

"It worked," she says. "No more grubs. And the broad spectrum control is definitely a key benefit. We have been controlling Japanese beetle grubs in those same neighborhoods ever since."

The control that MERIT provides has proven itself to Caudill in more ways than one. "We have been on properties treated with MERIT next to neighboring lots that were not," she explains. "In some instances the untreated lawn would have

damage right up to the lawn treated with MERIT."

MERIT has also saved Green Season time and money since it performs with only one application. "We have had a zero fail rate and no call-backs," says Caudill.

"I swear by MERIT. I never want to use anything else again."

Effective Control on Ornamentals

Charlie King, owner of King Green, a lawn care company in Atlanta, began using MERIT in small quantities on his clients' ornamentals. "We tend to start real slow with new products because of the kind of investment," says King. "But since we tried MERIT, we've used more and more every year—now we're into even more usage. The more we use it, the more we like it."

King Green services the entire metro Atlanta area, from Dalton, Ga., to about 20 miles south of the city. In this region of the country, King's customers experience problems with insects such as lacebugs and aphids on ornamentals. And he depends on MERIT for control.

The company treats a prominent property management company in Atlanta, which includes 35 apartment complexes throughout the city. King applies MERIT to protect the ornamentals at each complex.

MERIT is effective against a variety of ornamental pests, including Japanese beetles, leafminers, scale insects and whiteflies, as well as aphids and lacebugs.

"The key is that we don't have to respray where we put MERIT down," he says. "One application will do the job."

MERIT also fits in with King Green's Integrated Pest Management (IPM) philosophy. "Our job isn't to load the country down with pesticides, it's to keep plants pretty and healthy," explains King. MERIT helps King and his company do that with only one, low-rate soil application per season for control, versus multiple applications of a curative product.

Lawn care operators and golf course superintendents agree—for control of insects on turf and ornamentals, MERIT is



Charlie King
Owner
King Green



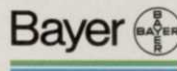
The ornamentals at this apartment complex are protected from lacebugs, aphids and other insects with one application of MERIT.

the insecticide they can depend on for effective, single application control.

For more information on MERIT, contact:

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early winter reduces sap flow from pruning cuts on trees such as conifers, maple, birch and walnut. Winter pruning minimizes damage to some tree species. The bark of some trees, such as maple and ash, can eas-

Cutting tips

✂ Proper cuts in late winter compartmentalize more rapidly with faster woundwood response. Good winter pruning cuts produce circular "doughnut" callus response in late spring on a relatively healthy tree. The callus develops over the pruning wound margin and differentiates into true wood (woundwood) as the growing season progresses.

✂ When hand pruning, cuts on smaller branches and twigs in the dormant season should be slightly higher at nodes (bud/branch junctions) than cuts at nodes in the growing season.

✂ Winter cuts should start about $\frac{1}{8}$ of an inch above the bud and slant away at a 45 degree angle to avoid low temperature injury to bud tissues.

ily tear loose during climbing and pruning during the spring flush of growth.

Don't confuse proper tree pruning with topping. Topping is the indiscriminate removal of a tree's main leader and branches, resulting in stubs. Topping severely disfigures trees and results in "watersprouts" which are weak limbs susceptible to damage from high winds or other adverse weather. Thinning is the correct method of branch removal. Branches are removed from their point of attachment to the trunk or another branch. This method eliminates unhealthy and unsightly stubs. Thinning the canopy reduces the amount of high wind damage.

Professional arborists also consider the tree's branch structure, growth structure and growth habits to produce the strongest, most attractive plant.

When shrubs flower a key

The best time to prune shrubs depends on the plant's flowering habit. Spring flow-

Fast growers

Some trees need very little pruning. Their natural habit is symmetrical and balanced; and they have little tendency to sprout unwanted shoots along their branches. These trees only need attention when they develop diseased or damaged limbs which need to be removed. Trees that need more attention are the fast growers; those that may be only marginally cold hardy in your area; and those that have weak wood or produce narrow crotches where the branches grow from the trunk. Trees planted in the wrong spot under utility lines, crowding walls and hanging over roofs and gutters need frequent pruning. If a tree is too large for its location, judicious pruning can reduce the size of the tree without destroying its attractive, natural shape.

*Courtesy Technic Tool Corporation,
Lewiston, Id.*

ering shrubs should not be pruned heavily in the winter. Although winter pruning does not damage the plant, it can remove flower buds produced during the previous growing season, resulting in fewer blossoms next spring. The best time to prune these is immediately after late spring petal fall.

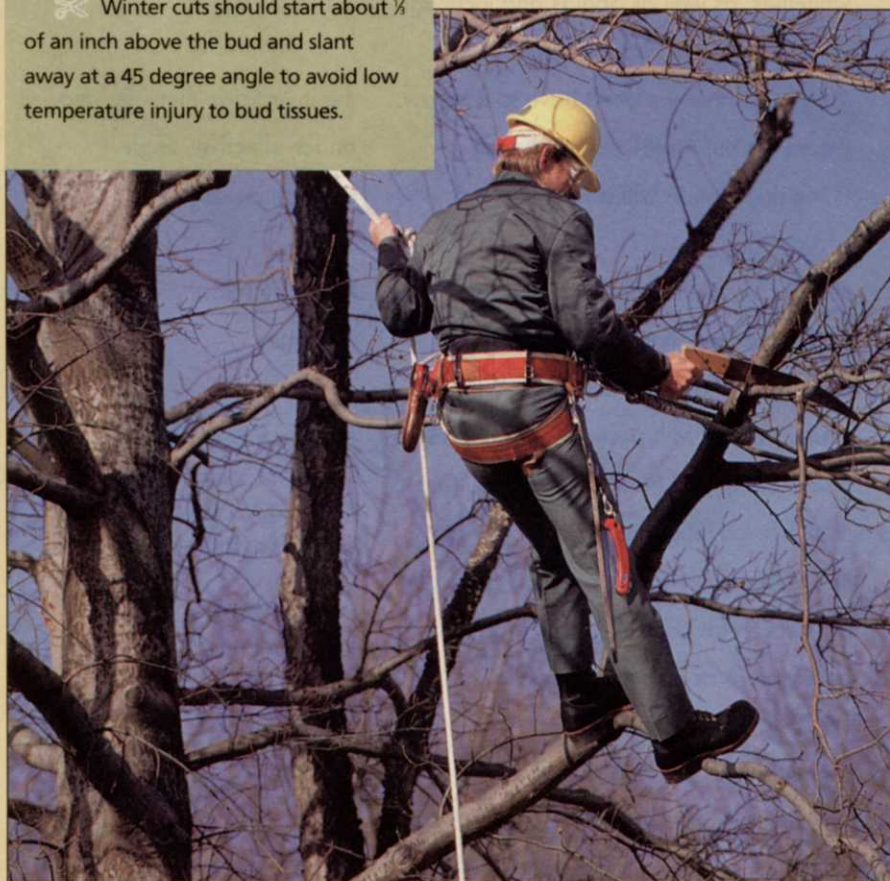
Though summer flowering shrubs can be pruned at any time of the year until close to the time of bloom, late in the dormant season is the best time.

Improper pruning practices can harm trees and shrubs. Pruning cuts that violate branch and trunk collars—natural barriers to disease-causing organisms—can leave trees and shrubs vulnerable to disease.

To ensure tree and shrub health, professional arboricultural standards should be followed when pruning.

Correct pruning produces healthier, stronger trees that live longer.

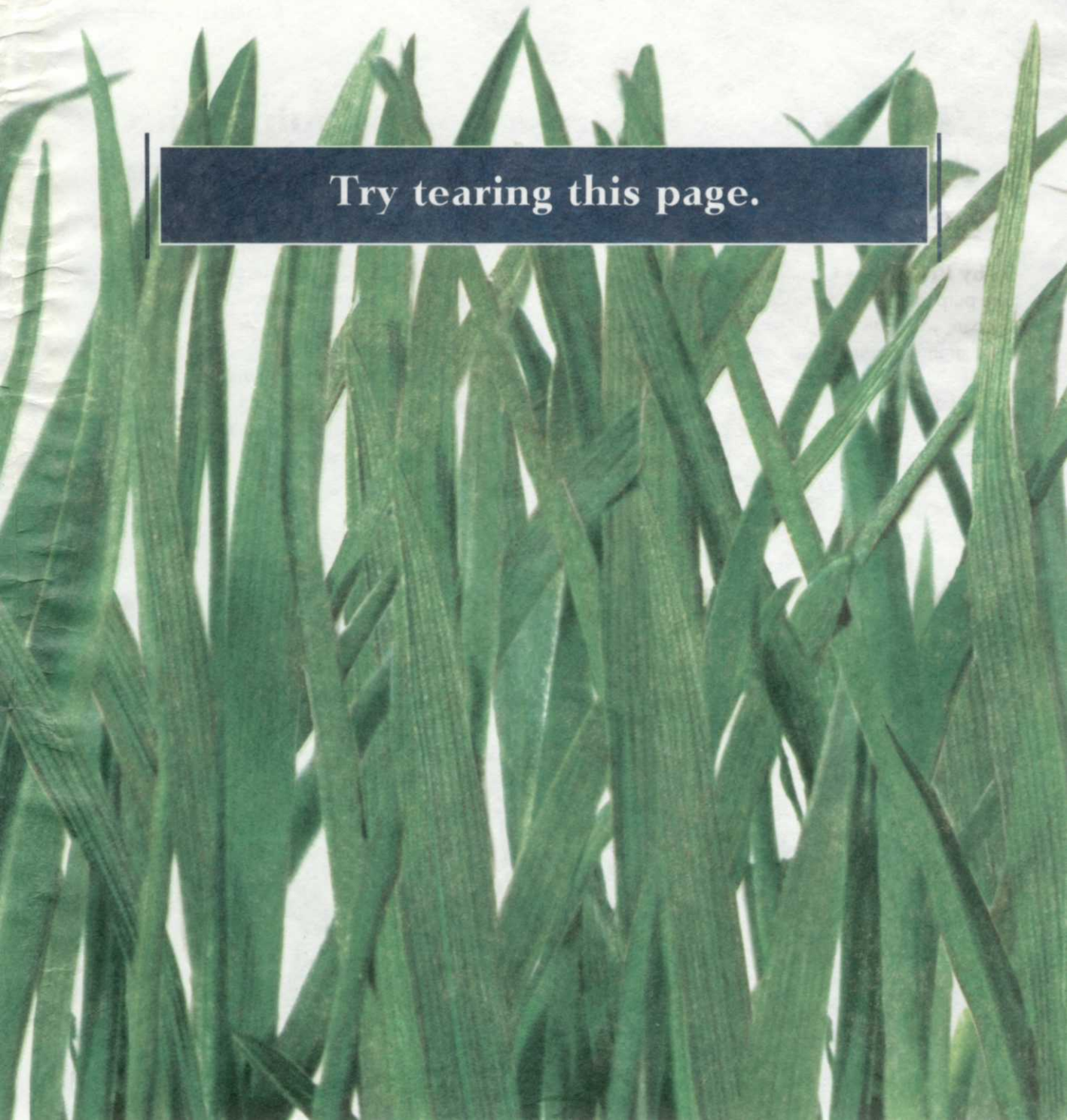
—*This information Courtesy the Davey Tree Expert Co., Kent, Ohio.*



Proper pruning improves the health and appearance of trees. Winter is an excellent time for most pruning.

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As you know, it's difficult to manage the harmful effects of heat, drought, disease and traffic once they occur. But now extensive research has proven that a program that includes applying Primo prior to the onset of stress can strengthen the structure of turfgrass to greater withstand these ongoing stresses throughout the season.

How Primo Achieves Remarkable Results.

The advantage of Primo versus other plant growth regulators is that it only targets the part of the plant which inhibits vertical growth. So Primo, unlike other

PGR's, still enables rich turf color, bigger root systems, lateral stems and root mass development.

The End Results.

On turf treated with Primo, the end result is a healthier, more durable blade with a higher tolerance to extreme elements. This new, stronger grass will also be more disease resistant and have a faster divot-recovery time.

And essentially, a healthier, stress-resistant turf means a more beautiful, better playing golf course all season long.

To start your Primo Pre-Stress Conditioning Program, call 800 395 - TURF for the name of your Novartis sales representative or your nearest Novartis distributor.



The green grass of summer is now dormant, and you're probably starting to take stock of your season, and *plan your vacation!* We hope you were able to accomplish at least one or two of the projects you had lined up. We know there were probably a few drawbacks. People quit, equipment breaks down, and the weather is always a big question mark...and how!

From the internet: from June to July, Randy Zidik, CGCS at Rolling Hills CC, McMurray, Pa., had 1.9 inches of rainfall. While 250 miles to

the south, John Cummings, Berry Hills CC, Charleston, W.Va., had eight inches of July rain.

"This lack of rainfall has been compounded by the fact that we have had numerous sunny days with very low humidity in the area of 30 percent," wrote Zidik.

David Moore reported on-line that more than seven inches of rain had fallen at Thousand Hills

Golf Course & Resort, Branson, Mo., in August, compounded by cloud cover.

"And we are having a very cool August," wrote Moore. "And looking at my radar it will be raining here again in about an hour and it looks like at least another inch [will fall]."

David Fearis, CGCS, Blue Hills CC, Kansas City, said temperatures varied all summer.

"On July 4th it was 78 degrees," wrote Fearis. "However, during the week of June 23-27, it reached 100 degrees three times...I am ready for snow!"

"Like all things, you learn to adapt," wrote Bruce Williams, CGCS, who this year completed a move to Los Angeles Country Club from his long-time digs at Bob O' Link, Highland Park, Ill.

"When I interviewed for the job at LACC it rained all day. I thought that was nice, except for the slowdown of traffic during the rain. Little did I know that the last measurable rain here would be .19-inches in February. They tell me the next

Was summer all you hoped it would be?



Terry McIVER

TERRY McIVER
Editor-in-chief

GOLF

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Sage Meadows a full-service course

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Innovations at Springfield

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Stone tries, likes new fungicide

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Nursery for 'replacement parts'

PAGE 18 G ▶

Bentgrass varieties well-tested

best chance for rain is in November.

"I do enjoy controlling the water rather than having it control me," wrote Williams, who has wall-to-wall irrigation at LACC.

"Too many times in Chicago we had an 85 percent chance of rain and did not water, only to find a 95 degree day with full sun in place of forecast rain."

We wish Williams well as he nears the end of his first year at LACC.

How's your equipment maintenance program going? Our article on page 25 goes "beyond the nuts and bolts" of equipment, to some basic truths that are becoming more evident as the labor pool continues to drain.

Ken Graves, Desert Princess Country Club and Resort in Cathedral City, Calif., points out that part of management's responsibility is to strive to complete more work in less time. His operation cultivates 400 acres of landscape and golf traffic.

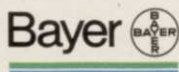
This fall and winter is your time to take a vacation, do some delayed studying, and plan for next year. If you can fit it in, please send us some of your ideas on how you are going to plan ahead for the new year. We'd love to hear from you. **LM**



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Fungicide

earns high 'Honors' marks

Superintendent Stone is happy so far with results from new control product.

Clemson researcher Martin is also encouraged, but advises supers to keep the 'old standby' products on hand for certain control challenges.



▲ David Stone won't be fenced in by complacency. He often takes advantage of opportunities to try new control products.

The first and last questions a superintendent has when presented with a new product is, "Does it work? Will it work on my course?"

David Stone, golf course superintendent of The Honors Course, Inc. in Ooltewah, Tenn., wants to know as much as any superintendent when it comes to product efficacy.

Located in the Chattanooga area, about 100 miles north of Atlanta, the private 18-hole course of zoysiagrass fairways and bentgrass greens has an elevation of 700 feet and is nestled between hills and dense trees with little air movement during the summer when temperatures stay around 90° F. with constant high humidity. Rainfall is plentiful, an average 52 inches a year.

"In fact, we average over 5 inches in the month of July," Stone says. "That's our hottest month, and also one of our highest rainfall months. With not much wind, that's tough."

Brown patch control at low rates

Brown patch (or zoysia patch) is Stone's primary disease concern at the Honors Course. It can appear when the zoysia is weak or stressed in the fall, when

temperatures cool, and last through the spring before temperatures heat up again.

Stone always experiments with new products. When Heritage became available as an experimental product in 1995, he gave the fungicide a trial run for brown patch control and continued his tests through 1996.

Heritage fungicide, from Zeneca, is the first representative of a new class of fungicide chemistry called strobilurins. The company's claim of long-residual control of the broadest spectrum of diseases ever is of great interest. That it is highly active in small amounts—just tenths of an ounce—has prompted talk about careful application. A spill at the tank could be expensive.

Thorough on-site test

Stone first tested the product in 1995, on bentgrass. Stone installed plots of 27 different bentgrass varieties, with replications, in a partial shade with little air movement. No fungicide applications had been made on the plots, with the exception of a control material used for dollar spot. By July 5, the plots had a significant amount of brown patch disease. Stone applied Heritage at the 0.4-ounce per 1,000-square foot rate to half of the plots.

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Addition of calcium to the soil by traditional means is not usually efficient or effective in treating the calcium deficiency of turfgrass. Once applied, the common forms of liming materials can rapidly change to compounds that are insoluble in water and not readily available to the plant. Continuous applications over long time periods are necessary to effect even modest improvements in calcium uptake.

Quelant™-Ca is a newly available amino acid chelated calcium product that corrects calcium deficiencies in turfgrass upon application. Quelant™-Ca provides readily available calcium chelated with amino acids so that it is easily absorbed by the leaves and/or the roots of the plant regardless of most soil and water conditions. The unique formulation of amino acids used for chelation was



developed not only to facilitate absorption by the leaves and roots, but to increase mobility of the calcium within the plant as well.

Quelant™-Ca is normally applied as a foliar spray and may also be applied through fertigation. Either way, it is tank-mix compatible with herbicides, soluble fertilizers, insecticides, fungicides and plant growth regulators. It will even help improve the efficiency of most of these treatments by increasing their absorption and translocation within the plant.

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Martin: Keep SBIs handy for dollar spot.

"The Heritage stopped and cleared up the existing brown patch on those plots," Stone says.

"And it was almost five weeks before any brown patch activity showed back up in those plots. That's very impressive. It stunned me, it really did."

Long residual, no phytotoxicity

Bruce Martin, Ph.D., turf pathologist at Clemson University, found the product lasts longer than more conventional brown patch materials.

"Heritage has given as high turf quality as any currently available materials under moderate to very high disease pressure, but without the negatives of short residual or potential phytotoxicity," he says.

"Our testing has shown good to excellent control of brown patch and summer decline in bentgrass with Fore and Fore/Aliette combinations, but residual control is poor, requiring multiple applications on short intervals when disease pressure is high," Martin says.

"Daconil is also very good and provides consistent control under moderate- to high-disease pressure, but better residual control than Fore or other products containing mancozeb. In my trials, Daconil has not quite provided the highest turf quality in very hot (100° F. and above) weather, as Fore or Fore/Aliette, but it is very close.

Turfgrass quality was a factor that Stone watched closely, as well. In his 1995 tests, Stone decided to use Heritage at the 0.2-ounce per 1000-square foot rate every two weeks on three of his average greens on the golf course.

"We rated those three greens as the best greens on the course that year," Stone says. "So Heritage could have had some turfgrass quality enhancement benefit

in addition to disease control. For sure, there's no damaging effects like we can have with the sterol inhibitors in the summer."

"Certainly there is a place for *sterol biosynthesis inhibitors* (SBIs, such as Eagle, Bayleton, Banner,

Sentinel and Rubigan)," Martin says. "They are still the best dollar spot fungicides available and some have excellent activity on other diseases. But SBIs (at least the one's currently available) can induce unacceptable plant growth regulation effects on bentgrass and Poa-dependent greens in hot weather. Heritage does not do this, even in very hot weather."

Because this fungicide does not control dollar

spot, Martin says dollar spot must be controlled through use of SBIs before hot weather becomes problematic. Or Heritage can be used in combination with chlorothalonil, iprodione, vinclozolin or some other fungicides to control dollar spot.

"Some of the latter fungicides, in combination with Heritage, provide excellent tank mix partners," Martin says.

"Superintendents with more dollar spot-susceptible cultivars, such as Crenshaw, should take note of this."

'Flexible' disease management

Martin points out that the product is the first fungicide that penetrates the plant, is upwardly mobile and controls both brown patch and Pythium blight. "This adds flexibility increases options for disease management programs," he says. The activity is a reflection of its chemistry. It is the first product in a new class of chemistry called strobilurins. Azoxystrobin, the active ingredient of Heritage, is synthetically derived from naturally occurring fungicides produced by several species of wood-decaying mushrooms.

These mushrooms produce "strobilurin" fungicides that inhibit competitive fungi while they break down dead trees. Natural strobilurins must be continually produced and excreted by the fungus, because they are unstable in the presence of light and other microbes. To form a more stable molecule, Zeneca modified the chemical structure of the strobilurin in the laboratory.

Preventive use for Stone

According to Zeneca, azoxystrobin is the only fungicide active ingredient that controls representatives of all four major classes of fungi, including the oomycetes, ascomycetes, basidiomycetes and deuteromycetes. Sterol inhibitors work by affecting a compound required by only three of the disease classes. Azoxystrobin stops the formation of ATP, a material required for metabolism in all fungi. As a result, azoxystrobin is a true fungicide. It actually kills the fungus by stopping active mycelium, preventing spore germination and inhibiting production of new spores in certain fungi.

Based on his experience, Stone believes that the product should be used on a preventative basis. Although both preventative and curative applications performed well, the preventative use was the better timing for Heritage. He plans to use it on his greens this year, under full registration, alternated with other materials to manage the potential for resistance.

Stone plans to use Heritage on his greens this year, under full registration, alternated with other products to manage the potential for resistance.

Stone will either make 0.2-ounce rate applications every couple of weeks or go with the 0.4-ounce rate at monthly intervals. He wants to review the product's activity on his zoysiagrass fairways. Last year he used Heritage at the 0.4-ounce rate on test strips located at his number 7 fairway, a hole located in a bowl with higher surrounding humidity. Number 7 is always prone to brown patch.

"We had total control for the fall and winter and through much of this spring. All the untreated strips have very high disease occurrence," Stone says. "We did make a second application in April on half of the strips. But even on the one's we didn't re-treat, there was not much disease activity."

Superintendents will find the fungicide is easy to mix and work with, Stone says. His workers have

not noticed any fumes or odors. A buffering agent is not required in water, he says, because the product is stable under a wide pH range. The Honors Course team has not noticed any phytotoxicity or negative effects on beneficial organisms, such as earthworms.

"The bottom line with Heritage is that it increases our options for disease control," says researcher Martin. Heritage is new. Although a lot of testing has been done, we still have a lot to learn."

Questions remain relative to anthracnose basal rot control or fairy ring control, for example.

Photos by Scott C. Lee.

ed. note: Inclusion of product names does not imply endorsement, nor does omission of any product does not imply criticism.

FUNGICIDES WERE FIRST USED AS SEED TREATMENTS

1915: ORGANOMERCURIAL FUNGICIDES

- ▶ Provided fungicidal and bactericidal activity
- ▶ First introduced as seed treatments
- ▶ Later became available as foliar sprays
- ▶ Diseases controlled: Snow mold
- ▶ No longer registered for turfgrass use

1930S-1940S: DITHIOCARBAMATE FUNGICIDES

- ▶ Includes mancozeb and substituted benzene (chlorothalonil, PCNB) fungicides
- ▶ Multiple-site protectant fungicides
- ▶ Active against a broad spectrum of fungi
- ▶ Short residual
- ▶ Widely used in combination or alternation with longer residual fungicides

1968: BENZIMIDAZOLE FUNGICIDES

- ▶ Includes benomyl and thiophanate-methyl
- ▶ Important breakthrough: First curative, systemic fungicides
- ▶ Could be used at lower rates with longer intervals
- ▶ Plants translocate active ingredients directly to the fungus
- ▶ Thiophanate-methyl still widely used on turfgrass

1978: PHENYLAMIDE FUNGICIDES

- ▶ Includes metalaxyl
- ▶ Especially useful against one class of fungi (Oomycetes)
- ▶ Controls Pythium, Phytophthora, etc.
- ▶ Metalaxyl remains in use on turfgrass

1980: DEMETHYLATION INHIBITOR (DMI) OR STEROL BIOSYNTHESIS INHIBITOR (SBI) FUNGICIDES

- ▶ At the time, these fungicides offered the widest range of activity
- ▶ Effective against three of the four major classes of fungi
- ▶ Not effective against Oomycetes fungi, including Pythium and Phytophthora
- ▶ Could be used with lower rates and offered long residual activity
- ▶ More fungicides marketed from the DMI's than any other group
- ▶ Widely used today on turfgrass

1997: STROBILURIN FUNGICIDES

- ▶ First fungicide to control all four major classes of fungi
- ▶ "True fungicides," strobilurins actually kill the fungus by stopping active mycelium, preventing spore germination and inhibiting production of new spores
- ▶ Preventative and curative activity
- ▶ Highly active at extremely low rates with long residual
- ▶ Does not control dollar spot
- ▶ Controls more than 18 diseases, including brown patch, Pythium, take-all patch, summer patch, anthracnose and snow mold
- ▶ Heritage fungicide, first strobilurin introduced, was registered February 7, 1997

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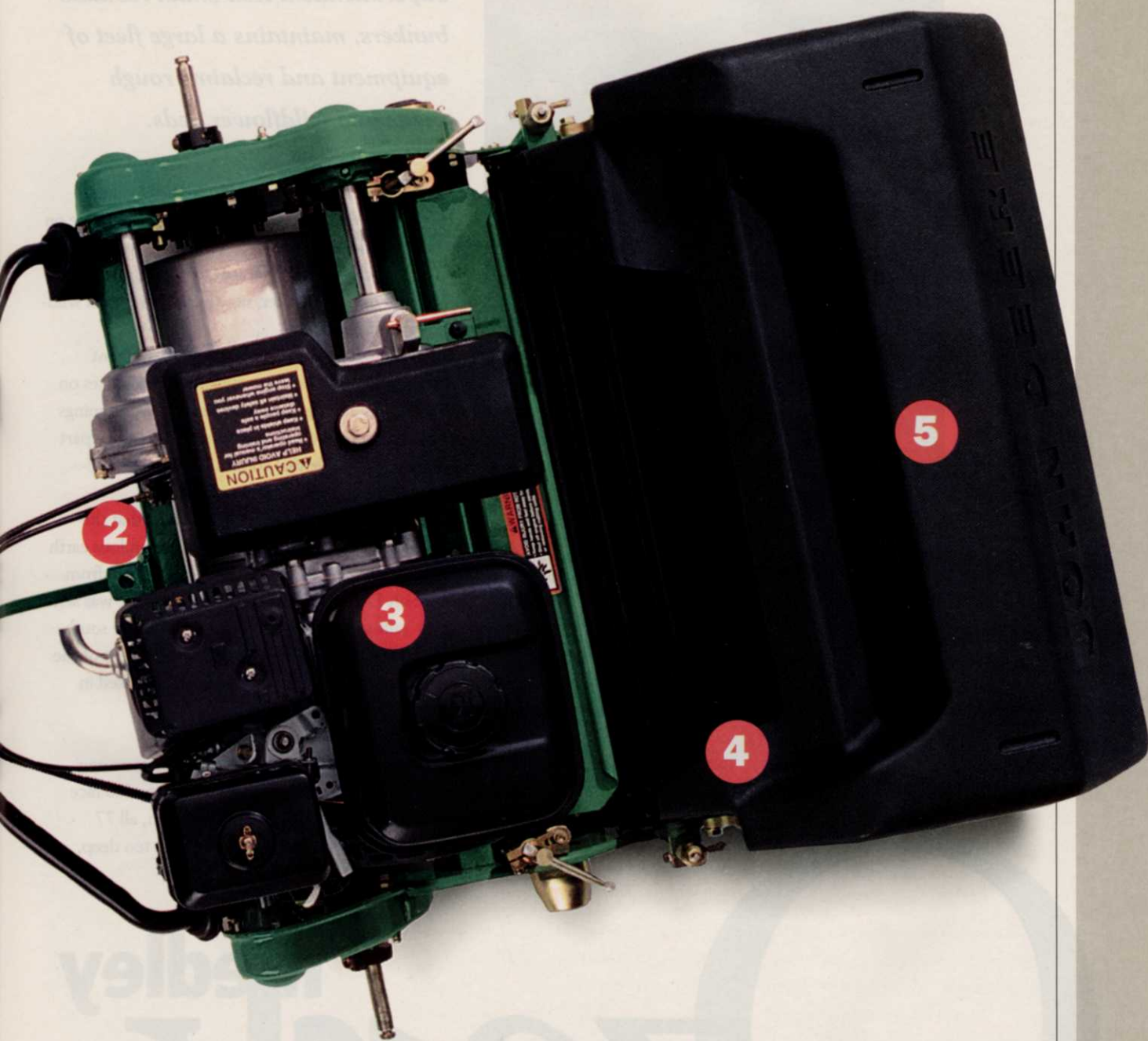
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STEP 5

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By LESLEE JAQUETTE

Superintendent Ken Smith rebuilds bunkers, maintains a large fleet of equipment and reclaims rough areas into wildflower beds.



PHOTOS BY LESLEE JAQUETTE

Superintendent Ken Smith of Highland Springs CC, Springfield, Mo., has “gone on the offensive”, to solve certain maintenance challenges. Solutions include a safely modified weedeater, new bunker sand and wildflower reclamation.

Designed by Gary Lynn with Robert Trent Jones, Jr., the 18-hole private course capitalizes on the Ozarks’ rolling terrain, limestone outcroppings and deep-rooted deciduous canopy. It is a key part of a 300-lot residential community that also demands substantial landscape attention.

Superintendent Ken Smith explains that the 200-acre course was opened after tremendous earth moving work in the fall of 1989. Smith hails from the Fort Dodge CC in Iowa, and admits he was sent into “culture shock” by lack of topsoil at the southwest Missouri course. Eventually, 80 percent of the topsoil at Highland Springs had to be trucked in from river beds.

Deep-lipped bunkers

Once the dirt was in place, the designers engineered the Trent Jones’ bunkers that tend to face the golfer head on. According to Smith, all 77 bunkers were built with lips that were too deep,

Ozark¹ medley

which maintenance crews have worked to correct over the years. To do this they add clay to soften the slopes and allow for a two- to three-inch sand fill contour. Currently, the bunkers need eight to 12-inches of sand to fill the void.

The silica sand looks gorgeous, but it doesn't work well, due to the shape of the sand particles. The sand does not compact much upon ball impact, says Smith.

"The result is lots of 'fried egg' lies. The ball goes 'splat!' and is buried in the sand."

The sand also tends to move downhill. Heavy rains carry the sand into drains, another maintenance headache. Even though Smith's summer crew of 20 has used a Sandpro to push the sand back up, it still gets contaminated by the rocks and soil.

A different sand

Smith's solution is to remove the old sand and start over. He estimates it will take several winters to replace the sand. This time he's using a sand with a more angular particle size. It's mined from river beds near Kansas City.



Smith's hydraulic weedeater attachment eliminates trouble when mowing around lake banks and bunkers.

His crew is also rebuilding the perimeters, checking drainage tile, ripping out old lines and using pea rock to level tiles. By the end of this winter Smith plans to rebuild half of the bunkers.

Nike Tour promoters call Highland Springs the "ultimate obstacle course," with its water and rock hazards and its six-inch roughs.

Some disease problems

Fairways and tees are zoysiagrass. Roughs are a combination of turf-type tall fescue and Kentucky bluegrass. Smith says this combination works well in the transition zone because when the bluegrass struggles with the Missouri heat, the fescue balances it out.

The fescue is prone to brown patch, however. To control the problem, Smith's crew sprays Cleary's 3336 on all green and fairway surrounds twice each summer. Typically, he sprays four weeks apart, as disease progression indicates.

Smith's most difficult disease problem has been anthracnose basil rot. The disease enters through turfgrass abrasions during the summer months.

Speed up, slow down

Not only does his crew maintain the course equipment, but it maintains a fleet of equipment used for real estate development. This includes a street sweeper and snow removal vehicle.

"The problem is the unexpected; and that people are in too much of a hurry," says Smith. "Still, it's a balancing act because we sometimes push the crew. Other times we say, 'slow the machines down.'"

To better manage mowing the severe angles caused by sand bunkers and lake perimeters, Smith got creative. He modified a walk-behind rotary mower with a hydraulic weedeater, and mounted dual tires to keep the machine from rutting. Now the machine mows the hard-to-get 18-inch strip between a bunker and the mower. One man can mow three acres of difficult



By winter's end, Smith and crew will have rebuilt many Highland Springs bunkers.

terrain, where previously three workers mowed, trimmed and raked.

Blooming beauties

Smith is changing some of Highland's turf acres into wildflowers. So far, he and Ornamentals Superintendent Linda Lindsey and her staff of two have successfully used wildflowers to beautify the numerous limestone outcroppings and ravines. People appreciate the flowers here.

Smith and Lindsey would like to reclaim 10 percent of the course for wildflowers, and to establish native grasses like big bluestem, little bluestem and love grass. This would also reduce course maintenance.

But, given the upscale, manicured nature of the development, it would be inappropriate to plant the long grasses adjacent to houses that line the course.


As members and owners become more aware of the issues, the staff hopes to eliminate difficult mowing areas and balance the intensive maintenance with plants that are easier to maintain.



*Is it just us, or
does a course without dollar
spot seem like a much
happier place?*

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Circle No. 104 on Reader Inquiry Card

A COURSE DESIGNED FOR 'affordable' golf

Superintendent Greg McDaniel is eager to open golf course development in Arkansas for middle-class American golfer.

By GARY BURCHFIELD

Golf developments typically appeal to people with lots of money. A Jonesboro, Arkansas, development, though, is targeting the "average" person. This new approach is being embraced by Jonesboro-area golfers.

Homes are already being built as Phase I of the new Sage Meadows Golf Club, an 18-hole course aiming for a March opening. The project could grow to as large as 500 building lots.

Sage Meadows is "semi-private" but will be open

to the public on a daily fee basis. Home owners in the development can join the golf club for a one-time initiation fee of \$1,000 and a monthly fee of \$125 per individual or \$145 for a family.

Fees for public golfers are reasonable, \$25 on Fridays, weekends and holidays, plus \$10 cart fees. Weekday rates are \$22. Junior rates are \$18 on weekdays and \$22 on weekends, after 2 p.m.

Golf Course Superintendent Greg McDaniel, who has been on the job since last April, says he can't wait to get the new course open.

"We've got a new course, close to a half million dollars worth of new equipment, and some new ideas," McDaniel says. "I'm just anxious to get it open and see it busy."

Last spring, the developers planned for a November opening, but a six-inch rain in September washed out most of the seeded greens, forcing McDaniel to replant. "It actually worked out okay, because we were able to improve some of the edges when we re-seeded," he says.

The course features sodded Meyer zoysia fairways, a variety of zoysia that can stand up to winter. Greens are bentgrass, seeded with Dominant bentgrass mixture. Tees, roughs and surrounds are Tifway 419 hybrid bermuda. Secondary areas are seeded to native grasses and wildflowers, with some common bermuda to help hold soil until the native plants take hold.

Sage Meadows' 13-acre driving range has large berms on each side to contain golf balls, and protect players on holes 1 and 10. Target greens are zoysia. Approaches were sprigged with 419 hybrid bermuda. Two chipping greens near the club house and a putting green at the pro shop offer several alternatives for private lessons and practice.

"We designed large tees with up to five tee positions each to give us more room to rotate markers and reduce wear on the tees," says McDaniel.

He says the course is designed with a minimum



Sage Meadows is semi-private, with daily fee play available to the general public. Holes on the course are described as 'beautiful,' 'demanding,' 'tough,' and 'one to remember.'

Md. oceanfront course to reopen

Berlin, Md.— The Newport Bay Golf Course at Ocean City Golf & Yacht Club in Berlin, Md.—previously known as the Bayside Course—has been completely redesigned and rebuilt, and will reopen for play in Spring of 1998.

It's been nominated as one of *Golf Digest's* "Best New Courses" for 1998. Golf Course Architect Lester George, of Colonial Golf Design, Inc., Richmond, Va., completed the design and has been overseeing the project since it started in January, 1996.

"It's a totally new course, with all new tees, greens, bunkers, irrigation and cart paths," says George. "I have redesigned or renovated every hole and the practice range."

The construction was handled by Quality Grassing of Lithia, Fla. Ocean City is a 36-hole private club, which is open to the public for resort daily fee play.

number of "parallel" holes and more of a "play around" layout. "It's pretty hard to hit into a fairway other than the hole you're playing."

Sage Meadows also has a top-of-the-line Rainbird Nimbus irrigation system with the "Freedom System" radio control. The system, when complete, will have about 950 sprinkler heads.

Developers provided a good budget for both equipment and maintenance, says McDaniel. His equipment line-up is heavily Jacobsen and includes two triplex greens mowers, two midweight fairway mowers, two heavyweight rough mowers, three walk-behind aerators, a Verti-Drain aerator, and 10 utility vehicles. Most of the equipment package was leased through Textron and the Bob Ladd Company, Memphis.

McDaniel had been assistant superintendent at Old Waverly Golf Club, West Point, Mississippi. (*Golf Digest* has recognized Old Waverly as one of the "Top 100" courses in the U.S., and the course has been selected to host the 1999 U.S. Women's

Sage Meadows particulars

Sage Meadows Golf Club is being developed by three local Jonesboro, Arkansas, businessmen: Bob and Ed Trout, who own the local *Jonesboro SUN* newspaper, and Kent Arnold. The trio is developing a similar project in Florida.

Home sites on the Sage Meadows course will range from condominium to estate size, and range in price from \$30,000 to \$100,000 per lot. The club includes a pool and racquet club with three tennis courts. Pool and tennis facilities are available only to property owners and guests.

The new 5,000 sq.ft. clubhouse includes a pro shop, grill and snack bar, and a private lounge. The lounge will be available to the general public on a membership basis and nominal fee.

The Tommy Bolt Signature golf course was designed by Kevin Tucker, Nashville, Tennessee, and built by Sajo Construction of Houston, Texas. Distances range from 166 yards on the par 3 hole number 5 to 605 yards on the par 5 number 15.



McDaniel: Five position tees give more room to rotate markers, reduce wear.

Open.) He and Mike Donoghue, assistant superintendent, operated out of a mobile home office during construction of the Sage Meadows course. McDaniel says Donoghue has been a great help in getting the course ready.

Turf nursery provides 'replacement parts'

by DR. BILL KNOOP,
Technical editor

I've always suggested that a golf course have at least one turf nursery. The more I'm around bentgrass in the south, the more I'm sure a nursery is absolutely necessary. As we all know, growing bentgrass in a hot, humid climate can be a very tenuous situation. If you haven't seen just how fast bentgrass can die when the conditions are right (or, I should say, "wrong") you're lucky. Poor soil drainage, high temperatures, high humidity, poor air drainage and poor water quality, plus high traffic are some examples of the negatives that can cause bentgrass superin-

been cut down or at least thinned out were on someone else's property. Nearly every summer, that green began to show spike marks, and it would just about stop growing. When the green began to look and play bad, the superintendent simply, overnight, replaced the surface with turf from the nursery. Most years, the newly-sodded green stayed in fair shape until cool weather returned.

Another superintendent had three greens that were in a flood plain. It was just a fact of life that every few years those greens were going to be under water for a week or so. Since these were bentgrass greens, they don't last long under water. Even if they didn't die from the flood, the silt left behind would completely plug up the green.

Since it's nearly impossible to remove silt from a green, the only real answer seems to be to remove the whole turf surface deep enough to get rid of all the silt. Now, the nursery pays for itself. Even though sodding a green may not be the best way to establish a putting surface, if the green is top-dressed after the sod is laid, the

putting surface may be acceptable. At least the green is not out of play very long.

The nursery should be constructed from the same material as the green, or it may have even a higher sand content. It should be mowed, fertilized and watered just like the rest of the greens. Consider it an "unused green".

Need to train an employee to mow greens? Why not let them learn to handle a greens mower on the nursery before you turn them loose on one of the real greens? A nursery can also be a great place to make sure the product works the way they say it does. **LM**



This nursery at Sandridge Golf Club, Chardon, Ohio, will provide Superintendent John Zimmers with turfgrass for green or fairway repair. The course opens in 1998.

tends some sleepless night. At times, we're going to lose some bentgrass no matter what we do.

I knew a superintendent who had 17 great bentgrass greens and one that was a real problem. It was at the bottom of a hill and had trees all around it. The result: no air drainage. The trees which should have

Three groups to test turfgrass

USGA, GCSAA and the National Turfgrass Evaluation Program (NTEP) have combined resources to evaluate grass varieties on golf course settings.

"On-site testing of turfgrass cultivars is not a new concept. However, the joint sponsorship of on-site putting green trials is new," said Dr. Robert C. Shearman, NTEP executive director.

Practice putting greens built to USGA specifications at 16 different golf courses across America, feature bermudagrass and/or bentgrass varieties. They will be monitored to provide data for golf course personnel in the building and maintenance of facilities. Northern locations will integrate bentgrass cultivars; far-south venues will use bermudagrass varieties. Both will be used in transition zone climates.

All putting greens will be used as practice greens at the facilities.

Penn State takes apps for program

Applications are being accepted for Penn State's two-year Golf Course Turfgrass Management Program for the class beginning in September 1998. There is an application fee of \$35 and the deadline for applications is Dec. 31, 1997. Call 814/863-0129.

Clarification

A survey appearing in this section in our September issue arose from questions asked of The Pacific Northwest Golf Association and the Washington State Golf Association, reports Keith Ihms, CGCS, with the North Texas GCSA. The short article incorrectly implied that Ihms was reporting the results to California superintendents..



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Dollar Spot
Summer Patch
Anthracnose



Pythium
Yellow Tuft



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LANDSCAPE/GROUNDS

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Needed, a 'flow' of workers

PAGE 6 L ▶

Cemetery care opportunities

PAGE 12 L ▶

From flood to baseball overnight

PAGE 16 L ▶

Making feedback work for you

It's too late to become a professional Christmas decorator in 1997. You'll need several months to prepare before you hang your first wreath or string of lights for hire. This decorating season is already well underway. Holiday decorating, like Christmas shopping, keeps creeping forward on the calendar.

But you might want to investigate it for 1998.

A growing number of lawn/landscape companies seem to be tapping into this potential new

source of revenue. It may be a good business fit for you, particularly if your production stops with the first big snow, and you want to keep some key employees through the winter. I don't see why it wouldn't work in the South or Southwest either if you have a plan, the manpower to deliver the service, and the resources to market it.

I learned about this business opportunity at a press conference at Expo '97 in Louisville this past July. What a strange time

to be talking about Christmas. On that particular day Louisville's heat and humidity chased exhibitors and visitors from the outdoor power equipment exhibit area and into the adjacent convention center which, of course, was air conditioned.

There in a small room Blake Smith did most of the talking at the press conference. His company, Christmas Decor, Lubbock, TX, offers Christmas Decorating franchises. Smith is an energetic young man, and he was selling his idea with lots of enthusiasm.

He said lawn care businesses, in particular, are nicely set up to offer this service. They can sell holiday decorating with door hangers, mailers or with signs in yards--just like they market their lawn/landscape services. With the exception of

ladders and, of course, the decorations themselves, most already have about everything they need to deliver the service, including a pool of potential customers.

Smith said lawn/landscape companies should concentrate on their residential customers first, and build this before chasing larger commercial jobs. He said many homeowners will pay \$800 to \$1000 to have their homes and properties decorated for the holidays.

Of course Smith said franchising is the way to get into this business. He said that Christmas Decor provides member companies with hands-on training, training manuals, videos, a "starter" kit of decorations, and access to vendors offering the best and most reliable supplies of holiday decorations.

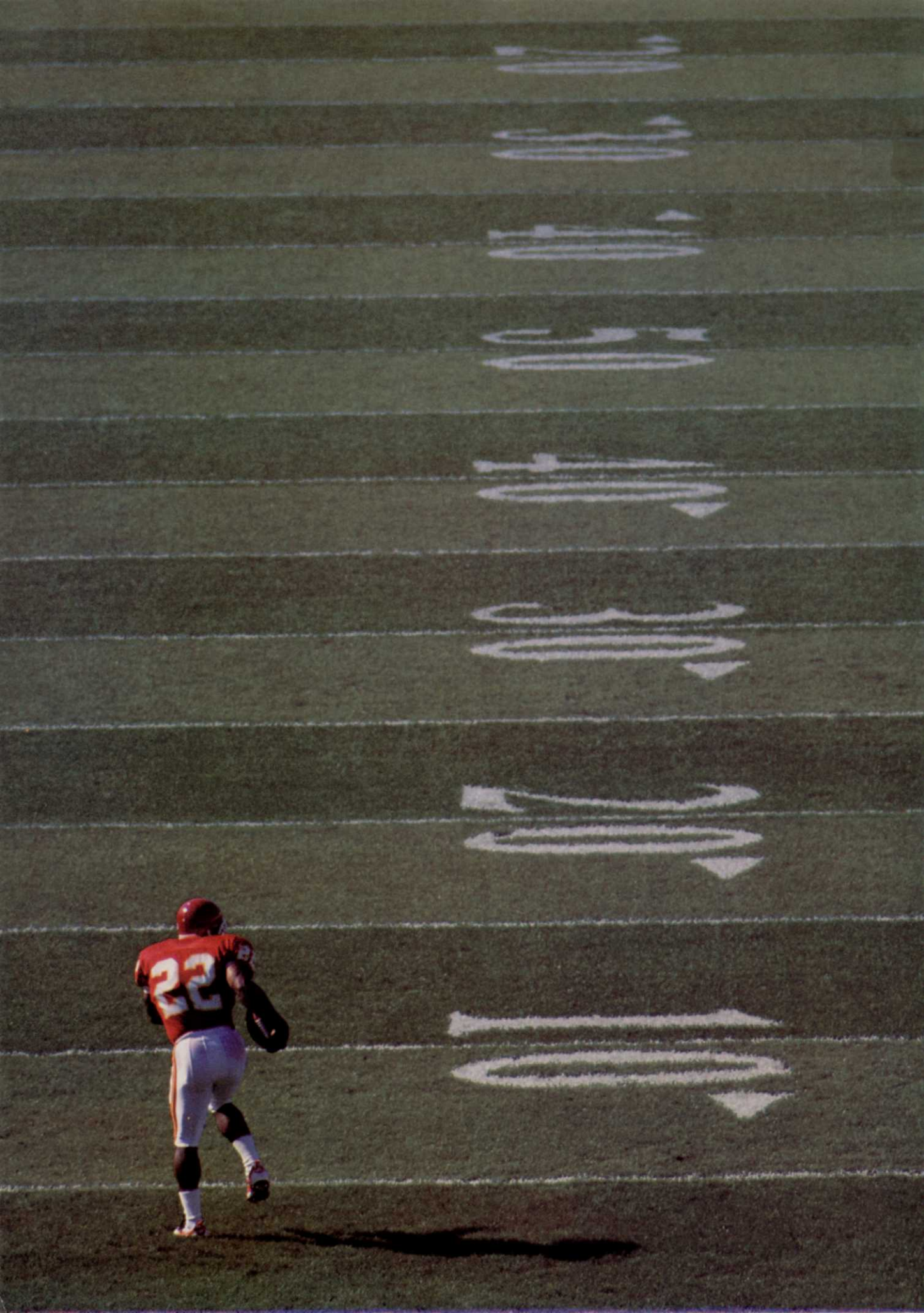
To learn more about Christmas Decor, call 800/687-9551.

Christmas decorating may offer \$\$ opportunities



Ron Hall

RON HALL
Managing Editor




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Circle No. 103 on Reader Inquiry Card

Lawn care needs a flow of workers for growth



BOB ANDREWS
Contributing Editor

Chemical lawn care is now more than 30 years old. It's a relatively young industry, and still developing. But, it's also maturing, certainly beyond the point where it tries to hire people for part-time work. Or as their second job. Or as a temporary place of employment between the last job and the next.

The chemical lawn care industry has arrived at a time when it must look, not just for employees to do today's work, but for a *flow* of employees to do tomorrow's work. It must look at creating

an on-going stream of potential employees to meet challenges that are sure to arise for each and every one of our businesses.

And not just next season, but long range.

Individual companies can't do this. With consolidation of the lawn care industry, there is really no pool of major companies out there that could drive such an endeavor. No. This effort must come from groups within the industry. It must come from trade associations,

either at the national, state or regional levels. Or, perhaps, by some collaborative effort among these groups.

Each year the Indiana State Lawn Care Association holds a Winter Workshop. Its purpose is member education. Because of continued strong member support, the Association has been able to raise a considerable amount of money which is re-invested in education.

This year the investment is going to Vincennes University in southwestern Indiana. Headed by Professor James Messmer, the university's Horticultural Department has offered an excellent two-year Associate Degree program for those interested in a career in turfgrass management. This program has turned out a steady stream of excellent candidates who will someday fill management

and/or owner positions in our industry.

At Messmer's suggestion, the Indiana State Lawn Care Association will take this program one step further. With the assistance of Vincennes University's excellent Audio Visual Department, the Association will develop a recruitment video to be used by vocational education departments in every high school in the state.

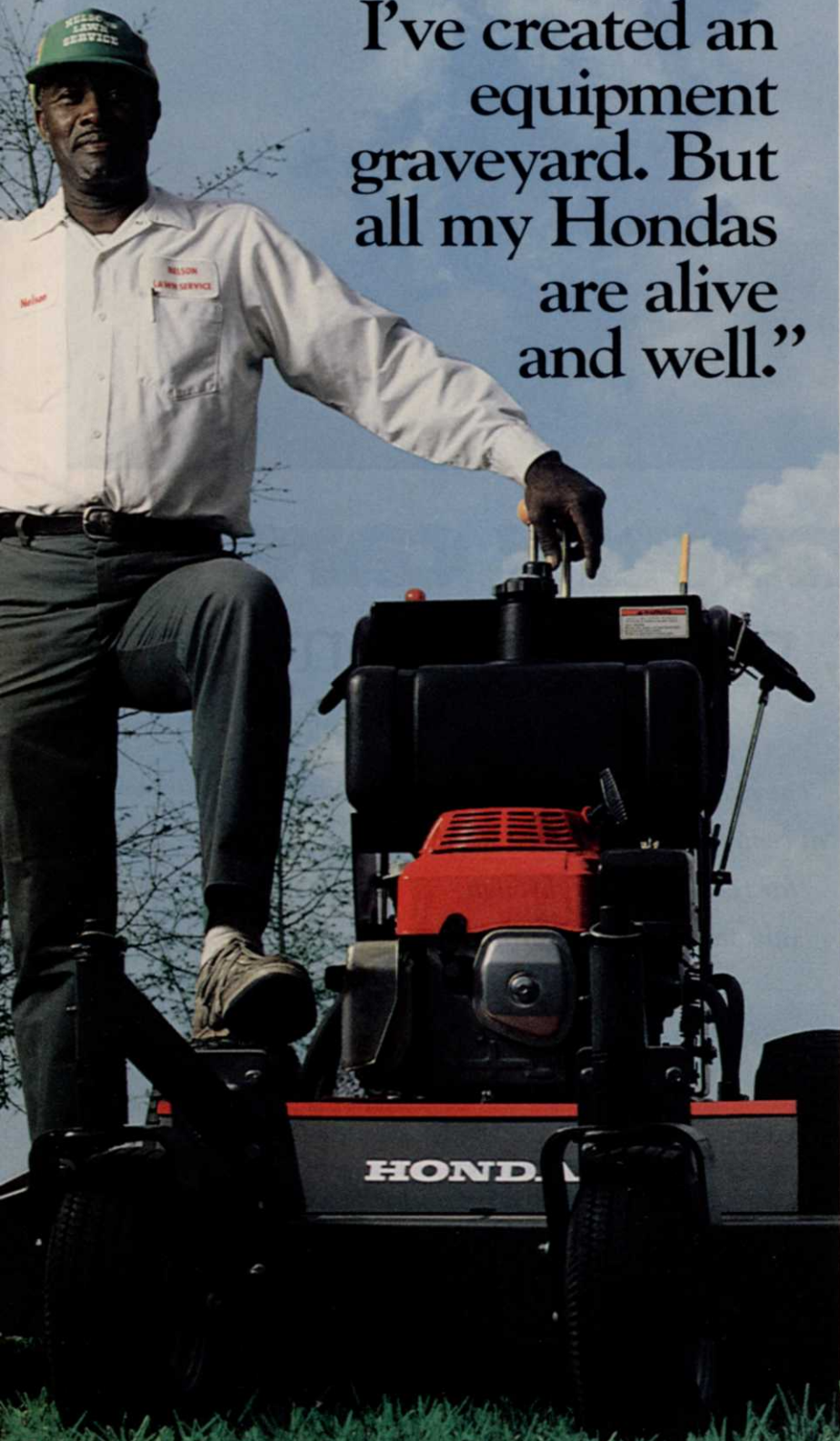
This 15-minute video will be available to any student in search of a long-term opportunity. It will focus on the importance of turfgrass in our society, how it has become a viable industry in and of itself, the many employment possibilities it offers, and the potential for personal as well as professional growth.

This video will not treat the industry with a sugar coating. It will address the physical nature of the work, weather issues, and the concerns that students may have about working with chemical products.

The Association looks at the video as another step in solidifying and building the chemical lawn care industry. It's another way of saying that we in the industry are offering opportunities to young people, and not just a "temporary stop along the way". **LM**

Only the lawn care associations--national, state or regional--can solve the industry's labor woes.

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About one-third of all cemetery managers contract out landscaping work and other aspects of cemetery management

Cemetery care smarter, more economical

The sheer volume of acreage at cemeteries dictates the need for reduced labor through subcontracting and proper plant selection.

By ROBERT E. REAVES

trust fund that exceeds \$12 million. Like Spring Grove, these cemeteries emphasize sculpture and landscape management.

Forest Lawn Memorial Parks in Southern California have set the aesthetic trends for many years in the cemetery industry. One example is the trend to use grass-level markers instead of monuments and obelisks. With five cemeteries in Los Angeles and Orange County, about 530 acres are developed under turf or under some type of landscape. Thousands of visitors come to see the outstanding examples of architecture and statuary at Forest Lawn

parks each year. An endowment care fund stands at \$175 million.

Contractor trend

About one-third of all cemeteries contract out both landscape and other aspects of cemetery management—especially where it makes good business sense. As an example, Spring Grove no longer does its own road repair. They also contract with local arborists for stump grinding and extensive tree pruning. Instead of raising its own annuals at on-site greenhouses, annuals are purchased from local greenhouses at half the cost. "Any prudent business manager must constantly ask the question whether it will cost less to do the work from the inside or outside," notes Smith.

Jon Stephenson, vice president of Greenwood Memorial Park and Mount Olivet Cemetery says before you make a decision to hire a contractor, you must completely understand what it costs for maintenance. "If you choose to contract out the landscape management, do it in increments, mowing, fertilization or tree care."

The last thing a grieving family wants to see is a loved one's grave site covered with tall weeds, and a marker that sinks into the ground.

Quality cemetery management and correct interment site preparation reduce these problems. A good plan can work for in-house crew or outside landscape contractor, at any size facility.

Spring Grove Cemetery and Arboretum of Cincinnati, Ohio, is a fine example of quality cemetery management. Chartered in 1845, it covers 730 total acres, 425 acres of which are mowed and developed. Not only does the park have a renowned arboretum, it also contains 14 lakes and 45 miles of high-crowned roads — perfect for bicycles and hiking. Tom Smith is senior vice president there.

Greenwood and Mount Olivet Cemeteries in Fort Worth, Texas, were dedicated in the early 1900s. The landscapes at both cemeteries are managed by skilled in-house crews. To ensure the perpetual care of the cemeteries, this association has a

Stephenson explains you should carefully weigh the advantages and disadvantages of contracting outside help. "With in-house workers you maintain control, but when you subcontract you eliminate employee taxes and benefits."

David Macdonald, manager of maintenance at the Hollywood Hills Forest Lawn Memorial-Park, says the skills of the in-house crew help determine whether or not to hire a contractor. Forest Lawn is fortunate to have an incredibly skilled management team, but other cemeteries could find outside contractors a big help.

Service driven, detail oriented

Environmental Care, Inc., is a national, full-service landscape management company that offers cemeteries a wide array of services. In addition to mowing, a few of its services include tree care, turf management, irrigation, pond management and pest control—along with the specialized equipment and skilled specialists needed to get the job done.

"There is a definite trend in the industry toward hiring outside landscape management companies because they help improve the bottom line. An in-house staff is very expensive and a contractor can do the job for significantly less money with trained labor," says Maureen Anami, operations manager for the Los Angeles branch of Environmental Care, Inc. Anami knows cemetery management. Prior to joining ECI, she worked at a major cemetery in Southern California.

Anami says good communication between the cemetery and the landscape management company is essential.

"Each day we check in with the cemetery foreman at 6 a.m. to get a list of memorial services for that day," says Anami. "Everything changes from day to

day, so we must be flexible, service driven and detail oriented — to do whatever it takes to get the job done."

Anami says improvement of a cemetery's bottom line is where ECI really shines. An example of this is in the area of water conservation. "We've got water consumption down to a science through ET-based irrigation. We've saved clients 20 to 30 percent in water costs and sewer charges, and in California that's a big deal."

Mowing becomes a challenge

Mowing and trimming around markers takes the greatest amount of time. Scheduling is very difficult because of the unpredictable number of services. Each day typically begins with a morning meeting attended by all the managers and supervisors to review the locations of services. The entire crew must be aware of traffic patterns and plan mowing and other management activities around the memorial services.

Spring Grove crews follow a rigorous range standard for turf height — 2 ½ to four inches at all times. "We take turf height measurements every week as benchmarks so that everyone gets a report card on their

performance," says Tom Smith. "Our mowing team uses the 90/10 theory. We may mow 90 percent of the property, but 10 percent of what we didn't mow is what 90 percent of the people see." The major turfgrass here is Kentucky bluegrass.

Monuments, markers and floral decorations are an ominous mowing obstacle at cemeteries. "Many cemeteries create their own headaches," remarks Jon Stephenson, of Greenwood Memorial Park and Mt. Olivet Cemetery in Fort Worth, TX.

"Properly maintained cemeteries must have strict guidelines on the proper placement of flowers, use approved vases and should only allow artificial flowers during the non-mowing season."

Plant growth regulators

Plant growth regulators (PGRs) should definitely be considered in a cemetery management program, since they can provide a significant reduction in mowing and trimming. "Cemeteries have obstacles that create mowing and trimming difficulty," says Joe DiPaola, Primo product manager at Novartis. "PGRs help cemeteries to grow a better turf without a sacrifice in turf

quality. Use of PGRs can mean 50 percent reduction in mowing — between mowings and actual mowing time." With less mowing time, crews are then able to pursue other tasks.

Smith agrees. "We started experimenting with PGRs in 1969, and we've tried to cooperate with every chemical company that has a product." He says that PGRs do not replace mowing and trimming, but definitely give breathing room to the maintenance team. "We make pre-green up applications of PGRs to our turfgrass through Memorial Day, as well as applications on Japanese Yew and other woody plant materials to slow growth."



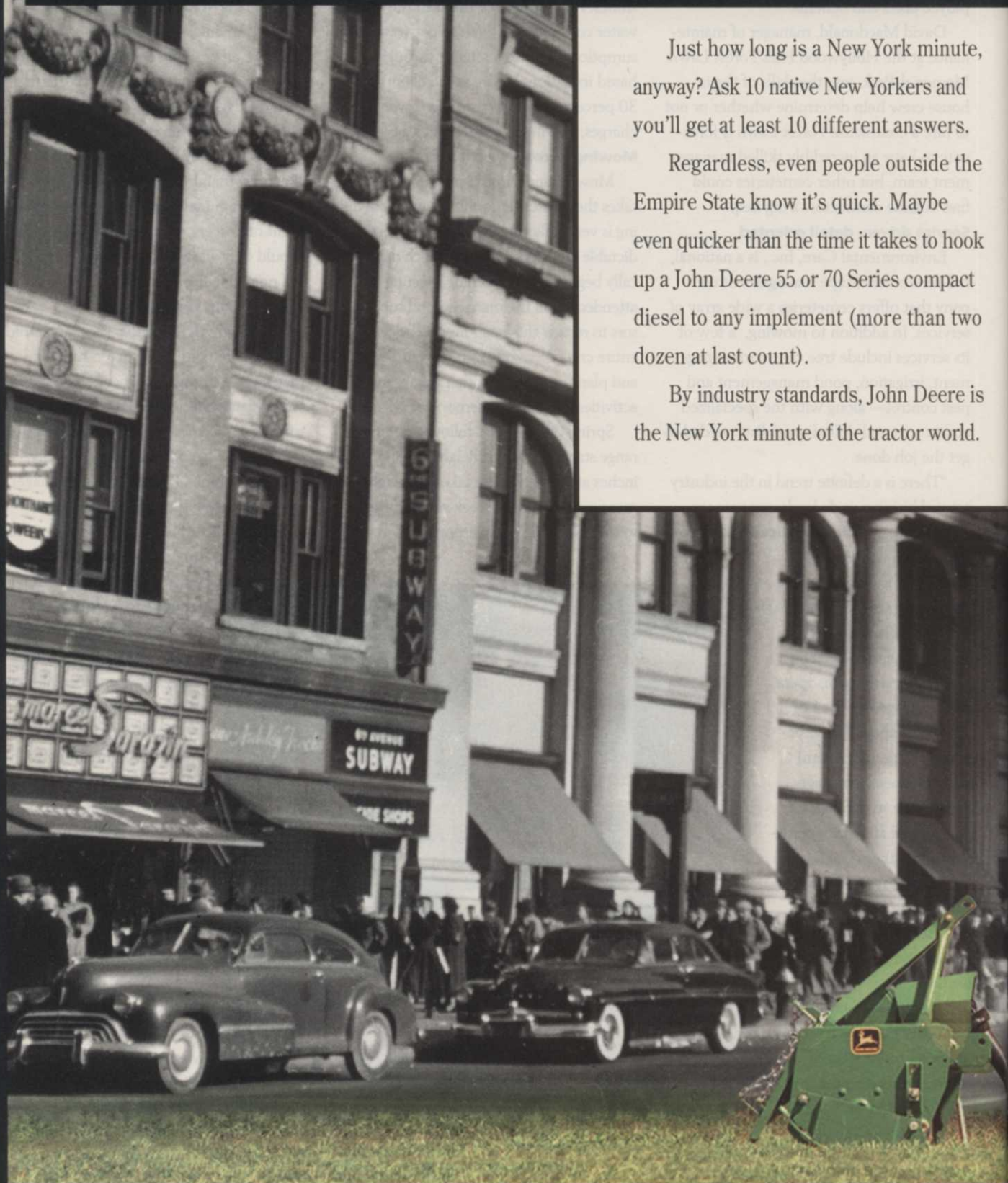
Ornamentals placed at this Spring Grove intersection add color and texture, reduce turf maintenance and are a more attractive sight for visitors.

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Just how long is a New York minute, anyway? Ask 10 native New Yorkers and you'll get at least 10 different answers.

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Forest Lawn has closely looked at plant growth regulators and has even done some trials with Primo. "Although Primo does suppress growth and improves turf color, the cost associated with its use were actually higher than turfgrass management without Primo." However, Macdonald is quick to point out that the cost-effectiveness of PGRs will be different at every cemetery. He says it depends on crew size, type of turfgrass, and the goals of the cemetery.

Pea gravel firms up soil

Settling soil is a persistent problem that

away, Mount Olivet's soil has a high clay content — prone to shrinking and swelling. "For heavy clay soils, we backfill with sand around the outer container, followed by a backfill to the grade. We tamp the soil, resod and tamp again to limit settling," explains Stephenson.

Forest Lawn's crew prepares the internment site with a backhoe. After the memorial service is completed, the soil is backfilled with a backhoe that has a hydraulically-operated tamping attachment. "If tamped correctly, we only have limited settling," says Macdonald. After thorough

not damage the cemetery markers or survey pins like other aeration equipment. Hydroject has nozzles that fracture the soil with high velocity water pressure and creates channels and crevices in the soil that encourage root growth.

However, core aerators continue to be very popular. "We find that the smaller Ryan walk-behind units work better in the developed areas of a cemetery, with pull-behind units more suitable for the larger, undeveloped areas," adds Anami. Like other aspects of cemetery management, Anami says you have to do whatever it takes to provide a top quality appearance.

Training conferences help

Within the cemetery industry, the commitment to ongoing training is very impressive. As an example, Greenwood/Mt. Olivet sends its crew to Texas Cemetery Association Maintenance Conferences, as well as the International Cemetery & Funeral Association University (ICFA) held at the University of Memphis.

Stephenson says ICFA University is made up of several "colleges"—week long classes on team work, new equipment, floral color in the landscape, pruning and other aspects of maintenance. "The caliber of this school demonstrates the professionalism of this industry," he remarks. ICFA University is very important in providing accreditation within the cemetery industry.

Spring Grove makes horticultural training available at no cost to its employees. "Several of our employees are going for a B.S. degree in horticulture at the new evening-only program at the University of Cincinnati," boasts Smith. "Our employees love it and we pick up the full tuition."

The author is with Irricom, a communications and public relations firm. He has an M.S. degree in horticulture from Oklahoma State University and can be reached at 512-331-2814. E-mail: irricom2@ix.netcom.com

For more information on the International Cemetery & Funeral Association University, Contact Tina Evans at the ICFA. Phone: 703/391-8400.



Spring Grove features a combination of large and small flower borders.

can be traced back to the internment preparation. "This is a very delicate matter and is the the number one concern of our customers," says Smith. To manage the problem, Spring Grove places a small aggregate pea gravel around the edge and up to the top of the concrete burial container, followed by a backfill of top soil. This method works well in areas of the country with severe winter weather and heavy soils.

Soil type has a direct impact on the degree of settling a site will experience. For example, the soil at Greenwood Memorial Park is very sandy and settling is not as much of a problem. But only a few miles

soil tamping, the sod is rolled back in place, and is immediately watered and tamped. "We experimented with sand to backfill internment sites, but noticed little difference in the amount of settling."

Soil compaction is evident

This constant disruption of the soil and heavy equipment of 22,000 pounds or more brings about the need for frequent turf aeration.

"We need an innovative aeration technique for this industry. Probably the best equipment on the market right now is Toro's Hydroject," advises Smith. He says Hydroject is noteworthy because it does



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FLOOD REPAIR

challenge for Brewers crew

"The grounds crew did the best job I've ever seen, maybe the best in the history of baseball" —KC Royals Manager Bob Boone after the flood.

By DAVID MELLOR

▼ Dave Mellor, left and Gary Vandenberg guide helicopter pilot to wet areas of the field. The copter was brought in for a four-hour dry down.



Milwaukee County Stadium is built on a 100 year flood plane. After the Brewers' game of June 20, we suffered our second "100 year flood"--in 11 years.

We manicured the field, then put on the rain tarp because grounds director Gary Vandenberg expected rain.

Early the next morning our DTN office radar showed the training effect of thunderstorms lining up one behind the other coming right over the top of us. Eight inches of rain fell in nine hours, flooding

many homes in the city and our playing field too. When the rain stopped about mid-morning, water stood in the first four rows of the box seats and most of the field was submerged by 3½ feet of muddy water.

We had two things going for us. Miller Park, which will open in 2000, was paying off already. The enormous construction

▲ Fourteen members of the grounds crew lined up to pump air under the tarp to cool the turf surface.

hole for the new stadium is between County Stadium and the river that overflowed, and took in 10 feet of water, leaving us to deal with *only* 3½ feet of water!

Secondly, County Stadium was constructed in the early 1950's on native soil. Unlike many of the newer flat sand or modified sand fields, ours has a crown through the middle axis resulting in the infield grass under the tarp and part of the infield "skin" not being submerged.

Tarp keeps in harmful heat

Even with all the water, we were confident that the field could be repaired once the water receded. We mobilized the crew to get the field ready where we could.

Around 3:00 p.m. the water was only receding one to two inches per hour, so that night's game was canceled. To make matters worse for us, the weather warmed up considerably. What about the turf under the infield tarp? The infield was like an island, and we could not remove the 16-ounce tarp, only fold in the sides. The heat built beneath the tarp, and to lift the edge of the tarp was like opening an oven door.

Getting lots of really good new customers is a pain in the you-know-what, but...

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Dayton, Ohio- Are you frustrated by advertising that never makes the phone ring? By being beat out of good jobs by cheap bidders? Feeling like you're starting your business all over again every season? Stuck at a certain level?

A million dollar per year "entrepreneur of the year" says that most of his peers' and competitors' marketing is anemic, me-too-istic, dull, full of costly waste, and ineffective. Arrogant? Egotistical? Marty Grunder says: "React to me any way you like—but one thing is for sure, if you are in the landscaping business or maintenance business, whether you are small or large, my marketing methods can easily double or triple your business in just one year, provide better customers, help you target and get exactly the kind of business you want, increase profitability and stability, and absolutely mystify and trump your competitors."

Big talk? Yes, it is, but this Grunder wiseacre has been showing off—and blowing sceptics away—his entire life. As a freckle-faced, red headed Dennis-the-Menace type kid, he started his business with nothing more than a "push" lawn mower and chutzpah. That little business went to 75 regular customers almost overnight. As a full-time student at the University of Dayton, while his buddies drove to school in old "beater" cars and flipped burgers for pocket money, Marty arrived in his Grunder Landscaping Company truck and, at age 21, did over \$300,000.00 in business. Last year he was named Young Entrepreneur of the Year by the Small Business Administration's Midwest Region, in the 1 to 25 employees category. Currently, Marty oversees a staff of 30, 18 trucks, a backhoe, an assortment of other equipment, and a diversified business doing everything from basic residential lawn maintenance to complicated commercial landscaping projects—and, this year, breaking \$1.5 million in annual sales. He's also investing in land, lecturing from time to time, and working with other landscapers as their "marketing coach."

Million Dollar Marketing Secrets Revealed In A Free Report—If You Qualify!

Grunder DOES have "secrets" for building these types of businesses, too. Here are just a few examples:

1. How to **spark referrals**... how to turn "small accounts" into big business.
2. How to **increase Val-Pak Coupon, direct-mail and Yellow Pages advertising results by 10% to 30%**...make your advertising much more productive and be able to accurately measure its value.

3. The 5 biggest mistakes 95% of the people in this business make when advertising and how to avoid them.
4. **How to stop the "price shopper" in his tracks. How to get good business without being the lowest bidder or offering cheapest price.**



Here's the smart-aleck kid standing next to his first truck. Who'd have guessed he'd quickly create the biggest and best company in southern Ohio, confound established, entrenched competitors, and exceed \$1.5 million in annual sales? Betcha he has a marketing secret or two in his pocket that you'd love to steal, if you could!

5. How to avoid the **fatal mistake** of confusing 'marketing' with 'selling'.
6. **Forget wasteful "name recognition" or "getting your name out there"**—learn to "target," create and deliver a "market-matched" message, and **attract exactly the type and size of clients you really want.**
7. Why your "service" should never be the #1 focus of your marketing.
8. Powerful but simple letters and things to say to existent customers to **cause demand for a variety of additional, highly profitable services.**
9. **The "secret" borrowed from the fad-diet business that sells high-priced, high-profit landscaping work like crazy.**
10. How to get people working for you and with you to really contribute like a championship team!
11. How to use **"automated, autopilot marketing"** to bring in new business without you or anyone else even talking with prospects on the phone!
12. Even "poor boy" **dirt cheap marketing** strategies, like what to write on a simple postcard to bring in a flood of new customers.

13. **The "4-Page" marketing tool used 6 to 10x a year that is guaranteed to increase your business by at least 30% year after year...automatically!**
14. How to position yourself as a "famous expert" in your area, get a ton of free advertising and **"fry" the competition.**

And there's a whole lot more. At the urging of a big-time, nationally respected direct marketing consultant and professional speaker who discovered and was "blown away" by everything Marty was doing, Marty prepared an easy-to-read but very complete, provocative **Special Report—"How To Re-Invent Your Lawn-Garden/Landscaping Business With Million Dollar Marketing Secrets"**—and you may be able to obtain a copy at absolutely no cost whatsoever.

Who Should Get Marty Grunder's Special Report?

Marty asks that you call for his free Report ONLY if: (1) you own your own business or are the President, CEO, manager or marketing manager for the business; (2) you make the decisions about advertising, marketing, and customer service investments; (3) you are currently unhappy with some aspect(s) of your business; (4) you recognize that in today's competitive environment, just "doing a great job" isn't enough to sustain a business; and (5) you are willing to make progressive innovative changes in your business if convinced, even reasonably assured that doing so will dramatically improve sales, profits, customer satisfaction, referrals, growth, and community prominence. (Please do NOT waste your time or Marty's money getting this Special Report if you are close-minded, change resistance, fully satisfied with your income, or just a curiosity-seeker without sincere interest in changing your business for the better.)

How To Get Your Free Report:

Simply write "Report" on your business card or a sheet of your letterhead and FAX it to 937-847-8067 or, for even more information and to get your Report, call 1-800-399-7135, listen to a brief free recorded message, then leave your name, company name, and address as instructed. You can FAX or call anytime, 24 hours a day, 7 days a week. If you prefer having your report sent confidentially to your home address, just let us know. Incidentally, requesting your free Report does not obligate you in any way; no salesperson will call to follow-up, nothing of the sort. However, this is a limited free offer, so please take care of it right now, while it's fresh in your mind.

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Circle No. 130 on Reader Inquiry Card

Fourteen members of the grounds crew lined up side by side and pumped air under the tarp for 10 to 15 minutes at a time to cool it down. They did this for 4½ hours, working around all four sides of the tarp.

The grass survived, with no scorching or pathogen damage.

Waiting on drainage

By 8:30 p.m. we had done all we could until the remaining two feet of water was gone. It took all night for it to drain, and by daybreak the only remaining water was in the dugouts and camera pits.

Still we had to get the field ready to play. Everybody on the crew went to work.

► The top one inch of the entire warning track was contaminated with scum and sediment so it was removed and replaced with all new material.

► The 90,000 square feet of the field had to be hand raked.

► A helicopter was brought in for 4 hours to help dry the surface.



PHOTO BY JOE VOPAL

The Miller Park construction site filled up with 10 feet of water. It helped save the Brewers field from further flooding.

► We were mowing the field by 8 a.m.

► We were watering the infield "skin" or dirt by 9 a.m.

► The teams took infield practice by 11:30 a.m. and the game against the Kansas City Royals started as scheduled at 1:07 p.m. The players, coaches and team

owner Bud Selig were truly amazed with how wonderful the field played. The pride and hard work by the crew provided a safe and playable field under tough conditions.

—The author is assistant director of grounds, Milwaukee Brewers baseball club.

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Feasting on feedback

Greenscapes in Naples, FL, goes to great lengths to 'talk' to its clients and its employees. Then it 'listens' to what they say so that it can give them what they want.

By RON HALL/ Managing Editor

Your company delivers excellent landscape services at a competitive price. But do your clients know that? You think your employees are well trained and efficient. But how do you know for sure?

You really can't answer either of these questions until you develop channels of communication that generate "useful" feedback.

Greenscapes, a 36-year-old landscape services firm in Naples, FL, has procedures to encourage feedback on all fronts. President Steven Pruchansky likens the process

to radar on an aircraft. It guides his company toward its goals as it corrects—from day to day even—the company's service delivery.

Greenscapes seeks feedback from within the company, from supervisors, team captains and employees; externally too, particularly from customers. Pruchansky and Linda Nelson, vice president of operations, (her mother, Ethel Rae Nelson founded the company, then known as Rae's Sod, in 1961) are convinced their focus on feedback aids Greenscapes' continued profitable growth.

Competition? You bet!

And, growth, particularly sustained growth, is no mean accomplishment in a tough market like Naples which already has plenty of solid competitors without the startups and part-timers. There are about 4,500 licensed lawn care companies on Florida's southern Gulf Coast. There may be another 2,000 or more unlicensed operators performing lawn or landscape care for hire.

"It's like a joke around here that every time it rains, one or two more companies spring up," says Linda Nelson.

"It's a very easy entry with little capital. If you have a pickup and a lawn mower, you're in business," adds Pruchansky.

Most newcomers, however, wither as the sun gets hotter, the days longer and the turfgrass and ornaments erupt in a riot of growth in spring and early summer. Landscape services here, in spite of Naples' south Florida location, are seasonal just as they are elsewhere. Just more intense.

The combination of Steve's administrative skills (he bought the company in 1992) and Linda Nelson's energy and knowledge of the local conditions have re-energized Greenscapes. While it continues to offer sod installation (it's primary business for decades), it now also provides full-service landscape management including irrigation and exterior chemical applica-



tions. It initiated tree pruning and trimming in 1996.

"We want everything on the landscape under our care," says Pruchansky. Having one company provide all landscape services is attractive to many customers, but an equally big reason for the "do all" approach is quality control.

"We provide customers with a guarantee that if anything dies while it's under our care, we'll replace it for free," he explains. "If somebody else is doing the fertilization or pest control and the grass is turning yellow, the applicator might point to the irrigation guy. Everybody is blaming somebody else. We don't want that. We want total responsibility."

The greatest demand for Greenscapes' services comes from homeowner associations. But acquiring them as clients isn't as simple as knocking on a door and asking for the business. Associations, by Florida state law, have to put property maintenance out to bid. Steve says his company approaches each bid with "sophisticated" job costing.

"We really don't have an aggressive sales presence," he adds. "We've relied mostly on referrals. We feel that if we do a superior job and present a quality image, people will want to have us on their properties."

"We're looking for controlled growth for a superior-quality product. We've had enough referrals that we haven't had to hit the phones."

Reliable workers a big plus

A reliable and seasoned Hispanic labor force plays a big part in Greenscapes' continued growth. Mexican workers have been a common sight in the south Florida labor market for decades, working in its resort hotels, on its construction crews, in its vegetable fields. Steve says he has great admiration for the stamina and dedication of Greenscapes' Mexican workers.

"They work very hard and they have been loyal to the company," he says. "Now, some of them are starting to buy houses here, and we're thrilled."

While Steve is the administrator, Linda concentrates on operations. She says on-

going communication is vital to operations, particularly since she speaks little Spanish. She leaves that up to her bilingual supervisors and team captains. Most have worked side-by-side with her for 10 years or more.

Linda's always on the go

First thing each Monday morning Linda meets with the team captains. "The meeting is crucial for the week. It reintroduces everybody to what we're going to be doing that week," she says. Team captains and Linda review job site reports. "Then we dis-



cuss the best ways to manage each job in the time we've allocated for it. We have to have feedback so we know how much time we need for each job on each property."

Linda also meets regularly with the entire staff of each division—sod, management, irrigation, spraying, tree—to discuss "time and job management." She also sits down each week with the company's two fulltime mechanics to discuss equipment and assess its productivity.

These meetings (not to mention regular on-going employee training meetings) seem to keep everybody working in the right direction, says Linda. Even so, Greenscapes still relies on "quality control inspectors" to conduct regular on-site property inspections.

"This feedback goes right back to the crews," says Pruchansky. "It gives us a check other than a field person. It gives us another eye. Our quality control people



Team captain Amador Martinez, above, and skilled workers, allow Linda Nelson, left, to keep homeowners' associations in Naples, FL, proud of their colorful landscapes.

are not production people. We want our production people to concentrate on performing the tasks they're assigned."

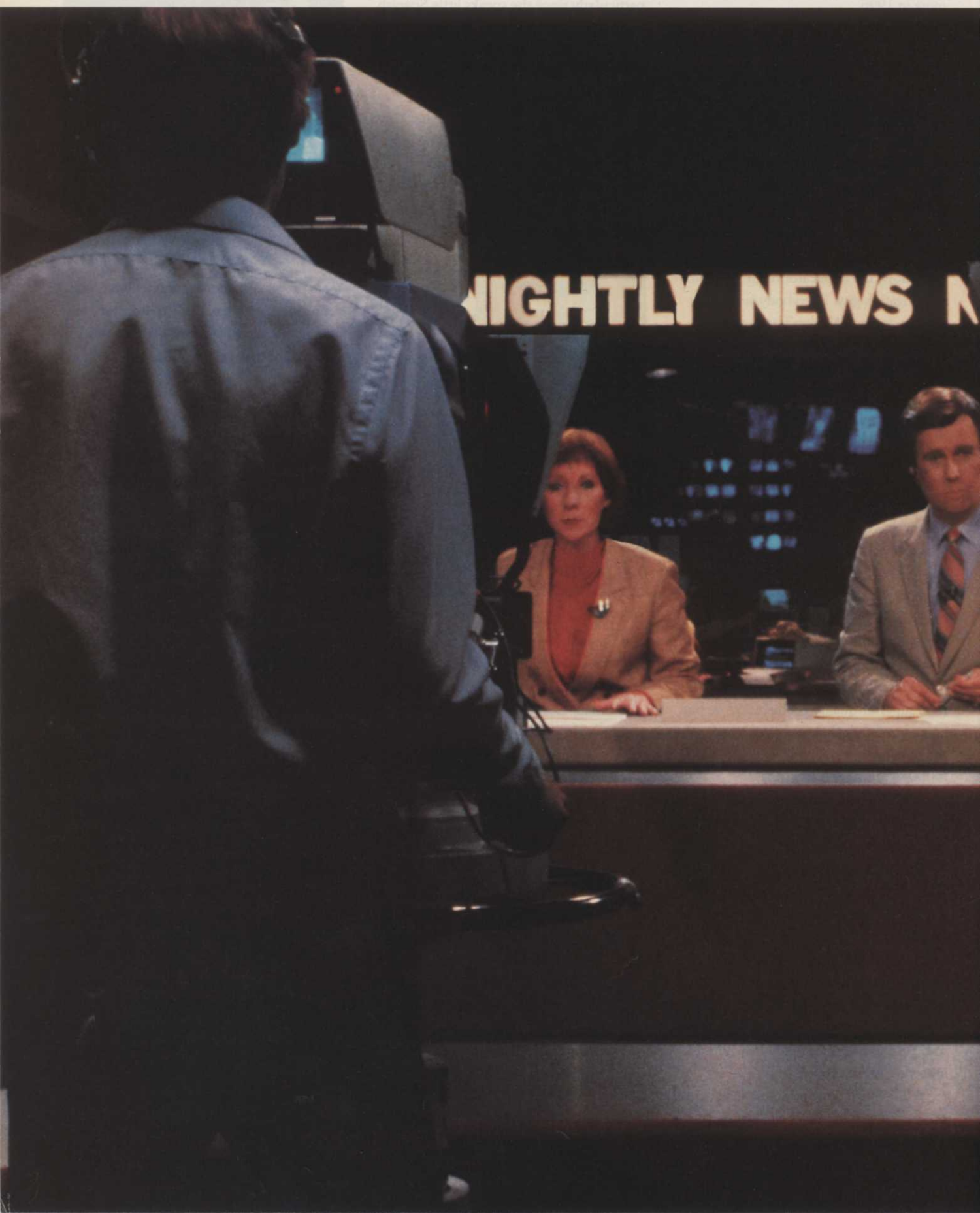
While internal communication keeps all employees aware of their roles, Greenscapes' interaction with clients is even more pro-active. Greenscapes regularly sends newsletters to every property owner in every association that it manages. It also provides clients with a schedule of the work it will be performing the next month. But, it's the face-to-face interaction that Linda says she enjoys.

She goes to each client site and confers with landscape managers, or members of landscape committees regularly, most of them once a week. She walks the property with them. They talk.

"We point out areas of concern and what needs to be addressed. They tell us what they want. We keep a strong line of communication with board members," she says. It also gives Linda an opportunity to suggest landscape extras and changes that will delight property owners.

"Sometimes you have to suggest changes to a property because people get tired of the same plants and the same schedule year after year," says Linda. "We never want them to get bored with us." **LM**

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Events

NOVEMBER

15-18: Green Industry Expo ALCA, PLCAA, PGMS Annual Conferences, Charlotte Convention Center; ALCA 800/395-2522, PLCAA 800/458-3466 and PGMS 410/584-9754.

17: Biological Control for the Green Industry Seminar, University of Massachusetts Campus Center, Amherst, MA; Kathleen Carroll, 413/545-0895 or Tina Smith 413/545-5306.

DECEMBER

1-4: North Central Turfgrass Expo, Pheasant Run Resort, St. Charles, IL. Call

ITF/NCTE 312/201-0101.

8-11: Ohio Turfgrass Foundation Regional Conference and Show, Columbus Convention Center, Columbus, Ohio. Contact OTF at 614/760-5442.

9-11: New Jersey Turfgrass & Landscape Expo '97, Trump Taj Mahal Casino/Resort, Atlantic City, NJ. Call 908/821-7134.

9-11: Georgia Turfgrass Conference & Show, Georgia International Convention Center, Atlanta, GA. Call 770/975-4123.

10: Indiana State Lawn Care Assoc. Winter Education Workshop, Oak Hill Mansion, Carmel, IN. Contact Robert E. Andrews at (317) 575-9010.

10-12: Rocky Mountain Regional Turfgrass Conference and Trade Show, Currihan Hall, Denver, CO. Contact Anita Hutner 303/770-2220.

JANUARY

5-7: MANTS, Baltimore Convention Center. Call 410/882-5300.

6-8: Eastern PA Turf Conference & Trade Show, Valley Forge Convention Center, King of Prussia, PA. Call 610/828-0253.

6-8: Ontario Turfgrass

Symposium, Regal Constellation Hotel, Toronto. Call 519/824-4132 (ext. 3814).

7: PLCAA Management Seminar, Charlotte Convention Center, Charlotte, NC. Call 800/458-3466.

7-9: North Carolina Turfgrass Conference & Show, Charlotte Convention Center, Charlotte, NC. Call 910/695-1333.

9-10: ALCA Masters in Management Seminar, Hyatt Orlando (Kissimmee, FL). Call 703/736-9666.

14: SC Landscape Contractors'/Turfgrass Conference, Sheraton Columbia Northwest, Columbia, SC. Call 803/790-2798.

STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION

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B. Paid and/or Requested Circulation		
1. Sales through dealers and carriers, street vendors and counter sales (Not mailed)	—	—
2. Paid or Requested Mail Subscriptions (include advertiser's proof copies and exchange copies)	47,561	47,309
C. Total Paid and/or Requested Circulation	47,561	47,309
D. Free Distribution by Mail (Samples, complimentary, and other free)	4,193	3,595
E. Free Distribution Outside the Mail (Carriers or Other means)	1,879	1,532
F. Total Free Distribution	6,072	5,127
G. Total Distribution	53,633	52,436
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Date: 9/15/97

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

IMC Vigoro has formed a new business alliance with **United Horticultural Supply** of Tampa Florida. UHS will represent IMC's turf fertilizer products in Florida. UHS will market Par-ex fertilizers and V-Cote controlled-release nitrogen and potash to golf course superintendents and lawn care/landscape companies. Steve Jackson of UHS leads the sales team. Bill Foster, director of IMC Vigoro's Professional Business Unit, says "the alliance will strengthen our distribution capabilities in Florida."

Turf managers can help support turfgrass research when they use natural organic **Milorganite** fertilizer this fall, announced Larry Lennert, manager of research and product development at Milorganite. For each ton purchased

and delivered between Aug. 1 and Nov. 30, 1997, Milorganite will donate \$10 to the turf manager's favorite research organization. This is the third year that Milorganite sponsored the Turfgrass Research Donation Program. Through the program it has donated about \$40,000 to turfgrass research in the U.S. and Canada.

The **Toro Company** named Stephen P. Wolfe to become vice president finance, treasurer and chief financial officer. Wolfe, 48, will replace Gerald T. Knight who resigned his position to become senior vice president and chief financial officer of Fingerhut Companies, Inc. Wolfe came to Toro as part of the acquisition of Wheel Horse Products, Inc., in 1986, where he was vice president of finance and treasurer.

Mountain West Products and Colorado Aggregate have merged to form **Mountain West Colorado Aggregate**.

The new company is reported to be the largest producer of western bark and lava rock products in the country. MWCA mines and harvests a diverse selection of 100 percent natural bark and decorative lava rock, along with a line of soil, river rock pebbles, white marble and decorative boulders. The company is based in Rexburg, Idaho.

The John Deere Worldwide Commercial & Consumer Division (www.deere.com) is building a major mowing equipment assembly plant in Fuquay-Varina, NC. The \$30 million plant will employ about 250 people when it

reaches full production. The site of the plant is about 15 miles from Deere Division headquarters in Raleigh, NC.

Zeneca Professional Products named Mark Brazinski as Turf & Ornamental Territory sales representative for the Mid-South/Southwest Region. Other Zeneca appointments include: Larry G. Feller as sales rep for the turf line for Alabama, Georgia, North and South Carolinas; James F. Petta as senior product service rep for the Western Region; Matt S. Giese as product service rep for the Northeast; Daniel J. P. Wickham as sales rep for the Western Region; and Tony Rademaker as market manager for Zeneca's turf line. He is responsible for the launch of Heritage Fungicide into the golf course market.

Eight golf courses in the Myrtle Beach, SC, area owned and operated by the Myrtle Beach National Company chose **Ransomes, Cushman and Ryan** turf maintenance equipment as their equipment of choice. The company purchased the extensive package of new equipment to eliminate the cost inefficiencies associated with maintaining the courses' old machinery.

American Cyanamid named Mike Toce senior sales manager for the Turf, Ornamental and Pest Control groups. Concurrently, the company realigned its sales territories to better manage increased product sales and the introduction of several new products into these two markets. Toce joined the company in 1981. **LM**

Info center

VIDEOS AND LITERATURE FOR THE GREEN INDUSTRY

CENTURY RAIN AID...Get the 1997-1998 Supplies Catalog from the nation's leading wholesale distributor of professional irrigation products by calling Century at 800-347-4272 or 248-588-2990. It features extensive irrigation product listings as well as an expanded reference section with irrigation tables and formulas, sizing and conversion charts, plus useful technical data.

FREE PLANNING GUIDE...offered by the American Society of Golf Course Architects. Request for Proposal for Golf Course Architectural Services can help developers address key elements of a project, including general notice, scope of services, owner's responsibilities, submittal requirements and the selection process. Contact ASGCA, 221 N. LaSalle St., Chicago, IL 60601; 312-372-7090. Fax to: 312-372-6160. E-mail: info@golfdesign.org.

PLANT HEALTH CARE INFO...The manual entitled *Plant Health Care for Woody Ornamentals; a Professional's Guide to Preventing and Managing Environmental Stresses and Pests* available from the International Society of Arboriculture (ISA). This 223-page book features 150 color photos and a variety of easy-to-use tables and charts. Cost \$45 (\$36 for ISA members). Add \$7 S&H in the U.S., 15 percent elsewhere. Contact ISA publication hotline at 1-888-472-8733.

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LESCO adds Curtis snow plow to line

LESCO added the Curtis snow plow to its line of winter equipment. This new snow plow, with the widest and strongest push frame on the market, minimizes stress to the vehicle frame. It also features a trip frame which stops in both directions to prevent overstretching the trip springs.

Hide away hydraulics protect components from wind chill, and provide improved vehicle engine cooling due to less radiator obstruction. An 18-inch cutting edge angle offers a softer trip, cleaner scraping and excellent back dragging capabilities.

For more information, contact your local LESCO sales rep, or call 800/321-5325.

Circle No. 257

It gives turf managers preemergent control of crabgrass, *Poa annua*, goosegrass, and other annual grassy and broadleaf weeds, plus extended feeding with Scotts' methylene urea controlled-release fertilizer.

"With KANSEL+, Scotts is delivering a new, proprietary approach to weed control and feeding," says Dan Paradiso, director of marketing of Scotts' ProTurf division. "Scotts' technological expertise with Pendimethalin and methylene urea controlled-release fertilizer, combined with Ronstar's proven results make an excellent product."

The product can be ordered for the 1998 season. It is also available as part of a Scotts Custom Application Service. To learn more about the product call 800/543-0006, or

Circle No. 258



bottom of the container, reducing the effort needed to rinse containers before disposal.

A wet flowable means the product is suspended in an aqueous material. This eliminates the dustiness associated with wettable powders and makes handling and measuring easier. The new formulation is available in 2.5-gallon containers.

FORE FloXL fungicide is a broad-spectrum protectant labeled for use on turf, including golf course greens and fairways. For a copy of the new flowable label and use directions, call 800/987-0467 and mention LANDSCAPE MANAGEMENT; visit the website www.rohmhaas.com, or

Circle No. 259

Scotts' new weed control/fert. combo

KANSEL+ is The Scotts Company's new combination weed control and fertilizer with Pendimethalin and Ron-

Hand trucks for nurserymen/landscapers

R. B. Manufacturing offers 15 new types of "Bucko Cart" hand trucks for the nursery and landscape industry. They were designed in cooperation with landscapers and tree & shrub growers. Bucko



Carts will handle tree balls up to 44 inches in diameter and 1,500 lbs. capacity. Other carts in the line handle boulders, large pots, drums, fencing materials, stone & brick and concrete bags with ease. For a brochure, contact R. B. Manufacturing at 800/863-5817 and mention LANDSCAPE MANAGEMENT, visit the company's website at www.RBM-FGCO.com, or

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OTF



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- ◆ **GCSAA Accreditation**

Software to improve customer service

TRIMS Software International, Inc., says its new Trimmer Software for the Service Contractor is designed for lawn care, tree care, pool maintenance, snow plowing, and other service care professionals. It will help to improve customer service, employee productivity, and company image by simplifying scheduling, routing, billing and customer tracking.

Information and product demonstration diskettes are available by contacting TRIMS Software at 800/608-7467 or demos may be downloaded from TRIMS web site at www.trims.com.

Circle No. 261

IS THERE A CORRELATION BETWEEN THE ORDER YOU PLACE AND THE SERVICE YOU GET?

Place the large order and service is no problem. Place an LTL order and service... well, it takes a detour.

Introducing Geo-Group International, a uniquely niched supplier of branded, industry-proven, specialty geosynthetic materials used in subsoil applications.

Rapid growth and our commitment to service has created an outstanding opportunity for a qualified professional distributor. Requirements include:

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Circle 109

Converts big trees to wood chips

Bandit Industries' Model 1850 Track Bandit is an 18-inch-diameter capacity, self-propelled whole tree chipper. It is equipped with a powerful hydraulic feed system and a wide chipper opening, which allows it to chip very limby whole trees, tree tops and piles of brush.

The Model 1850 is powered by a 250-hp Cummins of John Deere diesel engine. The unit is equipped with a 220° swivel discharge spout, which enables the operator to discharge chips in virtually in any direction. An intertractor B-2, 2-speed track undercarriage provides power to handle rough terrain.

The Model 1850 Will convert an 80-foot tree to chips in under a minute. This machine can be driven to the trees, eliminating the need to forward or skid. The Model 1850 (available as either a self-propelled or towable unit) is the mid-sized model in Bandit's line of self-propelled, whole tree chippers.

Call Bandit at 517/561-2273, and say you read about their product in *LANDSCAPE MANAGEMENT*, visit website www.banditchippers.com, or

Circle No.262



Lots of choices from Bunton

Bunton's Variable Speed Walk-Behind Mowers are come in 28-, 32-, 36-, 48- and 52-inch cutting widths. They are powered by a choice of engines ranging from the 8-hp Briggs & Stratton I/C to the 14-hp Kawasaki FC420V and 16-hp Briggs Vanguard.

Bunton's variable speed control lever lets the operator adjust to changing mowing conditions by varying the ground speed independently of blade speed. In addition, the contoured, fingertip steering levers provide zero-turning-radius precision and greater ease of handling for the operator.

Dual-section wheel belts on the 36-, 48- and 52-inch models enhance belt life by eliminating slippage and increasing tractor. Operator safety is enhanced by the Bunton interlock system which allows the engine to start when the blades are disengaged and the steering levers are locked in neutral. To keep mowing operations productive and efficient, a spring-loaded discharge guard prevents the chute from being left up while mowing, yet allows for easy attachment of grass catchers.



Circle No. 263