variety of accessories, brands and models of spray equipment are available for use in large and small turf and ornamental applications.

The head horticulturist/grounds supervisor for the Pinehurst Resort Country Club says the resort's grounds and golf course crews use all kinds of spray equipment, from a Cushman100-gallon tank with a sixfoot boom, to Spray Hawks, Flood Jets and Monsanto's Expedite sprayer for small spot treatments.

"My emphasis is on ornamentals—trees, shrubs and flowers," explains John Clark. "The superintendents are set up for a larger area."

> Clark says new equipment purchases are made "only if it's something we think will make the job more efficient, easier or safer.

"We're pretty intense about grounds care, and the superintendents are more intense," says Clark. All Pinehurst crews share a concern for spraying application safety and efficiency. Clark says the crews are always careful about what materials are applied, when they applied, and how the job is done.

"We're very conscientious about the weather," says Clark. "We watch the elements and spray when it's calm. If it's too windy, we shut down and wait for a better day."

Spraying Systems, Inc., says to delay spraying if wind speeds exceed 7 mph or tempera-

ture is above 85 degrees and relative humidity is less than 50 percent.

#### Safe and 'on the spot'

Accuracy and safety should be your two biggest concerns whenever you use spray applicators. These factors determine how much product you use, the future condition of the turfgrass, and whether or not you operate within established regulations and guidelines.

"Drift" is defined as the movement of spray droplets outside the intended target, and is a major concern to applicators. The smaller the droplet size, the more prone to drift the product will be in windier climates. Different-sized spray tips produce different-sized droplets under varied degrees of pressure. A nozzle might produce medium droplets at low pressures, while produc-



The Cushman 5th Wheel Sprayer contains six Venturi Jet agitators.



Jacobsen Division of Textron SV trucks offer a choice of three spraying attachments.



Agri-Fab's 15-gallon towable sprayer comes with a 12-foot handgun.



Solo sprayers are equipped with easy moving pumps with large cylinder capacity.

ing fine droplets as pressure is increased.

When using a boom sprayer, speed is an important factor in establishing accuracy. Sprayer calibration prepares your sprayer for operation and diagnoses tip wear.

Each nozzle must be checked for accuracy. Variations in sprayer output can be caused by mismatched nozzles or nozzles that have worn unevenly. There may also be some plumbing clogs to clear, or screens may be plugged or partially plugged.

Consult with manufacturers or distributors to learn the appropriate calculations for nozzle output.

## Spray nozzles: easy to damage

Don't overlook the importance of spray tips to proper pesticide application. The goal is to get the largest droplets without losing good target coverage. Today's advanced tip designs produce larger droplets less prone to drift, while maintaining a high quality spray pattern. In applications where maximum coverage is critical, higher carrier volumes may be necessary when droplet sizes are very coarse.

Watch for wear. Finely-machined edges on most tips are delicate and easy to damage. When the tips become damaged or worn, they often let more material through and over-apply product, or put product down unevenly.

These guidelines will help protect spray nozzles:

1) Select tips made of long-lasting material, or replace them often.

2) Use recommended strainers to reduce tip clogging.

**3)** Clean nozzles with a soft-bristled brush. Even a wooden toothpick can damage the orifice and cause uneven spray patterns.

The naked eye can't see tip damage, so you have to compare each tip's flow rate to the flow rate of a new tip of the same size and type. If flow rates from two or more tips on the boom differ by 10 percent, replace the entire set.



Tuflex truck-mounted spray systems range in capacities from 300 to 2000 gallons.

#### Tanks for different jobs

Spray tanks are made of either stainless steel or fiberglass, with polyurethane enamel for chemical and impact resistance.

Tank sizes range from about 5 gallons to small trailer models, to 3000 gallon, truck-mounted units.

If you need a larger tank, be sure its capacity is sufficient to cover the proper-

ties in one trip. Smaller, compact models may be designed for a van or pick-up truck bed. Features include diaphragm pumps, hose and applicator gun.

High-volume trigger sprayers can be used on a variety of containers. Adjustable sprayers can shoot 30 feet or more and also be dialed down to an ultra-fine mist.

cont. on page 20

## >LM REPORTS

## SPRAY EQUIPMENT FOR PROFESSIONAL USE

### AGRI-FAB (217) 728-8388 Circle No. 280

Sprayers for spot weed control to large-area fertilization have 15- to 25-gallon capacity tanks. They are available as hand-held, push models or tow and tractor-mounted units. All have easy-to-grip handgun hoses.

## BROYHILL (402) 987-3412 Circle No. 281

Sprayers for a variety of product applicators: Terramaster pinmounted sprayers for turf vehicles; AccuSpeed walk-behind booms; 200-gallon Hydramaster tanks; a Fairway LX 3000 series; and Mini-50 and Stadium-80 units. Accessories include low-profile booms; spray gun kits; hose reel assemblies; electric lift actuator; and foam markers. hoses and console mounting stand. Boom sprayers are available with 200- and 300-gallon tanks.

## DYNA-FOG

#### (317) 896-2561 Circle No. 283

Dyna-Fog plastic sprayers use UV-stabilized polypropylene tanks and fiberglass-reinforced wands. Nozzle wear is reduced by using polyacetal, a material with the characteristics of stainless steel and four times the nozzle life of brass, according to the company. Knapsack sprayers, trigger sprayers and pump sprayers are available. Tanks hold 1½, 3 and 4 gallons. The knapsack sprayer is made of a one-piece plastic tank with enclosed pump and no seals to wear out. Larger riding units are available for broadcast fogging against flies and mosquitoes.



Broyhill's walking boom features an Accuspeed speedometer and an optional, 'see-through' drift cover.

#### CUSHMAN (800) 228-4444 Circle No. 282

The Cushman Turf Master by SDI (Spraying Devices, Inc.) offers the ultimate in spraying technology along with proven benefits of the Cushman Turf-Truckster. The Turf Master features ground pressure of 11 psi on the rear wheels at full capacity. Tanks are 125- to 160-gallon. SDI's electronic boom spray control console includes pressure gauge, pressure adjustment switch, master and individual on/off switches, electric pressure regulator, three solenoid valves, boom feed

## ECHO (847) 540-8400 Circle No. 284

The MS-5 manual backpack sprayer features a five-gallon, highdensity polyethylene tank for longlasting use and fewer stops between refills. A 24-inch brass lance has an adjustable nozzle and an oversized actuator with lock-on feature, for commercial users with lots of spraying to do. All seals and Orings are made of chemically-resistant Viton.

#### FRIEND MFG. (716) 772-2622 Circle No. 285

Commander Sprayers have a wide range of accessories, such as mechanical and hydraulic spray booms, hose reels, spray guns, Kohler and Honda engines, sprayer computers and monitors. They are available as trailer models or utility vehicle-mounted, with an engine drive or PTO drive.

## GREGSON (716) 768-7035 Circle No. 286

Gregson makes truck-mounted sprayers from 500 to 800 gallons; and van, pick-up truck and trailer sprayers from 100 to 500 gallons. The Eco-500 is a 25-gallon stainless steel or poly tank used for blanket application from a main tank (typically fertilizer) and on-demand spot treatment from an auxiliary tank (typically herbicide). By installing the Eco-500 on existing sprayers, you are able to blanket-apply fertilizers and selectively apply pesticides by pulling a second trigger on the spray gun. Distributed in the U.S. through Rhett M. Clark, Inc.

## HANNAY REELS (518) 797-3791 Circle No. 287

The 1000 Series hose reel was designed to be strong, lightweight and suitable for various pest control and lawn care applications. The reel is also suitable for all power cleaning applications, including washdown, in-plant cleaning and degreasing. It is made to handle 1/2- and 1/2-inch I.D. hose from 50 to 175 feet long, and will handle product temperatures from 20° F to 400° F. The Series 1500 handles ¼- through ½-inch I.D. hose with either a direct-crank rewind or a chain and sprocket drive powered by electric or compressed air motor. The reel is a direct crank rewind. A removable crank is also available.

#### JACOBSEN (414) 637-4465 Circle No. 288

The SV-3422 and SV-2322 system vehicles offer a choice of three spraying attachments. Truckmounted sprayers are available in 125-gallon and 20-gallon models.

Both sprayers have a working width of 20 feet for fast coverage,

and remote electronic controls for easier hook-up and cleaner operation. For really big spraying jobs, use the fifth-wheel attachment 300-gallon sprayer.

## KROMER (612) 472-4167 Circle No. 289

The Kromer AFM is a multiple purpose unit for spraying weed and insect control products. It can also be used to water down baseball infields. The tank has a 50-gallon capacity. Attachments are available for other maintenance duties: a spring tooth harrow, leveling blade, broom, line painter, line cutter, utility box and draw bar.

#### LESCO (800) 321-5325 Circle No. 290

Choose from a complete line of poly tank sprayers, from 50 to 300 gallons. These high-quality spray units can be mounted in a pickup truck, van or truckster-type maintenance vehicle (50- and 100-gallon models only). Running gear assemblies are available that allow sprayers to be towed. These sprayers are ideal for use by professional turf managers, landscapers and tree and ornamental specialists. Backpack sprayers, poly sprayers, spray wands and spray guns are also available.

## MACKISSIC (610) 495-7181 Circle No. 291

The Mighty Mac PS350T-10 sprayer is a 50-gallon power sprayer. Spray tall trees up to 35 feet high with 300 lbs. pressure at 10 gallons per minute. The sturdy tank is non-corroding, 200-mil polyethylene and has a large 10inch fill opening with twist-on lid. The large opening allows easy interior access for thorough, reach-in cleaning. Flow bypass return line provides liquid agitation that keeps wettable powders in suspension. Other products range in size from 12½ to 50 gallons.

## PARKER HANNIFIN (216) 943-5700 Circle No. 292

The company's Hose Products Division offers a new catalog describing its varied assortment of hose, fittings and equipment. An appendices section offers informa-