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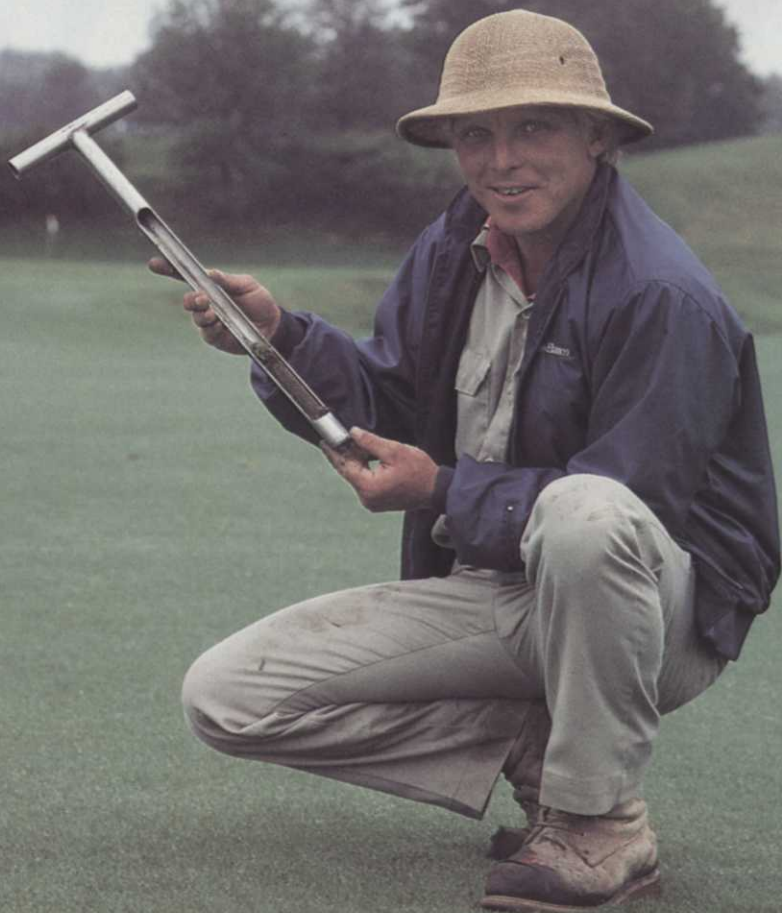
## State of the Industry

Dealing with the '90s





**Penneagle/Penncross  
Right on Course**

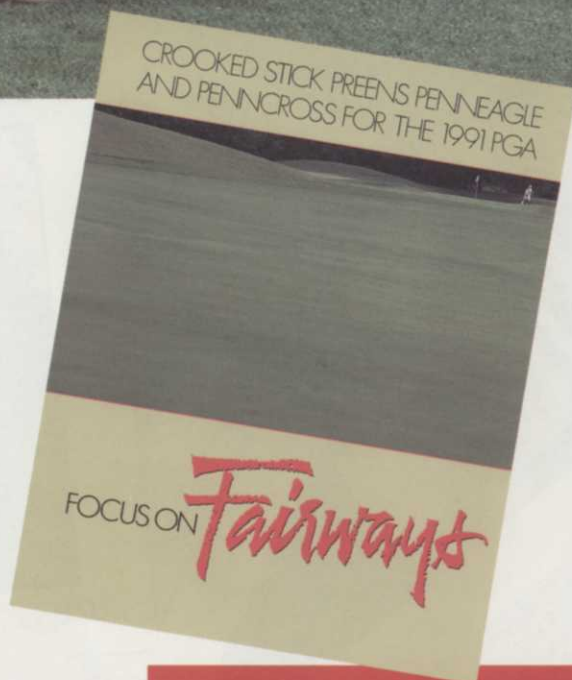


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by the Landscape Management staff. Green industry professionals are dealing with five burdensome issues today: dwindling labor pools, high insurance costs, regulations, marketing and maintaining a professional image.

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## A holiday word to the apocalyptics

'Tis the season to be jolly, so news this month from this corner might help brighten your holiday season.

Would you believe it if I told you that the landscape/golf industry is still alive and well, and not experiencing the wholesale "recession" predicted by the many apocalyptics—many of whom consider themselves to be economic whizzes?

Sure, there has been a minimal downturn in business. Very minimal. And yes, there are more business concerns bugging landscapers and golf course superintendents (see this month's "State of the Industry" report). But friends, by and large the green industry is effectively coping with the most recent roadblocks—including those imposed by certain Middle Eastern oil-producing countries.

It is a curious thing about this country's economy that when the apocalyptics speak, their vast minions from coast to coast—many of them leaders of *Fortune* 500 companies—listen. Thus, when political problems arose earlier this year in the Mideast, the oil companies immediately jacked up their pump prices by 30 to 40 percent. Which led to increased predictions of a crumbling economy by the surly apocalyptics. And we have the beginnings of the self-fulfilling prophecy.

Not surprisingly, then, it is a real delight to talk to the movers and shakers in the green industry and hear that their businesses remained healthy through this most recent economic escapade.

"Business in 1990 has been more a function of weather and not the recession here," notes Gary Thornton of Thornton Landscaping, Maineville, Ohio.

"All the other media are making it look bad," says Terry Stout of R.B. Stout, Akron, Ohio. "We see no effect, no problems, here."

"The last four to five years have been a record-breaker, says Arnie Sieg of the Bruce Co., Racine, Wisc. "And nobody is ready yet to say it won't be great again next year. Sure, we're going to keep alert to trends, but we're certainly not panicking."

Some parts of the country, most notably the Northeast, are experiencing a noticeable decrease in business because of the economy. But the big factor affecting green industry profits—as it always has been and always will be—is weather. Rain in the Midwest and lack of rain in the Southwest have been responsible for decreased profits, not the economy.

Our holiday message, then, is this: enjoy this special season. Spend more time away from the desk with your family and friends. Sing a few carols. Hang plenty of mistletoe. Because despite what the apocalyptics say, if you work in the green industry, you can afford it.

Happy holidays from the staff and management of LANDSCAPE MANAGEMENT!

Jerry Roche, editor

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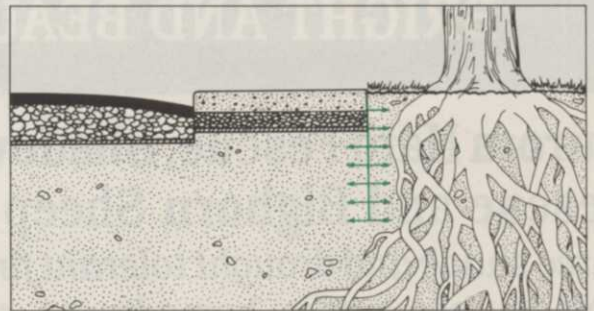
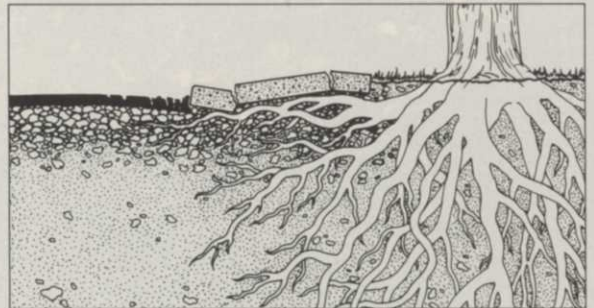
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# tame ur landscape.

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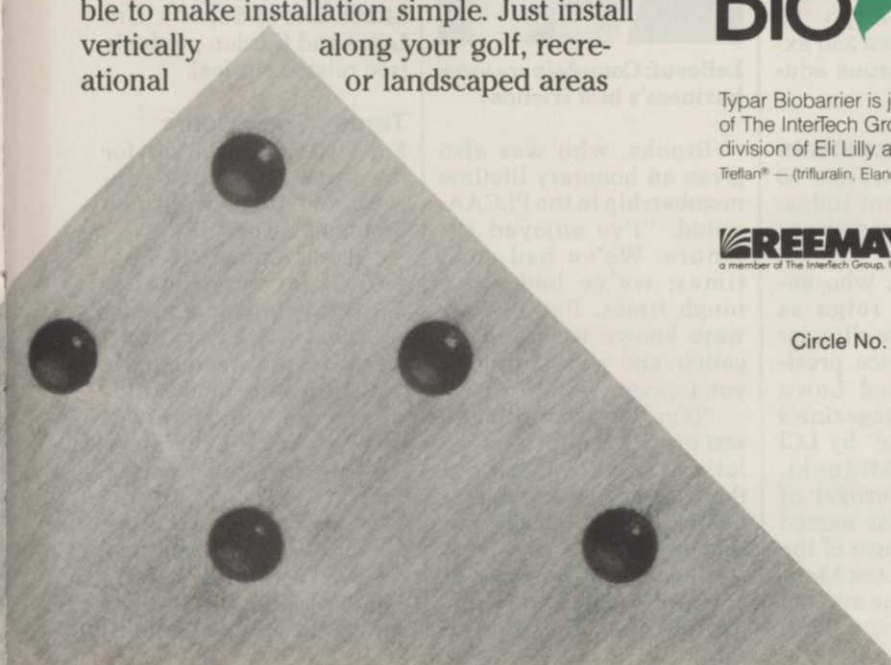
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# GREEN INDUSTRY NEWS

DECEMBER 1990, VOLUME 29, NUMBER 12

## LANDSCAPE MANAGEMENT

### CONFERENCES

# Service the customer, and profits necessarily follow

NASHVILLE, Tenn. — In dealing with your customers, you should heed the advice of twisted-tongued baseball sage Yogi Berra: "If people don't want to come out to the ballpark, nobody'll stop 'em."

Best-selling author Michael LeBoeuf provided that and other wisdom as keynote speaker at Green Industry Expo '90 here last month.

He told a full house at the Nashville Convention Center the five best ways to keep customers coming back:

- by far, the most important is to **be reliable**;
- people pay dearly for peace of mind, so **be credible**;
- use tangibles to **be attractive**;
- when customers want service, they want it now, so **be responsive**; and
- **be empathetic**: treat customers the way they want to be treated.

"A typical business hears from only four percent of its dissatisfied customers, (but) a customer who complains is your best friend," LeBoeuf noted. He added that complainers

point out areas of needed improvement, give you a second chance, and offer you a wonderful opportunity to earn their loyalty.

Next year's Expo will have a tough act to follow, judging by comments from some of the more than 3,000 participants.

A sell-out for the Professional Lawn Care Association, Associated Landscape Contractors, and Professional Grounds Management Society, Expo '90 featured more than 250 exhibits and numerous educational sessions.

### Special announcements

On the news front, Expo '90 featured important industry-related announcements.

James Brooks, who ended a 7½-year reign as PLCAA executive director and executive vice president, was named *Lawn Care Industry* magazine's "Man of the Year" by LCI publisher Jon Miducki. And Vince Patterozzi of ServiceMaster was named "Landscape Manager of the Year" by *LANDSCAPE MANAGEMENT* magazine and the PGMS.



**LeBoeuf: Complainers are a business's best friends.**

Brooks, who was also given an honorary lifetime membership in the PLCAA, noted: "I've enjoyed my tenure. We've had good times; we've had some tough times. But I've always known we'd pull together, and we did. I thank you forever.

"(For now), I'm going to rest up a little bit. There are lots of opportunities out there, some in the green industry. I'll turn up again in this industry."

The manufacturers of specialty pesticides announced the formation of

Responsible Industry for a Sound Environment (RISE), to address issues facing the green industry on the regulatory and safety fronts.

The PLCAA announced it has entered into a labeling agreement with K-Mart. K-Mart stores will support the association's new "Grasscycling" campaign by incorporating the program's logo, slogan and environmental message on package labeling for K-Mart's line of Super K-Gro Lawn and Garden products (see related stories).

### Three-in-one works

Expo '90 was a trial run for the three-association concept, and there were few problems reported.

"It was a huge success," said Sandy Marting, the PLCAA's director of public relations. "Everybody loved the show and educational programs, and exhibitors were very happy," said Marting. "Everyone's looking forward to next year."

Debra Dennis, executive director of ALCA, reported an ALCA/PGMS attendance of 528, "more than double the attendance at



ASSOCIATIONS

# PLCAA and Kmart join hands to promote environmental awareness to Americans

last year's St. Louis show. And we did receive quite a number of new memberships on site."

Added Alan Shulder, executive director of the PGMS, "It was an idea whose time had come five years ago."

Reported problems were few. ALCA registration at a separate locale was inconvenient, but sources say next year all three groups' events will be held in a main convention center.

Smaller exhibitors, according to Shulder, said the exhibit floor should have been open longer than the scheduled 10 hours. □

NASHVILLE, Tenn. — The Professional Lawn Care Association of America (PLCAA) announced here that Kmart Corp. will support the association's national environmental awareness campaign, "Grasscycling: Today's Turf, Tomorrow's Earth."

The 4,000-store retail chain will incorporate the program's logo, slogan, and environmental message on package labels for Kmart's

line of Super K-Gro lawn and garden products. Scheduled to appear early in the 1991 merchandising season, the new labeling will be included on all packaged items of Kmart household plant products, liquid and granular fertilizers, and insecticides.

"We are pleased to be including the PLCAA's Grasscycling identifiers on our lawn care products," says William L. Chilcutt,

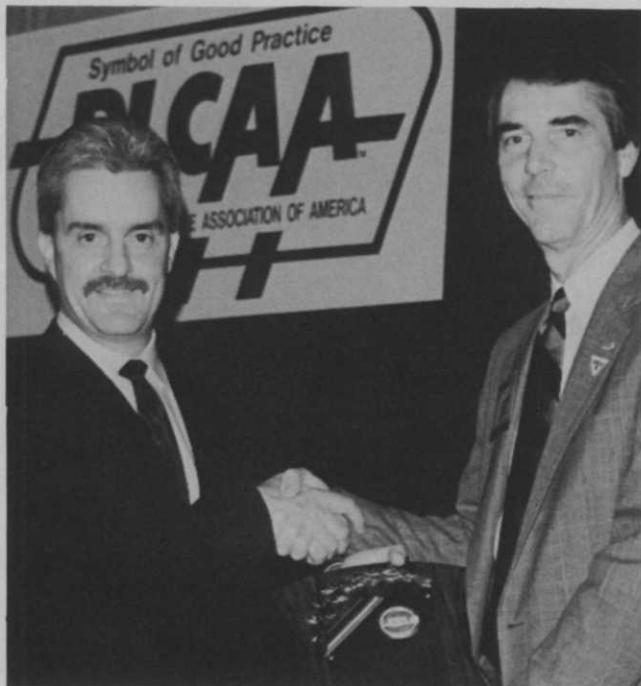
Kmart buyer for horticulture and decorative flowers. "Kmart's environmental program focuses on the solid waste stream, and the PLCAA's program fits in nicely with our overall environmental mission of a healthier environment for America."

The campaign's goal is to urge homeowners to leave grass clippings on the ground while mowing. The

to page 12



A packed room of landscape managers sits enthralled during an educational session at Expo '90 in Nashville



James Brooks (right) accepts the *Lawn Care Industry* "Man of the Year" award from LCI's publisher, Jon Miducki



Vince Patterozzi (left) gets his "Landscape Manager of the Year" award from current PGMS president Ted Shull

**KMART** from page 11  
two-pronged result is fewer tons of waste, and healthier lawns.

The labeling concept was presented to Kmart by The Andersons, a diversified agribusiness which formulates and packages products for major retail, lawn care and golf course distributors.

"We presented the concept to Kmart last summer," said Peter Machin, manager of sales and marketing for The Andersons' Lawn Fertilizer Division.

"We felt the "Grasscycling" program was very appropriate to Kmart's commitment to enhance, protect and preserve the global environment," said Machin.

When the Grasscycling program was introduced earlier this year, PLCAA's Sandy Marting said, "This program provides a practical solution for eliminating millions of tons of clippings taking up space in our municipal landfills." □

## Chemical manufacturers lead parade to support pesticides

NASHVILLE, Tenn. — Specialty pesticide manufacturers have united to form a new organization to better support the green industry's battle against misinformation.

Responsible Industry for a Sound Environment (RISE), an autonomous standing committee within the National Agricultural Chemicals Association (NACA), will act as an umbrella organization. It will address the issues affecting the \$1.3 billion green industry. A key part of the effort, according to sources, is "speaking in a unified voice to communicate the environmental, health and safety benefits of the proper use of pesticides."

"We are constantly bombarded by federal, state and local issues, regulations, legislation and misinforma-

*Budget for RISE is \$440,000, including \$10,000 for membership acquisition.*

tion," says Bill Liles of Ciba-Geigy. "This constant attack has cost us all valuable resources. In most cases, our defense has been weak and poorly focused due to a lack of a central, coordinated effort."

Allen Haws of the Mobay Specialty Products Group says RISE will "support the position that judicious use of pesticides can prove positive in the care, maintenance and protection of public health and property in the urban, suburban and industrial environment.

"It is our mission," says

Haws, "to be responsible to the public and support the industry."

The RISE membership drive has begun as a way to seek industry support and to create a large, strong entity that will have a voice of authority in the public and private sectors. RISE will serve as a clearinghouse of information on specialty markets, to promote and expand opportunities for the industry.

Integral in the program are lobbying at all levels of government, education for the public and end user programs on proper

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pesticide use and handling.

The group's initial proposed budget is \$440,000. Of that amount, \$220,000 is earmarked for salaries for a director, a secretary, office expenses, benefits and travel. Membership acquisition kitty is \$10,000. An additional \$200,000 is to be used for projects like coordinating university support, addressing state and local issues, developing educational programs and addressing environmental issues.

RISE urges participation to unite all resources necessary to the organization's efforts.

Membership in RISE is open to end users like golf course superintendents, landscape contractors and public employees. It is also open to basic manufacturers, formulators, distributors, associations, media and equipment manufacturers.

Those joining before Jan. 31, 1991 will achieve charter member status. □

## LEGISLATION

# Sanity prevails: 'Big Green' fails

SACRAMENTO, Calif. — "Big Green" has turned blue.

State Proposition 128, which would have turned California into a legislative jungle and severely limited pesticide use, was a loser in the Nov. 6 general election here.

Voters refused to foot the bill for "Big Green," which would have cost an estimated \$90 million in its first year, mostly through higher energy and food prices.

"People finally clued in on what 128 would mean to California's economy and what it would mean to California's environment, which is not much," says Scott MacDonald, who opposed the legislation. MacDonald says the bill failed to address smog, ground-

water contamination and toxic waste, which he says are California's true environmental culprits.

Failure of the initiative does not, however, mean that Californians are apathetic to a clean environment, says Richard Woodward, director of the anti-128 campaign. He believes the vote, "means that Californians are not willing to make faulty proposals a law of the state merely because they are called pro-environment by their promoters."

"Big Green" was sponsored by Assemblyman Tom Hayden (D-Santa Monica), and Atty. Gen. John Van de Kamp. Many motion picture and television personalities joined in the effort to pass the proposed bill, giving it high vis-

ibility among voters.

Hayden said efforts to protect the environment would be accelerated.

"We will get clean food, clean air, a clean ocean and government clean enough to stand up to the polluters in Sacramento," Hayden said. Prop 128 may reappear on ballots in two years.

"Big Green" would have provided \$300 million in bond funds to buy and preserve ancient redwood trees, curb auto and other emissions, banned oil development in state waters, and barred pesticides suspected of causing cancer.

Former Surgeon General C. Everett Koop was among 128's opponents. Koop echoed the concern of other "Big Green" opponents, by saying the bill would increase food, gas and utility prices and eliminate jobs.

Also failing at the polls in California were Prop. 130, a forestry protection measure, and Prop. 135, a pesticide counter-initiative sponsored by the agricultural industry. □

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# NEWS BRIEFS

**DUDECK'S A GRANDDAD...**LM editorial advisor **Dr. A.E. Dudeck** (University of Florida) became a grandfather on Oct. 5th. Daughter Kathy Collart gave birth to Timothy Collart at 9:31 a.m. Dudeck says that waiting in the delivery room with son-in-law Dave, "brought back memories of 30 years ago; I felt like an expectant father again." Congratulations to the Dudeck family.

**PROMOTING SAFETY...**A new "ALCA Supervisor's Safety Handbook" is available from the Associated Landscape Contractors of America. The book covers safety policies, meetings, proper clothing, general first-aid, equipment certification, material handling and (are you listening?) chemical safety. The book is available to members for \$4; non-members can get it for \$20 (maybe it's time you joined...?). Contact ALCA at (703) 241-4004; order by fax at (703) 532-0463.

**TAKING CHARGE...**Harold Vaubel has been hired by Signal Landmark as golf course superintendent for Eagle Crest Country Club, now under construction in the hills of Escondido, Calif.

**IN COLLEGE, IN BUSINESS...**Word comes from Centerville, Ohio, about the business success of **Martin Grunder**, a college student who operates a thriving landscaping business. Grunder, a senior finance major at the University of Dayton, cleared \$300,000 in gross sales last summer. "I've operated my own business since I was in seventh grade," says Grunder, who began his business career as a grass cutter. Today, he employs about 10 workers. "The darn phone is ringing off the hook," Grunder says.

**SPEAKING OF GETTING CLIPPED...**Calgene Pacific of Melbourne, Australia, is nearing completion in the breeding of a blue rose. Latest research was to isolate the gene that makes other flowers blue. The blue hue is to be transferred into roses, gerberas, carnations and chrysanthemums. But does Calgene really think, as reported, that a blue rose will fetch \$100 per stem? Wake up and smell the roses! A Japanese firm has invested \$5 million into Calgene's other gene research that seeks to produce flowers that last longer in the vase. What might those cost?

## PEOPLE

# 'Dad' Gill passes away in Milwaukee

MILWAUKEE, Wisconsin  
Harry Gill, a founder of the Sports Turf Managers Association and a friend to every athletic turf manager who ever raked an infield, died here of natural causes on Oct. 25.

"His passing represents a great loss to us individually and as an organization," notes Dale Keller Jr., executive director of the STMA. "Under his guiding hand, the association grew in membership and stature. Harry dedicated his life to making it a strong group with a main purpose to educate sports turf managers."

Gill, 69, was planning to retire on Nov. 1.

For the last 16 years of his life, Gill was superintendent of grounds and maintenance for the Milwaukee Brewers at County Stadium here and at Compadre Stadium in Chandler, Ariz. During those final 16 years, he won virtually every major turf award, including Sports Turf magazine's "Man of the Year" in 1990.

A press release from the Brewers aptly notes:

"To the Milwaukee Brewers, his friends and family, Harry Gill will be remembered affectionately as 'Dad,' a warm reception he often used when greeting someone he knew.

"Gill was soft-spoken, but was always able to captivate an audience, whether it was addressing a couple hundred at a convention or a couple in the Brewers' front office. A good-natured, friendly individual, he always found time to share a humorous tale with someone, usually leaving him with a smile. That's what made Harry Gill the king of the hill."

Gill was especially fond in recent years of telling audiences about his experience during the filming of "Major League" at County Stadium, and about his one-on-one conversations with



**HARRY C. GILL**  
1921-1990

such baseball notables as Henry Aaron.

As a tribute to his leadership, the Harry Gill Turf Scholarship was established in 1987 through the STMA.

Prior to joining the Brewers (where former assistant Gary Vanden Berg becomes his successor), the Milwaukee native was a groundskeeper and facilities director of a 45-hole golf course and 700-seat restaurant in Rockford, Ill.

Mary, his wife of 40 years, has requested that donations be made to the Gill Scholarship Fund or the local heart/diabetes funds or needy food programs.

—Jerry Roche □

## WATER

### Districts sign to save water

SACRAMENTO, Calif. — Two Southern California water districts recently signed an agreement which will ease the drain on that region's evaporating water supply.

The Irrigation Association reports that the Metropolitan Water District of Southern California will pay the Imperial Irrigation

to page 15



# Illinois wetlands are facing extinction

ST. CHARLES, Ill. — The once-thriving Illinois prairie wetland is now a drop in the bucket, and a concerned landscape architect has taken steps to preserve what little remains.

"Nearly 90 percent of the wetlands that characterized the Illinois landscape when the earliest settlers arrived...are now gone," says Greg Stevens,

senior landscape architect/project manager with The Lannert Group here.

According to Stevens, widespread drainage and development are the two biggest causes of shrinking wetlands, which are now recognized more as vital and important ecological systems.

But controversy has arisen over what today con-

stitutes a wetland.

"Because it is impossible and ill-advised to completely stop development," says Stevens, "we have to find some better way to distinguish between those wetlands that should be preserved and those that add nothing tangible to the environment."

It is in education that Stevens says landscape ar-

chitects can play a useful role.

The government wildlife department describes wetland as having:

- hydrophytic vegetation, or plants typically found in wetland and other aquatic habitats;

- hydric soil, which is saturated, flooded or ponded during the growing

*to page 18*

## **WATER** from page 14

District about \$97 million to build conservation facilities in the agricultural district, and another \$23 million for indirect costs over the program's first five years. Another \$2.6 million will be paid annually to cover the Imperial Irrigation District's direct cost of the program.

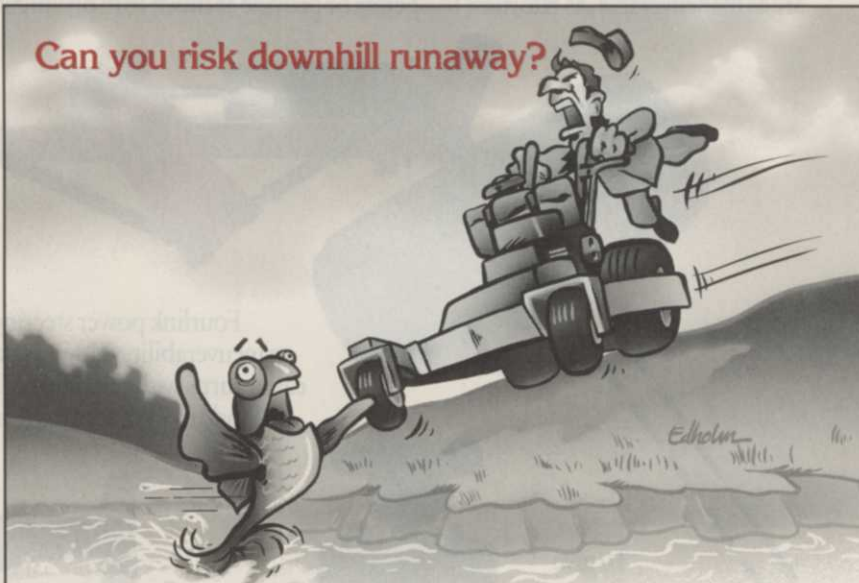
Under the program, Metropolitan will finance 16 conservation projects in the Imperial Valley and, in turn, will receive an estimated 106,100 acre-feet of water per year that would be saved.

The projects include automated control structures, concrete lining of earthen irrigation canals and new reservoirs. The conserved water will remain in the Colorado River and be available for Metropolitan to import into its service area through its Colorado River Aquaduct.

Metropolitan provides water service to more than 14.7 million Southern Californians in six counties. Imperial delivers water from the Colorado River to agricultural users or about 500,000 acres farmland, in the fertile Imperial Valley.

According to Carl Boronkay, general manager of Metropolitan, "Implementation of this landmark water conservation endeavor between the farmers in the Imperial Valley and urban Southern California exemplifies the growing role water management and conservation will play in meeting (our) future water needs." □

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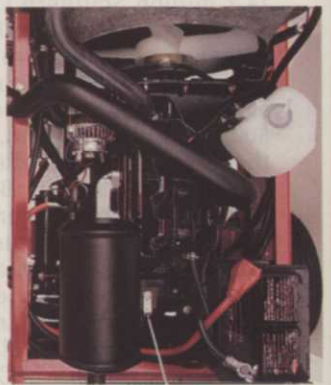


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The Groundsmaster 220 also is available with a 20 hp air-cooled gas engine.

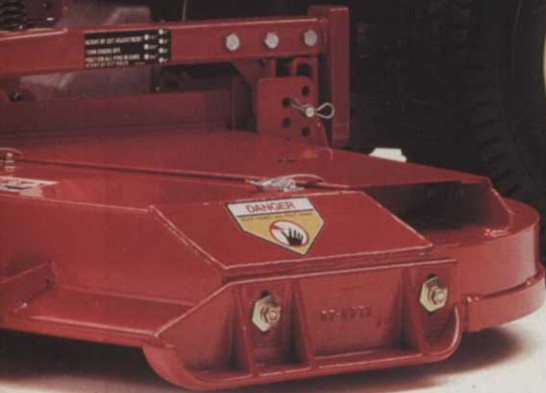




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**ILLINOIS** from page 15  
season to develop anaerobic conditions in the upper part; and

● hydrology, which is the science of dealing with the properties, distribution and circulation of water.

Section 404 of the Clean Water Act requires developers to obtain a permit before any dredging or fill activity occurs in property encroaching into a wetland.

"If the proposed development is found to impact the wetland area," explains Stevens, the landscape architect must devise an alternative layout or develop a plan that mitigates lost wetland to another on-site location."

To determine the exact

boundaries of wetland area, Stevens says The Lannert Group uses a wetland consultant, a soil scientist and a botanist.

That crew studies sites and makes the proper determination by using various factors:

● the amount of wetland vegetation present,

● the limits of the hydric soil and

● a computer-plot over a map or aerial photograph.

"This not only preserves an irreplaceable natural resource, but also achieves the highest and best possible use of that wetland," says Stevens. More people are able to enjoy the amenity, while its important ecological function has been retained." □

## EVENTS

### DECEMBER

**12-14: Pacific Coast Turf and Landscape Conference and Trade Show**, Washington State Convention and Trade Center, Seattle. Contact: Jones and Associates, Park Center, Suite 200, N. 908 Howard St., Spokane, WA 992-01-2261; (509) 327-5904.

**13-14: New England Arborists Exposition**, Sheraton Inn and Conference Center, Boxborough, Mass. Contact: Elizabeth Collins, Massachusetts Arborists Association, 288 Walnut St., Suite 300, Newton, MA 02160; (617) 332-8683.

### JANUARY

**4-6: Mid-Atlantic Nurserymen's Trade Show**, Baltimore Convention Center. Contact: P.O. Box 314, Perry Hall, MD 21128.

**7-9: Maryland Turfgrass Council Conference & Trade Show**, Baltimore Marriott Inner Harbor. Contact: Cheryl Gaultney, Michigan Turfgrass Council, 12 Pressie Lane, Churchville, MD 21028.

**9: Sacramento Valley Landscape & Nursery Expo**, Sacramento Community Convention Center. Contact: Patti Adkins, (916) 729-2606.

**13-18: National Institute of Golf Management**, Oglebay Park Resort and Conference Center, Wheeling, W.V. Contact: NIGM, Wheeling Park Commission, Oglebay, Wheeling WV 26003, or Department of Continuing Education at Oglebay, (800) 624-6988.

**14-16: Great Lakes Nursery & Landscape Trade Show**, Amway Grand Plaza Hotel and Grand Center, Grand Rapids, MI. Contact: Michigan Nursery and Landscape Association, 819 N. Washington Ave., Suite 2, Lansing, MI 48906; (517) 487-1282.

**14-17: Virginia Turf and Landscape Conference & Trade Show**, Richmond Centre and Richmond Marriott, Richmond, Va. Contact: Randeem Tharp, (804) 340-3473.

**14-17: University of Maryland Advanced Turfgrass IPM Short Course**, College Park, Md. Contact: Lee Hellman, (310) 454-7130.

## ATHLETIC TURF

### Rebuilding and resodding

Vicnor Farms of Connoquenessing, Pa. uses an innovative method of installing athletic fields.

The company strips off existing vegetation, tills, and adds lime, fertilizer and soil amendments. Fields are graded and sodded with a bluegrass blend.

Vicnor says the soil amendments loosen tight soils, reducing future soil compaction. Another amendment reduces the frequency of irrigation. According to Vicnor, amending the existing soil rather than using a sand base reduces divots caused by athletic cleats. Fields are playable in four to six weeks.

Vicnor Farms, which will consult with schools in maintaining rebuilt fields, is located at Box 227, Connoquenessing, PA 16027. Its phone number is (412) 789-7811.

### Natural turf in domes

Technology for installing and maintaining natural turf athletic fields in domed stadiums and other indoor facilities is now available from the Greenway Group of Horsham, Pa.

Greenway, says **Thomas L. Ripley Sr.**, has a patent pending on the Integrated Turf Management (ITM) System, which can also be used over existing artificial surfaces.

ITM provides the first transportable natural turfgrass system, complete with an all-new greenspec lightweight growing medium. The system, which **Dr. Henry Indyk** of Rutgers University helped develop, weighs a fraction of typical growing alternatives. ITM systems also can be interchanged to meet the demand of the sports activity.

For more information, contact Greenway at (215) 343-0110.

### Brochure is offered

**Dr. Bruce Augustin** and **Art Wick** of Lesco, Inc. have authored a new brochure entitled "Athletic Field Turf Maintenance Handbook." The 12-page brochure gives specifications for a variety of athletic fields. To receive a copy, call the Sports Turf Managers Association at (702) 739-8052 or Lesco at (800) 825-3726.





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# THE STATE OF THE INDUSTRY

Bill Russell of Chem-Turf Landscapes, Norcross, Ga., has a Ph.D. in agronomy, yet his company prospers because of his business acumen.

"You can be a whiz-kid as far as landscaping," Russell notes, "but if you don't run the business, you're going to fail."

Klaus Ahlers of Carlacio Landscape, Fullerton, Calif., who has a background in business administration, agrees: "Just understanding the different government programs that affect the landscape industry, you'd better have some kind of background in business."

## Labor: where is it?

The Association of Landscape Contractor's 1989 "Crystal Ball Report" wrote that "firms face the problem of attracting formally-trained individuals who want to work from the bottom to the top and stay with the firm. Existing firms also encounter those individuals who go into business for themselves, and because of inexperience, become unfair competitors."

The industry's labor force is largely composed of 18- to 25-year-olds. That group is shrinking, however, a problem which requires immediate attention.

"The day of the \$4.50-an-hour laborer is over," says ALCA, "and we all better realize it. And the day of the 15 percent payroll costs is over, and we better recognize it."

The labor situation has, however, gotten better in some areas, like along the eastern seaboard.

"The construction trades have fallen off considerably," explains Mike Stewart of Control Environmental Services, Edison, N.J., "so there's a lot less building in this area. We get an overwhelming response from ads for laborers."

Stewart also does a good amount of recruiting from SUNY's Cobleskill college or other schools offering 2-year agriculture/recreational land management degrees. Notes William Heyser of Heyser Landscaping, Norristown, Pa.: "The labor shortage is no longer an issue. The economy has taken care of that."

## Running out of gas

Gasoline prices—which started their skyrocket well into the growing season this year—have affected most landscapers, but probably none more than Russell's Chem-Turf.

"They've gone from .79 cents to \$1.25 a gallon here," notes Russell. "That's been a major glitch in our profit margins. If it gets to \$1.50 a gallon, you're talking double the original



Green industry professionals are dealing with five burdensome issues today: dwindling labor pools, high insurance costs, regulations, marketing and maintaining a professional image.

**G**one are the days when the aspiring landscaper, grounds manager or golf course superintendent could rely entirely on his horticultural expertise to churn out beautiful landscapes. A new era in landscape management has begun, a business-based era where the bottom line is not wholly affected by the landscaper's appearance.

And so goes the facts of life for today's landscaper, according to the re-

sults of a recent industry poll conducted by the editors of *LANDSCAPE MANAGEMENT*.

"If you came out of school with a degree in ornamental horticulture, you're not prepared to be a businessman," notes Gerry Leider of Tropical Plant Renters, Riverwood, Ill. "All the personnel issues, government employee and pesticide regulations that you have to abide by have become a hell of a lot more complex."





## Labor flux, insurance issues loom

If your workforce is fluid, and you're suffocating under oppressive insurance rates, one thing else is certain: you're not alone.

Robert Maronde, current president of the American Landscape Contractors Association (ALCA), predicts that stabilizing the workforce and managing insurance costs are "the top issues of the 1990s."

Maronde believes the labor pool is shrinking; what remains is ever-changing.

Maronde's term as ALCA president gives him a front-row seat at all landscape-related developments, and an opportunity to pass along what he's learned as president of Exotic Plant Rentals, South Elgin, Ill.

Maronde offers three solutions to stabilize the workforce and attract more people to landscaping:

- Higher wages;
- Fluid work hours;
- Innovative benefits, such as day-care subsidies for part-time workers not eligible for group health insurance.

"The prevailing wage rate across the United States is on par with McDonald's and Burger King," says Maronde. "Nobody can live on minimum wage."

Other landscapers in-the-know agree that to be competitive, wages must begin at \$7 to \$10 an hour.

Admittedly, landscaping is not a nine-to-five job. And then there's weekend work. Maronde thinks that to make the work more attractive, companies implement flex time, so workers avoid the hassle morning and evening rush hours. Alternating Saturday work might also help, and would take some schedule juggling, especially at companies with multiple offices.

To suppress volcanic insurance rates, Maronde says worker education programs must be widespread: in offices, greenhouses, warehouses, and in the field.

"We have to do more in-depth training," Maronde insists. "Workmen's compensation payments are going off the chart because of stupid accidents. The supervisor, manager, or company owner has not taken the time to review the proper way to handle machinery, equipment and hand tools."

Worker safety has long been a concern of ALCA. Its "Safety and Awareness" program contains everything a company needs to make its workers more aware of proper safety measures. It includes lessons in first aid, pesticide application and safe driving. "And it's economical," says Maronde. "All you need is a small TV and a VCR. Sit them down and show them." Regular safety reviews are a mandate at Exotic Plant Rentals.

When did you last review your customer base? Can you accurately describe your typical customer?

"A company owner must do a review (of his market) twice a year," insists Maronde. "Look at population growth or trends that influence your direct market. Otherwise, you won't be in business two to three years down the road."

Landscapers must pay attention to what may be a shifting market niche, as today, customer profiles are less defined.

"Marketing is a concept, an evaluation, an adjustment to trends that are happening within your grasp," explains, Maronde, who believes advertising is necessary to stay afloat. "If you sit there and don't advertise for a year," he says, "two years from now, nobody knows about you. You're a well kept secret. And you know what happens to a well-kept secret."

Top-flight landscapers perform quality work, but the public needs to know.

"You can win a ton of awards," says Maronde, "but that doesn't mean anything unless you utilize it and market your services. It's great to have all those plaques, but it's also great to have all those plaques in all the newspapers."

Marketing on this level is simple. It's done with an occasional press release to the business and garden sections of local papers. "And you don't have to be a large company to be able to afford it," insists Maronde. "There are a lot of marketing companies that would love to be able to spend four hours a week on your business, and put you three years ahead of yourself."

If you think your company has an image problem, look at the way your workers dress and the condition of the fleet.

Trucks must be bright and clean, insists Maronde. "They don't have to be new, just rust-free. And uniforms can't look like they were first worn in 1965." And: no jeans, no tennis shoes.

Maronde believes that landscape contractors are just as important to a job project as a building contractor; the mutual importance needs to be stressed. "Landscape contractors are not just the last guy to come in," he says. "We're part and parcel of the contracting trade."

Failure to comply with water and pesticide regulations could well put some companies out of business during the next few years. Stringent controls will continue, and the losers will be those who don't follow regulations and don't educate employees.

Maronde promises that the negligent companies will not be able to pass muster on facility inspections, and will fail when it comes to meeting insurance requirements. Quoth Maronde: "You must invest in yourself."

The emotionalism of the environmental movement will continue, albeit in waves. "The idea is to be able to ride through the storm and capitalize on it," advises Maronde. "Come up with a new or better product. Come up with a different way of handling the situation to make your customers better aware."

Landscape contracting and lawn maintenance is now a test of stewardship.

"If we can conserve water," suggests Maronde, "we cut down on water pollution. If we can filter the air, we can cut down on air pollution. There are ways to be pro-active. You can be part of the emotionalism, or part of the solution."

—Terry McIver □



**Bob Maronde:**  
*Emphasize worker safety and marketing.*



price. That means that instead of paying \$2500 a month for gas, we'll be paying almost \$5000. And if you're locked into annual contracts like we are, you can't adjust the prices you charge until next year."

### Competition is high

Stewart reports that competition in his neck of the woods is stiff. "In the past it was the land of plenty. For every construction job, we used to bid against five other companies. Now, it's about 40." More emphasis, too, is being put on full-service maintenance as the construction boom has faded.

To survive, he says, "you have to be good. Service and professionalism have to be stressed. It's going to keep separating the men from the boys."

To foster quality workmanship and responsibility within the ranks, landscapers must continue to promote from within their companies.

"If I have to hire a crew leader (from outside the company), then I've got a problem," says Mike Puckett, landscape construction manager at Fullcare, Inc., Louisville, Ky. "That means I can't keep good lead people."

Puckett thinks leadership is a quality most people have, "they just don't get the opportunity to develop it within themselves."

By hiring from within, Puckett follows a well-designed management blueprint.

"They know they have that opportunity," he says. "They want that responsibility; they want to upgrade themselves, they want to make more money. They can aspire to do that as opposed to just coming in, doing their work, and leaving. Every once in a while you'll get a guy who is not satisfied with that. He's restless. That's the person I'm looking for."

### Wages must rise

ALCA says wages must begin in the \$7.50 to \$10 range, and Stewart agrees. He starts his laborers at about the \$7.50 level.

In addition to a good paycheck, Puckett believes that workers deserve "mental wages" everyday. "That means you compliment people," he explains. "You tell them what they're doing well. You give constructive criticism.



Stewart



Ahlers



Leider

"I owe it to the guys to let them know anything and everything that is a positive," Puckett says. "Many times people are motivated by money or self-respect. One thing everybody likes is to be complimented."

### Insurance woes

Like many areas of the country, eastern Pennsylvania is experiencing an increase in the cost of Blue Cross/Blue Shield coverage next year. Coverage there will jump to \$560 per month per employee.

"There aren't many landscaping companies that can afford those rates," says Heyser. "Many companies, like us, are passing along some of the expenses to employees. We pay for so much coverage and then give the employee the option to purchase more."

Likewise out in California, where Ahlers says "you can't find a person who doesn't ask about insurance when you offer them a job" and in Illinois, where Leider notes that the health insurance prices are "ludicrous."

### Attack of the low-bidders

Price undercutting by some companies is a grub in the turf of many landscapers.

Who are the low-bidders? Is "right-to-work" a valid concept? Not when it affects quality and, in the long run, the collective image of the industry.

Mark Yahn, president of Ground Control Landscaping, Orlando, Fla., says contractors must "learn to bid responsibly for their own financial well-being as well as that of the industry."

"It does little good to take premium jobs out of the market," explains Yahn, "if the final result is conflict with the owner and no profit; or, in some cases, red ink."

"A lot (of the undercutters) have been in business for a short time," notes Stewart, "and I don't think they know a lot about pricing." But he says he looks forward to that competition, because in the long run, the most professional and service-driven companies will survive.

According to a new report by the Center for Golf Course Management, golf course superintendents consider environmental safety to be an extremely important priority in maintaining their courses.

When asked to rank special areas of concern, superintendents surveyed said groundwater protection was their highest priority. Also mentioned as important aspects of management were:

- notifying the public of control



product applications,

- water-use restrictions and
- regulations on underground storage tanks and hazard communications.

John Schilling, executive director of GCSAA, believes the survey is strong evidence that superintendents are sensitive to environmental issues.

"The study shows clearly," says Schilling, "that golf course superintendents are very well-informed about our nation's environmental priorities."

Pat Jones, GCSAA director of communications, says that its certified superintendents are acquiring a new respect from environmentalists.

"In the past," recalls Jones, "the



**Puckett**

superintendent was cast in the role of the villain. That was frustrating for GCSAA members who are very much concerned about protecting the environment."

According to Jones, the golf superintendents' initiative has paid off. "We've heard from folks in the environmental movement," says Jones. "They see us in a better light. People are looking at golf courses as a way to set aside natural land, and keep wildlife in areas that it might otherwise have been driven out from."

Superintendents have also become more accepting of the integrated pest management (IPM) concept. "We're pleased that it's becoming a practice on golf courses, and not just a philosophy," says Jones. "The interesting thing about (IPM)," continues Jones, "is that for a long time people thought it was something that you could pull out of a box. It doesn't work that way. The person has to learn the basic principles of turf management, and then relearn them and apply them at his or her facility. That puts a lot of impetus on the manager to make it a priority." **LM**

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LANDSCAPE MANAGEMENT'S next literature Round-up will be in the February 91 issue. Spotlight your brochure, catalog, sales literature, video or training film. For more information on this section circle the reader number or contact:

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Cynthia Gladfelter  
Literature Round-up  
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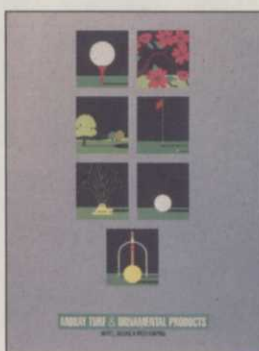
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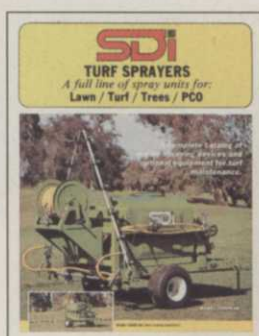
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While the law demands that you comply with regulations such as OSHA's Hazard Communication Standard and SARA Title III, the real benefits come from providing a safe workplace and being a responsible citizen.

# CHEMICAL SAFETY: IT'S IN YOUR HANDS

Any company that handles pesticides must comply with the appropriate safety regulations. But many don't know exactly what is required by law.

by Julie M. Baranyai, Ph.D.

**H**andling chemicals safely means being informed about the products you're handling, being aware of their hazards and being prepared to control, contain, and clean up a spill.

Golf course superintendents, landscape contractors and others who use pesticides and fertilizers must plan ahead and think about the "what-ifs":

"What if application equipment leaks?"

"What if there is a fire in a chemical storage building?"

If you are to handle chemicals safely, you must inform your employees by complying with the Occupa-

tional Safety and Health Administration (OSHA) Standard or Worker Right-to-Know Law. You also need to be aware of your responsibility to inform the community at large about chemicals used at your facility as required by SARA Title III or the Community Right-to-Know Law. Understanding and using Material Safety Data Sheets (MSDSs) is part of both of these laws.

#### **Worker right-to-know**

The worker right-to-know law was issued by OSHA on November 24, 1983 as the Hazard Communication Standard (HazCom). Initially, the legisla-

tion was limited to chemical manufacturers, imports, and distributors. It was expanded to include other users of hazardous chemicals, such as golf course superintendents and landscape contractors, on June 24, 1988.

The federal OSHA standard preempts any state or local worker right-to-know law unless it is an OSHA-approved state plan. HazCom protects the worker in the work place; it does not extend outside the work place. Employees of all businesses that handle hazardous chemicals, including contractors and subcontractors, are protected under the law.

Businesses are not responsible for a



worker who is self-employed; however any employees of a self-employed business owner are covered by the law.

### Legal requirements

The law requires that hazards of all chemicals used in a work place be evaluated and that information and training for safe use be provided to employees. Under HazCom, "hazardous chemical" is defined as any chemical that presents a physical (fire, explosion, etc.) or health hazard in the workplace, according to criteria set by OSHA.

Many pesticides not considered hazardous by the Environmental Protection Agency (EPA) or Department of Transportation (DOT) are considered

hazardous by OSHA, including most fertilizers and all pesticides. The MSDS received from your supplier should be consulted to determine if a product meets the OSHA definition of "hazardous chemical."

HazCom requires employers to:

- 1) Evaluate hazards of all chemicals handled in the workplace.
- 2) Develop and maintain (keep cur-

rent) a list of all hazardous chemicals to which employees are or may be exposed.

- 3) Obtain and make available to employees MSDSs for every hazardous chemical in the workplace.

- 4) Insure that all hazardous chemical containers on site are properly labeled.

- 5) Develop an employee training program to inform employees of physical and health hazards of chemicals and how to protect themselves.

- 6) Establish emergency procedures.

- 7) Establish proper work procedures in handling hazardous chemicals.

- 8) Develop a record system for inventory and training.

- 9) And develop a written hazard commu-

nication program.

The written Hazard Communication Program must explain how the employer intends to meet the law's requirements. It must include the hazardous chemical list, location and availability of MSDSs, and the employee training program.

Employees must be given the following information:

---

*The MSDS says what a chemical is, why it's hazardous, and how to use it safely.*

---

- Requirements of the worker right-to-know law.

- Operations in the work area where hazardous chemicals are present.

- Location of the written HazCom program, hazardous chemicals lists, and MSDSs.

Training requirements include the following:

- 1) Methods and observations employees can use to detect the presence or release of a hazardous chemical in their work area.

- 2) Health and physical hazards of chemicals in the work area.

- 3) Measures employees can take to protect themselves from chemical hazards and procedures implemented by the employer to provide protection, such as safe work practices and personal protective equipment.

- 4) How to read and interpret hazard information found on labels and MSDSs.

- 5) And how contractors or non-employees in the workplace are to be informed of chemical hazards.

Training is to be done when the employee is initially hired or assigned to a work area where hazardous chemicals are present. Although refresher courses are not required, any new hazard or hazardous chemical introduced into the workplace requires additional training.

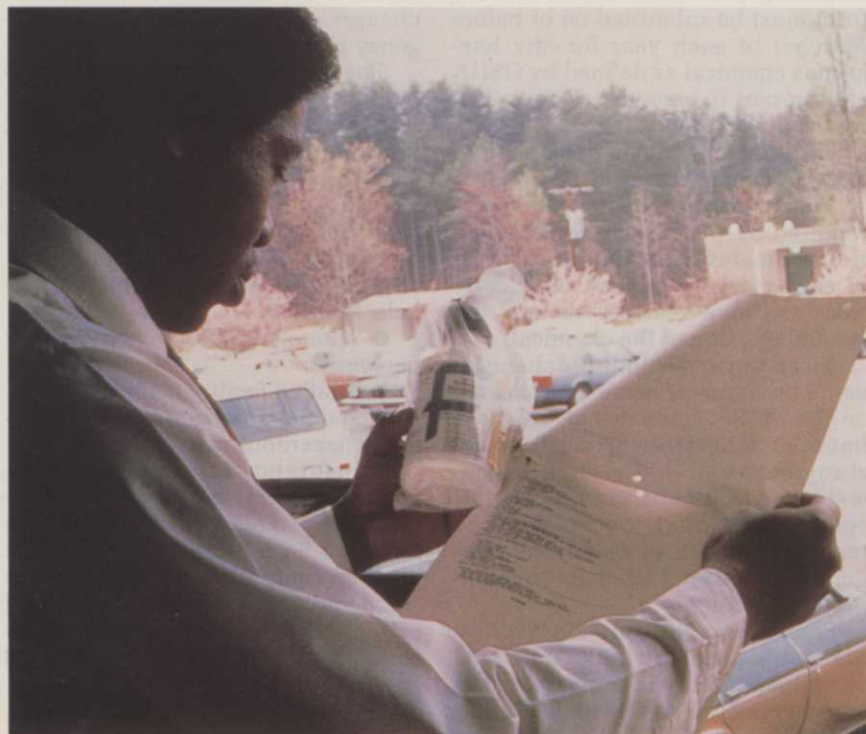
### Material Safety Data Sheets

The MSDS identifies what the chemical is, details why it is hazardous and tells how to work with it safely. Manufacturers of hazardous chemicals must provide MSDSs to their customers. If the customer is a distributor, the distributor must provide the MSDS to his customers, and so on down the line.

You should make sure that MSDSs you receive are complete and adequately explain hazards, that you have MSDSs for all chemicals on site, and that employees have access to MSDSs and can understand information on them.

### SARA Title III

SARA Title III is administered by the EPA rather than by OSHA. It was included in the 1986 Superfund Amendments and Reauthorization Act (SARA). Title III of the Act is also known as the "Emergency Planning and Community Right-to-Know Act." This law has four major components: Community Right-to-Know Reporting (Sections 311 and 312); Emergency Notification (Section 304); - Emergency Planning (Sections 301-303); and Toxic Chemical Release Reporting (Section 313, not discussed here -



Purveyors of hazardous chemicals are responsible for informing employees and the community at large about the control products used at your facility.

## EMPLOYEES MUST BE GIVEN THE FOLLOWING INFORMATION:

- ✓ Requirements of the worker right-to-know law
- ✓ Operations in the work area where hazardous chemicals are present
- ✓ Location of the written HazCom program, hazardous chemicals lists, and MSDSs

applies to manufacturers only).

### Community right-to-know

Community Right-to-Know Reporting businesses are required to report information about hazardous chemicals at their sites to the Local Emergency Planning Committee (LEPC), State Emergency Response Commission (SERC), or local fire department. Physical and health hazards of chemicals are to be reported by indicating which—if any—of the five EPA hazard categories applies: Immediate (acute) Health Hazard, Delayed (Chronic) Health Hazard, Fire Hazard, Sudden Release of Pressure, and Reactive Hazard.

Section 311 requires a one-time submission listing hazardous chemicals present at a facility. Alternatively, MSDSs may be provided. The lists or MSDSs are to be provided for all hazardous chemicals for which OSHA requires an MSDS if present in amounts greater than or equal to their Threshold Planning Quantity (TPQ). Currently, the TPQ is 10,000 pounds, except for chemicals designated as "Extremely Hazardous Substances" (EHSs) in Section 302 of SARA Title III.

### TPQ listings

The TPQ for many EHSs is listed in Section 302. For those not listed, the TPQ is 500 pounds (or 55 gallons). These TPQs are subject to change by EPA. The list or MSDSs must be submitted within three months after the facility first becomes subject to Section 311.

It is recommended that a list rather than MSDSs be provided, since every revised MSDS received by the facility must be re-submitted to the LEPC,

SERC and fire department. The list must include the EPA hazard categories for each chemical, chemical name, common name, and hazardous components of each substance, and, for mixtures, the identity of individual elements or compounds which are hazardous.

The LEPC, SERC, or local fire department may later request an MSDS for any chemical on the list.

Section 312 is an annual responsibility requiring more detailed information on chemical hazards and handling practices. An inventory form must be submitted on or before March 1 of each year for any hazardous chemical as defined by OSHA and present in amounts as described for Section 311 reporting.

Facilities may submit either a Tier I form or the more detailed Tier II form.

Tier I consists of a list of chemicals reported by the EPA hazard categories, estimates of maximum amounts of each category present on a daily basis and on a yearly basis, and the general location of the chemical.

Tier II reports include the chemical name or common name as indicated on the MSDS, estimates of the maximum amount of the chemical present at any given time during the year, general location, and description of storage. State, local, or emergency response officials, as well as the public, may request Tier II information from the facility.

Emergency Notification Section 304 requires that the LEPC and SERC be notified if there is a release of certain chemicals in excess of the Reportable Quantity (RQ) established by EPA for each covered substance. Chemicals covered include the Sec-

tion 302 EHSs and CERCLA hazardous substances.

Releases to the environment which go beyond the facility boundary must be reported, although EPA encourages reporting all releases for which there is a risk of movement offsite.

If a CERCLA chemical is involved, the National Response Center also must be informed, even if the release stays on your own property.

EPA has proposed to designate EHSs not on the CERCLA list as CERCLA hazardous substances, so that all releases, whether off your property or not, would be reportable on the local, state, and federal level. It is recommended that all of these groups be notified whenever any substance is spilled in an amount exceeding its RQ.

### Emergency planning

Any facility which has any of the Section 302 Extremely Hazardous Substances present in amounts over the TPQ must notify the SERC. You should work with the local fire department or LEPC to develop an emergency plan.

As a first step, appoint an emergency coordinator for your facility. Give his or her name, along with a copy of the emergency plan, to the fire department and LEPC. The plan should also be readily available to employees and extra copies should be filed at primary and secondary facility contact people's homes. The plan should be modified whenever changes at your facility affect emergency planning provisions.

The emergency plan should include:

- procedures to follow for spills, fire, or explosion;
- responsibilities of facility personnel;
- list of available safety and clean-up equipment and its location;
- product safety information (labels, MSDSs);
- phone numbers of emergency personnel;
- detailed facility map;
- special instructions for especially hazardous materials; and
- insurance information (name and phone number of agent).

While compliance with these two laws is a legal requirement, the real benefits come from providing a safe workplace for your employees and acting as a responsible corporate citizen in your community. **LM**

Dr. Baranyai is health and environmental safety specialist for Ciba-Geigy, Agricultural Division. She earned her Ph.D. in pharmacology from Duke University.



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The 4WD Turfcats T422D climbs steep hills\* with just a flip of a switch. For better side hill traction, a step on a pedal engages the differential lock.

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\*Consult your operator's manual for safety instructions when mowing hills.



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# WHERE IS YOUR COMPANY?

A strong position statement will set your company apart from the rest.

by Rudd McGary, Ph.D.

**P**ositioning has been an important concept in advertising since the mid-1970s. To successfully position your company in the consumer's mind, you need to articulate exactly what that position will be—and you don't need boatloads of advertising dollars to make it work.

The most visible aspect of positioning is the position statement. Famous positioning statements include, "It's The Real Thing" (Coca-Cola), and "Less Filling, Tastes Great" (Miller Brewing Co.). Each is a one-line explanation of how a company wants to position its product.

The position your company takes will make an impact on it internally and externally. It helps the company focus on what it does and how it does it. It should be part of your company's larger mission statement.

## What's the cost

Some companies spend millions of dollars to find that magic combination

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*It is important to articulate a position.*

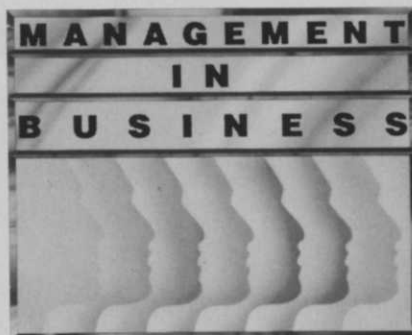
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of words that will stick in the customer's mind and influence them to purchase its product.

One green industry company that has used advertising to position itself nationally is ChemLawn, Inc. Its positioning statement used to be "Making America Green, One Lawn at a Time." Today, it's "We Care and It Shows." Both are designed to set the company apart in the customer's mind.

Though most green industry companies don't enjoy the deep advertising budget of a company like ChemLawn, positioning within your market is still possible.

A strong position is one that makes



you stand out in the minds of the consumer. Potential positions in the green industry include:

**Professional service.** Consumers want professional service from the moment they call you until they pay their bill.

**Courtesy.** A position statement like "Beautiful Lawns With a Smile" implies courteous service.

**Responsibility.** The customer wants to know what to do when mistakes are made. For example, the position statement "The People Who Work to Make Sure You're Satisfied," says that you'll do whatever it takes to make the customer happy.

**Fair Price.** This seems to be the most common green industry position, probably because every consumer wants a fair price. remember, you're more likely to distinguish your company with a position that isn't easily duplicated.

**Safety.** A position statement concerning the environment is effective in many areas. However, research has shown that consumers aren't willing to pay more for it.

All of these areas offer potential for a green industry company. The key is to choose an area that is both important to the consumer and offers a competitive edge.

Some position statements don't work for that reason. For example, a common position in the green industry is to offer a guarantee. Originally the concept worked well, but now

that it's part of nearly every company's position, its effectiveness is diluted. Unless your position statement differentiates you, it isn't working.

A good position statement has benefits within your organization as well. Employees often have an incomplete picture of the company for which they work. A position statement may shed some light on what they do and how they're to do it.

Employees generally work better together when they understand the company's position. It gives a basis for dealing with customers and helps set up all the advertising and sales efforts.

Companies that don't have significant advertising budgets need to rely on exposure to get position across. That means exploiting the times you're in contact with the customer, be it through Yellow Pages advertising, mailings, or during any office-to-customer communication.

In time, a strong position will begin to differentiate your company. **LM**



Rudd McGary, Ph.D., is a senior consultant with All-Green Management Associates in Columbus, Ohio



# TeeJet Just Made It Easier To Change The Way You Spray.



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Three nozzles help you control volume and drift. The optional low-volume extension wand is ideal for spot spraying and "touch-up" work.

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The TeeJet Lawn Spray Gun is the only lawn care gun with a trigger guard. It protects the applicator and the environment from accidental discharge.

So change the way you spray. Change to the TeeJet Lawn Spray Gun.





## Leasing equipment offers advantages

When Tony Fox decided to get back into the landscaping business after seven years absence, he knew he wanted the best equipment available. But he also wanted to "test the waters" before committing himself to a large capital investment.

"There's a lot of commercial and residential construction going on in the Pacific Northwest," says the Vancouver, Wash. contractor. "But I wanted to be sure of the stability of the economy before making a lot of capital outlays."

Fox diligently shopped around for a skid-steer loader—the workhorse for his new company—Special Dig and Construction. "I put between 50 and 60 hours on every machine I demo'ed," he says. Finally he found the loader that best fit his needs and the flexible financing to help him get his business off on a fresh start, a model with tracks, one-yard bucket, forks and backhoe attachment.

"Case Power and Equipment of Portland, Ore., gave me a 90-day lease. They would have given me a six-month lease, but after 90 days I felt confident enough to roll the lease over into a straight purchase."

### Innovation needed

Fox's experience illustrates the demand for innovative financing in the heavy equipment industry, says Phil Cote, Case Credit Corp. vice president for marketing and planning. One of the biggest challenges equipment financing companies face is responding faster to changing customer needs.

"Our customers' needs are changing faster in a more competitive marketplace," Cote says. "That's why we give dealers a great deal of flexibility in setting up financing arrangements."

One of the most important decisions facing a contractor who must upgrade or replace heavy machinery is the choice of a financing program. For example, lease financing can mean lower payments and shorter trade-in cycles; it's a way to fix costs and cash flow based on the operator's individual needs. "There's nothing wrong with paying only for what you use. And in this day and age, who can afford to needlessly tie up working capital?" Cote asks.

### Money at work

Dick Krueger of Krueger's Associated Landscape, Hillsboro, Ore., agrees. "Leasing lets me keep my money



**Flexible financing of heavy equipment may offer the landscaper lower payments, shorter trade-in cycles, and a way to fix costs and cash flow.**

working for me. My business is exclusively commercial contracts and keeping my assets liquid gives me more bonding capacity to get bids."

But leasing is not the answer for every contractor.

"The decision to lease or buy is a very personal one and should be made in terms of one's unique financial situation," Cote says. "The majority of businesses that fail go under because of cash flow problems. A contractor must ask how important it is to have a title or deed to a piece of equipment in meeting contractual needs."

Lower payments are possible under a lease arrangement because the customer is not required to have equity in the equipment. "You can only pay a portion of the selling price, which is determined according to depreciation," Cote says. "Say the current retail value of a machine is \$10,000 and you only need it for two seasons of work. At the end of two years, you would still owe \$5,000 under a traditional four-year contract. With a lease however, you pay \$5,000 on the value of the machine during

the period of use."

### Investment recovery

Usually contractors expect to recover some of their investment by trading in an old machine when it's been paid for. "That can backfire if the used equipment market softens and you don't get as much money back as you were counting on," Cote notes. "With leasing, you in essence receive the credit you would get on a trade-in up front."

Full-service financing is an integral part of the heavy equipment business. It benefits landscape contractors and others by making the use of new equipment more affordable.

"That's why we're currently reviewing all current finance programs and contracts in an effort to stay competitive," Cote says. Much of the input for new financing options comes from dealers.

"What influenced my decision was first, who had the better machine," says Fox. "After that however, it was which dealer offered the better support system."

LM



# MidAm '91

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# Helping your business grow.

## MidAm '91



# QUICKIE-QUIZ

## Proper calibration of spray equipment

Comparison of Pumps				
Type	Operating Range	Maximum Pressure	Materials Handled	Durability
Roller	300-1000 rpm	350 psi	wide range w/ proper rollers	spraying pressure decreases with wear, but worn rollers are easily replaced
Piston	100-600 rpm	1000 psi	any	long life
Centrifugal	1200-3500 rpm	200 psi	any	long life
Diaphragm	200-12,000 rpm	100 psi	any	long life
Gear	500-1800 rpm	100 psi	oil emulsions & nonabrasives not for wettable powders except when gears are of nylon	limited life under adverse conditions, spraying pressure & capacity decreases with wear
Flexible impeller	500-1500 rpm	50 psi	wettable pow- ders, mild abrasives	moderate
Sliding vane rotary	500-600 rpm	125 rsi	limited to oil and oil emul- sions	spraying pressure and capacity decreases w/wear

- Which of the following are important factors in the calibration of a sprayer?
  - discharge rate per nozzle
  - ground speed of the sprayer
  - nozzle spacing and boom length
  - recommended application rate
  - all of the above
- One way to achieve uniform coverage would be to:
  - use a higher rate of product
  - spray the area more than once
  - adjust the height of the boom
  - spray against the wind
- To spray 17 to 19 inches from the ground, what series of spray nozzle is recommended?:
  - 80 degree series
  - 73 degree series
  - 65 degree series
- As the orifices of the sprayer nozzle tips become worn, the spray pattern:
  - usually remains the same
  - is modified and more material is released
  - is modified and less material is released
- The lower the pump pressure, the \_\_\_\_\_ spray delivered.
  - more
  - less
  - faster
  - slower
- Which is not an accepted method of changing a sprayer's delivery rate?
  - adjusting the speed of the sprayer
  - changing pump pressure
  - altering the discs or nozzle sizes
  - moving the boom closer to the surface
- To reduce the risk of drifting, you should:
  - use more narrow angle nozzles
  - use more wider angle nozzles
  - increase ground speed
  - reduce ground speed
- What percentage of overlap is best for most uniform coverage?
  - 25 percent
  - 35 percent
  - 50 percent
  - 75 percent
- Nozzles on heavily used equipment should be replaced:
  - annually
  - twice a year
  - monthly
  - after each application
- Allowing for factors such as wind and irregular terrain, there should not be more than a \_\_\_\_\_ percent error in application.
  - one
  - five
  - 10
  - 15

Answers: 1) d; 2) c; 3) a; 4) b; 5) b; 6) d; 7) a; 8) d; 9) a; 10) b



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# RESEARCH UPDATE

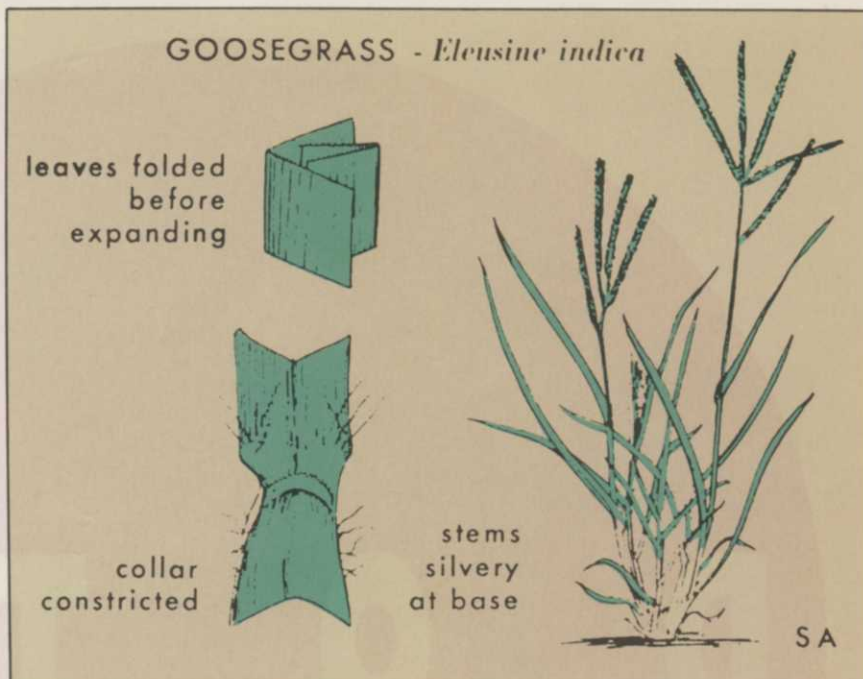
## Tenacious goosegrass subject of study

Researchers at Clemson University are studying the genetic structure of goosegrass to solve the mystery of the species' remarkable resistance to common herbicides.

"We're taking a genetics approach to characterize resistance in the population rather than in the individual plant," says horticulturist Vance Baird. "We're trying to define susceptible plants and resistant plants through DNA techniques."

According to Baird, DNA identification is more specific than any visual determination made by the naked eye.

Goosegrass presents major problems to farmers and turf professionals throughout the Southeast. According to Ted Whitwell, a Clemson weed scientist, cotton farmers in South Carolina already spend about \$25 per acre for herbicides. Goosegrass' resistance costs them an extra \$10 to \$15 per acre.



### Ancestral clues

Clemson researchers are investigating

Insights into goosegrass herbicide resistance may lie in its DNA structure.

if the resistant plants are the same or if they exhibit differences. According to Baird, if all the plants have the same resistance, it's safe to assume that they probably evolved from a common ancestor. Plants with different resistance capabilities, says Baird, indicate that the resistance phenomenon has arisen more than once. Genetic analysis distinguishes between the two possibilities, and allows scientists to eliminate one and focus on the other. Since farmers use like cultural and herbicide control practices, Clemson researchers believe the findings can apply anywhere.

only the resistant ones were left; but they were there all along," says Baird.

Another possibility is that there were no resistant plants, but that a recent genetic mutation has converted a susceptible plant into a resistant one. With continued use of the herbicide, their numbers are showing up large enough to detect them.

The one-year research program is funded by the USDA's Southern Regional Impact Pesticide Assessment Program. **LM**

### Herbicides of choice

The herbicides commonly used to control goosegrass—which Clemson lists as Treflan, Prowl and Balan—belong to the dinitroaniline family of herbicides. They are widely used on row crops, turf and ornamentals. The products attack a specific protein in the grass, and it is that protein which gives researchers a starting point.

One possibility is that the resistance has existed since the plant's origin, but no one has been spraying herbicides to allow those few individual plants to survive and become a significant part of the natural population of goosegrass.

"The herbicide eventually killed off all the susceptible ones until



Vance Baird

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- Low leaching and volatilization
- Reduced thatch build-up

IMPORTANT: Please remember always to read and follow carefully all label directions when applying any chemical.

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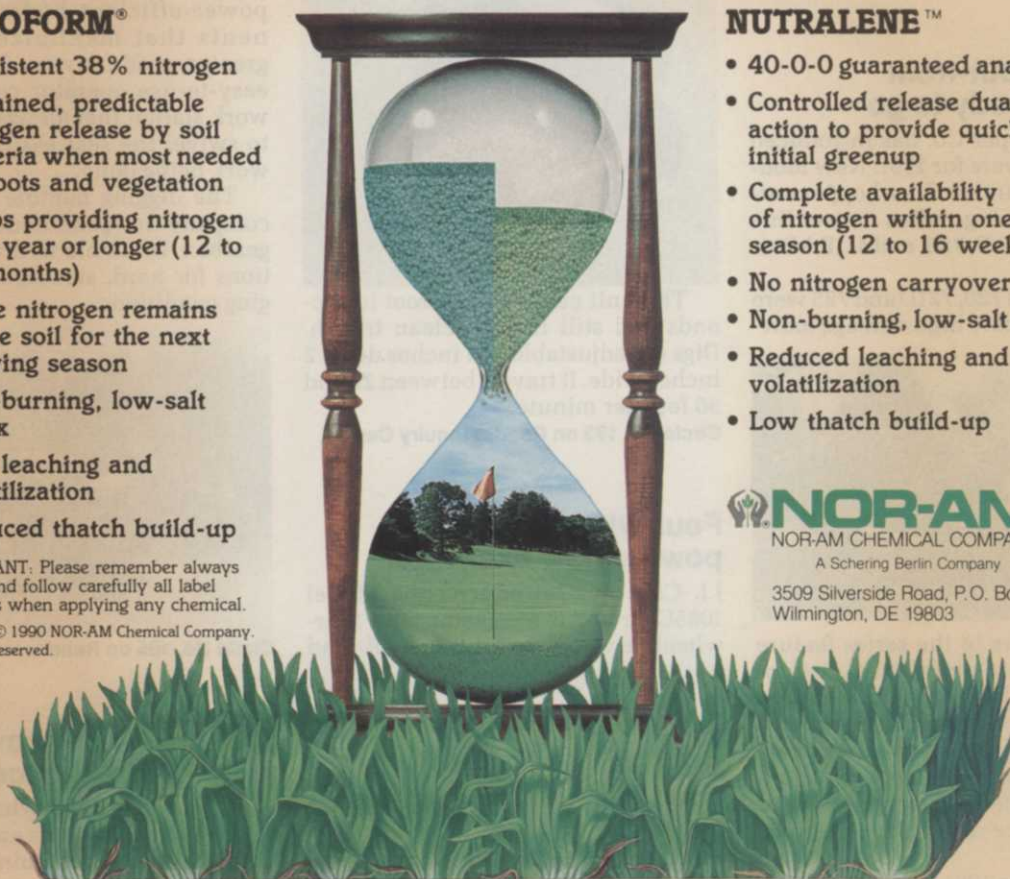
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# PRODUCTS

## Fertilizer spreader made to be compact, productive

Low maintenance and dependability are designed into the Model RS-30 from Classen Manufacturing.

This is a riding fertilizer spreader that can maneuver well in tight spaces (fits through a 30-inch gate), and put less fatigue on the operator.



Classen says the spreader has few moving parts, and can be used with most fertilizers.

The RS-30 is powered by an 8 hp Briggs & Stratton engine. A V-belt Peerless Transaxle drive has two forward speeds and one reverse.

The spreader covers up to 125,280 sq. ft. per hour.

Circle No. 191 on Reader Inquiry Card

## Four new out-front mowers ready to go

The Grasshopper Co. has introduced four new mowers for 1991. New models in the expanded Grasshopper out-front zero-turning-radius mower line are the 720, 721-D, 725, and 411R Mini-Hopper.

The models 720, 721D and 725 were designed to tackle high-acreage mow-



ing. All mowers in the series feature the exclusive Gemini dual-hydrostatic, direct-drive system designed specifically for turf applications.

The Gemini direct-drive delivers increased responsiveness, ease of operation, reduced maintenance and longer service life, Grasshopper claims.

Also new for 1991 is a series of ultra-low-profile EZ-Lift out-front decks in 48-, 52- and 61-inch cutting widths. All 700 Series mowers can be equipped with Grasshopper's heavy-

duty 72-inch deck. A new steering lever design incorporates high-density foam padding and an adjustment feature for maximum operator comfort.

Circle No. 192 on Reader Inquiry Card

## Trencher's drive system eliminates PTO damage

Kwik-Trench Earth Saw Co. has released the new model K-T 200 double V-belt drive protable trencher.

According to the company, the trencher offers superior performance, quality fabrication, and fast digging speed.

The V-belt drive system totally eliminates all engine vibration and any PTO damage due to operator abuse in problem digging areas.



The unit cuts a 6-inch root in seconds and still leave a clean trench. Digs are adjustable to 8 inches deep, 2 inches wide. It travels between 20 and 30 feet per minute.

Circle No. 193 on Reader Inquiry Card

## Four-wheel drive powers new excavator

J.I. Case has introduced the Model 1085C Cruz-Air excavator with four-wheel drive power for tough off-road



applications.

The 1085C is powered by a Case 6T590 turbocharged diesel engine

rated at 133 SAE net hp.

Ground drive and attachment operate independently, so power flows simultaneously to both. Operators can use attachment power to help push the unit if the wheels slip.

Rough-terrain capability is enhanced by a 16-inch ground clearance and 17 x 25-inch tires. Operators can choose two or four outriggers, each one independently controlled.

Circle No. 194 on Reader Inquiry Card

## First all-hydraulic trencher/plow is here

Ditch Witch has introduced what it calls the first, all-hydraulic Modularmatic trencher/plow.

The 50-hp Model 5020 represents a new generation of Ditch Witch Modularmatic units, the first to have a hydraulic digging chain/vibratory plow drive.

The 5020 is available with a full complement of Modularmatic work modules, including utility backhoe, vibratory plow and combo attachments. The digging attachments use power-efficient hydraulic components that maximize torque for greater productivity. The 5020 has easy-to-use operator controls and a work station that allows the operator to swivel the seat easily to view the work being done.

The digging module drive uses a company-designed double reduction gearbox, available in three speed options for hard, standard or easy digging conditions.



Circle No. 195 on Reader Inquiry Card

## Storage tanks provide full reg compliance

Ultra Tank provides what it says is a safe way to store fuels and other hazardous materials, combining the security of a UL-listed secondary containment system and the convenience of an aboveground tank.

Ultra Tank aboveground tanks  
*continued on page 45*



meet NFPA-30 and provide full regulatory compliance for storing and dispensing hazardous materials, including gasoline, diesel fuel, lubricants, hydraulic oils, waste oils, coolants and solvents.

Available in 120- to 1300-gallon capacities, in single- or double-wall units.

Circle No. 196 on Reader Inquiry Card

### Gear-driven sprinklers with adjustable arcs

Hunter Industries has introduced the I-40 ADS and I-25 ADS, new gear-driven rotary sprinklers with adjustable arcs.

The arc feature allows the installer to set the arc at any increment between 40° and 360°. Hunter says the adjustable arc feature lets the unit irrigate more efficiently and with less water waste.

Especially suited for commercial use, these sprinklers share many common features. A moderate to heavy ca-



capacity sprinkler, the I-40 ADS has five interchangeable nozzles which vary the discharge rate from 7 to 25.3 GPM. It covers a radius from 45 to 68 feet.

Circle No. 197 on Reader Inquiry Card

### Aerator/slit-seeder has reverse action

The Olathe Model 84 walk-behind aerator/slit-seeder comes with a new reverse action clutch for added operator maneuverability and ease of operation.

The Model 84 is equipped with an 18 hp engine for heavy-duty renovation jobs. Features include the patent pending Shatter Blade, which requires less power yet brings up more topdressing.

Remote seed shut-off allows the operator to shut the feed off at any

time. One handle engages blades and sets depth, and rear-wheel drive helps prevent surging common to front-



wheel-drive units.

Circle No. 198 on Reader Inquiry Card

### Hazard communication for the turf industry

Techne Train, Inc. offers a complete Hazard Communication Right-to-Know training program for the turf industry.

A complete instructional package includes manual, training video and 20 employee handbooks.

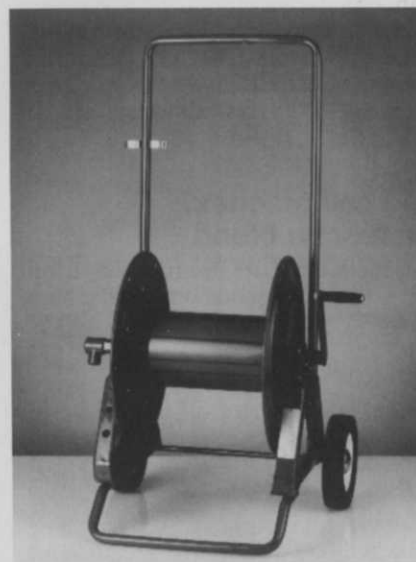
The cost is \$295. It includes a one-year subscription to the quarterly newsletter, and one year of telephone consultation with Techne-Train's Industrial Hygienist.

Circle No. 199 on Reader Inquiry Card

### Hose reel features detachable handle

Hannay Reels, the largest designer and manufacturer of hose and cable reels, now makes a compact, lightweight, portable hose reel that incorporates a detachable handle.

The detachable handle, in addition to making storage of the reel more compact, also means a significant sav-



ings in shipping costs because the reel can now be shipped via United Parcel

Service.

The portable hose reel, Model 1100, is rugged and durable, under the roughest working conditions. With the use of this reel, Hannay says that you'll get hose to any job site without piling or lugging it along.

Circle No. 200 on Reader Inquiry Card

### Turf wetting agent available in tablets

Lesco Wet non-ionic turf wetting agent is now available in 4 oz. tablets.

Lesco Wet increases the ability of water to penetrate compacted soil or dense thatch. It can be used to eliminate localized dry spots, help drain



standing water, enhance pesticide penetration and encourage deeper plant rooting.

Lesco Wet can be sprayed directly on turf without burning fine turfgrass.

According to Lesco, each tablet gives about 30 minutes of measured treatment, based on using a 3/4-inch hose and using the Buckner nozzle at 60 to 100 psi.

The product is also available in a granular formulation or liquid concentrate.

Circle No. 201 on Reader Inquiry Card

### New backpack sprayer holds four gallons

Ames Lawn and Garden Tools has added a new four-gallon backpack sprayer to its expanding line of lawn and garden sprayers for home and commercial use.

The ergonomically designed, manually operated sprayer—Model 21-960—is ideal for pest and weed control on lawns and gardens, greenhouses and tree nurseries.

With a high-grade polyethylene tank and chemically resistant Vitron soft parts and pump piston collar, the new sprayer provides high impact strength while eliminating rust and corrosion. The unit also features molded-in, zinc-plated steel tube frames and stand for added stability.

Up to 90 psi high pressure piston pump with fan and hollow cone



nozzle tips to insure effective spray atomization to meet specific needs.  
**Circle No. 202 on Reader Inquiry Card**

### Mid-size walk mowers have been redesigned

Exmark Manufacturing says its new premium mid-size walkers are proven, long-life performers. The top-of-the-line 48- and 36-inch premium walkers feature exclusive new operator conveniences such as a redesigned control panel, Soft Touch drive levers, five-speed in-line gear shift



and an extra large fuel tank.

Posi-Track pulleys give traction in wet conditions. The Constant-Control drive system with double idlers prevents downhill runaway and free-wheeling on slopes, and the Lo-Torq transmission drive system offers easier shifting and reduced transmission stress.

**Circle No. 203 on Reader Inquiry Card**

### Granular spreaders fit any pick-up tailgate

The Meyer Co. of Enumclaw, Wash. has concluded a license agreement with T.G.E. of Surrey, British Columbia to manufacture and market portable engine driven granular spreaders.

The Tail Gator Spreader weighs 180 lbs. It fits any pick-up tailgate or platform to spread any dry to damp

granular material.

For winter use, the Tail Gator Spreader can disperse snow and ice melters. In the summer, the Spreader handles seed/fertilizer, insect and weed controls, soil amendments, and gasoline and oil spill absorbers along roadsides.

The Tail Gator hopper holds 4 cu. ft. of product, which dispenses in 12 to 17 minutes at 1/2 open gate.



**Circle No. 204 on Reader Inquiry Card**

### Software system identifies 320 various weed species

The Western Expert Educational Diagnostic System (WEEDS) is a random access software package which allows the user to identify any of the 320 species illustrated in "Weeds of the West."

By selecting a few plant characteristics, you will be able to sort out any species in the book. The large number of menu choices and selection functions will accommodate a great variety of skill levels and plant conditions.

The program is accompanied by an extensive illustrated manual explaining how to recognize the characteristics used in plant identification.

It was developed by Richard Old, Robert Dobbins, Patricia Hine and Rober Calihan, University of Idaho.  
**Circle No. 205 on Reader Inquiry Card**

### New tall fescues, tall fescue blend

The Medalist Turf Products Division of Northrup King has introduced two



new, improved tall fescue varieties, Amigo and Arriba. The two new vari-

eties will be blended with Arid tall fescue, and offered to the professional turf market this fall as "The A-Team."

These improved dwarf varieties are representative of Northrup King's continued belief in tall fescue as a burgeoning species for today's more sophisticated turf manager.

"Amigo, Arriba and Arid are exceptional grasses," says Dr. Eric Nelson, director of turf research. "Each one has excellent drought and heat tolerance, fine texture, pleasing color and many low-maintenance characteristics."

**Circle No. 206 on Reader Inquiry Card**

### New backhoe mounts on Mustang loaders

The Du-Al 1015 backhoe adds even greater versatility to the 930A Mustang skid steer loader.

The Du-Al 1015 backhoe is ideal for light duty commercial applications in rental, construction, electrical, plumbing, landscape and agricultural industries.

The 1015 mounts and dismounts on your skid steer loader tractor in minutes and features a 7 1/2-foot digging depth. It is also available in 10-, 12-, 16-, and 24-inch bucket widths and converts to a category 1 three-point hitch.



**Circle No. 207 on Reader Inquiry Card**

### Feeding combines with safe grub control

Lebanon Total Turf Care has introduced Country Club 19-4-6 with Sevin for use on lawns, parks, golf courses and other professionally maintained turf areas.

Lebanon's Country Club 19-4-6 with Sevin brand carbaryl insecticide provides premium feeding together with safe, dependable control of common white grubs and a broad range of surface feeding insects.

Lebanon says turf care professionals can rely on Country Club to prevent damage to turfgrass areas and to insure fast green-up and sustained feeding. When used as directed, the product will provide control of turfgrass pests, including white grubs,



armyworms, chinch bugs, cutworms, earwigs, grasshoppers, sod webworms and ticks.



Circle No. 208 on Reader Inquiry Card

### Broom attachment brushes away snow problems

The Melroe Company of Fargo, ND, has introduced an angle broom attachment which fits most of its Bobcat loader models. The unit has a 68-inch straight sweep width, making it compact enough to get into tight corners, and against walls and fences.

The unit is ideal for public institutions and businesses wanting to keep sidewalks, driveways and small parking



areas free of light snow, dust and debris.

A rubber-dampened floatation system allows the broom bristles to float on the surface. An electric actuator, operated from the cab, angles the broom up to 25 degrees left or right.

The unit features 5° of oscillation, either direction, for better operation on uneven surfaces. The broom is powered by the loader's auxiliary hydraulic circuit, and operates at 125-250 rpm.

Circle No. 209 on Reader Inquiry Card

### Side discharge deck suits larger acreage

The Toro Company has introduced a new 62-inch ProLine side discharge deck.

The three-bladed deck was originally designed for Toro's large Groundmaster mowing products.

"Cutters have been asking for a bigger deck for their mid-size, walk-behind mowers," says Jim Wallace, ProLine marketing manager. "Commercial cutters increasingly are mowing larger acreages. They want to increase productivity without adding more crews. Our new 62-inch deck will help them do that because it cuts 20 percent more grass than the standard 52-inch deck."

The deck features counter-balance springs for improved deck floatation. Front and back anti-scalp rollers and an adjustable gauge wheel minimize scalping.

Cutting height can be adjusted



from one to four inches.

Circle No. 210 on Reader Inquiry Card

### Mower provides traction on slopes and bunkers

The Hustler 640 Hillsider from Excel Industries features full-time, six-wheel drive that provides unmatched traction, stability and comfort.

The 640 was designed to handle steep slopes, bunkers, hilly roadsides



berms and rough terrain.

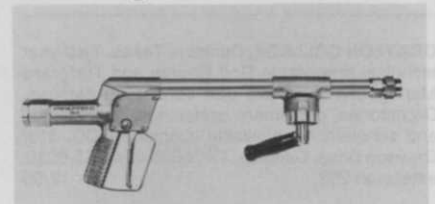
The self-leveling feature automatically tilts to keep the operator's station level for optimum comfort and productivity. This design is unique

because the engine is also held level, allowing for proper lubrication at all times. The tractor's weight distribution remains constant over the drive wheels for exceptional traction and balance.

Circle No. 211 on Reader Inquiry Card

### New long-range gun reaches the tall trees

A new longer-range tree spray gun from Spraying Systems Co. has an effective range of over 75 feet.



It is designed for large shade trees or along roadsides requiring maximum throw and safety.

"The gun is designed to be very operator-oriented," says Dr. Stephen Pearson, technical service manager. "A staged valve opening and front handle spray patten adjustment allow operators to maintain spray accuracy at all times."

A new "low kick-back" design gives operators total control of the gun and minimizes the risk of accidental exposure.

Circle No. 212 on Reader Inquiry Card

### 16-foot swath mows down the big jobs

Jacobsen's HR-15 mower has a cutting width of nearly 16 feet.

Jacobsen calls the HR-15 the only



mower with hydraulic rotary decks or Jacobsen's fine-cut flail decks. Available in either hydrostatic or manual transmission.

The HR-15 is powered by an 80-hp Perkins diesel engine, and a design proven durable by years of use in the field. Its three 72-inch decks are interchangeable for quicker servicing and lower maintenance costs.

Easy to operate, with adjustable seat, power steering, and cruise control on hydrostatic transmission models.

Circle No. 213 on Reader Inquiry Card



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**LANDSCAPE MAINTENANCE PRODUCTION MANAGER:** Rapidly growing Central Florida Landscape firm seeking an experienced production manager with strong people and organizational skills. Experience with large commercial accounts and a sincere desire to build a business based on customer service a must. Strong Salary and Benefits. Must relocate to Orlando. Send resume to: Mr. Khalsa, 1174 Florida Central Pkwy., Longwood, Florida 32750. 1/91

**MANAGER (Owner/Manager)** for landscape maintenance branch office in San Antonio, TX. You will be managing all aspects of new office (We will be starting with a significant customer base). You will have profit responsibilities and a great deal of latitude with customers/employees. Starting salary range is 20-26K\* plus benefits. Successful candidates will receive significant ownership of branch (30-60%) within 18 months. Must possess demonstrated success and management skills in the following areas: Employees, customers (prospective customers) and equipment. You need to have a desire and ability to make things look good and willingness to sacrifice to obtain satisfied customers and excellent looking properties within reasonable budgets. You will be affiliated with a company who enjoys an excellent reputation and demonstrated abilities who will endeavor to provide substantial support. However, this is very much a "sink-or-swim" type position. Send letter describing how you fit these criteria with resume to Manager, Post Office Box 15391, Austin, TX 78761. (\*Attention East and West Coasters: You can purchase a very nice 2,000' home for 70-90K in this area). 12/90

**SALE-DESIGN-ESTIMATING** a large high quality service oriented site construction corp. is looking for a highly motivated individual to join our team. Must have construction background, excellent communication skills, and a professional manner and appearance. Benefits and pay are commensurate with ability and experience. Send resume to Decorative Paving Co., 33 W. 518 Fabyan Parkway, West Chicago, IL 60185. 3/91

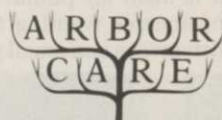
**LANDSCAPE MAINTENANCE TRAINEE:** Residential design/build landscape contractor is seeking a career-minded individual to become part of our landscape management team. Responsibilities include: maintenance of our landscape installations, warranty service and customer service. Knowledge of plant material helpful. Experience and/or education in horticulture or landscape maintenance helpful, but not necessary. Little or no mowing. 4-5 day work week, good pay with benefits. Send resume to or call: Garden Gate Landscaping, Inc., 821 Norwood Road, Silver Spring, Maryland 20905. (301)924-4131. 1/91

**LANDSCAPE MAINTENANCE FOREMAN:** Full-time, year-round career opportunity for individual with the right combination of education and experience in machinery use, technical expertise and knowledge of pests and diseases. Salary negotiable. Thornapple is a well regarded, quality oriented firm serving commercial accounts throughout the Chicago area. Send confidential inquiries, resumes and salary requirements to: Thornapple Landscape Maintenance, P.O. Box 626, Geneva, IL 60134. Attn: Steve Pease, (708)232-7050. 12/90

**LANDSCAPE DIVISION MANAGER:** Well established, rapidly growing company seeks individual to take over for retiring manager. Individual must be able to run both a maintenance and a planting division simultaneously. Requires exceptional organizational/management skills as well as complete command of plant materials and maintenance techniques. For consideration contact David Gorter, 855 Skokie Highway, Lake Bluff, IL 60044. 708-615-0800. 12/90

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**Landscape Supervisor:** Established Michigan Contractor looking for self-motivated individual with 5 years minimum experience to manage crews and oversee landscape installation. Send resume and salary requirements to: DeAngelis Landscape Incorporated, 22425 Van Horn Road, Woodhaven, Michigan 48183. EOE. 12/90



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# PROBLEM MANAGEMENT

## Managing gall on ornamentals

**Problem:** How is the crown gall problem managed on ornamental plants? (Pennsylvania)

**Solution:** Crown gall is a bacterial disease caused by *Agrobacterium tumefaciens*. These galls are usually formed on roots, lower stems and lower branches. Severely infected plants may decline and eventually die.

The bacterium (pathogen) enters the susceptible plants through wounds, which may result from transplanting, cultivating, pruning, insects, animals, etc.

To manage the problem, the following guidelines might be helpful:

- Avoid wounding susceptible plants at or near the soil line.

- Selectively remove infected plant parts when dry and disinfect pruning tools with Lysol or 10 percent household bleach between each cut to minimize disease spread.

- Remove severely infected plants promptly.

- Avoid planting susceptible plants such as apple, pear, brambles, euonymus, forsythia, Russian olive, grape. Plants such as hemlock, linden, holly, hornbeam, pine and spruce are known to be resistant.

- Chemical control: Galltrol-A and Gallex are two products from Ag Biochem, Inc. in Orinda, Calif., which are registered for use on several plants. Galltrol is a biological control material for crown gall management. This is used as pre-plant dip in greenhouses and nurseries. Pre-existing galls are not controlled with this material.

Gallex is recommended for eradicating existing crown galls. This material is painted on exposed galls, cut surfaces and nearby healthy tissue. Large galls should be removed prior to treatment. If new galls are found after four to six months, repeat treatment as needed.

## Removing tall fescue

**Problem:** Could you tell us how we can selectively remove tall fescue from established lawns? (Ohio)

**Solution:** A product called Lesco TFC dispersible granule turf herbicide from Lesco, Inc. is labelled for spot treatment to manage tall fescue. At rates of 2.76 to 5.33 oz. per acre, tolerant turf species such as Kentucky bluegrass, bentgrass, fine fescue, bahiagrass and bermudagrass show little phytotoxicity.

Spray to wet the foliage of unwanted tall fescue and avoid contacting this product on nearby ornamentals. Over-application may cause injury to desirable grasses. Application can be made in spring or fall when growth is active and desirable turf is not under stress. Fall treatment is preferred over spring.

Apply when the soil temperature is about 40°F or more. Yellowing of clumps will take one to three weeks and control can be expected in four to eight weeks.

After treatment the material translocates to growing points, prevents cell division, and inhibits growth. Yellowing and reddening gradually develops before dying. From the fall applications tall fescue plants may or may not die that same season. However, they will show discoloration in fall and die in spring.

Reports indicate that the product can adversely affect ryegrass and in some situations, it can kill. Therefore, be careful when dealing with lawns containing ryegrass.

If it is used properly, Lesco TFC Herbicide can be a very good alternative to digging or using non-selective herbicides such as Roundup for tall fescue control. Read and follow label specifications for good results.

## Black spots in maples

**Problem:** We are seeing a number of maple trees developing black spots. These are slightly raised. Until mid-August, these were not seen; however, suddenly around mid-August we received several calls from our clients. What is the problem? What can be done to manage this? (Ontario, Canada)

**Solution:** Based on your field observation of the foliar symptoms, the problem you are referring to is called tar spot fungal disease caused by *Rhytisma acerinum*. This year in August I have seen this problem on maple in the Buffalo, Rochester and Niagara areas.

The fungi overwinter as immature fruiting bodies in the spots on fallen leaves. In spring the fruiting bodies mature and release spores which spread to susceptible maples. The fungus grows inside the leaf tissue and produces thick, tarlike, irregular shining spots on the upper side of leaves. These spots are slightly raised from the other areas of leaves. Fruiting bodies of the fungus develop inside these thick areas (called stroma) during summer.

Tar leaf spots generally don't affect the health of the tree. The major problem is aesthetics. If the disease is severe the following spring, consider applying fungicides such as maneb, mancozeb, zineb, fixed copper or Bordeaux mixture. Make the first application at budbreak and repeat two to three at 10- to 14-day intervals.

Fertilizing affected trees with a slow-release source of fertilizer and deep root delivery system would also help improve the plant health and vitality.

LM



Balakrishna Rao is Manager of Technical Resources for the Davey Tree Co., Kent, Ohio.

Questions should be mailed to Problem Management, LANDSCAPE MANAGEMENT, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.

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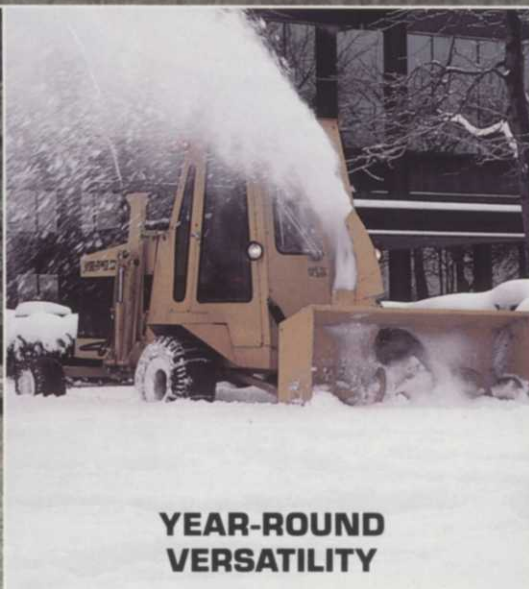
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