

Pressures on the industry mounting during "Decade of the Environment"

BY LISA GITLIN

It wouldn't be practical to list all the pressures weighing on owners of professional lawn

application businesses.

As you list them, the number grows. In spite of this, LCOs as a group, had a solid, if not spectacular, 1990. Their outlook for 1991 is guarded.

Some of the problems gnawing on the industry in 1990 and into 1991?

Growing public anxiety about lawn chemicals, mounting regulations, and a slowdown in the home building industry—these topped LCOs list of concerns.

Some complain of the increasing costs of complying with regulations.

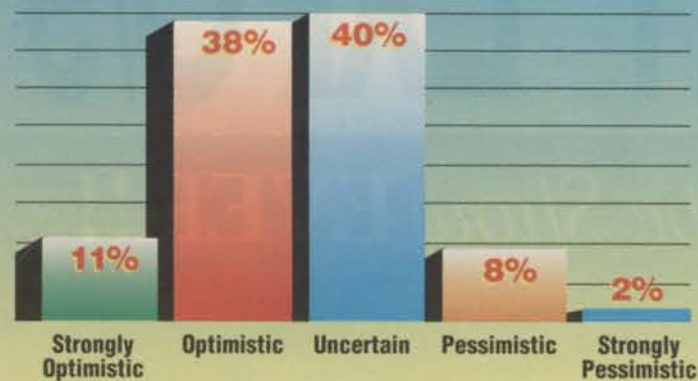
Others are upset by media's seemingly ceaseless warnings about chemical contamination and pollution, about the safety of lawn care products.

Increasingly LCOs are being asked questions about the safety of their prod-

What were your 1990 gross receipts?



What are your feelings concerning the future of chemical lawn care?



ucts. This they don't have a problem with. But, is anybody listening to their answers?

Everyone interviewed by LAWN CARE INDUSTRY magazine agreed on one overriding point: as the years go on, LCOs will need more expertise (technical, business, even public relations) to wring fair profits from an ever-

See **LCOS** on page 6

LAWN CARE INDUSTRY

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LAWN CARE IN TRANSITION
1991 STATE OF THE INDUSTRY

JULY 1991

VOLUME 15 NUMBER 7

Still growing but LCOs uneasy

BY RON HALL

We never asked the question so bluntly before but we're still surprised at the response.

Fully 40 percent of the LCOs answering our 1990 State of the Industry questionnaire (mailed to 1,000 readers, 264 completed and returned) say they're "uncertain" about the future of their industry.

Another 10 percent are either "pessimistic" or "strongly pessimistic". That leaves slightly under half feeling good about their futures in the chemical application business.

The responses—offered by readers prior to the start of the 1991 application season (at least in the cool-season turfgrass market)—signifies, we think, an industry, searching for answers.

The questions certainly are there:

- Is the American public as concerned about pesticide use as the media?
- Is the chemical applica-

tion market mature, even in secondary and small-town America?

- Will the regulatory climate continue to tighten on professional pesticide users?
- How much will the public pay for professional lawn care?

There is no one answer to any of the above questions. Indeed, answers vary according to regions of the country. Obviously the business climate in New England is much different than it is in, say, Florida.

Overall though we can confidently say that the industry is still expanding. In spite of the uncertainty, 73 percent of the LCI respondents say their businesses grew in 1990 and they expect them to grow this season. Since 40 percent of the respondents indicate they grossed \$50,000 or less in 1990, we don't can't pretend that the 23 percent growth they expect (averaged) means a proportionate number of new customers.

The response, mostly

independent, LCOs we've interviewed these past several months, say new customers are harder to come by, but that they've boosted revenue per customer. They say they're adding ancillary services—roadside

vegetation, small tree/shrub, etc. Some also now charge for services they previously provided as part of their basic service.

Pressed to estimate the size of the chemical lawn care industry from our sur-

vey, we put the total at \$2 billion. We serve 10 million Americans.

Again, this is not as homogeneous a market as perhaps it was even five

See **UNEASY** on page 7



GrassCycling, an industry success. Read about it at the Georgia Governor's Mansion, page 4.

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"Very disappointing," that's how Senator Richard Lugar (R-IN) described the 1988 FIFRA amendments. He told a breakfast audience of the CSMA the pesticide reregistration process is working way too slow.

The Florida Legislature considers a bill requiring the use of rain sensors for all sprinkler systems after Oct. 1, 1991. The intent is to save water.

Also in Florida, beginning January 1992 you cannot haul organic debris to a landfill in that state. In an unrelated matter, legislation is pending there that would require only licensed irrigation contractors be used to install, repair or maintain a sprinkler system.

Bob Tracinski, John Deere's accomplished public relations specialist thinks PLCAA's Grasscycling program will continue to be news for another two or three years. "We have a very, very strong and positive message with Grasscycling," he told PLCAA board members in May.

Steve Derrick, Orkin Lawn Care, at the same board meeting, said the lawn care industry should

expect negative press each spring and should prepare a first-strike public relations effort to counter it. "We know it's going to come and every year they (industry critics) get better at it," said Derrick.

This spring Du Pont issued a stop sale and recall of Benlate 50 DF, Benlate 1991 DF, and Tersan 1991 DRF fungicides because small amounts of atrazine herbicide were found in some samples. Tersan 1991 Wetttable Powder isn't affected and remains on the market.

A battle for young minds? Anti-pesticide activists have taken their views to the nation's youngsters. Most people in the specialty chemical and professional application businesses think they're intentionally misinforming the public. Whatever, they're getting their message out. The May issue of *Ranger Rick* Magazine blasted LCOs while a March showing of 3-2-1 Contact (Children's Television Workshop) extolled organic farming while taking shots at chemicals. Both messages were targeted at young Americans.

The Rutgers June 1990

Ornamental IPM newsletter recommended that homeowners not use Japanese Beetle pheromone traps. It seems they actually bring more beetles into an area than would otherwise be there.

Dr. Tim R. Murphy, extension agronomist—weed science, The University of Georgia, reports in the PGMS *Grounds Management Forum* that three new herbicides will be available for use in ornamentals in 1991. BASF has introduced Vantage (sethoxydim) for use in broadleaf ornamentals. Sethoxydim was previously marketed in ornamentals under the trade name of Poast but there are differences between Vantage and Poast, says Murphy. Vantage is a 1.0 lb./gal. formulation of sethoxydim and contains a surfactant.

Ohio reported several confirmed cases of Lyme disease this past spring. "It would not surprise me at all to get a documented case of Lyme disease anywhere in the state," says David Shetlar, entomologist at Ohio State University.

Oregon has had one of its coolest and wettest springs ever. Another strong turf seed year? LCI

NLA survey doesn't see 1991 as being top year

Northeast the hardest hit region

WASHINGTON, D.C.— Landscapers don't expect much from 1991, reports the National Landscape Association (NLA).

NLA members, responding to that organization's 16th annual Economic Survey, predicted modest growth for the remainder of

the year.

The NLA breaks its survey into geographical regions. NLA members from the Southeast predicted 4.7 percent growth, those from the Northeast 4.3 percent growth and the Great Lakes region just 2.7 percent increase.

(The NLA says it received too few responses from members in the Plain States and the Southwest to

make projections for those areas.)

The survey said 1990 was a mixed bag with Northeast landscape professionals struggling and those in the Southeast having a fine year.

Northeast NLA members reported a -0.7 percent falloff in landscape sales, while their industry cousins in the Southeast chalked up a 24 percent jump. LCI

LANDSCAPE SALES BY NLA MEMBERS

REGION	1987		1988		1989		1990		1991
	Expected	Actual	Expected	Actual	Expected	Actual	Expected	Actual	Expected
Northeast	+17.9	+21.9	+15.0	+13.8	+12.1	+6.0	+13.0	-.7	+4.3
Southeast	+26.3	+21.9	+14.0	+12.8	+16.9	+29.1	+26.5	+24.2	+4.7
Great Lakes	+16.4	+24.3	+14.0	+16.6	+16.7	+20.3	+16.9	+2.4	+2.7
Other	+6.4	+11.3	+11.5	+8.2	+10.6	+18.6	+16.8	+20.2	+6.4
Survey Avg.	+16.5%	+20.5%	+13.7	13.9	+14.3	+16.1	+16.7	+9.6	+4.4

GCSAA asks homeowners to read label before applications

LAWRENCE, KS—Golf course superintendents are now helping education homeowners on lawn care.

The Golf Course Superintendents Association of America (GCSAA) says it's co-sponsoring television public service announcements on the proper use of lawn care chemicals. The U.S. Environmental Protection Agency is also a co-sponsor.

The 30 and 10-second commercials ask homeowners to "read the directions and use only the amount needed

to do the job," when using lawn care chemicals. Both spots list a toll-free number (1-800-858-7378) that viewers may call to receive more information on proper usage of and possible alternatives to lawn chemicals.

A release from the GCSAA says the commercials were released in 40 top U.S. television markets and should reach an audience of millions.

"We hope these commercials will create more awareness of the need to use lawn care chemicals judiciously,"

said Lewis S.W. Crampton, EPA associate administrator for communications and public affairs.

Added Stephen G. Cadenelli, GCSAA president: "It is our pleasure to offer expertise to help America's homeowners maintain great home lawns in an environmentally responsible manner."

For more information on the "Think Before You Apply" campaign contact the GCSAA communications department 913/832-4470. LCI

UPFRONT

Grass lays where it falls at the *Guvnah's* mansion

BY RON HALL
editor

About 20 minutes from PLCAA headquarters is Georgia's Grassy cycling lawn.

"The Guvnah was havin' some ambassadas or someone for dinna," says the groundsman. The worker is 50ish, dressed in khaki slacks (neatly creased), a short-sleeve shirt open to the top of his chest, and a baseball cap, the edges already damp with sweat.

"An, whooeee that compost suh did stink," he says wiping his sun-reddened forehead. "The next day he had us move it. We took it a long ways from hea, way out back"

We're at the Georgia Governor's Mansion in an exclusive neighborhood just north of Atlanta. It's a spur-of-the-moment kind of thing.

We're in the area anyway with a couple of hours before an appointment in a north Atlanta suburb. Why not? "You can't miss it," says the clerk at the 7-Eleven just off I-75.

We'd heard that Georgia Governor Zell Miller is big on the Professional Lawn Care Association's Grassy cycling program. Apparently he—or someone on his staff—proclaimed the Governor's Mansion the official Grassy cycling lawn in Georgia.

We're curious. The late morning sun fights its way through the



haze. The sun is tough enough to throw shadows, barely. But, with the heat, even the shadows, weak as they are, seem to be sweating.

The morning is pumping itself up into a big, warm clapper of a thunderstorm.

"You've only got about a half hour," says the state trooper, stepping smartly from a small guard house just behind the entrance's iron gates. "The mansion closes early today."

With a crisp snap of his right arm he waves the tour busses onto the winding driveway toward the mansion perched about 200 yards off Ferry Paces Road. The busses are loaded with older folks, white-haired and balding men in colorful print shirts and silver-haired women in loose cotton dresses. The busses leave choking clouds of blue/black exhaust.

"Let me see a license please," the trooper says. He pulls a tiny notebook from a back pocket and

leisurely strolls to the back of the rental car and dutifully records the plate number.

"Can we kinda walk around and take a look at the grounds," we ask.

"No, either stay on the sidewalk or go into the mansion." He seems to mean business.

"Is there a sign on the grounds? It should say Grassy cycling, or something like that," we ask.

"Sign?" The officer puzzles, his forehead wrinkles. "No, there are no signs on these lawns. They're real strict about that kind of thing."

"Remember, you've only got about a half hour or so." Actually, a half hour is about as much time as anybody would need at a mansion, any mansion.

In a half hour you can learn that the Georgia mansion, in the Greek Revival style, was built in the mid 1960s. It's located on 18 acres of grounds. Dogwoods. Magnolias. Some of those droopy, reddish oriental maples or something.

This morning a middle-aged man is bumping over the massive front lawn on a riding mower. With thunderstorms every afternoon this week (and some far off rumblings suggesting another just over the tree line) the grass is ankle high but the tractor is near full throttle and throbbing.

True to form, the clippings—there are some pretty sizable chunks—lay where they fall.

Then the conversation



Georgia Governor's Mansion is state's official Grassy cycling lawn.

with the man I take to be a grounds supervisor. He's directing three younger men in the planting of flats of yellow marigolds along the walkway to the mansion.

He speaks in a decidedly southern accent. He's polite, and delighted that anyone would forsake the relative coolness of the Governor's Mansion (the bottom floor is open for tours almost daily. Governor Miller and his wife Shirley live on the upper floor.) to talk about grass and flowers.

Sure, he's familiar with the concept of leaving the grass clippings on the lawn, although he's not sure exactly what it's called. Or where the idea came from.

"The Guvnah knows the importance of savin' the envament," he says like the loyal soldier he is.

And then he tells me about the compost pile—in more detail than I can write here. And how he moved it away from the Mansion.

It just smelled something awful, says the groundsman and he grins. LCI

PA NURSERYMEN ACT TO SAVE H₂O

HARRISBURG, PA—Protecting water is a big concern of members of the Pennsylvania Nurserymen's Association (PNA).

More than half (57%) of the PNA members answering a survey said they're already using water preservation practices. Another seven percent say they intend to begin.

The mulching of growing areas to save water was reported by 53% of the respondees, while 27% said they're using drip irrigation or similar water-saving techniques.

Other programs used by members include retention ponds (25%); filter strips for surface runoff and altering growing medium (14%) and using gusing gray water (8%).

Composting of organic wastes is being done by 64% of the respondents and 50% use compost and/or sludge as soil amendments. LCI

TORO SUES FUQUA OVER "RECYCLING"

MINNEAPOLIS, MN—The Toro Company filed a lawsuit against Fuqua Industries, Inc., (Snapper Power Equipment).

The lawsuit, filed in the U.S. District Court for the District of Minnesota centers on the use of the word "Recycling" in the advertising and sales of Snapper power mowers.

Toro alleges that Recycler® is a Toro trademark. LCI

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FROM THE FIELD

A look at turfgrass diseases of summer

BY CHRISTOPHER SANN

Now that you're still confused from trying to deal with all the diseases of springtime, let's introduce diseases common to early summer.

These diseases are either foliar or root damaging. They usually make their first appearance in the late spring or early summer. They have similar symptoms and frequently show up with some of the diseases of early spring. This makes diagnosis harder.



for the control of leaf spot. Also its incidence seems to diminish as the turf's health and density increases.

Brown patch

Although brown patch is a major problem on short-cut golf course turf, traditionally it has not been a problem on taller-cut residential turf.

That is not to say that it does not occasionally appear as light infestations under the right set of environmen-

tal circumstances, but it's rarely of enough significance to be treated.

With the increased use of tall fescue and ryegrass varieties particularly in monostands the incidence of brown patch infestations is on the rise. If the infestation is light then treatment will probably not be necessary. If it develops into the characteristic smoke ring, then at least one application and probably two applications of fungicide will be

necessary.

Leaf spot

This late in the season leaf spot is usually not a problem unless it has progressed to the melt out phase where the disease has progressed down into the crown area and causes the collapse of the turf. Once the disease has progressed to this phase there is little that can be done other than

See **TURF** on page 6

Foliar damaging diseases

This group of diseases is distinguished by two characteristics. First, as the name implies, they initially attack the leaf portion of the turfgrass plant. Second, as a group, they're successfully treated with the appropriate fungicide(s) after the onset of the various visual symptoms.

The speed at which the grass recovers from the disease will vary widely and depends on the species of turfgrass, the severity of the infection, the turfgrass health prior to the attack and the fungicide(s) used to control the disease.

Dollar spot

Dollar spot, with its small silver dollar-sized circles of light-brown or off-white turf, may be the most recognized of all turfgrass diseases.

From an LCO's point of view, dollar spot doesn't seem to be that much of a problem, especially on the newer varieties of bluegrasses, ryegrasses and tall fescues.

It can however be a problem on older varieties like common bluegrasses and red fescues. It can also be a persistent secondary problem on turf that is suffering from one or more of the root-damaging diseases.

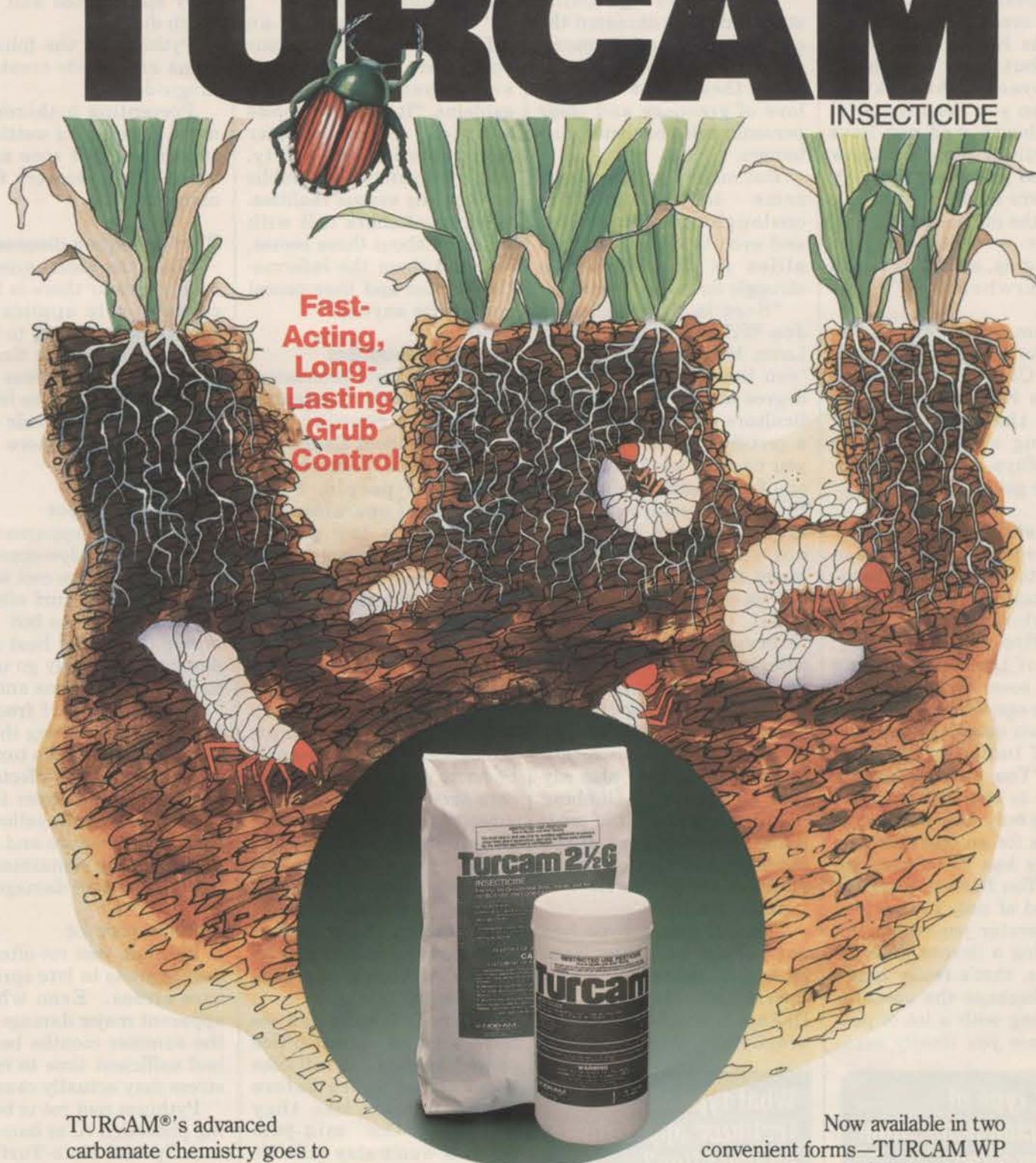
Dollar spot damage can be unsightly but is usually not permanent on otherwise healthy turf. Light infestations may not need to be treated and usually disappear with a light fertilization and a couple of mowings.

Where it is a persistent problem, there are both systemic and contact fungicides that work well. There is even some evidence that benomyl-resistant dollar spot can be treated with benomyl-based fungicides after waiting two years.

The incidence of dollar spot is usually greatly reduced by the use earlier in the spring of fungicides

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LCOS

from page 1

more-demanding marketplace.

Don Keller, president Keller's Turf and Shrub Care, Independence, MO, is amazed at the changes he's seen in his 21 years in business. "It used to be that you just needed an occupation license to open a lawn care business, and back when I was starting up I think it cost \$15," says Keller.

"Since then everything's changed. Now you need a license to use pesticides. You need a special permit to generate waste and oil. You staff needs special permits to drive your trucks, and the permits have to be renewed every two years."

Adds Keller, "not only that but now you have employee right-to-know laws, so you need material data sheets. And you have community right-to-know laws, so you have to notify members of the community about the materials you use."

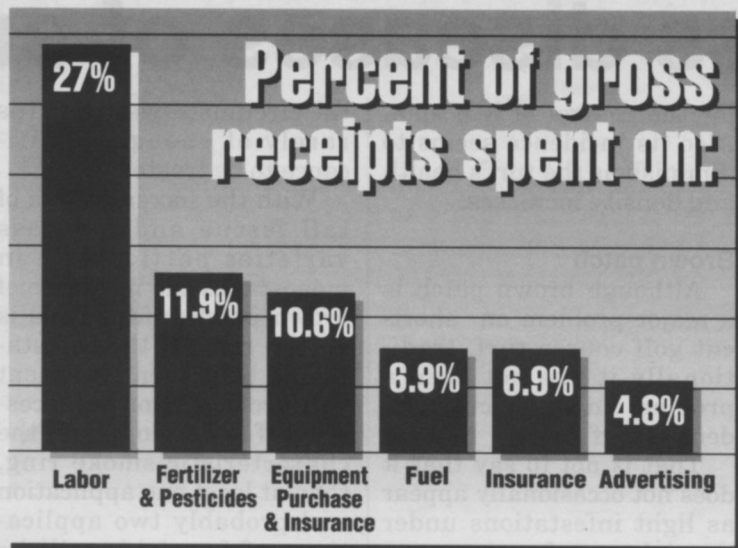
"For a company just starting up, all of this has to be overwhelming," says Keller.

Thomas Jessen, president Perma-Green Supreme Inc., Crown Point, IN, echoes Keller's concerns about the difficulties of starting a new business these days, let alone keeping one going.

Fewer startups?

"There seems to be a trend to reduce new business startups. Fewer people are entering the market, and I find that disturbing. Some of these laws being passed seem very restrictive for new operators."

Jessen questions the fairness of Indiana's licensing laws. "You have to have a license to own and operate, but the only way to get it is to work for an operator who already has a license," he says. "You have to work for a period of time to convince the operator you're worthy of getting a license. In a lot of cases, that's really tough to do, because the operator is dealing with a lot of people. Once you finally man-



age to get your license, you have to be nasty and quit.

"It's a Catch-22."

Jessen says tightening standards may threaten the existence of small, mom-and-pop type outfits who pride themselves on their love of greenery and their personal relations with customers.

But many operators have come to accept the onslaught of regulations, and even to regard them as allies in the industry's struggle for public trust.

"Here in Florida," says Joe Williams, president, Lawn Master in Pensacola, "you have to either have a degree and 20 hours of horticulture education to sit for a certified operator test, or you need to work for someone for at least two years. I think the certification laws are good. They show that not just anyone off the street can come in and start a lawn care business."

All the professionals interviewed said, without reservation, that complying with environmental standards and obeying the law are essential components for success in the lawn care business. But they also say that LCOs will be climbing uphill in the pursuit of credibility, if not dollars, if the industry doesn't step up its public relations efforts.

Branching out

"All the media hype has not helped us," says Neal DeAngelo, president, Lawn Specialties, Hazleton, PA. DeAngelo and his co-owner brother, Paul, have

branched out into industrial weed control and street sweeping to keep their receipts up.

"We put together an information packet for our customers, and update it every year," DeAngelo explains. "It contains copies of articles on groundwater contamination, pet safety, employee safety, and public perceptions versus realities. When customers call with concerns about these issues, we send them the information packet and they cancel our service anyway."

Home turf toughest

By and large, professionals with mostly residential clients are running into more flack about their operations than commercial lawn care people. Some commercial operators say they keep a low profile when treating lawns in public view. Businesses, as well as government agencies, will always need well manicured lawns for image.

"In Atlanta, flower installation has become a pretty big thing," says Terry Walton, president, Greenscape Environmental Service, a 10-year-old lawn care service in Atlanta with mostly commercial clients. "Color is very important here."

Walton, who reports \$1.2 million in receipts last year, a 20 percent increase over 1989, says he anticipates an end to Atlanta's business slump soon.

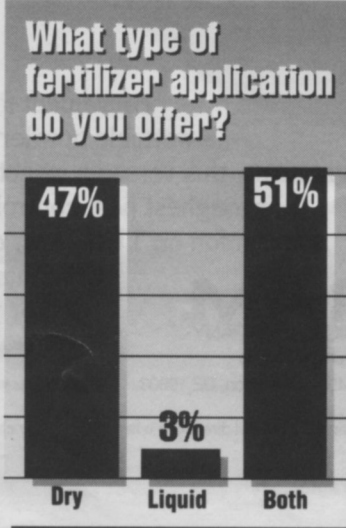
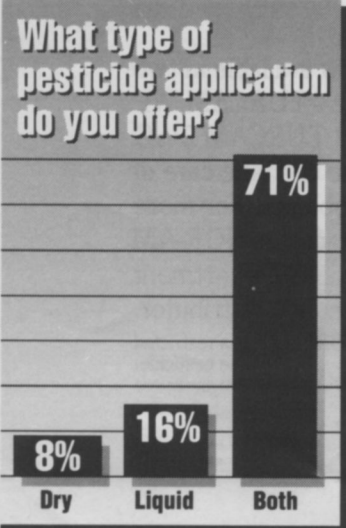
"We're overbuilt and we have a lot of vacant office space," he says. "It will take a couple of years before things become like they were in the mid-80s. Atlanta won't stay still for long. Already the economy is picking up a little."

Walton says the only nervous inquiries he receives about lawn care products come from condos which constitute a tiny percentage of his accounts.

TV publicity has hurt

"TV (publicity on chemicals) has hurt us in that

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TURF

from page 5

to reseed and apply preventive fungicides in the future.

Pythium

The name of pythium is used to describe four or five different fungi. These different fungi have different symptoms and intensity of damage. Most attack either the crown areas or roots and if not initially fatal can cause the turf to collapse under summer's heat.

Pythium's usually a problem from mid to late summer when high heat and humidity provide an ideal environment for this disease.

Recent work indicates that pythium can become a major problem starting at temperatures as low as 55-60 degrees.

Pythium is a major problem in any turf area where the soil moisture level remains high for periods of time as short as 48 hours. It's a major problem in shaded turf, in areas of standing water or drainage areas and in monostands of ryegrass and or tall fescue.

The extent of pythium damage in residential turf is not fully appreciated and is probably often misdiagnosed as patch disease.

Pythium in the foliar-affecting stage is highly contagious and needs treatment with several applications of fungicide.

Preventing pythium is the preferred method of treatment. The use of wetting agents to control excessive moisture in the root zone and root-growth stimulating materials to aid in recovery from root damage can be helpful in managing it.

Root damaging diseases

When the visual symptoms of root damaging diseases do finally appear there is frequently massive turf loss despite curative rate applications of fungicides. This occurs because the damage to the root structure has often been so substantial by the time treatments are made that any moisture or heat stress can quickly result in turf death.

In cases where the infected turf has been able to survive the first stress periods of early summer, turf will often die back during the more stressful periods of middle to late summer.

Necrotic ring spot

Despite its' apparent rapid onset of symptoms, necrotic ring spot is a slow-moving disease. The period of greatest infection is in the cool wet periods of the spring and fall.

The infected turf often survives for years in non-symptomatic conditions but can show small round areas of collapsed turf under heat and moisture stress. These areas of damage frequently go undiagnosed and untreated, leading to further infections and further damage.

Untreated turf frequently develops excessive thatch further exaggerating the problem. The problem also seems to deteriorate as the turf density increases with maturity.

Frequently the effects of the disease are most prominent in wet areas or under trees. It will occasionally manifest itself in a general yellowing of the turf despite apparently sufficient moisture and fertilizer.

Fungicides containing fenarimol at high rates will stop any further root damage from necrotic ring spot.

Pythium root rot

Pythium root rot often shows up as roughly circular yellowing areas in late spring at the first sign of heat or moisture stress. Even when successfully treated with no apparent major damage, the effected areas will reappear in the summer months because the root structures have not had sufficient time to regenerate. High heat and moisture stress may actually cause the turf to collapse.

Pythium root rot is best treated with fungicides containing phosethyl Al or banol on a preventive basis.

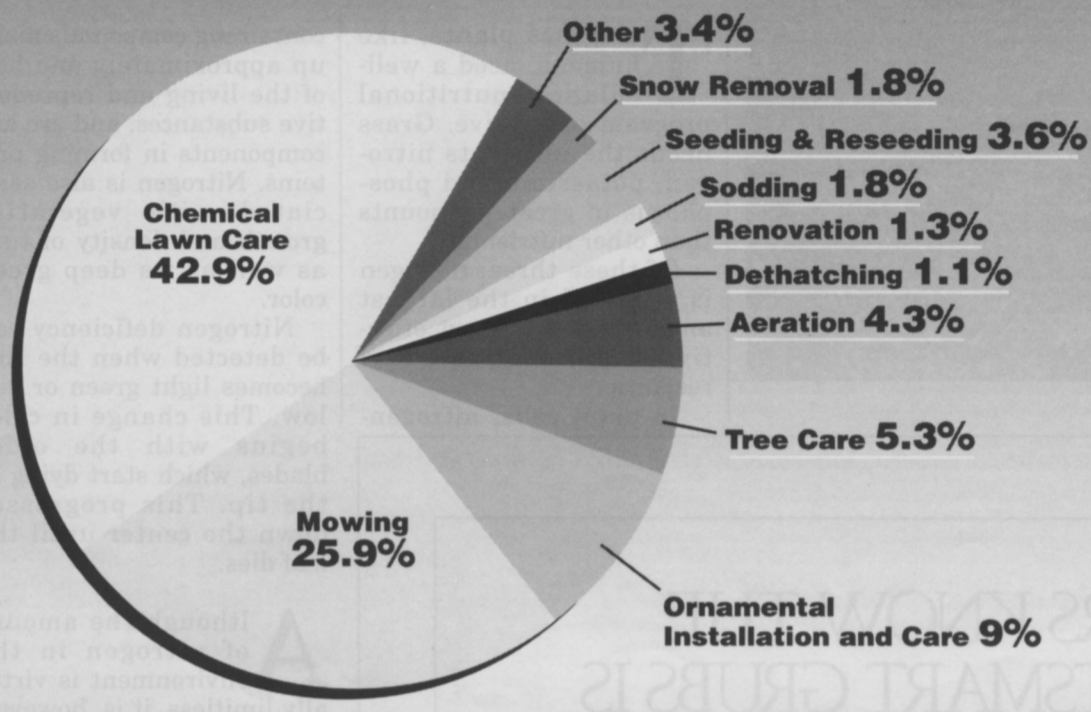
A Special Note-Turf that is producing seed head and stalk growth is particularly vulnerable to many of the weaker pathogens. Because the elongation of the stem tissue is occurring at such a rapid rate, the leaves on the stalks frequently show symptoms in an exaggerated manner. This usually does not require treatment. LCI

LOUISVILLE, KY—Briggs & Stratton hosts its fourth annual run/walk at Expo '91 here Monday July 29th (day 2)

The run begins at 7 a.m. and is open to all show attendees. It will be held on the Expo grounds.

There is a \$10 entry fee (\$5 of which will be donated to the Special Olympics LCI

Percentage of Business Volume



LCOS

from page 6

respect," says Walton. He adds that perceptions about hazardous materials have created another liability by boosting his worker compensation rates. He has 40 employees.

Cindy Poore, owner Perfection Landscape Maintenance, Cucamonga, CA, must be extremely careful about following regulations since her clients are mostly government agencies. "I don't think you run into too many problems as long as you're cautious and play by the rules," says Poore.

"But it gets irritating sometimes. We find ourselves in a watchdog position. We need to make sure if we follow the rules other companies do too."

Poore says companies that cut corners in their service can place lower contract bids. "All the customers see is the dollar signs," she says.

Finding workers

Poore says finding qualified employees has become harder. "A lot of people who apply for jobs don't imagine this as a professional career. We need to teach people that a member of this industry is not just a fellow with a truck and a lawn mower or sprayer."

Some of the applicants she's interviewed can barely read.

In essence, most concerns expressed by LCOs were all linked in some way to public perception.

To combat fears about turf chemicals, many operators say they keep a low profile.

Poore and Walton say they often treat commercial and government lawns early in the morning to minimize exposure to pedestrians.

But LCOs agree that lowered profiles don't offer long-term solutions to lawn care issues.

Keeping up with new research and products, and educating the public about lawn care will sustain the industry in the long run, they insist.

John Bria, manager Apline Lawn Care, Chappaqua, NY, used an integrated management approach to maintain growth in his seven-year-old company. He says his 25 percent pace is aided by a management staff that deals with nothing but sales, customer concerns, and assembling package deals to improve business in 1991's uncertain economy.

They're options now

"All the services we used to call standardized are now projected as options. People are getting bare bones lawn care. They don't get grub control. They may have to live with a few more weeds."

Bria says he does more with less by keeping abreast of current issues. He maintains a balance of commercial and residential clients. His staff communicates with real estate agents and building superintendents about lawn care operations.

Residential operations are carried out during work and school hours, and two management assistants are available to respond to inquiries about any service or product.

Industry members who just want to do their job, who keep up with develop-

ments, know their business, and don't want to function as public relations satellites are banking on industry associations to help them.

"Here in California we're not as well organized as they are in the east," says Poore. "Our associations are out to improve our image but they charge high fees."

United effort

In Missouri and Kansas, Keller reports, LCOs work well together to meet state and regional challenges.

"Here, when lawn care trucks pass one another, people give one another the thumbs up," says Keller. "I hear it's different in some other parts of the country. I think we've got to realize there's plenty (of business) for everyone if we do it right."

Olivia Golden, executive direction of the Professional Lawn Care Association of MidAmerica (about 150 members), says education inside and outside the industry will improve the industry's standing with the public.

"We haven't done as good a job as the environmentalists in getting our message out," says Golden.

"There are so many people out there who got into this business because they love to be outdoors, and now they're spending all their time indoors, dealing with regulations.

Higher startup costs

"And startup costs are getting higher and higher for the fellow who wants to go out there and start a business."

The association holds seminars to help people get certified, and to teach veterans about new rules, trends

and products. It also networks with new lawn care certification programs in two junior colleges in the region, one in Kansas and one in Missouri.

"People must be able to read and follow directions," says Golden. Lawn care associations can uplift industry members and promote the industry as well help educate it.

Keller, active in the association, says the press of day-to-day challenges cuts into LCOs time to devote to the industry as a whole.

"But a lot of people are realizing that we have to organize ourselves to keep this industry alive," says Keller.

LCI

UNEASY

from page 1

years ago. It's become increasingly regional. Customized. In some areas, micro-markets are developing. (natural/organic markets?)

With the industry still growing in terms of revenues and the number of LCOs uncertain about the future, the chemical lawn application industry is in a transitional period.

The key is the American public's perception of LCOs themselves. Though the public continues to value landscapes and lawns, and continues to demand top-quality turfgrass (and is willing to pay for it), there remains sizable numbers of homeowners not yet convinced that chemical lawn care is for them.

Apparently the green revolution that turned the United States into the greatest food producing nation the world has ever seen is being discounted. Or forgotten.

The last generation to fear starvation, the Depression-era generation, is going or gone.

The generation that received its first (and perhaps) only education to pesticides with Rachel Carson's book *Silent Spring* is today's decision makers.

The word pesticide is anathema to them. They hold it in the same light as, say, the word cholesterol.

But where the huge fast food industry has been quick to respond to shifts in the marketplace with leaner hamburgers and recycled paper bags (and multi-million dollar marketing campaigns), LCOs haven't been as adept at generating the very correct perception that they're also environment's friends.

LCI

Did you raise prices in 1990?

Yes 56%

No 44%

Are you raising prices for 1991?

Yes 66.4%

No 33.6%



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Notice the big difference between fertilized and unfertilized turfgrass.

Controlled-release N not as likely to leach to H₂O

Turfgrass plants, like humans, need a well-balanced nutritional program to survive. Grass needs the nutrients nitrogen, potassium and phosphorus in greater amounts than other nutrients.

Of these three, nitrogen is required in the largest amounts and is most effective in stimulating a turf response.

In plant cells, nitrogen-

containing compounds make up approximately one half of the living and reproductive substances, and are key components in forming proteins. Nitrogen is also associated with vegetative growth and density of turf, as well as its deep green color.

Nitrogen deficiency can be detected when the turf becomes light green or yellow. This change in color begins with the older blades, which start dying at the tip. This progresses down the center until the leaf dies.

Although the amount of nitrogen in the environment is virtually limitless, it is, however, rarely present in plant-available forms. Because of this, fertilization is the key to keeping turfgrass healthy and well maintained.

When fertilizing turfgrass areas, there are two general types of "food" to consider. Quick-release fertilizers and controlled-release nitrogen fertilizers.

Quick-release nitrogen sources are usually classified as highly water soluble. This means the nutrients will become available to plants as soon as they're dissolved in water.

While this type of fertilizer might give good initial green-up, it can also burn the plant if applied in excess. Also, its positive effects are short-lived.

Turfgrass has a good appetite, but can only absorb a limited amount of nutrients at any given time. For this reason it's important to fertilize or feed lawns at a controlled rate so the nutrients can be absorbed.

The second category, controlled-release nitrogen fertilizers, is often more desirable as a source of food for the turfgrass plant.

Controlled-release nitrogen sources have low water solubility, consequently all of the nitrogen is not immediately available to the turfgrass plant.

Use of controlled-release nitrogen fertilizers significantly reduces nitrogen leaching to groundwater. Using dry, granular fertilizer products that release nitrogen on an "as needed" basis is an effective means to ensure controlled release of the nitrogen.

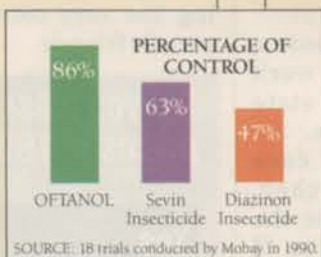
Leaching losses of fertilizer nitrogen from turfgrasses is highly influenced by fertilizer management

OFTANOL USERS KNOW THE BEST WAY TO OUTSMART GRUBS IS WITH A LITTLE EXTRA HOMEWORK.

Getting rid of grubs that attack your customers' lawns can be pretty tricky sometimes. Unfortunately, simply treating against these destructive pests doesn't always guarantee success.

But many lawn care operators have learned that all it takes to outsmart grubs is a little preparation—finding the right product and the right time of year for application. The product is OFTANOL® Insecticide. Studies show that time after time, OFTANOL provides consistent grub control. And delivers superior control over widely used products such as Sevin® and Diazinon Insecticides.

The right time to apply it? That will vary from region to region. But a good rule of thumb is



to treat with OFTANOL when grubs are at the surface. An easy way to check is by just pulling back a bit of sod and looking for infestation. Or call your local Extension office to determine peak periods of grub feeding in your area.

These are, of course, just the basics of effective grub control. If you'd like to learn more about OFTANOL and its proper usage, contact your local Mobay representative. Or just give us a call at (800) 842-8020. One of our trained professionals will be standing

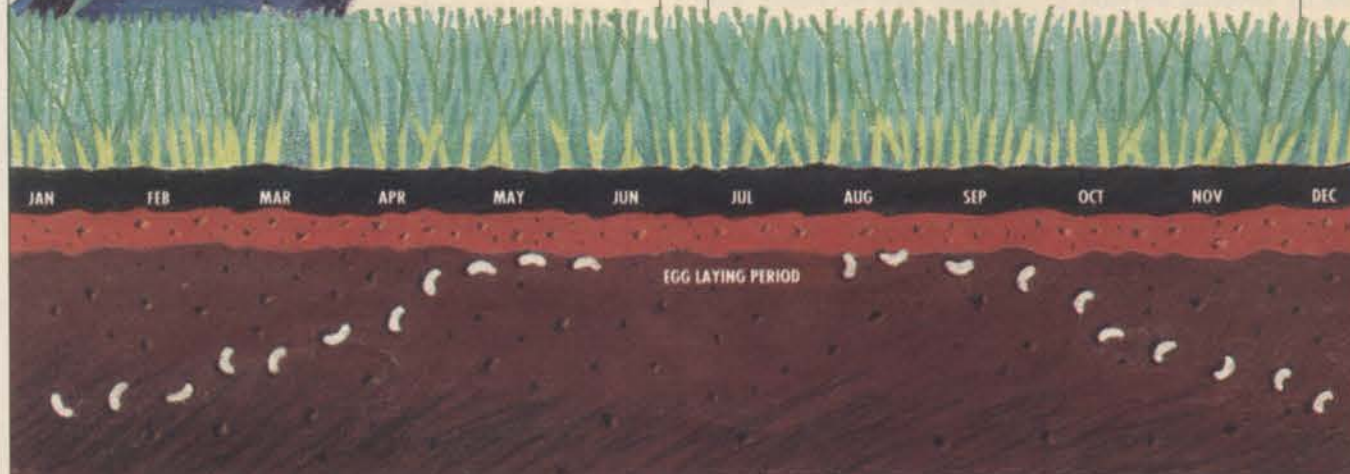
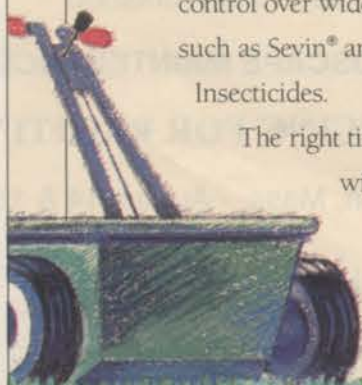
by to answer your questions. Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120.

So why let grubs continue to test your patience when the easy answer is OFTANOL.



OFTANOL is a Reg. TM of Bayer AG, Germany
Sevin is a Reg. TM of Rhone-Poulenc Ag Company

912690



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N

from page 8

practices. Nitrogen source, rate and timing, soil texture and irrigation effect nitrogen leaching into the groundwater. Leaching losses of fertilizer nitrogen from turf areas is generally well below 10 percent.

However, under a worst case scenario (sandy soils, heavy irrigation or rainfall, over application of nitrogen, dormant turf as in late fall until spring green-up and application of highly soluble nitrogen sources) leaching of nitrogen can be significant (eight to 55 percent). Using slow-release nitrogen sources reduces the potential of leaching to zero to 10 percent of the applied nitrogen. 1.

Initially, slow-release nitrogen fertilizers will promote good green-up of the grass plant and lead to continued, even growth with no starvation periods of growth spurts. Because it's absorbed by the turfgrass plants at a slow, more even rate as it's slowly released, nitrogen from controlled-release fertilizers does not leach through well-maintained turf into groundwater under normal conditions.

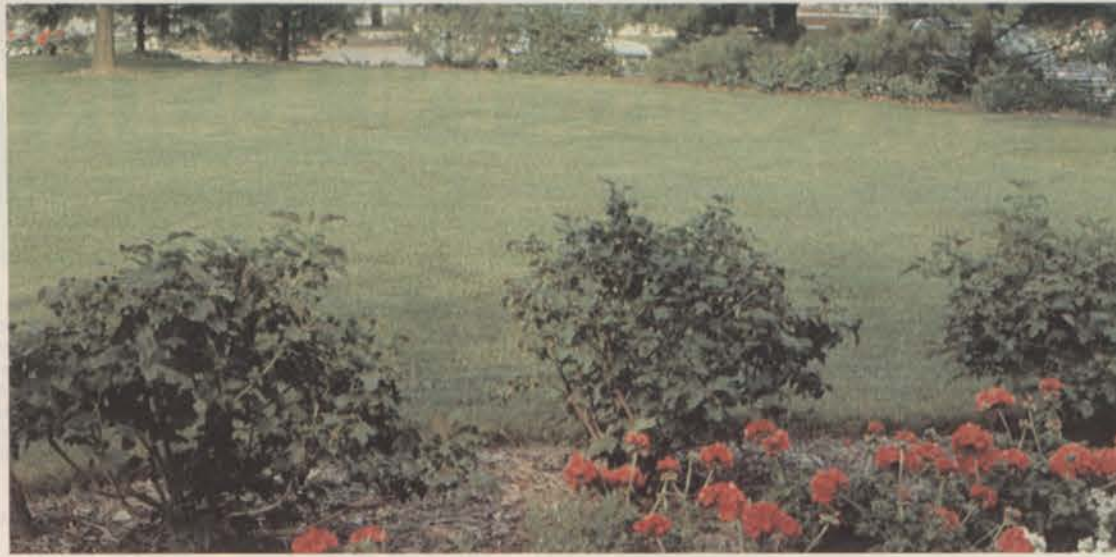
For the turfgrass plant, a slow-release nitrogen nutritional program improves plant color and increases underground growth, blade width and hardness. It simultaneously reduces weed encroachment and diseases such as dollar spot, red thread and rust.

In addition, slow and/or controlled-release nitrogen sources will reduce clipping removal from turf areas by 15 to 40 percent depending upon nitrogen sources, compared to quick-release sources.

Environmentally, well-maintained turf offers a variety of benefits. It reduces surface water runoff and soil erosion. And, it has a cooling affect, often reducing surface temperatures by 30 to 40 degrees. 2.

Turfgrass plants absorb noxious gases—sulphur dioxide, carbon dioxide, ozone, hydrogen and others—and release pure, life-sustaining oxygen.

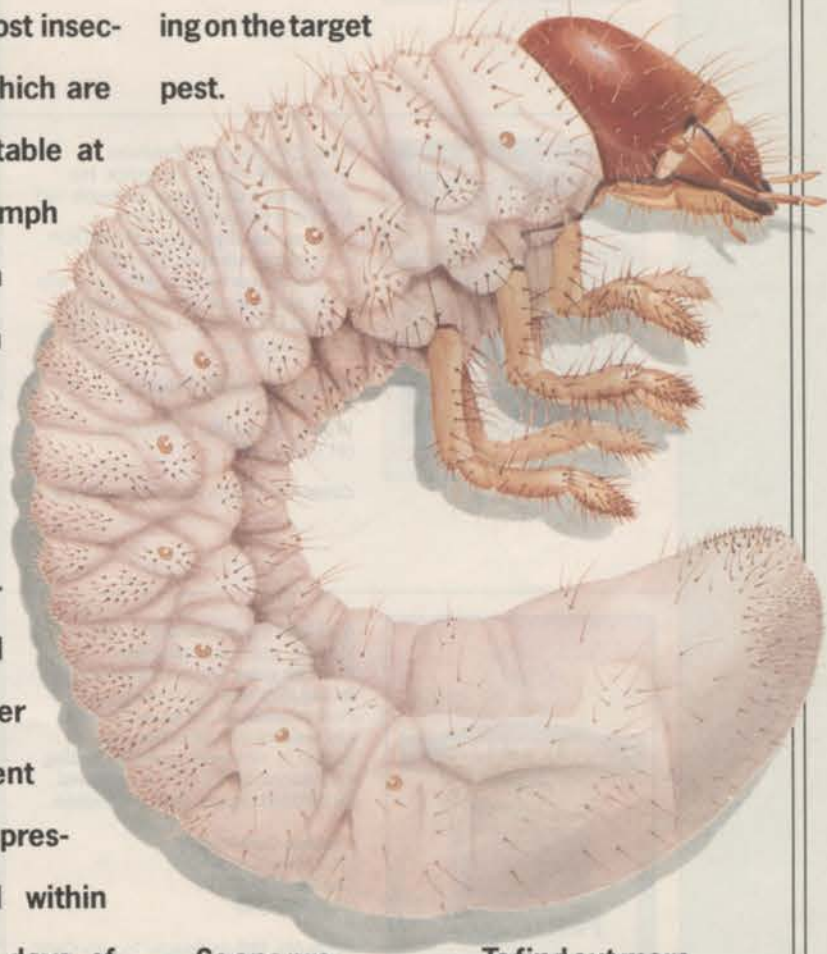
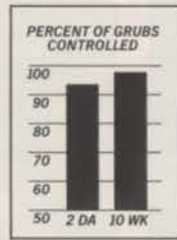
Dirt and dust from the atmosphere are trapped by turf, and impurities are cleansed from water. In addition, well-maintained turf helps diminish noise by absorbing and deflecting sound. Glare drops through deflection and absorption.



NICE TOUCH

Some people are in such a hurry to find to find a problem—like the misuse or overuse of lawn care chemicals—they haven't the time to enjoy scenes like this one. The proper use of fertilizer and chemical control products creates environments that make us all healthier and happier. That's what the professional turf provider seeks, and what he/she can provide.

When it comes insects combined. Better yet, once grub damage. to grubs, it's Triumph® applied to the soil, And protect you not enough is changing Triumph keeps on from losing what just to suppress them. all that. working for up to profits you have grind them into best, Triumph has been proven in over ten years of testing to consistently rid turf of over 90 percent of grubs present. And within just 2-3 days of application. So one preventive application in late summer or early fall is all that's needed to protect turf from costly



HOW TO SQUASH A GRUB.

To find out more, contact your turf products distributor or Ciba-Geigy representative. **TRIUMPH**

© 1990 CIBA-GEIGY Corporation, Turf and Ornamental Products, Box 18300, Greensboro, NC 27419. Always read and follow label directions. For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the applicator certification.

LAWN CARE INDUSTRY

Serving the needs of the professional lawn care operator

LITERATURE ROUND-UP

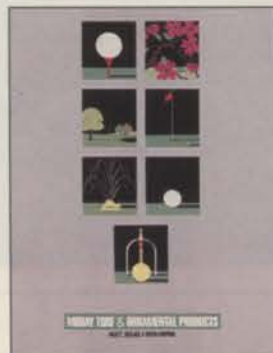
Get more information on the products you're interested in—simply return the reader service card. There's no cost and no obligation.



IronROOTS is a natural biostimulant plus 5% chelated iron designed to improve stress tolerance and appearance in turfgrass, trees and ornamental plants. Use in all turf maintenance to promote root growth and recovery from stress damage.

ROOTS Inc.
25 Science Park
New Haven, CT 06511
(800) 342-6173

Circle No. 121 on Reader Inquiry Card



Mobay Corporation has literature on its full line of turf and ornamental products. Brochures contain technical data and information on handling, application and storage of each product. Mobay manufactures turf and ornamental fungicides, insecticides and herbicides.

Mobay Corporation
Specialty Products Group
P.O. Box 4913
Kansas City, MO 64120
(800) 842-8020

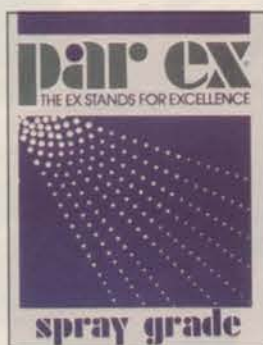
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NoburN Natural Wetting Agent and Soil Penetrant is a steroid saponin extract from the desert Yucca plant. NoburN does not have to be watered in and will not burn or discolor turfgrass when applied in hot or dry weather.

ROOTS Inc.
25 Science Park
New Haven, CT 06511
(800) 342-6173

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PAR EX® Specialty Products, Division of Vigoro Industries, Inc. introduces a new line of sprayable turf fertilizers featuring exclusive environmentally responsible IBDU® slow release nitrogen. The newly developed line features 4 ready to mix NPK plus micronutrient mixes and straight IBDU 31-0-0 for your own custom mixing.

PAR EX Specialty Products
P.O. Box 512
Winter Haven, FL 33882-0512
(813) 294-2567

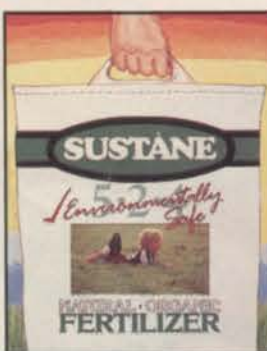
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CHIPCO® brand 26019 fungicide provides proven control of most damaging turf diseases. Its long-lasting residual action delivers this broad-spectrum control for up to a full month — so it fits well with your spray schedule. (CHIPCO is a registered trademark of Rhone-Poulenc Ag Company)

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Research Triangle Park, NC 27709
(800) 334-9745

Circle No. 127 on Reader Inquiry Card



A natural organic fertilizer; non-burning, non-toxic, odor-free. Provides quick green-up, plus long-lasting slow nutrient release. Proven performance in professional and residential application, it is backed by extensive testing in leading institutions. SUSTANE is approved for certified organic food production.

Sustane Corporation
1107 Hazeltine Blvd.
Chaska, MN 55318
(612) 448-8828

Circle No. 123 on Reader Inquiry Card



Turf Iron 15%N-6%Fe. Turf Iron Special 6%N-6%Fe-2%Mn. Overnight green up at the most cost effective prices on the market. Mixes with anything. Turf Iron Granular chelates. Designed to give full summer control on trees, shrubs and etc.

Ruffin Inc.
P.O. Box 940
Dodge City, KS 67801
(800) 535-7479



Brochure of natural products for lawn services and landscapers. Includes sample program outlines applicable to both commercial and residential lawn care. Company maintains a research and service staff to assist operators who have questions or need help in formulating programs.

Ringer Corporation
9959 Valley View Road
Minneapolis, MN 55344
(612) 941-4180

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Circle No. 128 on Reader Inquiry Card
Homelite offers a 52-page catalog featuring their complete line of outdoor power products. The catalog covers lawn mowers, hedge trimmers, trimmers & brushcutters (25 cc to 40 cc), blowers, edgers, generators, pumps, chain saws, snow throwers, pressure washers, and air compressors.

Homelite Division of Textron Inc.
14401 Carowinds Blvd.
Charlotte, NC 28273
(704) 588-3200

Circle No. 129 on Reader Inquiry Card

N

from page 11

In addition to using dry, granular, controlled-release nitrogen fertilizers, the following practices will diminish the amount of unused nitrogen that could damage the plant and/or leach into the groundwater:

Recommendations

Apply fertilizer only at the recommended rate (generally 0.5 to 2.0 pound of nitrogen per 1,000 square feet). Rates vary with the season of the year and source of nitrogen.

Know your soil type. Leaching is more prevalent in sandy soils and runoff is greater on clay soils, so the amount and frequency of watering must be regulated.

On clay loam soils, apply an inch of water per week using 1/4-1/2 inch per hour; on sandy soils, water twice a week using 3/4 inch per hour.

Apply fertilizer to; actively growing grass only. Don't apply fertilizer to grass that has gone dormant in summer or winter.

Return grass clippings to; the turf area. This will help recycle nutrients already captured by the grass and may reduce total nutrient requirements.

In contrast to quick-release fertilizers, controlled-release fertilizers are more desirable in the production of well-maintained turfgrass plants. This is true for the sake of the plant as well as the environment. Just applying the fertilizer, however, is not always enough.

Get to know the turfgrass that is being fed—the type, the soil, the amounts of nutrients required. All these factors play a role in the specific type of controlled-release fertilizer the grass needs. Well-maintained turf is protected against future problems and protects the environment.

Source: Petrovic, A. Martin (1990). *The Fate of Nitrogenous Fertilizer Applied to Turfgrass*. *J. Envir. Qual.* 19:1-14.

Source: *The Journal of Environmental Turfgrass*. American Sod Producers Association, Vol. II No. 1, Spring, 1990.

ASPA MEETS

ROLLING MEADOWS, IL—The American Sod Producers Association's (ASPA) Convention

July 31-Aug 2, Red Lion Hotel/Lloyd Center, Portland, OR. ASPA, 1855 Hicks Road, Rolling Meadows, IL 60008. 708/705-8347.

Wisconsin Lawn Care Month poster winners

Natalie Osowski, a 7th grader from South Milwaukee, won the "Benefits of Turf" poster contest sponsored by the Grounds Management Association of Wisconsin (GMAW). She and her family were treated to a night on the town in Milwaukee and a Milwaukee Brewer baseball game. Natalie is shown here with (left) GMAW President Terry Kurth and Lou Wierichs, GMAW VP. Other winners in the contest receiving \$200 savings bonds were 6th grader Beth Duglinski, Cudahy, and Jeremy Montpas, South Milwaukee. "It's important for us to keep the positive image up in our everyday contacts and gain the public trust for our industry," said Wierichs.

**CORNELL FIELD DAY IS JULY 29**

PLAINVIEW, NY—The Cornell Cooperative Extension of Nassau County's Green Industry Field Day, July 29.

Extension office/field research facility, 1425 Old Country Road, Plainview, NY. (Rain date Tuesday, July 30).

Maria Cinque at Cornell Cooperative Extension of Nassau County, 1425 Old Country Road, Bldg. J., Plainview, NY 11803. 516/454-0900. LCI

ARE YOU OPEN TO A NEW WAY TO PROFIT FROM CRABGRASS CONTROL?

**PUT DOWN ACCLAIM® WITH YOUR PRE.**

The old ways die hard. LCOs have traditionally used a pre to fight crabgrass. And it works. But there's a better, more profitable way to get effective crabgrass control.

This season, break with tradition. Use an application of postemergence Acclaim® IEC Herbicide plus a pre-such as Balan®, Dacthal®, Pre-M®, Betasan® or others—at the time crabgrass germinates. It's a crabgrass control strategy that really works.

With Acclaim plus a pre, you can control crabgrass effectively and efficiently with just one trip across the lawn. You'll keep your customers satisfied and eliminate costly callbacks. And that means more profit.

This spring, try a new approach to crabgrass control. Use postemergence Acclaim plus a pre. It's the most effective, most economical way to beat crabgrass.



Read and follow label directions carefully. Acclaim and the name and logo HOECHST are registered trademarks of Hoechst AG. The name and logo ROUSSEL are registered trademarks of Roussel Uclaf S.A. Balan is a registered trademark of Dow Elanco. Dacthal is a registered trademark of Permethrin ASC Corporation. Pre-M is a registered trademark of Lesco, Inc. Betasan is a registered trademark of ICI American Corp.

Marketed by Hoechst-Roussel Agri-Vet Company, Somerville, NJ 08876-1258

Hoechst
Roussel

Save \$100/gallon
this season on Acclaim.
See your distributor.

ACCLAIM®. Because your turf is always on display.

PLCAA finalizing advertising guidelines so LCOs can better inform customers

Problem not as widespread as critics contend. Joint FTC/EPA effort turns up just five complaints this past year.

BY RON HALL

What can LCOs advertise or even say to clients and potential clients regarding their services?

The question is an increasingly hard one to answer because of complaints from the public and public officials. They insist that some LCOs misrepresent the safety of products they use.

The most vocal critic is New York State Attorney General Robert Abrams.

He's been doggedly critical of the lawn care industry. In both the 1990 and 1991 in the 1990 senate subcommittee lawn care hearings he hammered away on LCO advertising.

Even so, government agencies, at least on the federal level, can't seem to find any widespread abuses by the lawn care industry.

Is there a problem?

Indeed, there hasn't even been a determination of just how large a problem this is.

Lee Peeler, with the Federal Trade Commission, told a 1991 senate subcommittee that the FTC shares jurisdiction with the U.S. Environmental Protection Agency (EPA) over the advertising of pesticide products.

He said the FTC and the EPA set up formal referral procedures in the spring of 1990 to monitor ads for lawn care pesticides.

The emphasis, he said, was on health and safety claims. EPA would refer questionable advertising and marketing claims made by LCOs to the FTC regional offices for evaluation.

In the year since then, the EPA made five referrals to the FTC. All involved claims that the services or products are "safe" or "non-toxic" or safer than other types of lawn care services or products.

Three came from Yellow Pages advertising, one from a consumer brochure, and one from local newspaper advertising.

Organic claims disputed

Four of the five investigations involved claims made by companies offering "organic" alternatives to chemical lawn care services, said Peeler.

The criticism and result-

ing attention from the FTC and EPA prompted the Professional Lawn Care Association of America (PLCAA) to update and revise its advertising recommendations to LCOs.

PLCAA's suggestions apply to all communications with the public, written and verbal.

Health and safety claims, those are the damager areas in LCO advertising.

LCOs can say that the products they use have been reviewed by EPA and have met criteria for the registered use(s), says PLCAA's new guidelines.

EPA doesn't approve

However, the EPA does not officially "approve" a product.

LCOs should avoid any statement that characterizes any pesticide as safe, non-poisonous, low in toxicity, biodegradable, nontoxic or harmless.

In legal circles the word safe indicates the absolute absence of risk. Never say that "a material is safe," says PLCAA.

Avoid safety comparisons between liquid and dry applications, or organic, natural and synthetic products.

The guidelines further advise that before LCOs reach an agreement with customers, they state what services are included. Disclaimers, if any, should be in type size no more than one point smaller than the body of the text in print advertising.

When no body text is incorporated, disclaimers will be no smaller than 9-point type. Disclaimers for broadcast media will be made at the same decibel level and speed as the majority of the commercial.

Disclose price

When discussed, price of the service should be fully disclosed. The existence of taxes, surcharges or other applicable service charges, if any, will be revealed.

The name and logo of the company should be clearly visible in print. The company name should be audible in broadcast messages.

By August confusion surrounding what's natural and what's not, particularly regarding turf fertilizer, may clear up. LCI

Professional Lawn Care GREEN ON GREEN LAWN CARE

COMMERCIAL & RESIDENTIAL

● Lawn Fertilizing & Weed Control Program



We use only Safe Natural Organic Fertilizers

- Weekly Mowing & Trimming
- Lawn Dethatching & Aeration

835-2647

Chicago Heights

What is natural? What isn't natural? Industry could have answer by Aug.

August is when membership of the Plant Food Control Officers (APFCO) meets. It will vote on definitions particularly hard to pin down, both in agriculture and in lawn care.

These involve the definitions of fertilizers, specifically what is natural, organic, etc.

These terms are already being freely used in various marketing campaigns yet confusion surrounds their meanings.

APFCO membership reportedly is not all in agreement about the definitions. There may be changes, but they may not be significant.

This past May the directors of the Professional Lawn Care Association of America (PLCAA) provisionally agreed to recognize the APFCO definitions. About 35 states already do.

"As long as we know what the rules are that puts us in better stead," said Steve Hardyman, at PLCAA's May meeting. He's chairman of PLCAA's Government Affairs Committee and also ChemLawn's representative on the board.

Hardyman said the public's perception of natural versus synthetic "is clearly becoming a huge issue."

The lawn care industry must have something rational to base its advertising and marketing on "to avoid some of the outrageous claims that are being made out there," added Hardyman.

Thomas Delaney of the PLCAA staff said that should APFCO alter its definitions in August, the PLCAA board can follow suit. "But we've got to have something," he said.

The PLCAA board tentatively approved the following definitions as part of its revised advertising guidelines:

Organic fertilizer—A material containing carbon and one or more elements other than hydrogen and oxygen essential for plant growth.

Natural organic fertilizer—Materials

derived from either plant or animal products containing one or more elements (other than carbon, hydrogen and oxygen) which are essential for plant growth.

These materials may be subjected to biological degradation processes under normal conditions of aging, rainfall, sun-curing, air drying, composting, rotting, enzymatic, or anaerobic/aerobic bacterial action, or any combination of these.

These materials shall not be mixed with synthetic materials or changed in any physical or chemical manner from their initial state except by manipulations such as drying, cooking, chopping, grinding, shredding, (ashing, hydrolysis) or pelleting.

Natural inorganic fertilizer—A mineral nutrient source that exists in or is produced by nature and may be altered from its original state only by physical manipulation.

Natural fertilizer—A substance composed only of natural organic and/or natural inorganic fertilizer materials and natural fillers.

Natural base—A fertilizer containing a minimum of 50 percent by weight of natural fertilizer materials.

Organic base—A fertilizer containing a minimum of 50 percent by weight of natural fertilizer materials and 50 percent by weight of primary nutrients which are derived from natural fertilizer materials.

Organic base fertilizer—A fertilizer containing a minimum of 50 percent by weight of organic fertilizer materials and 50 percent by weight of primary nutrients which are derived from organic fertilizer materials.

Avoid safety comparisons between organic, natural and synthetic products. Such comparisons include but are not limited to, references to toxicity, drift, odor, and exposure.

When referring to organic or natural fertilizers and/or pesticides analysis should be given. LCI

More LCOs get 'natural' with dawn of the 90s

But skepticism remains as many in industry call for data showing the ability of the new products and programs to deliver the kinds of quality lawns customers demand

BY LYNN NOVELLI

Few issues in lawn care stir as much debate, confusion and speculation as natural turf management.

LCI's recent mail survey of 270 lawn care companies indicates that more than 34 percent use organic/natural fertilizers and 24 percent use some biological pest control products.

Another 59 percent are considering using natural or organic products; 45 percent are looking at biological products.

But many LCOs, even some of those already offering natural programs, aren't convinced natural lawn care can provide the level of quality most lawn care customers want.

Definitions for "organic" and "natural" would resolve a lot of confusion, says Steve Leisring, vice president of Greenlon, Inc., Cincinnati.

"Without standardized terminology throughout the industry, advertising can unintentionally mislead or confuse customers," he tells LAWN CARE INDUSTRY. Standard definitions would also identify customer demand and allow customers to meaningfully compare costs.

Most lawn care professionals share Leisring's feelings that the industry needs to define the terms.

"It's the customer who needs to clearly understand the difference between natural and organic," says Hal Zeve, marketing director for Lawn Doctor, Inc. "Unless the customer understands this, the door is open for deception."

Regardless of definitions, customer demand in some areas of the country has LCOs scrambling to develop alternatives to traditional chemical programs.

Green Machine, Inc., a small Bloomfield, CT operation has 15-20 percent of its customers on natural programs, says chief executive officer Joel Caplin. "Natural turf programs are definitely a growing part of the business in this market," he tells LCI. He expects to eventually build natural lawn care to 50 percent of this business.

In other areas of the country the self-styled environmental movement hasn't yet caught up to organic lawn care. LCOs in these areas are taking a wait and see attitude. At Greenlon, one of the larger companies in its market, only about one percent of the customers have chosen an organic program. Leisring says the company has no plans to aggressively market that program this year.

Nick Dennis, owner of Pro-Lawn Plus, Jacksonville, FL, reports no requests in his area for natural lawn care programs. He's doubtful many customers will demand it.

"All the hoopla and I haven't seen any customer interest at all," says Dennis. Beyond that, he's not convinced natural pest control would work in Florida.

"It would last about three hours in Florida, so forget it," he says.

Even in California the movement to natural turf management has been slow to gain momentum, says Hal Edmonds, general manager at Lawn Green in Sacramento.

Edmonds thinks consumer education about turf management in general is more the issue than zeroing in on the use of all natural products.

The marketing experts at the major lawn care franchisors are as unsure as everyone else about how significant a market will exist for organic and natural products.

Lawn Doctor, for example, doesn't offer a natural or organic program this spring. They do offer pesticide-free lawn care, says Zeve, emphasizing their IPM program.

Meanwhile, ChemLawn, with sales over \$200 million annually, is in the middle of a national rollout of their organic-based fertilizer program, says Steve Hardymon, vice president public affairs.

Competitors are quick to point out that the product may be organic-based but is spiked with urea—meaning, in the strictest sense it doesn't qualify as a natural or organic product.

Hardymon has no quarrel with that. ChemLawn calls the product "organic-based," he points out. "That means it isn't all natural and we are not marketing it as such."

Like everyone else, he adds, ChemLawn would like to see standardized definitions for these types of products.

Organic and organic-based fertilizers seem to be further along in development than are natural pesticides. Few are on the market, leaving no one sure how to approach environmental pest control. For now at least, the answer seems to be some version of IPM.

The catch in using true biological pest control, such as nematodes or milky spore disease, is that most customers want quick, effective treatment. And, as Glenn Schuelke, Nitro-Green, Pocatello, ID, says: "People aren't willing to pay a higher price and wait for results."

A few companies, like Natural Lawns, Inc., Arlington, VA, offer a natural fertilizer/pesticide-free turf management program. Natural Lawns' Daniel Henneberg says about 10 percent of his customers are on this plan. But when a customer opts for an IPM program "we do use pesticides," says Henneberg in Virginia.

NaturaLawn, a relative newcomer to the franchise game offers several levels of IPM service says officer Phil Catron. "First choice is no pesticides, second is biologic pest control, and last resort is chemicals.

"Catron started the company with the philosophy that lawn care can and should be "completely natural." But he, and others attempting to tap into the American public's new found interest in the environment are finding that easier to advertise than to deliver.

Predictably there are strong differences of opinion.

Larry Hoover, production manager for Bio Green, Manassas, VA, thinks companies that market natural lawn care at the expense of the traditional companies harm the entire industry. He also says the media uproar over the safety of lawn care chemicals is just that, a lot of noise.

"What we need is better training and tighter control over lawn care technicians. Under-trained operators are more the problem than the materials," he tells LCI.

In the final analysis it's the customer who has the final say anyway, adds Hoover.

"Is the customer willing to pay a premium price and allow time for such a program to work?"

Most LCOs say natural programs cost more to give to customers, in some cases as much as 100 percent more, than traditional programs. (NaturaLawn's Catron disputes this and says his program is competitively priced.)

Can natural/organic turf management work?

Believers and critics alike say the question must be addressed by carefully documented, unbiased research.

Then, many LCOs say they still need to be convinced customers will accept it at the levels that will be profitable to them. LCI

Ringer official: no need for chemically addicted lawns in U.S. anymore

WASHINGTON, D.C.—What do you think about the idea of using two different lawn application warning flags?

One would represent lawns treated with synthetic fertilizers and pesticides. The other would indicate lawns treated with natural or organic products.

How about a red warning tag or tape across the mouth or opening of containers of synthetic lawn and garden products sold to consumers?

Fred Hundt of the Ringer Corporation, Minneapolis, made these suggestions during the U.S. Senate Subcommittee hearing on lawn care in May. Hundt is Ringer's vice president of retail marketing.

Did his testimony underline the deepening rift between proponents of so-called natural/organic lawn care products and makers (users too) of traditional chemical products? (Here's where we get into a semantic tangle inasmuch as natural/organic products are basically chemical in nature as well.)

The controversy, simmering for years, flared anew in April with a new Ringer television commercial starring British comedian John Cleese, former member of the Monty Python series.

Cleese, describing chemical lawn products in the TV spot, says: "These are the chemicals that go into the lawn that go into the rain water that goes into the streams that go into the lakes that go into the fish that go into people who put the chemicals in the lawn in the first place."

The commercial drew immediate protests from ChemLawn and O.M. Scotts & Sons Company who termed the advertisement's message as "false" and "misleading"

But if Ringer intends to soften its aggressive marketing stance, it wasn't apparent in Hundt's statements to the senate subcommittee.

"You can't just spray your problems away," said Hundt. "The social and environmental cost of chemically addicted lawns and gardens is something we can't afford to pay any more."

Hundt said conventional chemical fertilizers have been linked to groundwater contamination, "many of the

commercial herbicide products are linked to health risks," and insecticides?

"There are technologies which can control pests without killing wildlife, or causing cancer or nerve disorders," he said.

Hundt told the hearing

audience that:

- Industry should set standards for what's natural and what's not.

- EPA should be encouraged to make conversion to alternatives a strong agency policy.

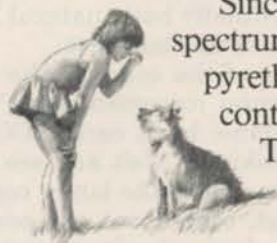
- Government should establish a system of labeling that distinguishes natural organic products "currently safe alternatives must be labeled with the same warnings as toxic chemical products, and that does nothing to help consumers," Hundt said. LCI



Fred Hundt, Ringer Corporation vice president of marketing, urged a senate subcommittee to consider different regulations for synthetic and natural lawn care products.

It only takes one insecticide to protect your customers from top to bottom. By using TEMPO® 2 Ornamental Insecticide, you can treat home lawns, flowers, plants, shrubs, even trees with unmatched effectiveness.

Reduce exposure. TEMPO uses 80% less active ingredient than the leading insecticide, so there's 80% less chemical to impact the environment. And that reduces the potential for exposure to your customers and their pets.



TEMPO reduces exposure to your customers, your employees and the environment.

Since TEMPO is a broad-spectrum, advanced generation pyrethroid, it gives excellent control at low dosage rates.

This allows you to control tough surface-feeding pests like sod webworms, cutworms, armyworms, even ticks without yellowing the grass or interfering with fertilizers or fungicides.



A Little Tempo Will

On top of all that, TEMPO is practically odorless.

No phytotoxicity on ornamentals. Using TEMPO on all your customers' flowers, plants and shrubs is an excellent way to control leaf-feeding insects without burning the leaves or blooms.

Plus, the fast knockdown and long residual of TEMPO make it effective on tough pests like pine shoot moths, webworms and sawflies.

And again, 80% less chemical means less handling, mixing and disposal hassles,

as well as less impact on the environment.

Less chemical needed to spray trees. Nothing is better on trees than TEMPO. Because not only are you spraying less



TEMPO effectively controls surface and leaf-feeding pests like tent caterpillars, Japanese beetles and bagworms.



Fesperman: prescription fertilization to grow with LCOs

Koos VP: natural market grows

BY TERRY McIVER

Here's an idea that can't miss: sell both natural organic and synthetic fertilizer.

Koos, Inc. manufactures both types in plants in Kenosha, WI, and Plant City, FL, says its vice president Steve Fesperman.

The company sells 70 percent of its product to agricultural, but also retails fertilizers in thousands of

retail outlets in the United States.

But Fesperman says that more and more, the professional market is taking notice, especially when it realizes that customers want "natural" products.

When comparing the two, Fesperman says customers often feel they get biased information from companies selling either synthetic or natural fertilizers.

"Our point is to try and

sort through the prejudice and get down to what is most beneficial," he says.

For LCOs this means giving customers rich green turf without excessive plant leaf growth.

But Fesperman admits that it will take a few weeks for natural fertilizer customers to see improvement in their lawns because of the low nutritional value of the raw materials used.

The all natural organics

are 80 percent water insoluble and have no salt. The down side is cost. They are low in nutritional value and are twice to three times as expensive as chemical fertilizers.

More expensive

"We can buy granular urea for \$180 a ton that's 46 percent nitrogen," says Fesperman. "Leather tankage is \$200 a ton with only 11.8 percent nitrogen."

Fesperman says that the high price of current organic sources might force the market to find cheaper sources.

Prescription fertilizer blends, although not a new idea, are becoming more popular in both do-it-yourself and commercial markets, he believes.

"Different prescriptions depend on different soil and weather conditions," says Fesperman. "Out of the 80 different fertilizer materials, we'll encourage customers to use as much premium slow-release material as we can."

In addition to weather and soil conditions, there are other questions to ask a customer interested in a prescribed mixture: Do you fertilize four to five times a year? Do you advertise that you use totally natural organic fertilizer? What about weed control?

"The all natural organic weed control method is to continue to feed the turf, following the theory that healthy turf crowds out the weeds," says Fesperman

Reduces pesticides?

Another benefit of the all natural organics is the microbial activity which helps decompose thatch.

"We eliminate the thatch layer and hopefully reduce the amount of insecticides or/and fungicides that would be necessary.

Organics still account for only about 10 percent of Koos' business, but demand is growing.

"There's nothing wrong with chemical fertilizers," says Fesperman, "for the people who know how to use chemical fertilizers. If the homeowner is not going to; follow the label directions, no matter which product he uses, he needs to call ChemLawn, Barefoot Grass, Tru Green..."

Fesperman agrees that product misuse is greatest in the hands of the do-it-yourselfer.

"The homeowner is the worst culprit. The consumer is using more than is needed," says the Koos vp. LCI



Cover The Whole Lot.

chemical into the air, TEMPO also costs less than other leading insecticides.

In addition, TEMPO is compatible with all types of spray equipment and won't cause downtime due to clogging.

And it's effective on such leaf-chewing and leaf-skeletonizing insects as gypsy moth larvae, oakworm caterpillars, leafrollers, bagworms and cankerworms.

With 80% less active ingredient, it only takes a little TEMPO to cover a lot of ground. And that has big advantages for you and your customers.

For more information, contact the Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120 (800) 842-8020.



Mobay
A Bayer USA INC COMPANY



700 thousand kids get anti-industry message veiled as conservation

Blabbermouth birds and bunnies sabotage LCO in one-sided National Wildlife Federation children's story.

BY RON HALL

Reginald Robin had better chirp a different tune if he wants to be friends with the thousands of responsible applicators of chemical pest control products.

But RR is a bird brain.

He's one of several feathered and furred blowhards in a children's story in the May 1991 issue of RANGER RICK magazine.

Reggie, as you might guess, is pretty good at blabbing his beak about things he doesn't know much about.

So says Allen James, executive director of RISE, a coalition of manufacturers, formulators and distributors of specialty chemicals. He was among the first to respond to the strongly anti-chemical message in the story. See the text of his letter to the editor of the magazine and the editor's reply.

Specialty chemicals are the very chemicals that Reggie and friends Casey Cottontail and Becky Hare badmouth in their four-page crusade against the big, bad lawn care guy.

The blabbering bunnies are hopping (pardon the pun) mad because they're convinced that lawn chemicals are killing all the worms in the "perfect-looking lawns". And killing the fish in a nearby pond too.

The villain in all this is Bo-Bob's Grow-Green Lawn Care Service ("We kill bugs. We kill weeds. We fix your lawn so you won't

have to.")

(Actually, Bo-Bob gets his comeuppance as Scarlett Fox chucks a fair-sized rock into a wasp's nest. The wasps—wouldn't you just know it—sting the living bejesus out of Mr. LCO. Now, that's something for all you kiddies to be whapping at with sticks and rocks—wasp's nests.)

The article, sprinkled with fanciful drawings of robins, bunnies and Ranger Rick himself, a raccoon, is in a magazine that goes to 700,000 homes each month. Ranger Rick magazine is written for children age 6 to 12, a woman at the magazine told Lawn Care Industry.

The article, written by Sallie Luther, ends with this advice for all the little Rangers:

"How dangerous are lawn chemicals to people, pets, and wildlife? No one knows for sure. So until we know they're completely safe, it's better not to use them at all.

"The good news is that some lawn care companies will take care of your lawn without using chemicals. So if your parents want to use a lawn care company, ask them to try one of these 'natural' ones!

"There are also lots of things you and your family can do to have a healthy, chemical-free lawn. For more information, write to: NCAMP (the National Coalition Against the Misuse of Pesticides); 701 E Street SE; Washington, DC 20003; Attention: Lawn Care." LCI

RISE complains...

May 22, 1991,
Gerald Bishop
Editor, Ranger Rick
National Wildlife Federation
8925 Leesburg Pike
Vienna, VA 22184

Dear Mr. Bishop:

As the Executive Director of RISE (Responsible Industry for a Sound Environment) representing manufacturers, formulators and distributors of specialty pesticide products, I would like to express our concern regarding an article appearing in the May 1991 issue of Ranger Rick titled "Adventures of Ranger Rick" written by Sallie Luther.

The implications and misstatements in the article serve to induce the "fear factor" in children regarding chemicals used to protect and maintain our lawns and public areas. Ms. Luther would have our children believe that weeds and yellowjackets are better for lawns than a sufficiently developed turf growth. Yet, hundreds of children each year are stung by bees, bitten by ants, and react physically to weeds and other uncontrolled, wild and poisonous plants in unprotected lawns.

Ms. Luther even advocates violence against lawn care companies through such diversionary "tactics" as Scarlett Fox's disturbing a wasp's nest (a very dangerous thing to advocate to children).

Lawn care companies utilize trained applicators who carefully apply appropriate products according to label directions to protect against Noxious weeds, undesirable pests and harmful insects. In our opinion, Ms. Luther has unfortunately misled your young readers into believing that these products are harmful to pets and people. The postlog note even discourages the use of our products

RISE would be pleased to assist Ms. Luther in developing a more balanced story which demonstrates the beneficial value of lawn care products, and which avoids inciting unnecessary fear in our children.

Thank you for your consideration.

Sincerely,
Allen James

Ranger Rick replies...

May 24, 1991
Allen James
Executive Direction
Responsible Industry for a Sound Environment
1155 15th St. N.W.
Washington, DC 20005

Dear Mr. James:

Thank you for your letter about our May 1991 "Adventures of Ranger Rick" story dealing with the use of lawn care chemicals.

We appreciate your offer to help us develop a "more balanced" story about the use of these chemicals, but we are confident that what we presented is in the best interest of all children who may be exposed to such toxic products. We properly point out that while direct harmful effects on children and animals from lawn care chemicals have not yet been conclusively demonstrated, it makes sense to avoid their use through the choice of non-toxic alternatives.

Given the many unfortunate "surprises" that supposedly benign toxics have sprung upon us over the past few decades, we feel our approach is far more responsible than advocating, as you seem to be doing, that the use of toxic lawn chemicals is actually good for children because it protects them from stinging bees, biting ants and "wild and poisonous plants."

Statements such as these leave us with even more determination to help our readers understand the dangers in blindly accepting the assurances of the toxic chemical industry.

Sincerely,
Gerald Bishop
Editor

Wichita lawn care firm earns contractor of year designation

Larry Nichols' Nichols Lawn Service in Wichita, KS, was named 1991 U.S. Small Business Administration's Region VII Prime Contractor of the Year. Region VII encompasses Iowa, Kansas, Missouri, and Nebraska.

Ed Harvell, McConnell Air Force Base, Wichita, nominated Nichols.

"Larry Nichols is a performance-oriented professional contractor," said Harvell, deputy for small business at the base.

Harvell says Nichols is particularly good at getting excellent seasonal help, and that his company offers competitive prices on mowing, seeding, fertilizing, landscaping, spraying and snow removal.

Nichols Lawn Service was founded in 1957 by Chavous Nichols Sr. in his garage. His sons, Chavous Jr. and Larry now operated the company which employs 30 people.

The firm's client list includes McConnell Air Force Base, Bank IV, St. Ives Homeowners, Temple Emmanuel Cemetery.

Nichols was honored during special ceremonies in Washington, D.C. in May. The award is based on performance under federal contracts. There are 10 regional winners throughout the United States.

Valerie A. Feliberti joined ISK Biotech Corporation as associate process engineer. She comes from Georgia Gulf Corporation. **Roger Kaiser**, formerly a research specialist with Monsanto, is a commercial development representative with ISK Biotech, headquartered in Mentor, Ohio.

Richard Skorepa joined Mobay Specialty Products as a sales representative in Ohio, Kentucky, and southern Michigan. He worked in the Peace Corps in the mid 1970s prior to serving



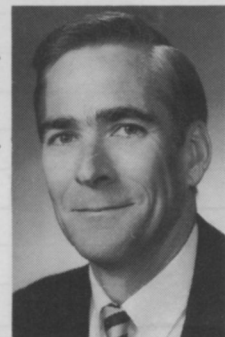
Richard Skorepa

at the University of Missouri Extension Office. His positions in private industry include being production manager for Evergreen Lawns, St. Louis, MO, turf pathologist for Horticultural Consultants, also in St. Louis, and finally turf supervisor at the Brickman Group.

Willie H. Dowden is the new manager of information services for Environmental Industries, Calabasas, CA. He's a graduate of the University of South Florida.

Rain Bird, Glendora, CA, promoted **Frank Busam** to vice president of quality, **Kris Freudenthaler** to director of human resources, and **Pamela Kratzer**.

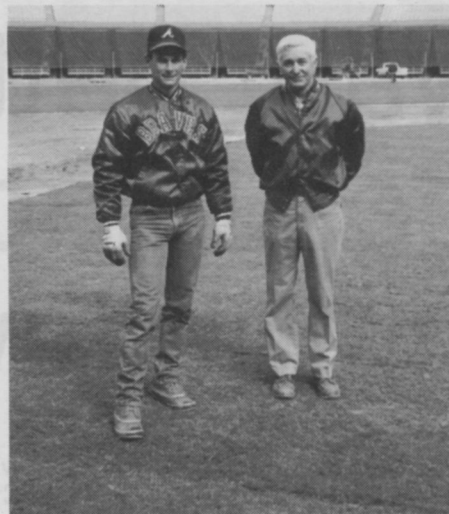
Randy Carter joined



Frank Busam

MacKissic, Inc., Parker Ford, PA. He will be organizing sales and marketing for the company's line of front tine tillers.

Patrick S. Reinfried, a high school senior from Oakland, MJ, earned the 1991 Murray Glauberman Memorial Scholarship. The Chemical Specialties Manufacturers Association presented the \$2,000-a-year scholarship. He plans to attend Stanford LCI



ATLANTA'S NEW TURF

ATLANTA, GA—This past winter the playing field at Atlanta-Fulton County Stadium got a face lift.

Ed Mangan came over from the Kansas City Royals to help.

About 112,000 square feet of Tifway 419 Bermudagrass were overseeded with Laser Poa Trivialis.

The stadium is home for the Atlanta Braves baseball club and the Falcons footballers.

Mangan (left) with field manager Atlanta Braves Turner Gibson. LCI

Butcher, baker, candlestick maker.

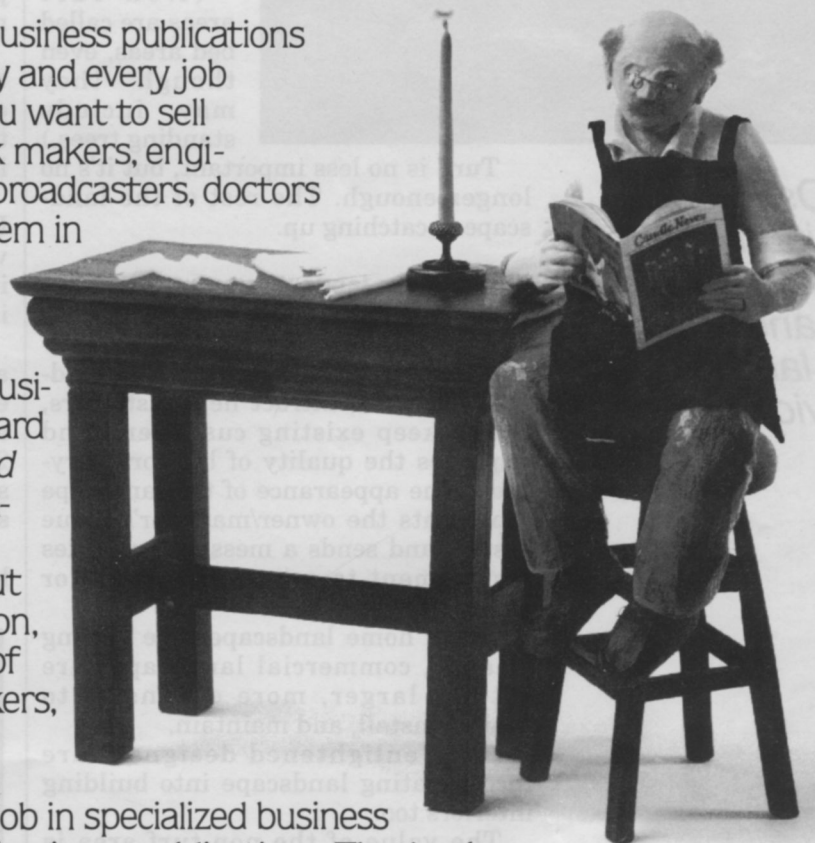
Excellent *specialized* business publications serve virtually every industry and every job function in America. So if you want to sell butchers, bakers, candlestick makers, engineers, electricians, bankers, broadcasters, doctors or dentists, you can reach them in publications that help them decide how, when, what and from whom to buy.

Important people in businesses important to you regard these publications as *required* reading. They are the publications that keep men and women knowledgeable about *their* business, *their* profession, *their* job. In a recent survey of 3,800 industry decision makers, 94 percent said they were more likely to find technical information helpful in their job in specialized business publications than in general business publications. That's why twice as many decision makers read the editorial and advertising content of these specialized publications.

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ABP

Association of Business Publishers
The publications your customers read first.



How-to book shows LCOs how to build their own chemical containment system

BY JAMES E. GUYETTE

Chemical containment systems for lawn care companies are coming. Legislation to prevent chemical contamination is being considered for five states. More of this type of legislation is inevitable.

LCOs faced with installing chemical containment and mixing facilities may be aided by a book authored by Fredric Haskett *How to Build Your Own Integrated Pesticide Storage/Containment/Recycling System*.

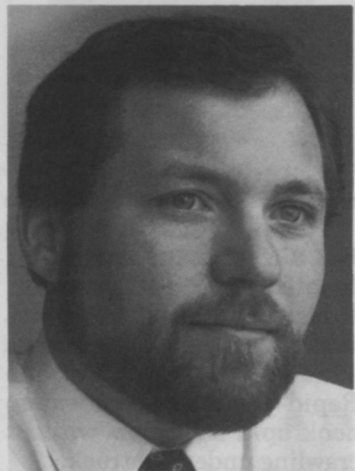
In 1985 and 1986 Haskett, former owner of Greenworld Landscape Management, Dover, Ohio, designed, developed and installed an integrated system for storage, mixing, handling, spill containment and residue recycling.

He claims it's practical and affordable.

Many benefits

"In four years of operation it has proven itself in several ways," Haskett reports:

- increased employee safety;
- reduced insurance rate growth;
- it eliminated or significantly reduced the high cost

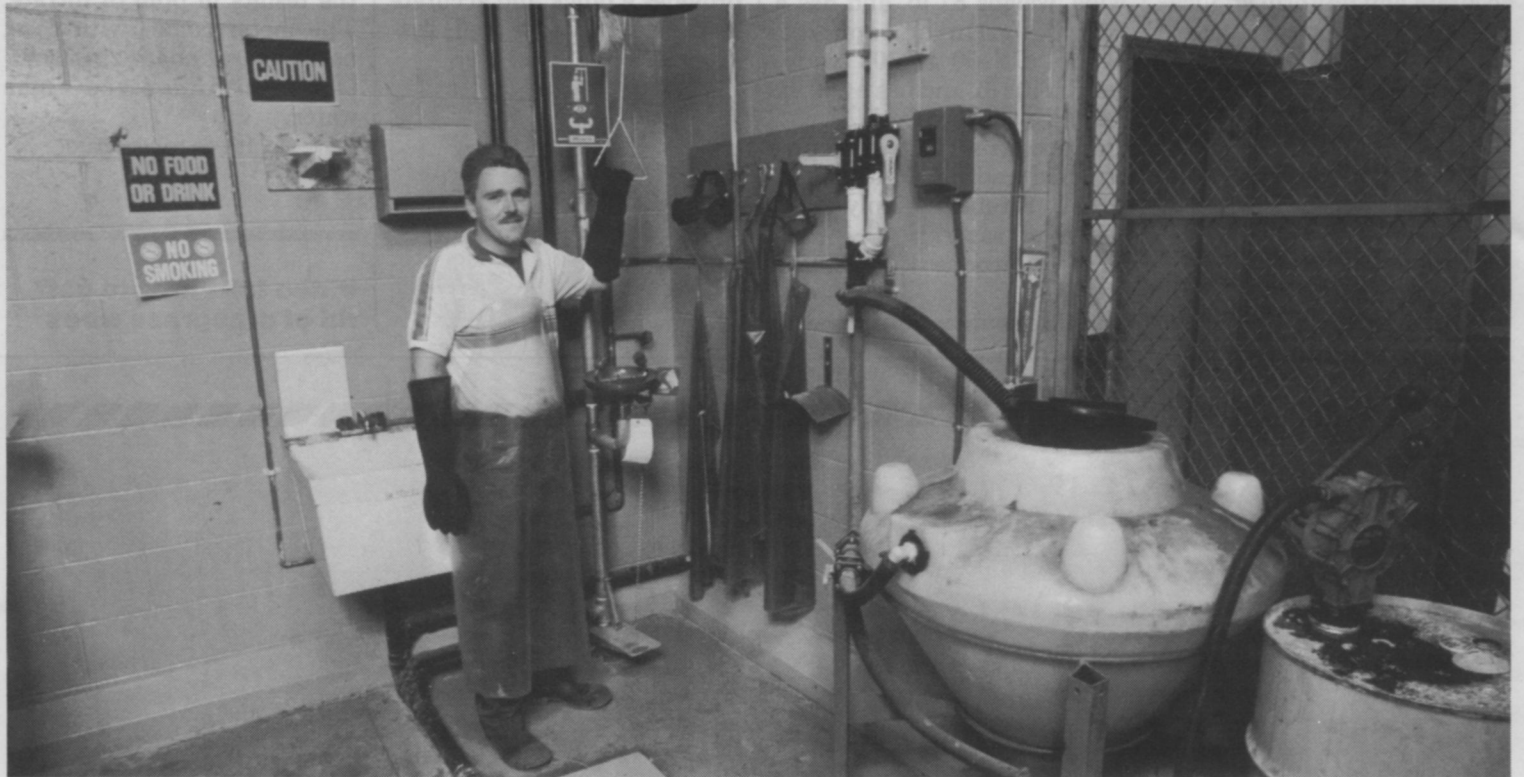


Vast majority of pesticide users not ready for laws—Fredric Haskett

and liability of both the storage and disposal of waste residues.

Haskett then set out to share some of his tips with other LCOs.

"The system is flexible and can easily be used in both new construction and refitted into an existing structure," he says, noting



As the pesticide storage, containment and mixing regulations tighten, LCOs will have to improve their facilities.

that it has passed all federal, state and local health, and pollution authorities.

Mistakes could cost

"The cost could be catastrophic if you are not prepared," he warns, citing the expense, bad publicity, criminal liability, civil lawsuits and perhaps even bankruptcy that could befall an LCO should a spill occur at his headquarters.

It's estimated that 80-90 percent of professional pesticide end users aren't yet prepared to implement containment procedures or deal with the consequences should they fail to do so, believes Haskett.

"We in the industry have done a good job of countering the negative issues raised in the area of consumer safety, applicator safety and low risk versus the high benefits of our services," he points out. "We, on the other hand, haven't done as good a job in the areas of internal operation."

Two major sections

Haskett's Greenworld facility (profiled in the August 1990 issue of Lawn Care Industry magazine) is divided into two major areas, primary containment and secondary containment.

The interior of the building is coated with a special sealant resistant to chemicals. Silicone fills the cracks in the concrete. Each section has self-contained pumps that catch all waste and spilled products so they can be recycled.

The primary containment has a six-inch dike sur-

rounding it. This can hold up to 1,000 gallons. All chemical concentrates are handled in this area. This area also contains an eye wash fountain, plus a shower and sink that drain into a sump that isolates all chem-

icals—keeping them from the water or sewer system.

The secondary containment area is surrounded by a four-inch dike that can hold up to 3,000 gallons. Daily operations take place here, where diluted materi-

als are handled. Trucks are parked here, and dry chemicals such as fertilizers are stored here too.

Contact Fredrick Haskett, P.O. Box 336, Dover, Ohio 44622. 216/364-5235. LCI

SCMA PREZ SAYS EPA NEEDS SOME PEP

WASHINGTON, D.C.—The U.S. Environmental Protection Agency's (EPA) needs to get its act together in the registration of pesticides.

That was the message Ralph Engel, president of the Chemical Specialties Manufacturers Association (CSMA) brought to the House Agriculture Subcommittee on Department Operations, Research and Foreign Agriculture late this spring.

Engel called for improvements to the federal pesticide registration and review process. "Industry does not object to this scrutiny because we want the public to know that pesticides have been thoroughly tested and are safe and effective used in accordance to directions," said Engel. "But the process must be efficient."

EPA is in bad shape, he told the panel headed by Representative Charles Rose (D—NC).

Problems include loss of applications and data; inconsistent labeling directives; failure to communicate policy from one agency to another; and excessive delays in approval of label changes even for those changes mandated by new EPA registration standards.

"Out of some 400 me-to-type applications submitted by our members last year, only six were turned around within the statutory 90-day period," claimed Engel. "For the agency to ignore its requirements under FIFRA is to create a very real anti-competitive situation in the marketplace."

As far as boosting the fees companies pay to have their products reviewed, Engel said SCMA members are dead against it. LCI

PLCAA ANNOUNCES SIX SUMMER SHORT COURSES

MARIETTA, GA—Lawn care owners and managers are invited to one of a series of management short courses.

The Professional Lawn Care Association of America is sponsoring the following courses:

- July 10, Wooster, Ohio, co-sponsor Ohio Lawn Care Association.
- July 16, Louisville, KY, co-sponsor Kentucky Association of Lawn Care Professionals.
- July 18, Indianapolis, IN, co-sponsor Indiana State Lawn Care Association.
- July 22, Billings, Montana, co-sponsor Association of Montana Turf and Ornamental Professionals.

- August 7, State College, PA, co-sponsor Lawn Care Association of Pennsylvania.
- August 8, Rochester, NY, co-sponsor New York State Lawn Care Association.

Topics to be covered in the short courses include personnel issues, DOT regulations, and media/customer relations.

Cost of the one-day short courses is \$40 for PLCAA members, \$85 for non members. (Those joining PLCAA at the short courses can use the difference between member and non-member cost toward their membership fee.)

For more information, contact PLCAA, 1000 Johnson Ferry Road, NE, Suite C-135, Marietta, GA 30068. LCI

NEW PRODUCTS

Worksaver shows two drop spreader models

Worksaver Inc. says its two new drop spreaders provide accurate and uniform applica-



tion of seed, granular fertilizer and chemical. Streaking is eliminated.

The Model DS-36 is 36" wide, weighs 87 lb. and has a 180 lb. fertilizer capacity. Model DS-60 is 60" wide, weighs 108 lb. and has a 300 lb. fertilizer capacity.

Both are ruggedly constructed and have pneumatic 4:00 X 8 tubeless 2-ply tires, says Worksaver.

Circle No. 151 on service card.

Nitrate levels measured easily in water samples

Spectrum Technologies, Inc. says the Cardy Nitrate Meter provides a quick and accurate in-the-field test for well, irri-



gation and surface water or field runoff and tile drainage.

To use, place several drops of water on the sensor and read the results in ppm of nitrate. The meter comes with case, batteries, standardizing solutions and deionized rinse water.

Circle No. 152 on service card.

Video tells how to get rid of crabgrass woes



Hoechst-Roussel Agri-Vet Company offers a 10-minute video on dealing with crabgrass with Acclaim® IEC Herbicide.

"Crabgrass Control Strategies" is an informative video featuring LCOs using Acclaim in IPM programs, border programs and as a rescue treatment.

It's available at no charge to LCOs. Write: Crabgrass Control Strategies, 3343 Peachtree Road, Suite 1220, East Tower, Atlanta, GA 30326.

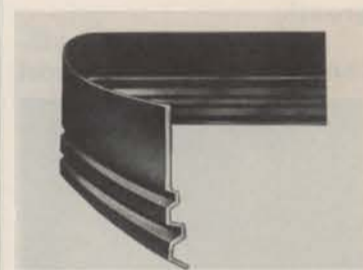
Circle No. 153 on service card.

This UV-treated edging safe and easy to install

Oly-Ola Sales, Inc., says its Slim-Edg polyethylene landscape edging offers a safe, durable and low-profile alternative to round-top edging. It's made of flexible, UV-treated black polyethylene.

The product's four horizontal grooves at the bottom, together with superior non-bending steel anchoring stakes, eliminate frost heave problems.

Circle No. 154 on service card.



Here's a faster way to hitch up snowplow

Boss Products shows its Rapid-Tach quick hitch on its straight blade snowplow. The Rapid-Tach is a faster way to hook up a snowplow without crawling under the truck.

Just drive into the plow, drop the cable controlled pins in place and you're ready to go. Circle No. 155 on service card.

Water-soluble packet can color your ponds

Want to color a lake or pond? Just toss a water-soluble packet into the water.

Becker-Underwood offers Lake Colorant WSP, a highly concentrated colorant packaged in water soluble packets. Each packet colors one acre foot of water. The packet will dissolve in less than four minutes. The product won't harm fish or wildlife, claims the company.

Circle No. 156 on service card.

"In today's economy, any edge in efficiency is money in the bank."

"To be competitive in this marketplace, you have to cut operating costs without cutting service. Our customers are cost-conscious, so we have to manage our business better." George and Patricia Morrell own and operate one of Atlanta's largest landscape maintenance firms. They have owned Isuzu trucks since 1985.

"After the first two or three Isuzu trucks we were hooked. Our mechanics told us these trucks were simply built better. Our Chevrolets are about the same age and they're literally falling apart.



With Isuzu trucks we've had no major problems. The mileage is twice what we were getting with other trucks. And the employees aren't tearing them up. They're solid, quality trucks. The difference in initial cost is paid back ten times over during their life. "No matter what the competition does, we feel that as long as we keep buying Isuzu trucks and managing our people well, we'll continue to grow"

To find out where you can get the Isuzu Truck edge, call (800) 255-2550.



Works for the Morrells.



Image can now be used on certain ornamentals
American Cyanamid Company says Image® herbicide received EPA registration of an expanded turf label to include use on selected landscape ornamentals.

Image, first introduced to lawn care in 1987, is used for the control of purple nutsedge, wild onion and garlic and other weeds. It can now be used at labeled rates around and over the top of selected landscape ornamentals

tals for control of certain weeds.
Circle No. 157 on service card.

Adapter gives Feldman aerators versatility

The Feldman pull-behind aerator can now be used with tractors possessing 3-point hitches. Feldman Engineering & Manufacturing Co. offers an adapter that allows prompt adjustment of the aerator

tines for soil penetration or transport.

Four bolts, included in the adapter kit, attach the aerator frame to the adapter. Built of steel, the 3-point hitch adapter attaches to either the 2340-32 or 2340-48 models.

Circle No. 158 on service card.

Jacobsen says Aero King aerators rugged

The Jacobsen Aero King

aerators come in three models, a roll type and two reciprocating aerators, in widths from 19 to 30 inches for up to 30,000 square feet of capacity per hour.

All three models come with a reliable, 4-cycle, OVH engine with electronic ignition and steel construction. All three models fit through a 30-inch gate.

Circle No. 159 on service card.

This product targeted

for southern weeds
O.M. Scott & Sons offers Southern Weedgrass Control.

It provides pre-emergent control of six annual grassy weeds and 10 broadleaf weeds. The product, which contains pendimethalin, is effective on all established southern varieties of turfgrasses.

Southern Weedgrass Control features an improved carrier, says O.M. Scott.
Circle No. 160 on service card.



WHEN YOU'VE GOT GRUB CONTROL THAT'S THIS GOOD, WHY NOT SPREAD IT AROUND?

When it comes to grub control, there's nothing faster or more effective than DYLOX® Insecticide from Mobay.

Now, thanks to DYLOX 6.2 Granular Insecticide, there are two great formulations of DYLOX to tackle tough grub problems.

DYLOX gives you the fast-acting protection you've come to depend on, and now the new granular formulation makes it even easier to use.

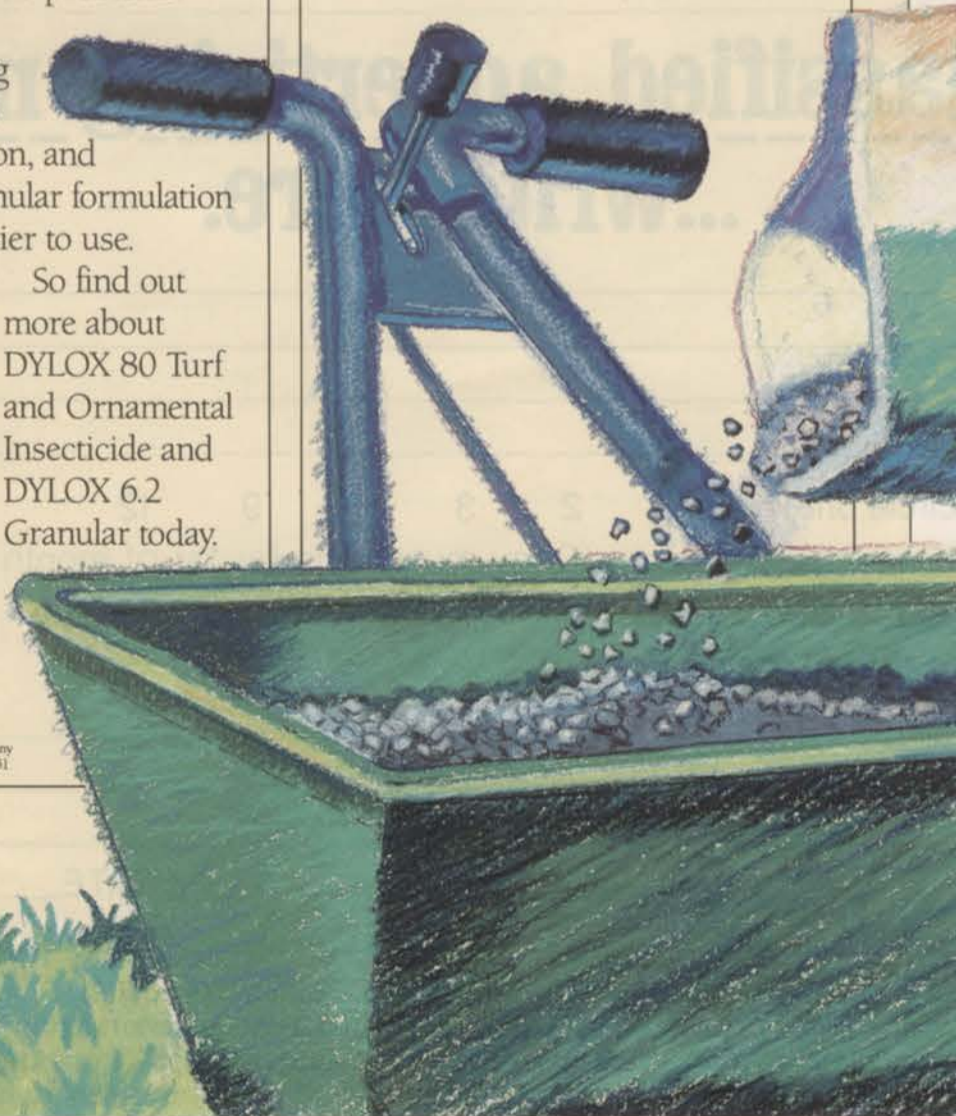
So find out more about DYLOX 80 Turf and Ornamental Insecticide and DYLOX 6.2 Granular today.



DYLOX is a Reg. TM of Bayer AG, Germany
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Because the only thing faster than DYLOX at work, is the way its reputation for grub control has been spreading. Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120. (800) 842-8020.



Maxon introduces new pager with big memory

Maxon Paging says its new POCSAG digital numeric display pager has 12-message memory, an easy-to-read display, tough Lexan housing, and comes with a case.

It's powered by one "AA" battery and uses a single control for On/Off, Silent/Beep, and Read/Reset functions.
Circle No. 161 on service card.



Husqvarna booklet valuable tree guide

Husqvarna's new brochure describing proper techniques for tree felling and limbing is a handy reference for anyone doing tree work.

The four-color, 32-page brochure covers items such as directional felling, sweep limbing and cross-cutting.

The brochure is entitled "Husqvarna Work Technique for Felling and Limbing" and is available free of charge from Husqvarna Forest & Garden Co., 907 W. Irving Park Road, Itasca, IL 60143. 708/773-2777.

Circle No. 162 on service card.

Want more information about a product you see advertised? Simply circle the corresponding Reader Service Number on the postpaid cards at the back of the magazine.

CLASSIFIED

RATES: \$1.05 per word (minimum charge, \$40). Boldface words or words in all capital letters charged at \$1.30 per word. Boxed or display ads charged at \$90(1X), \$85(3X), \$80(6X), \$75(9X), \$70(12X) per column inch (one inch minimum). (Frequencies based on calendar year). Agency commission allowed only when camera ready art is provided by agency. For ads using blind box numbers add \$20 to total cost of ad per issue. Send ad copy with payment to: DAWN NILSEN, LAWN CARE INDUSTRY, 1 E. First St., Duluth, MN 55802. 218-723-9179. Fax Number 218-723-9437.

BOX NUMBER REPLIES: Mail box number replies to: LAWN CARE INDUSTRY, Classified Ad Department, 1 East First Street, Duluth, MN 55802. Please include box number in address.

FOR SALE

FOR SALE: Automated lawn service in Bergen County, NJ. Owner operated. For more information call 914-638-1259. 7/91

HANNAY HOSE REELS: New in the box. E1526's and E1530's - \$359. 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

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Swingle Tree Company, Denver, Colorado, an industry leader since 1947 is looking for a supervisor for our tree spraying department. *Min. 2-3 yrs. experience in diagnosis and recommendations. *Working knowledge of tree spraying equipment. *Excellent communication skills combined with field and supervisory experience. *2-4 year related degree desired. *Health, Dental and Pension Plan. *Salary range: \$21,000-\$25,000. Call Tom or Greg (303)337-6200. 7/91

SERVICES

CO-OP DIRECT MAILING SERVICE: -Mail to 885,000 swimming pool addresses - or mail only to your area. -Mail with two other companies, and your price is only \$80 per thousand. -Mailings limited to three advertisers - so as not to diminish impact of mailer. -Compatible advertisers, share costs, save money, give you the best results and highest return for your advertising dollars. -All ads are in four colors. -\$80 per thousand price includes: one 8-1/2" x 11" ad with two other advertisers. For information: Co-Op Direct Mailing Service, (800)543-6603. 7/91

BUSINESS OPPORTUNITIES

CURB KING: Curbing machine that lays continuous concrete landscape borders. Financing available. Low investment, high returns. For information call 303-434-5337 or write P.O. Box 40567, Grand Junction, CO 81504. TF

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like we polluted theirs.

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Buy thru ... Sell thru ...

Classifieds Get Results

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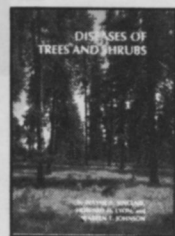
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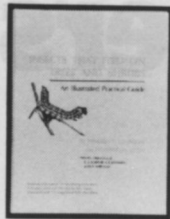
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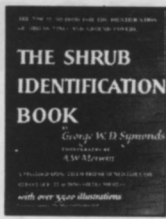
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by Richard W. Harris
Provides comprehensive coverage of complete planting, site analysis, preparation and special planting methods, fully detailed coverage of fertilization, irrigation and pruning guidelines on preventative maintenance, repair and chemical control, how-tos of diagnosing plant problems, practical data on non-infectious disorders, diseases, insects and related pests and pest management. **\$63.00**



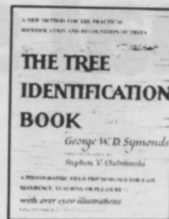
430 - DISEASES OF TREES AND SHRUBS
By Wayne Sinclair, Howard Lyon and Warren Johnson
A comprehensive pictorial survey of the diseases of, as well as the environmental damage to, forest and shade trees and woody ornamental plants in the United States and Canada. Reflects the most important developments in fungal biology and taxonomy, plant bacteriology, virology, and environmentally induced stress in plants. Summarizes information about newly discovered diseases and provides up-to-date accounts of old ones. **\$52.50**



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by George Symonds
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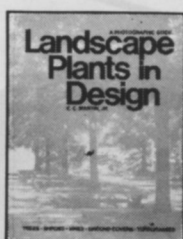
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Eleventh edition. Provides all the pricing data you need in one convenient source. 28 major sections cover site, recreation and landscape development, 65 subsections provide specific data on materials, equipment and labor. Will save you hours on time-consuming research and calculations. Organized in easy-to-use CSI format. **\$44.95**



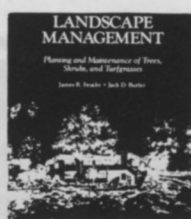
300 - LANDSCAPE DESIGN: A PRACTICAL APPROACH
by Leroy Hannebaum
Geared for the commercial designer/salesperson, this is one-stop guide to the landscape design process. Covers the entire highly competitive field including design analysis techniques, pointers on land forms, specialized business landscaping methods, environmental design guidelines, specifications, estimations, bids. **\$54.95**



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An in-depth examination that combines technical training in landscape science with methods of accounting, business management, marketing and sales. Discusses effective methods for performing lawn installations, landscape planting and maintenance. Step-by-step accounting calculations are explained in simple terms. **\$54.95**



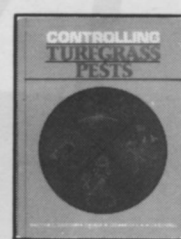
365 - LANDSCAPE PLANTS IN DESIGN
by Edward C. Martin
An annotated black & white photographic guide to the design qualities of ornamental plants and their aesthetic and functional use in landscape designing. Over 600 trees, shrubs, vines, ground covers and turfgrasses are described in non-technical language. Over 1900 photographs. Provides a basis for selecting the best plant materials for any particular use in landscape design. Contains detailed indexes that provide quick reference to particular design qualities and growing conditions. **\$69.95**



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Planting and Maintenance of Trees, Shrubs, and Turfgrasses. Describes the basic principles of cultural management of installed landscapes. The important factors of plant growth, soils and fertilizers, improved planting techniques and new pruning techniques, integrated pest and disease management, and spray-equipment calibration and care are all featured. **\$35.95**



375 - RESIDENTIAL LANDSCAPES
by Gregory M. Pierceall
An excellent reference for individuals involved in the design and development of plantings and constructed features for residential sites. Illustrations and actual residential case study examples are used to communicate graphic, planning and design concepts which are the focus of this text. **\$55.95**



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by Shurtleff, Fermanian, Randell
New comprehensive guide provides the most up-to-date information available on the identification, biology, control and management of every type of turfgrass pest. **\$48.95**



235 - LAWN CARE: A HANDBOOK FOR PROFESSIONALS
by H. Decker, J. Decker
Written by turfgrass professionals, this handy guide will be invaluable for playing field managers, golf course managers, or any lawn care practitioner. Covers all aspects of turfgrass management. **\$48.95**



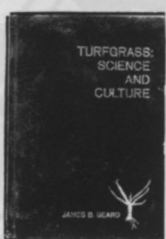
640 - TURF IRRIGATION MANUAL
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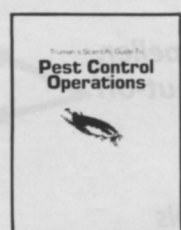
110 - TURF MANAGERS' HANDBOOK-Second Edition
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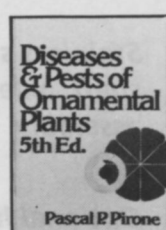
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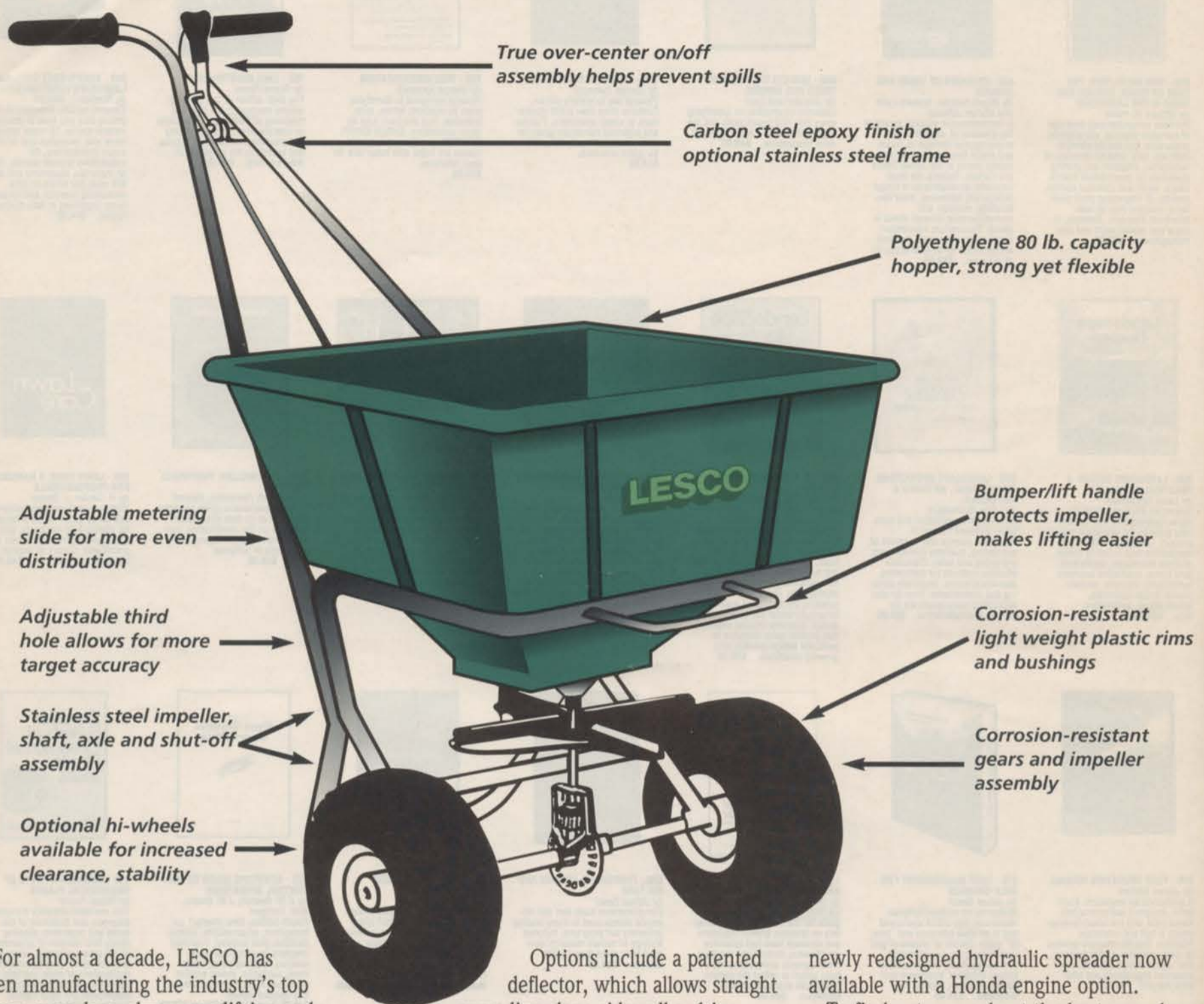
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