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Week 1



Week 2



Week 3



Week 7



Week 8



Week 9

Now You Can Use Daconil U For A Great Looking Course Week A

What could make spray-dry Daconil Ultrex[®] fungicide even better? How about a new, enhanced Super Weather Stik[™] formulation? Testing shows you can get exceptional results with this new formulation at application rates 20% lower than before. That means you can now tighten your schedule for even better disease control without a significant increase in overall cost.

You could even use Daconil Ultrex every time you spray, either alone or tank mixed, and actually cut your costs by reducing your use of expensive systemic fungicides.

A special free offer to try an even better approach.

Because Super Weather Stik Daconil Ultrex fungicide is so effective at these new low rates, we've been able to



Week 4



Week 5



Week 6



Week 10



Week 11



Week 12

Ultrax Every Time You Spray After Week After Week After Week.

develop a whole new spraying program using it at regular seven day intervals. As the photos above show, this program has been getting great results at courses like Shaker Heights Country Club, near Cleveland, Ohio, and it can do the same for you, giving you better disease resistance management and a healthier, greener course than you've ever had before, while still supporting

your cost containment efforts. And to prove that to you, we've created the Daconil Ultrax Challenge — with enough free product for you to test this program on one green or fairway all season long. Ask your distributor for all the details. It could change your whole approach to disease control.

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45 sec

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that it eliminates all need for rinsing to make disposal easier, too. Plus the superior sticking and staying power of our Super Weather Stik formulation for exceptional broad-spectrum control of some 70 diseases that attack turf, ornamentals, and trees. And the fact that there's never been a documented case

of disease resistance to a Daconil® brand fungicide in over 25 years. More good reasons Super Weather Stik Daconil Ultrex is a great choice for you. ISK Biosciences Corporation, Turf & Specialty Products, 1523 Johnson Ferry Rd., Suite 250, Marietta, GA 30062.

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The text comes from a poster at a fast food restaurant. And there's more: Uniforms! Good hours! Be part of an exciting team environment! Meet new people! Salaries start at \$6/hour! Management opportunities!

In terms of competition with the green industry, the mass marketing that has made our fast food giants so good at getting people to buy, now extends to their tactics for getting people to work in the stores.

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People who are not in the know think working on a golf course means heat, and sweat and sunburn and misery. They don't know the benefits of the job: exposure to agronomy and turf management, both of which are fascinating subjects; lush green grass; eating lunch in the shade of an old oak tree; watching the sun rise over the trees; the serenity of the course in the early morning hours; the prestige of a well-managed golf course; watch-

ing a foursome hit up onto the green or blast away at a tee shot; and free golf.

And...career opportunities! Combine that with the GCSAA certification program, or other intensive course of study (financed at least in part by you) and you're likely to keep people happy, interested and productive.

Finally, are you willing and able to pay people a decent wage?

The Ohio Turf Foundation held a Job Fair during the OTF's December trade show. Here's what some of the advertised jobs were paying:

- ▶ Assistant superintendent, full time: \$22,000-\$25,000 plus vacation; health; dental; savings plan.
- ▶ Horticulturist: \$17,000-\$19,000; must know IPM diagnostics, consultation.
- ▶ Golf course horticulturist, \$8-\$10/hour. Re-

Fresh air!
Good pay!
Free golf!
A career!



Terry McIver

TERRY McIVER
Editor-in-Chief

GOLF/GROUNDS

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Plan how to pay for new facility

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Prairiegrass a 'natural' choice

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GCSAA show preview

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Annual tourney a benefit to golf

sponsible for flower gardens, trees, planting, purchasing. May be required to do golf course maintenance.

"\$18,000 works out to \$9 an hour. It's quite a bit above minimum wage, but to invest four years of college, it is disappointing," says Tim Rhodus, associate professor of horticulture at the Ohio State University.

"You can make more money if you move past basic horticulture work, and into more supervisory positions with companies...they want to see your ability to work with people."

Rhodus says many of his horticulture students are majoring in landscape horticulture, with an eye to becoming entrepreneurs.

"Their primary goal is to run their own business," says Rhodus.

The OSU horticulture department has a web site that lists horticultural positions available and student resumes, at no charge.

This way, says Rhodus, students have a look at a wider variety of opportunities, and get more exposure to higher paying positions.

E-mail to: rhodus.1@osu.edu. Phone number is (614) 292-3871.

Beginning next month in this space: we feature a guest columnist from the golf course industry. First up: Jim Snow, executive director of the USGA Green Section. **LM**

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DOLLAR-WISE

new maintenance facility construction

Plan your construction well and refurbish what you can to make the new facility a project you look forward to. A contingency fund will help pay for it.

▲ Piles were driven to reinforce footings.

▼ The old storage area was due to be replaced.



Is your golf maintenance facility known as the maintenance “shed” or “barn” by your crews and golfers who play the course? If it is, you could have a problem—both with your department’s image and its quality of work.

Even if you can’t tell a book by its cover, you can generally tell the quality of a golf course maintenance operation by its building...barn...shed—whatever you call it. How the facility looks and is organized indicates how much money and effort is being put into the maintenance function.

“If the barn is unorganized and dirty, the quality of work follows,” says Joe Alonzi of Westchester Country Club, which finally completed a new maintenance facility last summer. “A well-organized maintenance center increases efficiency and responsibility.”

As Alonzi learned, sometimes the actual construction of such a facility takes a back seat to the planning and financial considerations that go before.

When he took over at Westchester in 1992, the board had approved construction of a maintenance

facility that had originally been proposed by Ted Horton (now at Pebble Beach) in 1987. Budget—as proposed in 1987—was \$700,000, so Alonzi’s first order of business was to get a 15 percent contingency fund approved.

“If we had built according to plan, we knew we would fall short of our needs,” Alonzi told attendees at the most recent New York State Turfgrass Association convention. Faced with five years worth of inflation, “we also knew it would be a challenge.”

Before...

Here’s how Alonzi took on pre-construction considerations:

1) He hired a building architect for \$9800. The

architect was responsible for obtaining permits and coordinating with a building fabricator.

2) The project was separated into three distinct parts: the 50-by-180-foot maintenance facility, a 2500 sq. ft. repair shop and a 6500 sq. ft. equipment storage area. The design included seven concrete storage bins and a wash station.

3) Bids were taken from eight contractors. Low bid was \$545,000 for one 9,000 sq. ft. building and an additional \$28,000 for a 10-by-48-foot pesticide storage building and \$25,000 for the wash station.

The bid also included a \$12,000 performance bond that was required by the club. Combined with the architect's fee, the cost projection was now at \$607,800.

4) Alonzi decided to repair the existing structure, to be used as an administrative building. That project included a new roof, new gutters, vinyl siding, new windows and remodeling the interior. Cost: \$75,000; total cost now at \$682,800.

5) Removal of soil bins was estimated to cost \$40,000, bringing the total cost to \$722,800, by which time Alonzi "knew we'd be in trouble" making the budget of \$700,000—even with the \$105,000 contingency money.

...and after

"The first problem was unacceptable soils—rock, muck and peat—during excavation," Alonzi remembers. "Construction was stopped after four days and we had to hire an engineer to oversee a new slab and new footings that ended up taking two months." Piles, a pile driver and cranes cost an additional \$50,000.

Next, new city specifications required an eight-inch water main for the fire protection system. The trenching company hit rock while installing the main and, due to a "rock clause" in the contract, charged an additional \$6,000.

By now, the project's total costs were at \$759,800—\$59,800 into the contingency



The original building was remodeled to be used as an administrative building. That project included a new roof, new gutters, vinyl siding, new windows and interior work.



Finished. The new facility at Westchester includes a 2500 sq. ft. repair shop and a 6500 sq. ft. equipment storage area.

fund. Tack on another \$19,000 to reinforce the main building's metal shell with plywood and bollards.

Finally, in March of last year, a "floating" concrete slab was poured in 25-foot sections to eliminate its cracking as the ground would settle and heave. Coarse asphalt was poured May 16th.

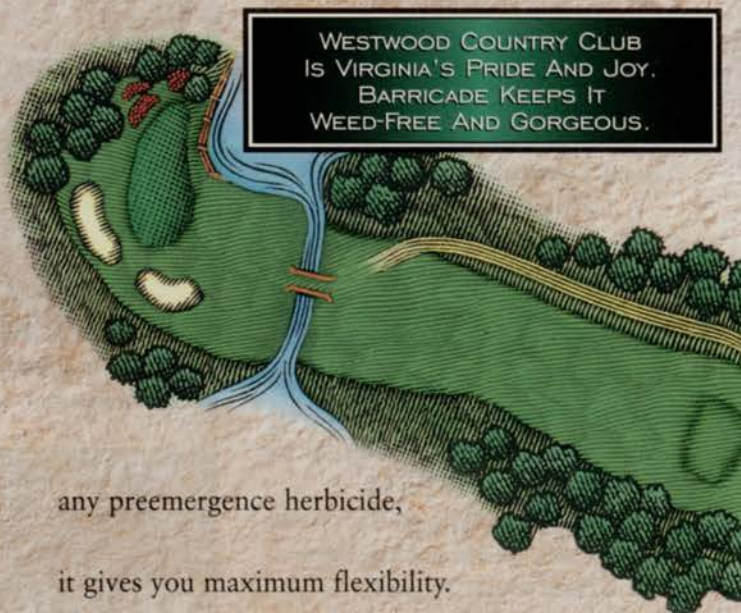
By June 12th, the building was 99 percent complete and the pesticide storage bin

started going up. On July 14th, the main building, the wash station and storage building had been completed, much to Alonzi's relief.

"We had \$25,000 left in the contingency fund," Alonzi told New York Turf attendees, "but it was really a long haul." □

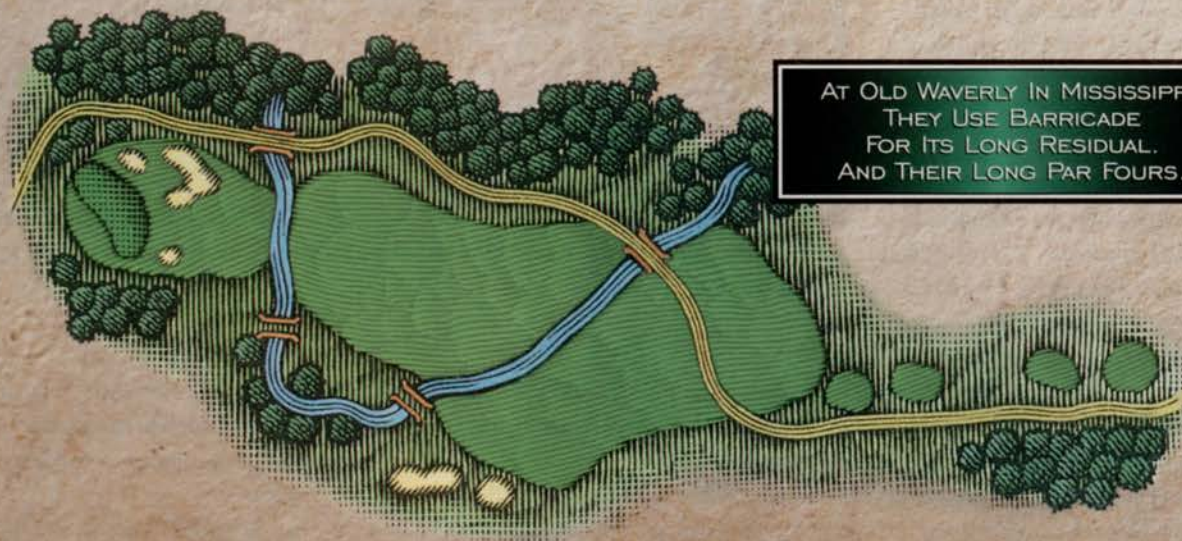
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Rubber to the rescue

A topdressing made from shredded used tires gives turfgrass managers another tool to combat turf compaction and traffic injury.

by RON HALL/
Managing Editor

Some professional users say a new crumb rubber topdressing is a valuable tool to alleviate compaction, protect turfgrass from heavy traffic and, at least one user believes, from winter kill of bermudagrass where that's a problem. The crumb rubber product is made from used tires.

How does it protect turfgrass?

Researchers Dr. J. N. "Trey" Rogers, III, and J. T. Vanini demonstrated at Michigan State University's Hancock Turfgrass Research Center that a $\frac{1}{2}$ to $\frac{3}{4}$ -inch layer of the crumb rubber material protects the crowns of turfgrass plants from traffic. They attribute this to the increase in surface area and the rounder edges of the shredded rubber, compared to sand which is often used in topdressing. And, because the rubber particles have less density than soil, they're not worked into the soil; they remain on the soil surface. More good news: after several years of testing, the researchers have yet to discover any environmental downsides to using the product either.

So far the crumb rubber has been used mostly in turfgrass mowed above $\frac{1}{4}$ -inch and subject to heavy foot or, in the case of a golf course, cart traffic. Typically it's applied $\frac{1}{2}$ to $\frac{3}{4}$ -inch deep either by a spreader or a topdresser.

It can be shoveled onto small areas too, and raked or brushed into the turf.

It helped protect turf

Mark Hoban, a certified golf course superintendent, learned about the product several years ago while visiting Michigan State University. "I thought, 'what a great idea,' even though it hadn't been tried on southern grasses," says Hoban.

Prior to last season, he applied crumb rubber topdressing to 11 areas of The Standard Club in Duluth, GA. The Standard Club is an Audobon Sanctuary-certified, 18-hole, 300-acre course just northeast of Atlanta. It has predominantly bermudagrass tees, fairways and immediate ruffs.

Hoban, 11 years at the course, used crumb rubber in areas where foot traffic badly damages turfgrass, like walk trails onto greens or around bunkers. But, he couldn't have anticipated that the 1995-96 winter was going to be so harsh.

"We had a big time winter kill this past winter," says Hoban. "But we only lost two of the 11 areas where we used the crumb rubber. The turf might have been thin in some of those areas, but it grew back during the summer, and I didn't have to resod. But 50 feet to the left or right of those areas that had the crumb rubber we had winter kill."

While his experiences with crumb rubber have been mostly positive, Hoban cautions against viewing it as a cureall.

"Even if you apply it, you won't have perfect grass if you have a lot of traffic, or the grass is in heavy shade, or you have very cold winters. But, it will probably keep you from having to resod the area," says Hoban.

Used on high-cut turf so far

The crumb rubber topdressing product—trade name Crown III—is produced from used tires after all the steel and nylon cord have been removed from them.

President Comelia "Comy" Snyder, specifically her company, JaiTire Industries, Denver, has the worldwide rights to market the topdressing. She licensed the patent from Michigan State University after researchers





Crumb rubber in areas where foot traffic badly damages turfgrass, like walk trails onto greens or around bunkers.

Rogers and Vanini assessed and documented its value on turfgrass.

This topdressing, unlike sand, is not used on golf course tees or greens. Not yet anyway. But, it is being increasingly used in areas where turfgrass is cut much higher. Say on a pedestrian mall of a campus. Or on a youth soccer field. Or at the entrance of a golf cart path. Actually, users seem to be finding new uses for crumb rubber topdressing at every corner.

Cornelia Snyder wants to establish Crown III in the professional market.

She says that JaiTire has 27 dealers across the United States, and reports that about 500 sites are using the crumb rubber topdressing. These include a handful of high-profile golf courses and sports fields.

One of the dealers offering Crown III is Benham Chemical, headquartered in Farmington Hills, Mich. General Manager Dan Banks says Benham has been working with the product almost since research began at MSU. Benham, working with the MSU turf team, supplied the crumb rubber used for some of the turfgrass areas inside the Pontiac Silverdome during the

World Cup soccer matches several years ago. He points out that the MSU-patented product is the only crumb rubber topdressing on the market.

Get the real stuff

"Turfgrass managers should realize how important it is to get the right source of rubber," says Banks. "There are different

grinds, different sizes and different qualities in terms of content."

One of Benham Chemical's customers this past season was Bill Rousseau, maintenance superintendent for Saginaw Township, Mich. The township bought enough crumb rubber to treat two youth soccer fields. Rousseau says he applied the crumb rubber with a commercial topdresser, three applications at $\frac{1}{4}$ -inch each to build up to a $\frac{3}{8}$ -inch layer.

"So far the results have been very good," says Rousseau. "We could see a difference in the grass. In the treated area the grass was standing and looking good, and right next to it where we stopped, it was matted down."

Many turf managers may balk at the \$480-a-ton cost for crumb rubber, but JaiTire's Snyder defends the price. Because the product is new, it requires extensive marketing, Snyder says. Also, there are significant expenses involved in acquiring, shipping and shredding used tires.

"The real question is the value," says Snyder. "If you apply the product to 100 square feet at the end of a cart path it's going to cost about \$50. But if you don't have to resod that golf cart path you've made that \$50 back and more." □

Mulch from shredded tires?

Scott NeSmith is researching the use of shredded tires as a mulch, both for agriculture and, possibly, for landscapes too.

"In terms of mulch, we can see right away that the properties are there," says the associate professor of horticulture at the University of Georgia. "It conserves moisture. It suppresses weed growth. It modifies the soil temperature some but it doesn't cool the soil quite as much as the pine bark does. We're trying to get a better look at that."

NeSmith began the work last year at the Griffin Research Station about 40 miles south of Atlanta. So far, he's put the shredded tire mulch around about 100 Christmas trees, and has other plots where trees are surrounded by pine bark mulch, sod or where treated with a herbicide. He's conducting similar experiments with blueberry plants.

NeSmith says he wants to determine if there is any long-term effects, either to plants or the environment, to using mulch made of shredded tires..

He says the material—it comes in different grades from several inches across to gravel-sized—might turn out to be the answer to areas that are difficult to get to, or too costly to mulch on a regular basis □

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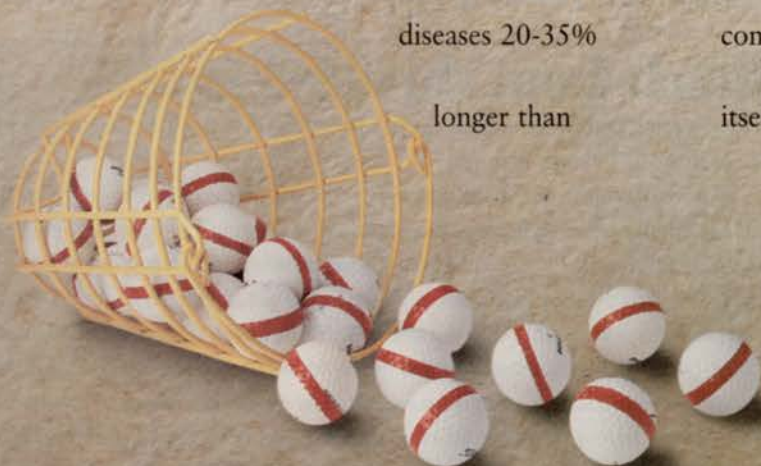
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Prairiegrass makes Merit Club a 'natural'

Management is the key to blending prairie into a championship-caliber course in Chicagoland area.

By RON HALL/ Managing Editor

More than 20 million acres of prairies greeted the first European settlers to what is now Illinois. The prairies shrank rapidly after John Deere in Grand De-tour, Ill., invented the self-scouring, steel-bladed plow. Settlers used the plow to turn

the vast grasslands into crop-land. Today, only 2,000 acres of the original Illinois prairies remain, says Kenneth R. Robertson of the Illinois Natural History Survey.

A group of farsighted individuals reversed the trend near Libertyville, IL. They worked as a team to recreate prairies within a championship-caliber

golf course, the Merit Club. The property also contains about 35 acres of protected wetlands and 40 acres of savannah containing mostly oak, hickory and linden.

Previously, the 500-acre Bert A. Getz estate, had been a farm. But Getz didn't want the land developed—not in the traditional sense anyway.

Instead, he convinced Ed Oldfield, former golf director at the Glen View Club, to assist him in planning a golf course. Oldfield convinced golf course architect Bob Lohman and veteran superintendent Oscar Miles to join the team.

Together they created one of Chicagoland's most unique and scenic golf courses. Meanwhile, Getz dedicated the 325 acres inside the golf course to the Core Lands Group and its Open Lands Project so that it would remain a perpetual green site.

Getz began building the Merit Club team in 1989, and the golf course opened for play on July 4, 1992. Ever since, it's been up to veteran superinten-

dent Oscar Miles to maintain the Merit Club's tees, greens and fairways, and also its natural prairies.

"The prairies make the course look natural so that when a person plays each hole, it's defined by the prairies," explains Miles. "Only three holes have native woods on them."

Maintaining a prairie is not an easy task, says Miles, not even with his 35-plus years of experience maintaining golf courses. It's an enjoyable challenge though.

"I was real fortunate here," says Miles. "When this course was being developed I was brought on the site to help prepare the budget and do the grassing plan with the architect and the course designer. Our goal was to do the course right the first time so we didn't have to do it over."

While the basic features of the course have remained intact since the course opened for play over four years ago, its prairies have not. Miles learned—and has come to appreciate—that prairies change



'Our goal was to do the course right the first time,' says Oscar Miles.

Starting a prairie not cheap

So you want to grow a prairie on areas of your golf course? Make sure your budget can cover it. To start one acre of prairie, Oscar Miles, superintendent at the Merit Club, Libertyville, IL, offers these estimates of material costs:

Quantity	Product	Cost
2 qts	glyphosate	\$25
44 lbs.	IDOT native prairiegrass mix	\$114
44 lbs.	sheeps fescue	\$90
11 ozs.	IDOT native forbs mix	\$166
5.5 lbs.	wildflower mix	\$127
440 lbs.	6-24-24 starter fertilizer	\$75
880 lbs.	woodfiber mulch	\$229

The total cost for materials is about \$926 per acre, says Miles, but the real cost will approach \$2,000 per acre when you factor in the cost of labor and equipment.

Most of the above costs are one-time, explains Miles. Many prairie plants produce their own seed once they're established. (IDOT is Illinois Department of Transportation.)



The prairie at the Merit Club isn't very attractive after its annual burn, but as spring arrives the tall grasses and wildflowers become a beautiful background for the Merit Club's golfers, most of whom walk the course.



about \$6000.

"You can't just put the grass and wildflowers out and expect them to take over. It's going to take work to get rid of the competition and do additional seeding to enhance the area to make it become what you're visualizing," says

Miles.

In March, workers, use a 15-foot rotary and a 72-inch mower to cut the 6- and 7-foot tall prairie grasses down to six inches. Miles wants the cut material to lay on the ground to get a more controlled burn. Since the club has always worked closely with the village of Gurnee, it has no trouble getting a permit to annually burn the approximately 75 acres of prairie on the course. The permit costs \$75.

Workers take precautions to make sure the burn stays controlled, including initiating smaller preliminary burns a day or so before the big burn. Also, a two-man crew stands by and mans a 300-gallon sprayer with 200 feet of hose during the burn. The burn rids the prairie of woody invaders like cottonwood and black willow saplings. Because the prairie grasses develop such deep roots (often 10 feet deep or more), and because their growing points are below ground, they're not harmed.

Miles has been careful to keep the tall-grass prairies out of play ("unless you're really wild"), and planted a blend of dwarf turf-type tall fescues and wildflowers in areas separating the playing areas and the prairies.

"Some of these grasses, big bluestem, Indiangrass and switchgrass, are beautiful, but they're so tall you don't want them in an area where you're going to play. You have to keep them in the background or over on the side," he says.

The crew at the Merit Club isn't hesitant to give Mother Nature a hand in keeping the prairies beautiful and ever changing, particularly areas surrounding tees and greens. After a burn, for instance, the crew will hand seed wildflower seeds in open spaces between clump grasses. Because there are usually fissures in the soil, the seeds germinate in the cracks.

Miles says he learns something new about prairies every day, and adjusts their management to what he's learned. He also listens carefully to what members are saying about the prairies. When they have good suggestions, he acts on them.

"Most of our golfers here love it and brag about it," says Miles. "They know it's a real treat to walk this course."

Established prairies don't need any additional nitrogen or irrigation. These practices promote too much green growth.

Miles has also learned that prairies need large areas. "If a prairie planting is too small, it doesn't work. It looks too man-made and forced." □

and evolve. They don't require the level of care he provides the Merit Club's fine turf, but they do require maintenance.

Fortunately, he has a separate budget for prairie management, some of which pays for a crew of four or five workers to walk the prairies on the course several weeks each June and chop down weeds before they flower and go to seed. The weeds are piled, taken away and burned. Miles says it costs



Superintendent Oscar Miles says prairies sometimes need help.

IT WHISPERS WHILE



Photographed at Blackwolf Run, Kohler, Wis.

IT WORKS



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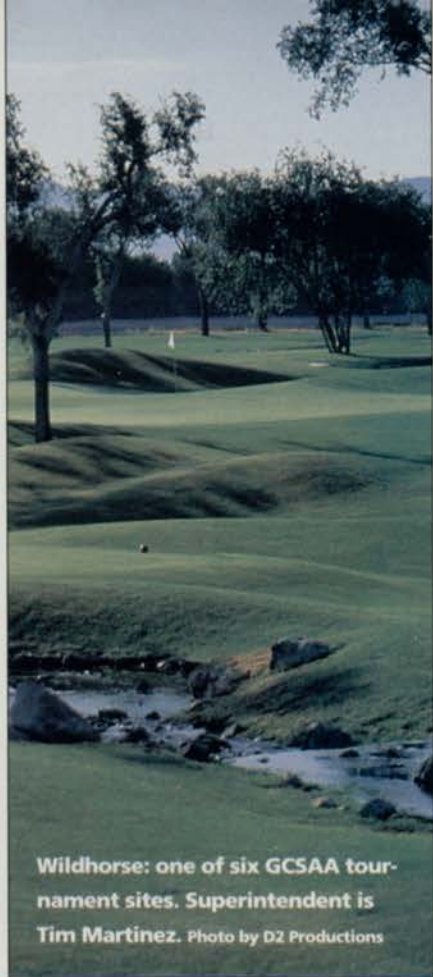
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Wildhorse: one of six GCSAA tournament sites. Superintendent is Tim Martinez. Photo by D2 Productions

Golf greats Hurdzan, Crenshaw at GCSAA

Also on the bill at the annual show: 700 exhibitors, 78 seminars, the annual tournament, and astronaut Jim Lovell. No problem here, Houston!

The 68th International Golf Course Conference and Show, presented by the Golf Course Superintendents Association of America, features awards given to noted industry trailblazers and a talk by a pioneer who once was out of this world:

► Acclaimed golf course architect Michael Hurdzan, Ph.D., receives the GCSAA's President's Award for Environmental Leadership during the golf course industry's premier event, held Feb. 6-12 in Las Vegas. The award is presented in recognition of an individual's contribution to stewardship of natural resources.

► Ben Crenshaw receives the Association's "Old Tom Morris Award," for his contributions to the game of golf—as both a player and agronomist—during the

GCSAA Gala '97, on Feb. 11.

► Capt. James A. Lovell, spacecraft commander of the Apollo 13 space flight, will speak at the Saturday, Feb. 8 opening session—sponsored by United Horticultural Supply—with a presentation that includes anecdotes from the never-completed 1970 moon mission.

Many suppliers, many seminars

International exhibitors will display their products and services at the Las Vegas Convention Center Feb. 10-12.

More than 450,000 square feet of convention space features equipment, architecture and turfgrass seed.

The educational sessions at this year's show will address every management concern. In partnership with Ransomes/Cushman/Ryan, a total of 78 GCSAA seminars will be offered Thursday through Monday, Feb. 6-10, including six new seminars and eight seminar titles which will be offered twice. Conference education sessions and forums are scheduled Sunday through Wednesday, Feb. 9-12. An extra day of session and forum programming is offered at this year's show.

The politics of golf

On Feb. 10, a panel of five golf industry experts explores how to manage the politics of the golf course in a session titled, "Politics is to Golf Courses like Drought Stress is to Turfgrass."

Each panelist will give a short presentation to provide a framework for discussion, and moderator Tommy Witt of Wynstone Golf Club, North Barrington, Ill., leads the discussion. Panelists include Dennis Lyon, CGCS, City of Aurora Golf Division; and Bob Brame, CGCS, director of the USGA Green Section North-Central Region.

A new seminar features three panelists who will relate their experiences with gov-

ernment regulation in the workplace. Panelists include political consultant Michael E. Dunn, with advice on how to deal effectively with government; James Husting, CGCS, Woodbridge Golf & Country Club, Woodbridge, Calif; and Darren Davis, Olde Florida Golf Club, Naples, Fla. Husting and Davis will explain how they tackled state legislative and regulatory issues. The seminar will be held on Feb. 10 from 1 to 4 p.m.

Journalists debate

The Government & Environmental Session, sponsored by Ciba Turf & Ornamental Products, the Jacobsen Division of Textron, Rain Bird and Pursell Industries, features a version of *The McGlaughlin Group*, the Washington, D.C.-based talk show. Scheduled participants are program regulars Fred Barnes and Eleanor Clift, and golf course developer Kim Richards. □

SEMINAR HIGHLIGHTS AT 1997 GCSAA SHOW

Sunday, Feb. 9

- Volunteer Uses at the Golf Course
- Ending the Privatization of Public Golf Facilities
- Golf Course Water Quality
- Green-Type *Poa annua*

Monday, Feb. 10

- Maintenance building construction
- Night management practices
- Managing bentgrass in warm climates

Tuesday, Feb. 11

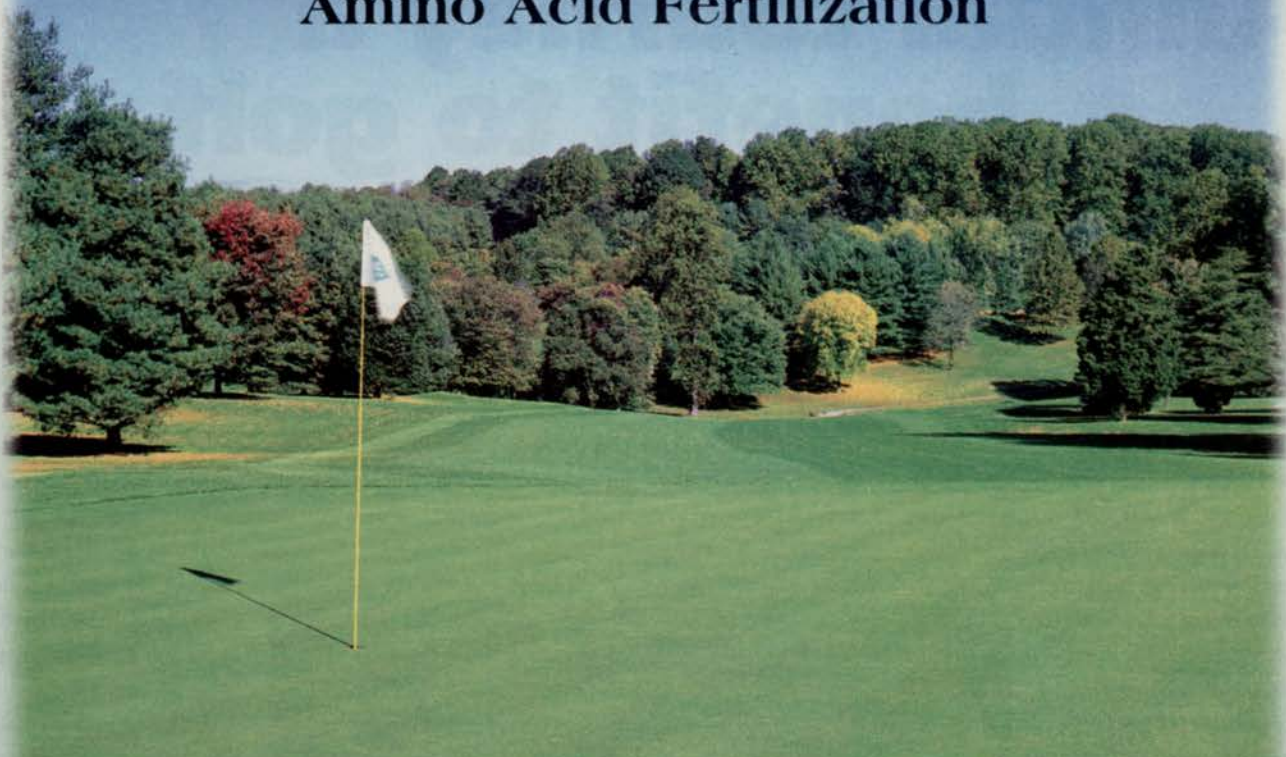
- Lightweight rollers
- Simplified training
- USGA Turf Tips

Wednesday, Feb. 12

- Successful environmental plans
- How to adopt a school
- Drainage installation techniques
- Irrigation technology update

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Annual tourney a benefit to golf

The Prestonwood Country Club team from Cary, NC took first place in the 10th Annual John Deere Team Championship Golf Tournament at Pelican Hill Golf Club, Newport Beach, Calif.

Winning team members: Ron Gilmore, superintendent; Greg Guman, Golf Professional; Don Thomas, club manager; Vance Heafner, club president; and Chris Revels, representative of John Deere golf and turf products distributor Revels Tractor Co., Inc.

Recognition for golf course personnel

The international tournament was initiated in 1987, as a way to show appreciation and recognition for the people who work behind the scenes at a golf course.

"These are not just great teams of golfers, but great teams of golf course professionals," says Jeff Gredvig, general manager of John Deere's Commercial

Grounds Care Products Division.

"John Deere is proud to recognize these teams not only for their skills on the course, but for helping design and maintain courses that challenge the skills of every golf enthusiast," says Gredvig.

Competing teams were composed of the golf course superintendent, the golf professional, the club manager and club president (or two other members of the top management team).

The teams were later joined for the tournament finals by a representative from their local Deere golf and turf products distributorship.

Stiff competition

Each team competes locally to determine its slot in the finals. A total of 924 teams played in 32 local tournaments in preparation for the final. The Prestonwood Country Club team earned the right to compete by winning from among 32 teams at the local tournament held at Grandover



Prestonwood Country Club's winning team. From left, Ron Gilmore, superintendent; Greg Guman, golf professional; Don Thomas, club manager; Vance Heafner, club president; and Chris Revels, Revels Tractor Co.

Country Club, Greensboro, N.C. The local tournament was sponsored by Revels Tractor Co. of Fuquay-Varina, N.C.

The tournament does much to support two major industry associations. John Deere contributes \$20 for each of the teams competing at the local tournaments to either the Golf Course Superintendents Association of America Foundation or the Canadian Golf Superintendents Association Scholarship fund.

"John Deere has always felt that it's important to give back to the industries we support," says Gredvig. "Over the past 10 years, John Deere has given more than

\$120,000 to the respective golf course superintendents associations. As a company and as an organization, we're pleased to make this contribution."

This year's tournament resulted in a gift of \$14,220 going to the Golf Course Superintendents Association of America, and a \$4,260 gift to the Canadian Golf Superintendents Association.

Placing second in the tournament was the team from the Caledonia Golf & Fish Club, Pawleys Island, SC.

Finishing in third place was the team from Desert Mountain Golf Club, Scottsdale, AZ.

All-around team approach to work

Bringing together the various personnel involved in running and supplying a golf course helps them understand each others point of view, improves communication and increase the respect for each person's

responsibilities.

"Superintendents today are more focused on the big picture of how our courses are perceived by golfers, the community and the general public," says Don Hoos, superintendent at Pelican Hill.

"We'll need to incorporate all the education, training, resources and technology available to keep our courses and our role as superintendents in a positive position on environmental issues in the future." **LM**

(Look for more on Hoos and Pelican Hill in our February issue.—ed.)

Here's One Birdie You Don't Want To See On Your Course.



Golf was never meant to be a water sport.

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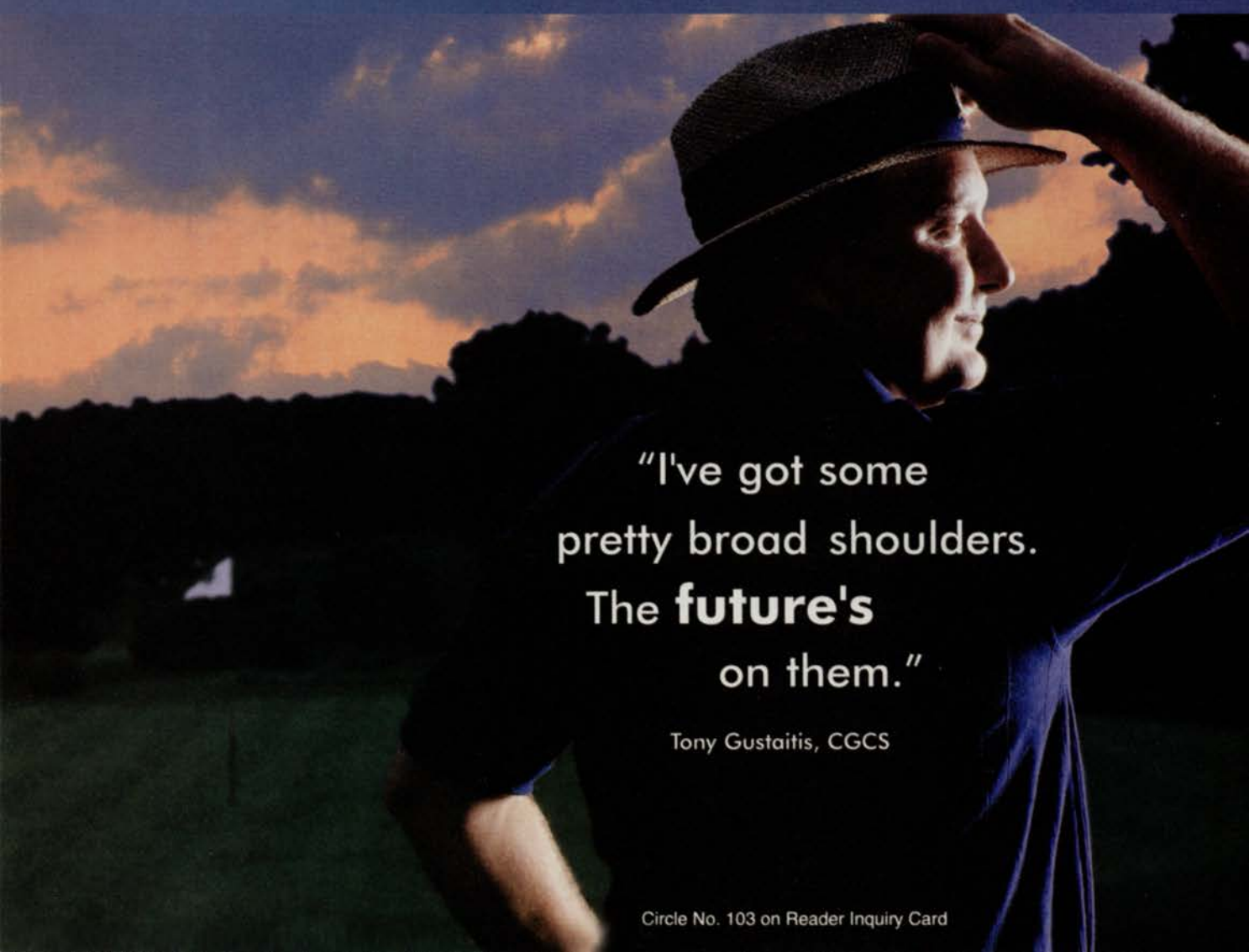
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Pendimethalin



"I've got some
pretty broad shoulders.
The **future's**
on them."

Tony Gustaitis, CGCS

Circle No. 103 on Reader Inquiry Card

Bigger TG-CL means more of the same for LCOs



Ron Hall

RON HALL
Managing Editor

“I tell my guys not to worry about what anybody else is doing, but to go out and do what they’re supposed to do,” said one longtime Ohio lawn care operator.

“I only wish I’d bought a thousand more shares of Barefoot,” responded his colleague.

What brought them together was the annual Ohio Lawn Care Association luncheon and business meeting on Dec. 11, 1996. The two friendly competitors were discussing the announcement that ServiceMaster intends to buy Barefoot, Inc.

The deal will merge America’s two largest lawn care companies. TG-CL, with revenues of \$630 million in 1996, will absorb Barefoot which had sales of about \$125 million.

(For the record, nobody from either TG-CL or Barefoot was at the luncheon.)

The deal reminds us that business, after all, is numbers. And more numbers. Like the \$4.5 billion in worldwide revenues that SM reported in 1995.

Or the Barefoot stock that the one LCO at our

table wishes he had bought a lot more of, considering he bought below \$10 and SM has offered Barefoot \$16 a share.

But, the deal took about everybody in lawn care by surprise. Otherwise, we would have all mortgaged our farms and cashed in.

The prospect of an even larger TG-CL and the disappearance of Barefoot didn’t dominate our lunch conversation. It didn’t generate the same energy and interest other deals did a decade ago. That’s when this takeover fun really began.

Remember Waste Management trying to get ChemLawn, and EcoLab finally acquiring it? Or when Wayne Huizenga got a controlling interest in TruGreen just before Waste Management stepped into the picture?

EcoLab’s CL and Waste Management’s TG

[LAWN/LANDSCAPE]

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Doppel wins environmental award

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10 low maintenance design tips

PAGE 12 L ▶

Have a goal for customer survey

PAGE 16 L ▶

Deer control in demand

PAGE 18 L ▶

Trees & turf one city’s trademark

did horribly. More than a few people blamed it on “a mature industry”. They said: “there’s not a lot of room for growth anymore” or “we sure miss the excitement of the old days”.

You can bet there’s a lot of excitement at the SM’s Consumer Services Division in Memphis.

SM took over TG in 1990 as part of a deal to get Terminix. Within a few years, it had TG on its feet again. Then, incredibly, it snapped up and absorbed much larger CL. That opened eyes.

TG-CL has been buying companies ever since. So when TG-CL’s Bob vonGruben spoke at the 1995 PLCAA Conference on the topic of buying and selling a lawn care company it seemed like just about everybody showed up.

For independent LCOs not much should change. If they’ve been competing against giant TG-CL, they’ll just have to keep battling. They’ll have to keep doing what they do best.

Of course, the other option is that they can sell the business. **LM**



Quick.

Name something
whose work lasts all season,
is loved by all and does
some of its best work under
trees and ornamentals.

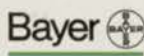
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I remember my mother often saying that when something was hard to find, it was like looking for a needle in a haystack. Reversely, sometimes I think that searching for new employees is like looking for a haystack among needles. In other words, we often miss the obvious.

If the green industry labor shortage is as severe as many claim, then it pays all of us to review some of the basic ways in which we can search out our new employees.

What do the experts say?

Looking for a haystack in the needles



BOB ANDREWS
Contributing Editor

1) Often the best source of new employees are current ones. If your shop is a good place to work, and your staff knows what kind of help you are looking for, encourage employees to refer their friends and acquaintances.

This has two benefits. First, the potential hire may already know something about your business and the work involved. Secondly, your current employee is unlikely to refer a poor candidate

since subsequent problems with that candidate would reflect badly on them.

2) Customers often turn out to be a surprising source of good employees. One of our best came from a customer whose business was downsizing and had to let this person go. We were both in the right place at the right time. However, none of that would have happened had the customer not known of our need. Newsletters are great for this as are leave-behinds in your invoices.

3) As business owners, and as an industry, we need to be more involved in the vocational departments of our local schools. In talking to some of them, I found real interest in knowing more about opportunities in the lawn care industry. Others told me of their frustration in training students for jobs which did not then exist, or training

them in manufacturing skills when the marketplace increasingly called for service sector employees. Either way, there appears to be an opportunity here. Our Indiana State Lawn Care Association Board recently began researching how it can be more involved in vocational education.

4) More and more industries are looking to job sharing when it comes to meeting their employment needs. Simply put, it is often far easier to find two part time people to fill one fulltime job, than it is a single person. Our community is full of men and women who already have a career position but who are looking for additional dollars.

One LCO I know uses fire fighters to fill in as turf specialists. He has two routes, and four such folks to fill them. Takes a little more juggling and management, but it does get the job done.

In a similar case, the lawn care company employs second shift factory workers for four or five hours during the day. An added bonus here is that such employees may already have a benefit program through their fulltime job and, thus, will not be looking to you for one.

5) Recruiting "out of season" is something we all should consider. Before you suggest that I have my head examined, think about the real costs of passing up a good new hire simply because your business is in downtime. Such periods are often those in which someone else has laid off a qualified employee. Or perhaps an individual is looking to make a change.

Hiring during such periods also gives you ample time to train the new hire and have that person up to speed when the season starts. Most importantly, the payroll dollars you spend employing that person over the winter may seem paltry compared to headaches you could face by not being able to find needed help during the spring rush.

Many of us have to continue to rely on traditional sources for new employees. A first step is to search out previously unexplored ways of finding such people, or revisit some tried and true methods. **LM**

He writes...he scores!

Timothy J. Doppel is not widely known as an author, not outside of the Detroit area anyway. He's the owner of Atwood LawnCare, Inc., in Sterling Heights, Mich.

Doppel however, earned PLCAA's Fourth Annual Environmental Improvement Award in 1996—sponsored by *LANDSCAPE MANAGEMENT* magazine—partly because of his writing talents. He used these

talents to help educate homeowners and professionals alike in southeastern Michigan about the responsible use of quick-release fertilizers and pesticides. These efforts resulted in him authoring the book, *The Healthy Landscape: Landscape Care for a New Century*.

The book contains a series of articles that he wrote for the *Landscape Architect*, the monthly magazine of the Metropolitan Detroit Landscape Association (MDLA). The articles detail responsible use of fertilizers and pesticides.

The book resulted from his involvement as a technical resource person on the steering committee of an organization known as the Healthy Lawn and Garden Project. Its purpose was to reduce the use of quick-release fertilizers and the overuse of pesticides to

protect ground and surface water in Oakland County, Mich. Doppel was one of MDLA's representatives on the committee.

But before the project could get underway, everyone had to agree on what constituted a "healthy landscape."

After several months of reviewing recognized horticultural, agronomic and IPM principals, an advisory committee came up with this definition:

- ▶ right plant in the right place
- ▶ fertile soils with organic matter content
- ▶ yard clippings and wastes used as resources on-site
- ▶ diversity of flowers, vegetables, trees and insects
- ▶ active biological soil system that allows soil to provide nutrients for plant growth
- ▶ essential needs of plants for growth considered, including nutrient and water needs
- ▶ careful use of pesticide and quick-release fertilizers which may harm water resources and public health if misused.

In writing the articles Doppel sought the knowledge and advice of respected turfgrass and landscape experts in Michigan and surrounding states. He says he also received valuable help from the MDLA and green industry professionals in the Detroit area.

His articles garnered such positive response that it was decided to gather them into a book that could serve as a training and resource document for landscape professionals and others.

In June 1996, 1000 copies of *The Healthy Landscape* were published. Copies went to MDLA members, Michigan State University Extension and the Southeast Oakland County Resource Recovery Authority. Others were made available at green industry seminars and conferences. A second printing of the book is likely in March.

Meanwhile Doppel, in addition to running Atwood LawnCare, a company he purchased about 12 years ago, maintains a busy schedule writing for the *Landscape Architect*, serving on green industry committees, and speaking on behalf of the industry. □

*PLCAA presents LM-sponsored
"Environmental Improvement
Award" to Detroit-area LCO
for book on landscape care.*



Tim Doppel receives the PLCAA Environmental Improvement Award from Terry McIver, LM editor-in-chief, during the Green Industry Expo.



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10 design tips

for low-maintenance landscapes

By LORI LYMAN



Lyman: 'mass grading often destroys landforms and existing vegetation that could be preserved.'

Today's successful landscape architects strive to create progressive, functional, beautiful landscapes. In recent years many of these leading edge projects can be described as being more "natural." The goal is to provide clients with landscapes that, following Mother Nature's example, require less time and expense to maintain than more traditional designs. This doesn't mean every landscape has to be a native restoration project though.

The following 10 tips will outline alternative practices for designing low-maintenance landscapes.

1) Right plant/right place

The right plant/right place rule can't be reinforced enough. Too often we are tempted to use a plant in the wrong place simply because it would look good. Then, in two or three years, stress has weakened the plant to a point where it requires

more intensive maintenance.

Aldo Leopold emphasized the importance of this idea in his 1966 work, "The Land Ethic." He wrote: "A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise." In his statement, Leopold was referring to a larger scale of environmental impacts, but we can still apply his thought to individual projects through proper selection of plant materials.

For example, buckthorn was introduced to the United States from Europe to be used primarily as an ornamental tree. Unfortunately, it entered our woodlands and now competes with indigenous species. Lythrum is another example that it re-seeds in such tremendous quantities that it stifles native species which would otherwise provide food and refuge for wildlife. Often exotic plants that aren't indigenous to a region can cause more harm than good.

That's why it's best to stay with materials whose proven performance suits the location you're placing it in. Not only are there environmental issues concerning right plant in the right place, but future maintenance, removal and replacement costs.

2) Large sweeping beds

Gentle sweeping beds offer ease of mowing which is usually a good percentage of a maintenance contract. Equally

The dwarf fountain grass in the lower left corner blends well with the surrounding hardscape.



important, they look good. Again, large drifts or sweeps are natural. Singular plantings are not.

3) Design with natural landforms

The common and economical mass grading of sites needs to be closely monitored. Mass grading often destroys landforms and existing vegetation that could be preserved. The less interference in native areas like woodlands, the less maintenance will be required in keeping them healthy for years to come.

Familiarize yourself with a site's microclimates as well. Be aware of areas subject to wind, areas that warm more quickly from the sun, and areas prone to snow stockpiles.

4) Sensible use of annual flowers

In a recent symposium at the Chicago Botanic Gardens a quote from a 130-year-old publication, "British Grasses" was discussed. The quote: "of late years public taste has been turned to the advantageous effect of grasses in landscape gardening. Ferns had the credit of first winning attention from color to form, and grasses next stepped in to confirm the preference for grace and elegance over gaudy colouring."

This shows two thoughts—one is that garden styles repeat themselves. Also, we seem to be rediscovering a trend toward native restoration, including the use of more plants like ornamental grasses, ferns, flowering perennials and groundcovers in places that were previously planted with higher-maintenance, high-color annuals.

5) Unity with variety

There are many examples of problems occurring with monocultures including the disastrous effects arising from Dutch elm



McDonald's office campus is known for its "natural" restored woodland design.

disease and, more recently, with Diplodia tip blight on Austrian pines. The key here is to plant "unity with variety."

6) Mulch periodically

Mulching improves the aesthetics, minimizes weeds, helps preserve soil moisture and keeps soil temperatures constant in areas that lack other effective vegetative groundcovers.

7) Cultivate with care, or not at all

Cultivating beds can destroy the roots of plants as well as have negative affects on some of the beneficial micro-organisms in the soil. Usually cultivating is done for aesthetic purposes. More often than not, it can be avoided by planting the proper groundcover, or by mulching.

8) Tip prune, don't shear

It costs more to take the time to shear plants than it does to tip prune, which allows a more natural look and results in healthier plants.

9) Appropriate proportions of fine turf

By naturalizing existing finished lawns you may invest some dollars upfront but in the end you ultimately reduce mainte-

nance costs by reducing irrigation, fertilization and mowing. Large corporate properties seem to be in the forefront of this trend. For example, in 1996 the American Society of Landscape Architects, Illinois Chapter, presented awards to 20 projects. Most contained elements of environmental restoration and incorporated low-maintenance design features.

10) Simplify fall cleanups

If a landscape is designed to have a more natural look there can be less of a need for intensive fall cleanups during which we take away the natural process of decomposition. By allowing leaves to remain on the site they can decompose and return organic material to the soil. Also, many perennials, including native grasses, are more striking when left uncut, and provide form and substance to a landscape all winter long. □

—Lori Lyman is a project manager with Mariani Landscape, Lake Bluff, IL

Deer control in demand

Some landscape companies offer fences to help clients protect their valuable ornamentals from hungry deer.

By JIM GUYETTE

Landscape managers can earn extra profits by offering deer control services, an item expected to be more in demand as deer populations across the United States climb, and the damage deer do to landscape trees and other landscape plants worsens.

Aggravating the problem is the continuing development of farms and woodlands into housing and commercial developments. This increasingly brings landscaped properties and deer together.

"We're going to be actively marketing this (deer control)," says Donna Elliott of Donna Elliott and Associates, a full-service firm based in Evergreen, Colo. So far she's had success by installing more than 1,000 feet of deer control fencing for several clients. "Most people can live with the turf being eaten, but they draw the line when the deer start eating perennials," she says.

"The deer population's been building over the last several years," explains Jim Mack, landscape operations manager at the 3,100-acre Holden Arboretum, Mentor, Ohio. Mack has installed over 10 miles of

deer fencing after trying other methods of keeping the deer away. "We've tried them all," he admits.

Fall-winter feeders

Deer damage typically begins in the fall and continues until food supplies become abundant again in the spring.

Hungry deer will eat just about any planted material, but seem to be particularly fond of hostas, azaleas, rhododendrons and many different trees.

"When you get into suburban areas there's a huge problem," says Al Benner, Benner's Gardens, Inc., New Hope, Penn. "Deer just come in and chow down. They like to browse on ornamentals. They really seem to do a job on flow-ers and ornamental shrubs. They'll strip them bare."

Benner too thinks the best way of controlling deer is to "keep them out." But most homeowners don't know how to do this.

"By the time you come in the homeowner is completely frustrated. They finally say, 'No mas! I can't take it anymore.'"

Benner says after several successful fencing installations, word that a landscape company can provide deer control



Al Benner, Benner's Gardens, New Hope, PA, shows that the deer fencing, at least installed in a natural setting, is not obtrusive.

will get around. Also, it doesn't hurt to let local extension people know you're offering the service too. You'd be surprised at how many homeowners call extension personnel asking for solutions to the deer problem.

"A lot of people don't even know this service exists," says Benner.

Fence not a distraction

Deer control fencing comes in two sizes. It's lightweight enough to be attached to trees that may already be on a property. Fiberglass, steel or wooden posts can be used also. The dark color usually makes it unobtrusive when installed.

Almost a quarter of the clients of John E. Hoffman Landscaping Inc., Petoskey, Mich., buy deer control services. "After we put in the landscaping we talk to our clients about protection. We don't want to see their plants destroyed," says Hoffman, pres-

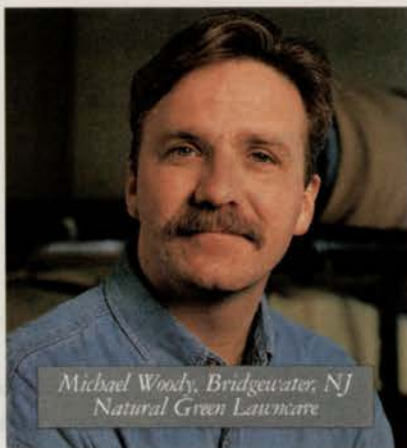
ident and CEO.

Hoffman says he has no set fee; he measures the area to be covered and prepares an estimate. Since many of his clients are "summer people" (Petoskey is a popular resort on the shores of Lake Michigan in northern Michigan.) they depend on his firm to protect their landscaping investment while they're away.

The fencing only works when the area to be protected is entirely enclosed. "If someone doesn't seal the area completely, the deer will go under the fence or around it and then they're trapped," warns Benner. "And they'll do anything to get out."

For more information about deer fencing, contact Al Benner at 6974 Upper York Road, New Hope, PA 18938. (800) 753-4660. □

—Jim Guyette is a freelance writer living in northeast Ohio.



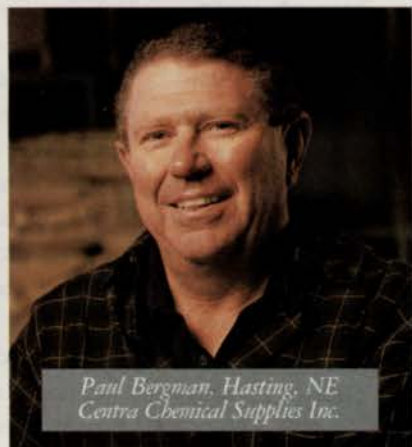
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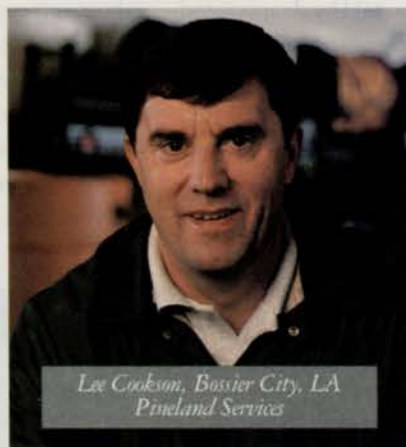
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Know objectives before you survey

Surveys—like the best companies—need to have a clearly-defined goal.

by JUDITH GUIDO

I'm often asked by folks in the green industry, How do you develop a good survey?

I am also told by disappointed surveyors of the industry that surveys don't work. I answer the first question with a question of my own: "Why do you want to do a survey? After giving me a perplexed look, landscapers tell me that "all companies do surveys," and surveys are a

mandatory part of doing business. Another popular response is, "We do it every year."

You survey customers whenever you want to know specific information that you plan to use to effect some change within your organization, *not* because surveys are "part of doing business."

Another important fact about surveys is that they aren't complete once they're sent out in the mail. They need to be collected, read, understood analyzed and *acted upon*.

Most of the people who told me that surveys don't work, when questioned fur-



Guido: If you don't know why you're taking the survey, you'll just be wasting time and money.

ther, said they never followed through on any of these important steps.

Certified mail boosts response rate

Certified or express mail will increase the survey response rate and decrease response time. I recommend this method only when time is a major factor or an extremely high response rate is needed to validate your survey.

These kinds of mailings are more expensive with a larger sample. Wait about four weeks

before sending out a reminder letter to those who have not replied. Generally, you can expect about 10 percent of the outstanding sample to respond after they receive "reminder cards."

Send a thank you card and perhaps a token of appreciation to all respondents. One year, Laflamme Services mailed a packet of herb seeds to survey respondents. It was a lightweight, inexpensive, industry-related gift.

Analyze and take action

Get all your employees together, and make sure that anyone who may be affected by the survey reads and understands it. Discuss responses, and set up a meeting for follow-up. Make a list of action plans to solve problems or duplicate (cross-company) the strengths that were identified. Assign these tasks and set deadlines.

Let the respondents know what you are going to do with the information. This lets your customers know you are not wasting their time. □

The author is director of marketing and business development for Laflamme Services/Grass Roots, Bridgeport, Ct.

Common-sense survey tips

1. Consider your budget and staff skill.

Make sure someone in your company knows how to design and analyze the data.

2. Know your audience. Include age, gender, education, professional status and attention span. Consider how much time will be needed for them to complete the survey.

3. Determine the sample size. You can survey everyone in your small customer base, but a larger customer base requires you to be selective: which customers do you most want to hear from—building owners as opposed to facility managers? Women instead of men?

4. Determine the method. Self-administered surveys include mail and other written surveys. Interviewer-administered surveys are done by phone and in-person contact.

5. Balance the length and information.

Shorter surveys should bring a higher response rate, but will provide less information. But, you can always do another. Remember: you have to *act* on this information!

6. Ask one question at a time. Don't ask: Do your workers show up on time *and* are they dressed in their uniforms? You may get one 'yes' and not know which question they have answered.

7. Keep questions short, 25 words or less.

8. Avoid loaded questions, which discredit your results.

9. Pretest your survey with friends and employees to see if they find it user-friendly and easy to understand.

10. Explain the survey to customers, in a one page cover letter. Tell them why you need to know their opinions.

J.G.

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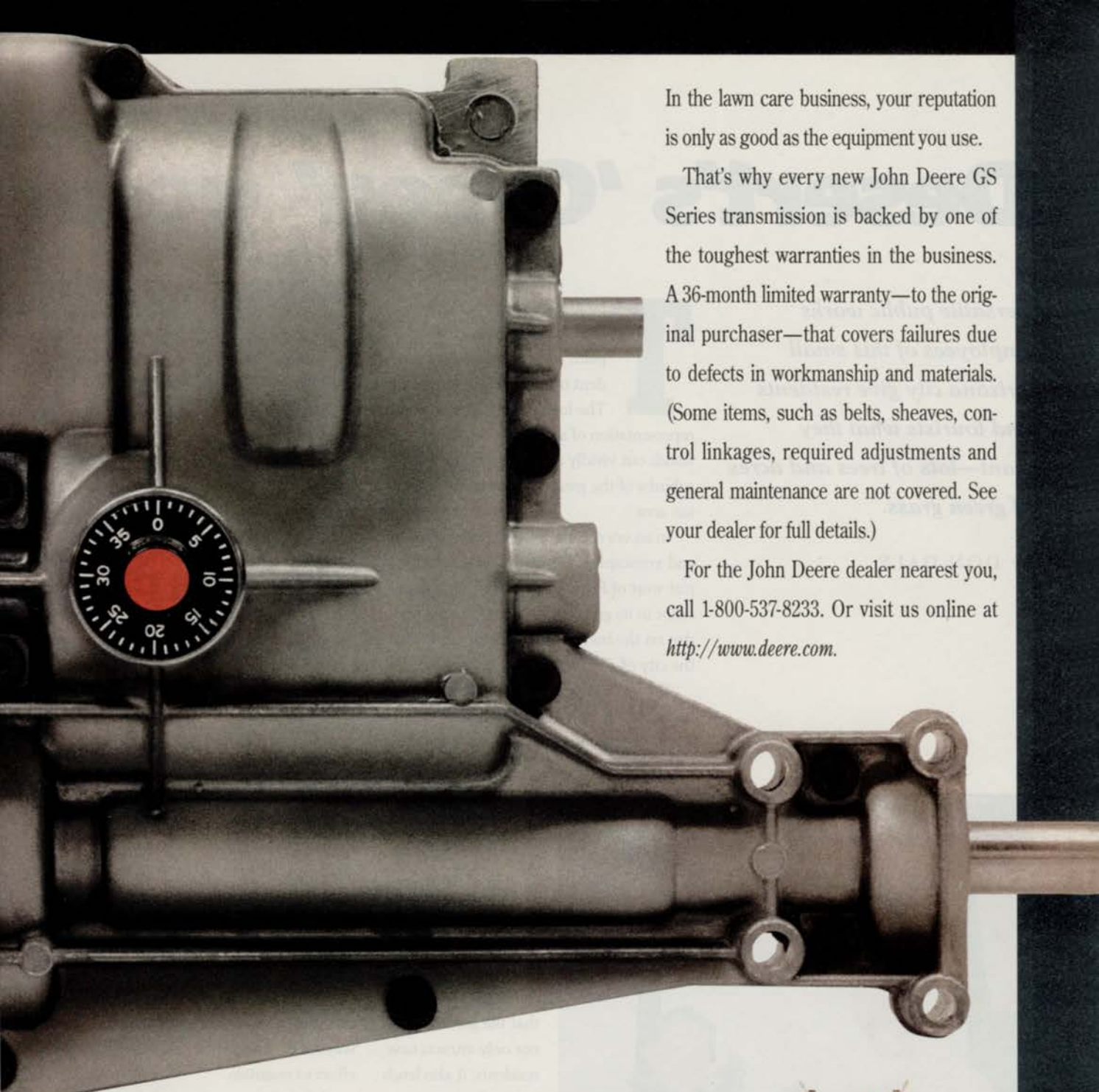
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Desert's 'Green' gem

Versatile public works employees of this small Arizona city give residents and tourists what they want—lots of trees and acres of green grass.

by DON DALE

The logo of the City of Litchfield Park, Ariz., is a line of palm and orange trees resplendent on a white background. The logo, in fact, is an accurate representation of a city so green that it stands out vividly among the other desert suburbs of the greater Phoenix metropolitan area.

In an era of strict water conservation and xeriscaping, Litchfield Park, located just west of Phoenix, is making a commitment to its green look. But it places a burden on the budget and landscaping staff of the city of 38,000.

"We've seen a value for it since way back," says City Manager Bob Musselwhite, who points out that ever since the

city was set up by the Goodyear Tire and Rubber Company in 1916 it has specialized in trees.

"We get criticized a lot for the amount of water we use," Musselwhite says, but the city feels strongly that the green look not only attracts new residents, it also lends a more homey atmosphere to the community.

"This type of element in our landscaping and design of our cities is critical in bringing us together," he maintains.

The man who bears the burden of the landscaping is Bob Gaunt, maybe



A green image is emphasized throughout Litchfield Park, Ariz.



Public Works Director Bob Gaunt, left, and City Manager Bob Musselwhite think the money spent on maintaining the city's trees and turf is well spent.

the only public works director in the state who has a horticultural background rather than one relating to streets or buildings. He estimates that over 50 percent of the cost of public works salaries in Litchfield Park goes to landscape.

'Trademark look' high maintenance

The trademark look of the city is its alternating palm and orange trees along main downtown thoroughfares. It has been this way for decades, but it still requires a lot of effort to maintain.

"We lose quite a few to lightning," Gaunt says of the palm trees. "They're not a problem otherwise. We have about 1,400 palm trees. That's how many we trim a year."

Actually, because of safety concerns, the city contracts private trimmers to do the specialized job of trimming palms. Gaunt reserves his force of eight employees for other work.

One of the biggest jobs recently has been to replace some of the 60 or 70-year-old sour orange trees which line the boulevards.



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wards. A recent two-year drought killed many of them.

"We've got a pretty extensive program to replace them," says Gaunt. "We replace 40 or 50 per year."

Pruning the trees is also a big job for public works. The city has an extensive pathway system, and the orange trees overhang the distinctive red concrete paths. The trees are trimmed so that people can

"We're trying to educate people who live along the right of ways to help us water those trees," says Gaunt, to avert heavy drought losses.

walk under them.

That presents another horticultural problem. When citrus tree trunks are exposed to the harsh Arizona sun, they sunburn. Trees can die. So white paint must be applied to the trunks every year.

Many of the street medians and fringe areas of Litchfield Park are planted with oranges and palms. But the city has gone to more drought-resistant vegetation such as Mondale pines, Chilean mesquite, heritage live oak and cactus in its new plantings away from city-center.

Most orange trees are either on drip or bubbler irrigation, says Gaunt. The adjacent palm trees can survive on natural rainfall plus the little water they pick up from the orange tree irrigation.

"We're trying to educate people who live along the right of ways to help us



water those trees," says Gaunt, who points out that this could avert heavy death losses in drought times.

Litchfield Park has no city ordinances addressing what trees residents can plant, other than pollen producers such as fruited olives and mulberries. Those are banned, and the city is actively removing them for the health benefits of residents and visitors. The city is a tourist area with the Wigwam Resort the city's biggest economic asset.

"We took out about 60 fruited olives last year and replaced them with other trees," Gaunt says.

Turf care is another heavy labor cost for the city. Half of the crew at times is busy mowing.

"Mowing takes basically two days—that's with four guys," Gaunt explains. Most of the rotary riding mowers are mulchers which improves aesthetics after mowing.

Common bermuda/perennial rye

All city grass is common bermuda, and in order to keep the dormant turf looking good in the winter the city overseeds everything except its soccer fields. Gaunt uses perennial rye for overseeding instead of annual rye, because it requires less water



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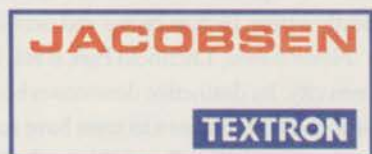
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Tree-lined boulevards give this desert city its character. Note the white paint used to protect the trunks of the citrus trees.

and mowing.

The city considers the rather large cost of the overseeding—10,000 pounds of seed—this winter alone was hefty. But it's necessary to keep up the city's image during the season when it gets most of its tourists.

'Tree City' image a boost

The city has four parks that, with other grassy areas, bring the mowed areas up to 23 acres. The heavily used soccer fields are not overseeded, because the rye would just be ruined, and it is a slippery playing surface.

"We have one desert park," says Gaunt. It has been planted with desert vegetation, mostly native, such as cactus and ocotillo.

Nevertheless, Litchfield Park is still a green city. Its distinctive downtown boulevards and commitment to trees have made it a designated Tree City, USA by the National Arbor Day Foundation three years in a row, and it obtains state funds to help maintain its green image.

Maricopa County found out how dedi-



When the county erected this wall, it created openings to save the beauty of trees like this Aleppo pine.

cated the city was to its trees when it widened a boundary street and erected a barrier wall between it and the city. Public works made sure the country saved every tree it could, and the engineers got in the spirit of things so thoroughly that they even erected masonry fences with holes in them for trees to lean through.

Many tasks done well

Gaunt points out that the secret to a small municipality such as Litchfield Park being successful with such a large landscaping commitment is the public works employees.

"The secret is that everyone has to be versatile," he says. His crew of eight may all be working on streets one day and tree plantings or irrigation maintenance the next.

Gaunt designates specialties within the work crew to facilitate landscape maintenance. For example, one man is the pri-

mary tree trimmer. But all employees work on turf or trees at some time, and hiring people with good attitudes and sending them to training seminars when possible enables Gaunt to keep the green areas looking good year-round.

The city tries to cultivate an "ownership" attitude in its public employees; they more the identify with the city as their own, the better they do in their work.

Musselwhite says there is a lot of hassle in keeping a city green in the low desert, but Litchfield Park has a distinctive image. And the city and residents are committed to keeping it. **LM**

—Don Dale is freelance writer living and working in Willcox, Ariz.

Bisset Nursery Corporation of Long Island, N.Y., reports it has acquired the **Design Imaging Group**, developer of landscape imaging software. DIG has developed site plan software for the pool and landscape industries, including three new programs. Bisset, the largest re-wholesaler in the Northeast, was one of DIG's first customers. Bisset says it brings a successful customer service record to the table, which will fit together nicely with DIG's qualified technical staff and sales representatives. The program's inventor, Garry Galpin, remains with the team.

Data Transmission Network Corporation (DTN), an infor-

mation and communication services company, has acquired all the subscribers of Golf Link. The former Golf Link subscribers have been assimilated into DTN Weather Center which helps turf-related industries plan their work activity by providing them detailed weather information in a timely fashion. Golf Link had more than 450 subscribers to its information system. DTN is headquartered in Omaha.

Century Rain Aid, one of the country's largest distributors of landscape irrigation equipment, has reached an agreement with **Shemin Nurseries, Inc.**, in which Century will establish product outlets in eight

of Shemin's 14 distribution centers. Shemin hq is in Danbury, Ct. The company is a wholly-owned subsidiary of Weyerhaeuser Co. Century President Wayne Miller says the agreement gives Century's customers added convenience, and Century benefits from Shemin's customer traffic.

Encore Manufacturing Co., Beatrice, Neb., was awarded an Outstanding Nebraska Industry Award. The award is presented by The Nebraska Diplomats, an organization of business people from throughout the state who help recruit new and expanding business for the state. Encore was picked for its "continual

growth and contributions to economic development."

Lofts Seed, Inc., has moved its corporate offices from Somerset, N.J. to Winson-Salem, N.C. According to company President, Ken Budd, the move gives the company easy access to banking, legal and accounting resources. "It also provides our customers with enhanced customer service, better product value and a more streamlined operation that will help grow their business," said Budd. Lofts' New Jersey research facilities and personnel remain in Somerset. Neil R. Myers has been named director of marketing for the seed supplier, which recently gave royalty checks for more than \$670,000 to Rutgers University and the University of Rhode Island research programs.

The Toro Company's two-year or 1500 hours warranty on its entire commercial product line is an industry first, says Toro. Mike Goodwin, manager of Worldwide Service for Toro, says the warranty includes equipment purchased in 1996. The "two-year" warranty will apply to those products not equipped with hour meters. Toro also reports it has completed its buy of the **James Hardie Irrigation Group** for \$119 million. **Maruyama** and Toro will jointly produce and market hand-held commercial equipment to landscape contractors. Toro CEO Kendrick Melrose called the move, "a significant boost to the company's growing landscape contractor business." **LM**

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Events

JANUARY

11-12: "Capturing Nature's Visual Patterns in Landscape Design: Observation, Analysis and Design," Connecticut College in New London, CT. Phone (215) 247-5777.

13-15: Massachusetts Turf Conference and Trade Show, Hynes Convention Center, Boston. Phone (413) 592-0120.

13-16: Advanced Turfgrass IPM Short Course, University of Maryland, College Park, MD. Phone (301) 405-3913.

13-17: Golf Course Maintenance Short Course, Holiday Inn on the Lane, Columbus, Ohio. Phone Barbara Bloetscher at (614) 292-7457.

14: Perennial Plant Program, Avon, Ohio. Conducted by Charles Behnke, OSU Extension. Call (216) 322-0127.

15: Landscape & Nursery Expo/97, Sacramento Community Convention Center, Sacramento, CA. (916) 442-4470.

15-19: STMA Conference and Exhibition, Red Lion Hotel, Colorado Springs, CO. Contact Steve Trusty (800) 323-3875.

17-18: WinterGreen Show, hosted by Georgia Green Industry Association. Cobb Galleria Center, North Atlanta. Phone GGIA at (706) 492-4664.

17-19: PLCAA Annual Management Conference & Golf Classic, Tempe,

Ariz. Includes sessions on public policy and the 105th Congress, the outlook for business and the economy and recruitment in a tight labor market and compensation to keep good employees. Call PLCAA at (800) 458-3466.

20-23: Michigan Turfgrass Conference, Holiday Inn South Convention Center, Lansing. Phone (517) 321-1660.

20-24: Professional Horticulture Conference of Virginia, Virginia Beach. Phone Polly Carden (804) 523-4734.

20-24: Second Annual Turfgrass Short Course, sponsored by the Turfgrass Council of North Carolina in cooperation with the faculty and staff at North Carolina State University. Course will be taught at the Brownstone Hotel in Raleigh. Call the Council at (910) 695-1333.

20-Feb. 7: Rutgers Professional Golf Turf Management School, Cook College, New Brunswick, NJ. Call Missy Marciante (908) 932-9271.

21, also 28: Everyday Spanish for Landscape Contractors, Cook College Short Course, New Brunswick, NJ, call Lori Albrizio (908) 932-8451.

21-23: Mid-American Green Industry Convention, hosted by PLCAMA. BTA Conference Center, Kansas City, MO. Phone (816) 561-5323.

21-23: Midwest Turf

Expo, Indiana Convention Center, Indianapolis. Call Beverly Bratton (317) 494-8039.

22-23: Effective Contract Writing for Landscapers, Cook College Short Course, New Brunswick, NJ. Call Lori Albrizio (908) 932-8451.

24: Michigan GCSSA Seminar, one-day seminar following Michigan Turf Conf. Phone (517) 321-1660.

24-25: ALCA Masters in Management, Atlanta. Call ALCA at (800) 395-2522.

24-25: Commercial Lawn Care Equipment Exhibition and Trade Show, Jacksonville Agricultural Fairgrounds, Jacksonville, FL. Contact Kirk Rust (904) 778-9632.

27-28: Arkansas Turfgrass Association Trade Show, Excelsior Hotel, Statehouse Convention Center. Contact: Angie McSwain, (501) 664-8048.

27-29: Iowa Turfgrass Conference and Show, Des Moines Convention Center. Contact The Turf Office at (515) 232-8222.

28-29: Rutgers Advanced Turfgrass Management Symposium, New Brunswick, NJ. Phone (908) 932-9271.

29: Charles VanderKooi Seminar, in conjunction with Century Rain Aid trade show (1/28). Phone Alicia Wright (770) 446-0613.

29-31: Utah Green Industry Conference and Trade Show, Utah State Fairpark, Salt Lake City. Conference information, Dr. Larry Rupp (801) 797-2255.

30: Introduction to the Internet for Golf Turf Pros, Rutgers University, New Brunswick, NJ. Call (908) 932-9271.

30: Northeastern PA Turfgrass and Grounds Maintenance School, Mountain Laurel Resort, White Haven, PA. Phone Andrew McNutt (814) 863-1368, or the PTC at (814) 863-3475.

31: Superbowl of Lighting III, sponsored by California Landscape Lighting at its Westlake Village, CA, office. Phone (800) 457-0710.

FEBRUARY

4-8: NAA Winter Management Conference, Nassau (Bahamas) Marriott Crystal Palace Resort. Contact the NAA (800) 733-2622.

5-7: Midwinter Conference Turfgrass Producers International, Savannah, GA. TPI at (800) 405-8873.

6-7: Northern California Turf & Landscape Exposition, Santa Clara Convention Center. Phone (515) 505-9600.

6-7: Inland Northwest Turf, Tree & Landscape Conference, Spokane, WA. Call WSU Conferences & Institutes (800) 942-4978.

6-7: Weed Management Workshop, Clarion Plaza Hotel, Orlando, FL. Sponsored by the Weed Science Society of America and The American Society for Horticultural Science. Call (703) 836-4606.

12-14: '97 Winter Workshop, Bethesda Marriott, Bethesda, MD. Call Landscape Contractors Associa-

tion MD-DC-VA (301) 948-0810.

12-13: ALCA University workshop, managing front-line employee performance, Hinds Community College, Raymond, MS, sponsored by Hinds Community College, Mississippi Nurserymen's Association and ALCA. Call ALCA at (800) 395-2522.

13: PLCAA Workshop, "Heads-Up Training—How to Teach in the Workplace," featuring practical teaching tips and techniques that you can implement on the job immediately; New Brunswick, NJ. For a brochure, contact PLCAA at 1000 Johnson Ferry Rd. NE, Suite C-1135, Marietta, GA 30068; (800) 445-3466.

16-18: Ohio Tree Care Conference & Trade Show, Worthington, Ohio. Sponsored by the Ohio chapter of the ISA. Call (614) 433-0045.

16-19: ALCA Executive Forum, Acapulco, Mexico. Call ALCA at (800) 395-2522.

17: ALCA University workshop, managing front-line employee performance, The Holiday Inn West, Hilliard, Ohio, sponsored by Ohio Nursery and Landscape Association, Ohio Landscapers Association and ALCA. Call ALCA at (800) 395-2522.

18-19: OSU Professional Lawn Care Short Course, Holiday Inn on the Lane,

Columbus, Ohio. Phone Barbara Bloetscher (614) 292-4230.

18-20: Mid-Pacific Horticultural Trade Show & Conference, Hilo on the Big Island of Hawaii. Phone Jo Ann Johnston (808) 969-2088.

19-22: Outdoor Power Equipment Distributors Assn. Meeting, Sheraton El Conquistado Resort, Tucson, AZ. For reservations (800) 325-7832.

19-23: Southeastern Flower Show, City Hall East Exhibition Center, Atlanta. Call Ryan March (404) 252-7577.

21-22: ALCA Masters in Management, San Francisco. Call ALCA at (800)

395-2522.
22-March 2: Southern Spring Show, Charlotte Merchandise Mart, Charlotte, NC. Call (704) 376-6594.

24: Water Conservation Practices on the Golf Course, Rutgers University, New Brunswick, NJ. Phone (908) 932-9271.

24-25: Turf and Grounds Exposition, Holiday Inn Suffern, Suffern, NY. Contact New York State Turfgrass Association (518) 783-1229.

25-26: Southern Illinois Grounds Maintenance School, Gateway Convention Center, Collinsville, IL. Contact Ron Cornwell (618) 692-9434.



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The Sports Turf Managers Association (STMA) is an organization of professionals representing all segments of the sports turf industry. Our members work to combine the science of growing grass and the art of maintaining sports turf to produce playing fields that are both safe and aesthetically pleasing.

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If you're serious about the sports industry, then it's time to become a member of STMA. Join today!

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Zero-Turn mower is one maneuverable machine

Great Dane Power Equipment says its Zero-Turn Surfer is the most compact commercial mower in the industry and is more maneuverable than a zero-turn hydro walk-behind. Its stand-on platform is nearly at the center of zero-turn radius and provides the operator with excellent visibility for trimming. Because of its wide wheel stance, the Surfer has excellent sidehill stability, says Great Dane. Cutter decks from 36, 48, 52 and 61 inch. Engines include Kawasaki, Vanguard, and Kohler. Contact Great Dane at (414) 544-4090 and tell them you saw the Surfer in LM, or

Circle No. 280

This bio-filter is easy to clean and maintain

An improved Bio-Filter from Rena Corporation is adequate for most ponds up to 500 gallons of capacity, and is easier to clean and maintain. The EBF-External Bio-Filter is a true wet/dry biological filter that uses natural processes to remove ammonia from the water.

Water from the pond is pumped through the Bio-Filter where it is aerated and then filtered through two layers of foam. The water then flows through plastic filter media which is colonized with millions of bacteria. The bacteria breaks down organic compounds such as ammonia into harmless nitrates. A universal adaptor allows use of all sizes of tubing from 1/2 inch to 3/4 inch. Call Rena at (704) 587-7110 and say you saw it in LANDSCAPE MANAGEMENT, or

Circle No. 281



Alamo boom mowers sport new features, better efficiency

The Alamo Industrial Machete boom mowers use a closed-loop hydraulic system. The piston pump and motor will achieve 96 percent efficiency because more energy is transmitted to the mechanical elements and less oil is lost to slippage than with a standard gear system.

The Machete's blade bar is reinforced with three 3/4-inch thick leaves, and the spindle housing is attached to the deck with eight 3/4-inch bolts. The operator can control all boom movements with a single joystick including the electro-hydraulic proportional lift, swing, and dipper arm which permits greater precision in positioning. Other features: Teflon impregnated bearings, heavier hydraulic hoses, and 1 1/2-inch chrome-plated pins at all pivot points on the boom. Contact Alamo Industrial at (210) 379-0864 and say you read about the booms in LANDSCAPE MANAGEMENT, or

Circle No 282



Buckner's controllers offer 3 configurations

Buckner unveils its MTBi and MTC model controllers. Available in 4, 8 and 12-station configurations, the MTBi is designed for indoor mounting applications. The MTC is intended for outdoor use.

Both the MTBi and the MTC feature an electro-mechanical clock design for simple, straightforward water program setting. It does not depend on electronic memory and is well suited for areas prone to lightning strikes, power outages or power surges. Both models also feature a "Day Wheel" allowing up to 23 starts per day. Contact Buckner at (209) 275-0500 and tell them you read about the controllers in LANDSCAPE MANAGEMENT, or

Circle No 283

LANDSCAPE Bookstore



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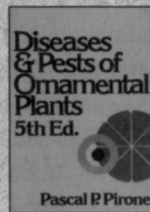


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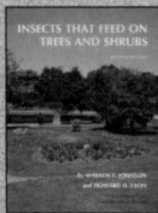
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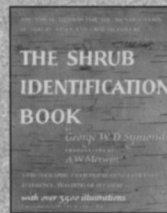
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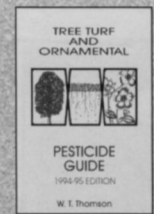


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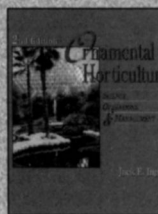
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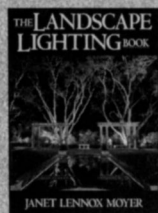
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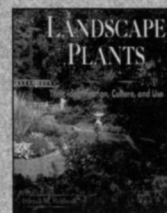
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**LANDSCAPE
MANAGEMENT**

Toro mower maintenance can save you \$\$

Maintenance kits for The Toro Company's Groundsmaster 200 and 300 series rotary mowers can now be purchased from Toro distributors nationwide. These kits provide filters; blade and belts; spindle assemblies; and caster wheels. The cost savings of the kits are estimated at 10 to 25 percent compared to suggested retail of parts when purchased separately.

The kits are packaged in an innovative carton that provides graphic images of the parts and an inventory check-off. The design is intended to prevent confusion between kits and let customers

know which parts have been used, which remain, and when to order a new kit. Ask for maintenance kits for other Toro commercial products too, specifically the Groundsmaster 3000; Greensmaster 3000, 3100 and 3200; and the Reelmaster 5100 and 5300. Contact Toro at (612) 887-8335 and tell them you read about the kits in LM, or

Circle No. 284



Structron ropeless pruner uses a cable

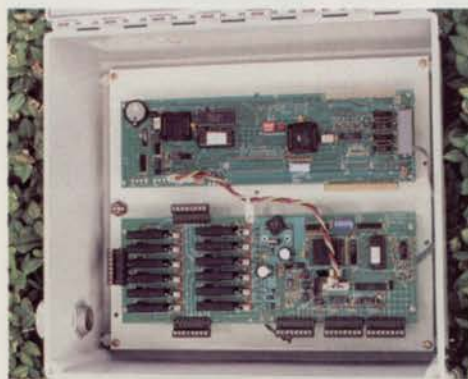
Structron Corporation says its Pull and Prune is the first ropeless pruner on the market. It's made with an internal steel cable eliminating the need for the standard rope-pulley system. For easier cutting, it features a Power Slide handle and a steel head with a compound action cutting blade. The Pull & Prune comes with a 72-inch light-weight fiberglass handle for greater comfort and control. Call (619) 744-6371 and mention you learned about the Pull & Prune in LANDSCAPE MANAGEMENT, or

Circle No. 286

Computerized environmental control system is point and click

Gro-MACS is a computerized environmental control system for landscape and turf maintenance such as golf course and stadium irrigation and fertilization systems. It features a Microsoft Windows

point-and-click user interface on a standard IBM-compatible PC which displays the status of environmental conditions, control operations and alarms.



From one location you can enter your environmental schedules for the entire system. The Gro-MACS will monitor sensors for temperature, precipitation, sunlight, water pressure and flow, soil moisture, and use the data to control devices such as watering or irrigation pumps and valves, fertilizing systems and more.

Versions of the Gro-MACS are available in Microsoft Windows 3.1 and Windows 95 format. The system will keep track of all data, such as water usage, and even track how long pumps have been on for maintenance purposes. Call ASOMA-WTC Engineering, Inc. at (512) 258-6608 for more details, or

Circle No. 285

Multi-purpose hand tool aids in cleanups

The Shrake sifter/rake is an excellent tool for gardening, composting and landscaping purposes. Irrigation maintenance and pond cleanups are also made easier thanks to the Shrake's ability to sift debris.

Available in a 48- or 24-inch ash or hickory handles, the Shrake will do anything a square-nose shovel will do, except pick up water or dust!

Landscapers can use the Shrake as a time saver, and it saves soil by breaking up clods of dirt. Snow will not freeze to the tool, and slides off instantly. The perforated Shrake is perfect for cleaning up ponds and lakes.

For more information, call (800) 997-4373 and say you saw it in LANDSCAPE MANAGEMENT, or

Circle No. 287



These staples eliminate stooping and rework too

TurfTacs is a biodegradable sod and turf staple system to secure sod, turfgrass, erosion control netting and grass and flower mats. It eliminates rework caused by edges curling, lifting and drying out. The staples are driven into the earth by a sturdy, stainless steel TurfTacker that works like a giant standup stapler. It allows the applicator to apply the staples while standing. The TurfTacker holds a cartridge of 60 staples. TurfTacs biodegrade in 3-8 weeks, and comes in two forms: universal U-shaped for netting, ground cover and seams; L-shaped for sod pieces, divots, grass and flower mats. To find out more, call (888) 887-3822 and mention LANDSCAPE MANAGEMENT, OF

Circle No. 288

Tas Trimmers clean up around sprinkler heads

Tas Industries offers a family of trimmers specifically designed to clean out growth from donut protectors, pop-up sprinkler heads, rotary sprinkler heads, golf course rotary heads, and control valve covers.

The trimmers fit the following straight-shaft trimmers: Echo, John Deere, Lesco, Shindaiwa, Maruyama, Husqvarna, Stihl, Green Machine, Robin, Red Max, Tanaka, and Weed Eater. They will clean sprinkler head donuts with 2 1/2, 3 1/2 and 4-inch centers as well as control valve covers 6 inch and 10 inch in diameter. For more information contact Tas at (941) 485-0262, mentioning LANDSCAPE MANAGEMENT, OF

Circle No. 289

Tri-King Mower now with more muscle

Jacobsen's new Tri-King triplex reel mowers feature a choice of high-output, 18-hp Briggs & Stratton Vanguard engine or a 19-hp liquid-cooled, low-emissions Kubota diesel for greater power and performance.

"The new Tri-Kings are also easier to operate," says Steve Yolitz, vice president of strategic product planning at Jacobsen. "The new steering wheel, power steering and automatic, three-wheel drive really improve maneuverability and operator comfort."



New, heavy-duty Eaton 2000 Series traction motors, plus a larger fan and high-flow water pump are features that enhance Tri-King reliability.

Tri-King mowers feature 72-inch and 84-inch cutting widths, with five-, seven-, and ten-blade reels. If you'd like to learn more about the Tri-King, check out the Jacobsen/Texttron Web site at www.jacobsen.texttron.com; call (414) 637-4465 or,

Circle No. 290

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**Retail/Horticulture Industry
CUSTOMER RELATIONS TEAM LEADER**

If you are up to the challenge of playing a key part in building a growth oriented company contact us NOW.

The candidate we seek must be able to lead, coach and train their team, handle sales and marketing projects from start to finish, and interface successfully with our outside sales professionals and customers. GREEN INDUSTRY EXPERIENCE and computer literacy is a plus.

We offer a competitive pay and bonus structure with room to grow. Please mail or fax your resume to:

AGRITURF, INC.

c/o Personnel Dept.
59 Dwight Street, Hatfield, MA 10038
Fax: 413-247-9401

**BRANCH MANAGER
Landscape Maintenance**

Lifescapes Inc., one of Atlanta's largest and fastest growing full service landscape companies is seeking a highly motivated individual to assume leadership of one of our metro area locations. Candidate must have proven management, sales and interpersonal skills. For immediate confidential consideration, please send or fax resume to:

**Human Resource Dir., Lifescapes Inc., 6644 Hickory
Flat Hwy., Canton, GA 30115. Fax # (770) 345-1250.**

*Other opportunities exist for
Maintenance Supervisors and Irrigation Service Tech.*

Landscape Design/Sales

We are a large full service landscape company seeking a well-rounded individual with at least 5 years experience in residential landscape design and construction to design, estimate, sell and supervise high quality landscaping projects. Excellent communication, sales and graphic skills are a must. Irrigation knowledge a plus.

**Please send resume and salary requirements to:
Morin's Landscaping, Inc., 301 Depot Road,
Holliis, NH 03049. Attention: Thomas Morin.**

AGRONOMIST

Large private lawn care co. in Buffalo N.Y. needs motivated turf expert. A 4 yr. degree and 5 years exper. is required. Training and safety background helpful. Benefit package includes mid 30's to start.

Send resume to: Funk Lawn Care.

330 Fillmore Ave., Tonawanda, N.Y. 14150
or contact Bill or Bob at 1-800-FUNK-LAWN

Landscape Management Crew Leader and Crew Leader Trainee for high end residential. Two career positions open, excellent pay and benefits with stable, 35 year old, multiple award winning company doing residential Design/Build/Maintain projects in the **Washington DC metro market.** Crew Leader must have minimum of 2 years experience in plant and lawn care plus IPM. Call or send resume to:

**Charles Bowers
Garden Gate Landscaping, Inc.
821 Norwood Road
Silver Spring, MD 20905
301-924-4131**

Join America's leading irrigation and landscape lighting distributor, Century Rain Aid, as we continue to grow. Century is now accepting applications for branch management positions for the Philadelphia and New Jersey markets. Irrigation experience and a college education are preferred. Century offers industry competitive wage and benefit programs. Please send your resume and salary requirements to:

Century Rain Aid, 31691 Dequindre Rd.,
Madison Heights, MI 48071, Attn: Wayne MILLER.

PRE-EMPLOYMENT DRUG SCREENING REQUIRED.
CENTURY IS AN EQUAL OPPORTUNITY EMPLOYER.

Landscape Designer/Estimator Needed

Well established landscape/build company seeks highly motivated, well organized, self starter to join our team effort. Must have a minimum of 3 years experience in landscape field and a knowledge of ornamental horticulture. Must have ability to communicate well, design, estimate and sell projects. Competitive salary and benefits package. Send resume to Gradco, Inc., 7341 Cahaba Valley Road, Birmingham, Alabama 35242. Attention Mike Summers.

SALES ENVIRONMENTAL CARE, INC. is

expanding markets in No. Calif. Bay Area. Must have 3-5 years experience and strong track record in sales. Need to be articulate w/strong interpersonal and organizational skills. Knowledge of local markets and property management a plus. Excellent growth potential, full benefits. Send resume: 825 Mabury Road, San Jose, CA 95133 EOE

BRANCH SALES MANAGER National Lawn Equipment, Parts & Accessories Supplier expanding into the Northeast, Mid Atlantic and Southeast. Need articulate individual with retail management experience. Computer literate. Several markets available. Send resume with salary history & requirements to: **Landscapers Supply, P.O. Box 459, Spring Valley, NY 10977-0459.** 8/97

OREGON'S LARGEST COMMERCIAL LANDSCAPE COMPANY located in the Portland Metro area is looking for experienced Maintenance and Construction Supervisors, Forepersons and Irrigation Technicians. Must be self-motivated, team-oriented, industry professionals with excellent communication and organizational skills. Training and opportunities for those who want to grow with us. Join our ALCA Award Winning Team and enjoy the lifestyle of the beautiful Pacific Northwest as an extra bonus. Send resume to: **NORTHWEST LANDSCAPE INDUSTRIES, 16075 SW Upper Boones Ferry Road, Tigard, OR 97224 - OR fax to (503) 620-7592.** 1/97

HELP WANTED

One of No. VA's Most Successful Landscape firms has opening for Designer/Estimator & Production Manager. Must have minimum of 2 years experience. Excellent growth opportunity and benefits package.

Call 703-352-7555