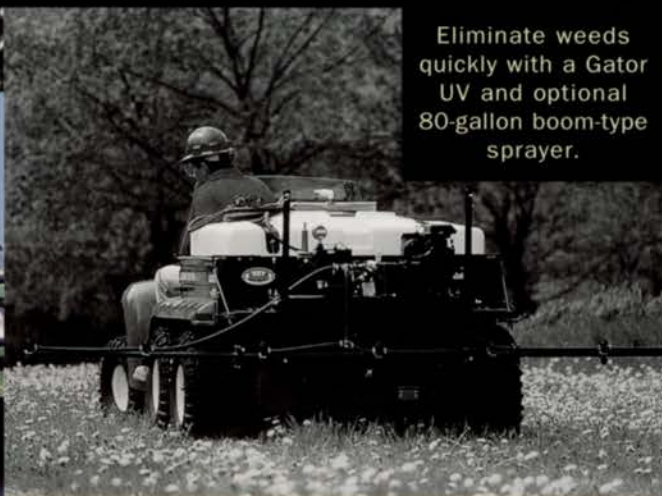
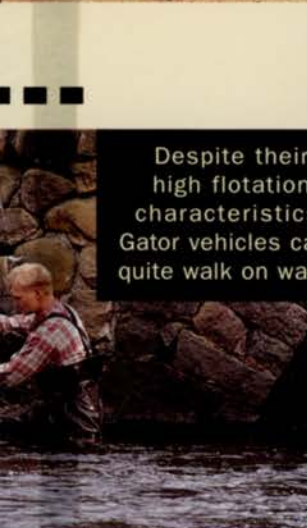


With a footprint of just 7.1 psi, the 18-hp 6x4 Diesel goes just about anywhere.



Eliminate weeds quickly with a Gator UV and optional 80-gallon boom-type sprayer.

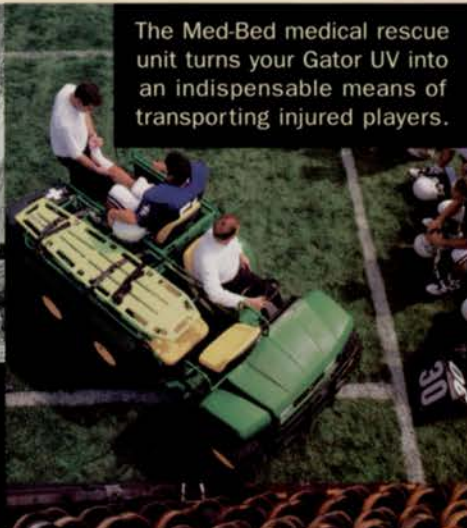
and Works...



Despite their high flotation characteristics, Gator vehicles can't quite walk on water.



Optional lift kit lets you raise or lower the bed easily with a dash-mounted switch.



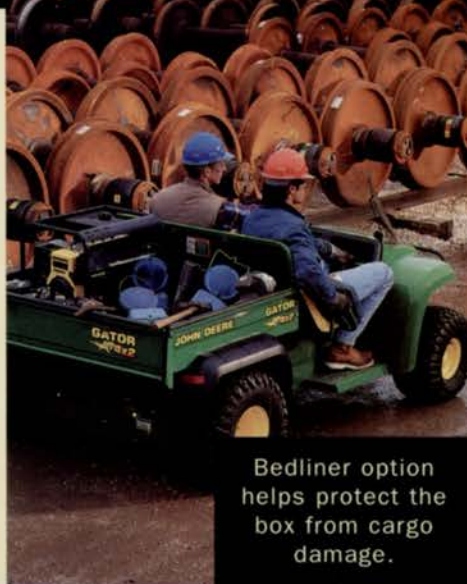
The Med-Bed medical rescue unit turns your Gator UV into an indispensable means of transporting injured players.

and Works

With a John Deere Gator® Utility Vehicle, the play is **not** the thing. Gas or diesel, 2- or 4-wheel drive, the concept behind the Gator is simple — it works. And works. And works. Stable, surefooted and able to seat two-up comfortably, a Gator vehicle can tote up to 1,400 pounds* — turf, trail, or no trail at all.

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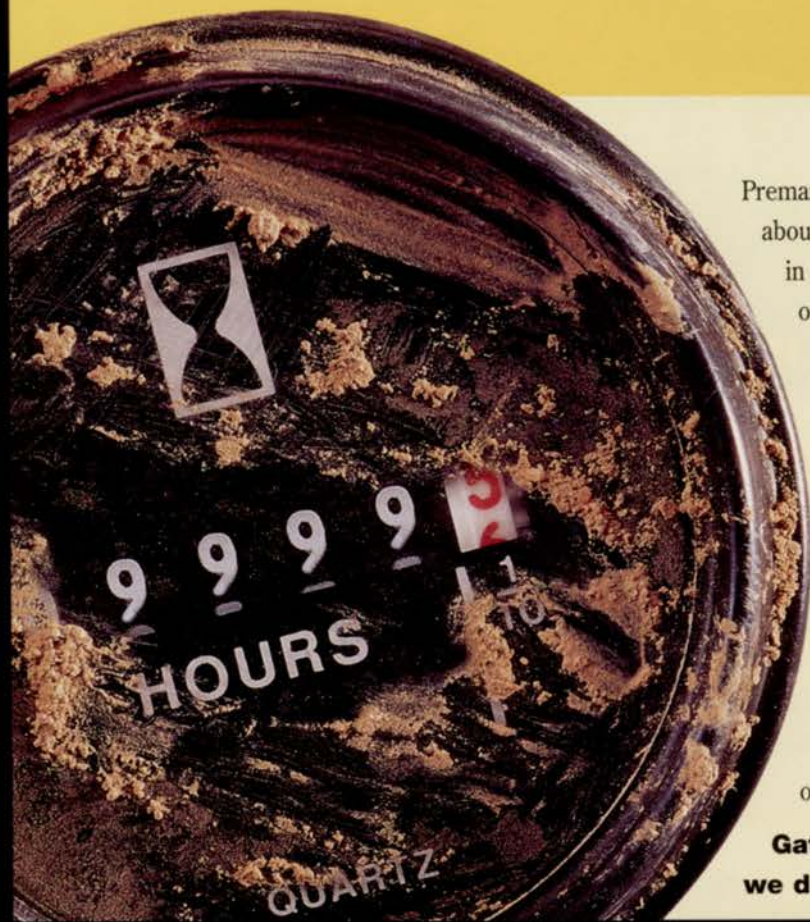
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we don't build them for the fun of it**

It certainly would be a miracle



Ron Hall

RON HALL
Managing Editor

The fishing hadn't been kind to Bob "Low-Super-Drive" Stevick who earned his nickname by the insane way he shifted gears on his dad's Olds 88. (The Olds had an automatic transmission, by the way.)

Bob was casting a flashy "Wonder Boy" lure and he hadn't registered a hit. The rest of us bobbed jigs. We were murdering the bass and crappie in the farm pond.

"Why do you suppose it's called the Wonder Boy?" mused Bob, again scrutinizing the the incredible claims on the lure's empty package.

"Because it'd be a wonder if it ever caught a fish," chimed in Fats Orty. The comment drew the expected jibes, but Bob insisted the Wonder Boy would, soon enough, work magic--it never did.

That long-ago afternoon of fishing with buddies popped into my head at this year's Turf-Seed, Inc. Field Day in Rolesville, NC, as I walked over a turf plot planted with a grass seed touted as "Miracle Lawn".

This seed is sold through advertisements in some consumer magazines. The price is steep, \$6 a pound or so.

Miracle Lawn? You bet. *It would* be a miracle if this grass seed ever produced anything resembling a lawn.

Then there's my brother-in-law who was hooked by a magazine advertisement promising an "amazing" lawn. He mailed his check and received, several weeks later, a manila envelope stuffed with sprigs. He planted them out. They did—as promised—spread over his yard. In fact, over several seasons, they spread into the edges of his neighbor's lawn too. *Amazing*. But not good.

Most homeowners know little about grasses, the differences among species and varieties. They recognize names like Kentucky bluegrass, perennial ryegrass and tall fescue. That's about it.

[LANDSCAPE/GROUNDS]

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Protecting Puget Sound

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Making waves in the desert

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Make newsletters work for you

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Mizzou's 'hammered' sports turf

PAGE 16 L ▶

Coupons: junk mail jewels?

PAGE 18 L ▶

New England sports field dynamo

That's where you, the turf professional, come in. One of your concerns, of course, is to give clients the best turf that you can. We can help.

Look over LM's '97 Pocket Seed Guide. (It came with July's issue, or let us know and we'll send you one.) In particular, review the data from sites closest to you to see which turfseed varieties perform best in your region. Talk with local university and extension turf experts too.

Remember, your clients probably know little about turfgrass. **LM**

Questions, comments? Call Ron at (216) 891-2636, fax at (216) 891-2675, or e-mail at rhall@advanstar.com



Protecting Puget Sound

Landscape architect Angela Danadjieva's job was to beautify (and hide) Seattle's new half billion dollar sewage treatment facility.

By LESLEE JAQUETTE

After a decade of: planning; permits; building a 3,000-foot-long retaining wall; moving 30,000 cubic yards of topsoil; 20 miles of irrigation line;

10,000 trees and 15,000 shrubs and ground cover plants, the \$573 million West Point Sewage

Treatment Plant in Seattle, Wash., is open.

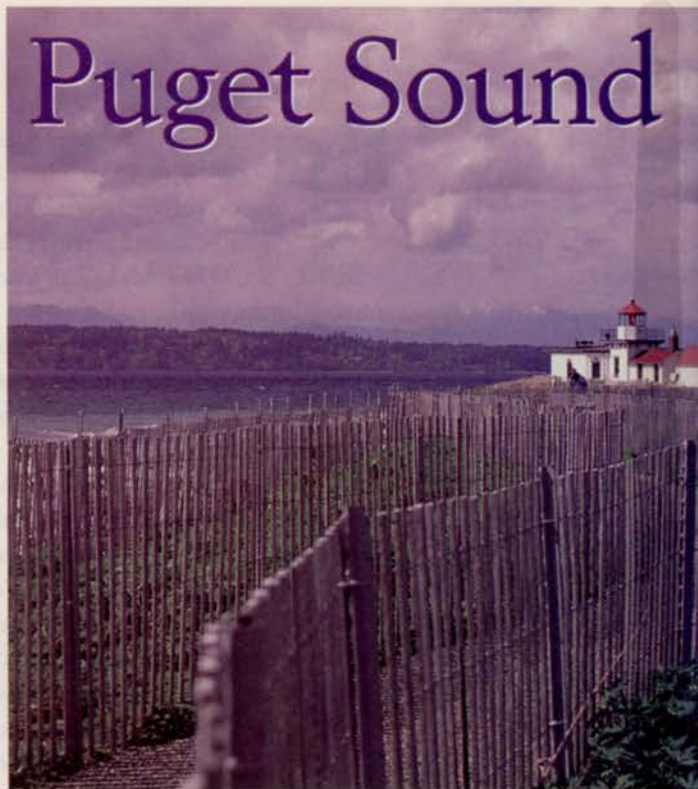
Found on a spit of land on the east side of Puget Sound, adjacent to Seattle's largest public park, the secondary treatment plant was the single largest investment ever made to protect the water quality of Puget Sound. The key to the success of the project was the landscape design created by Angela Danadjieva of Tiburon, Calif., and CHM2Hill of Seattle.



Lisa Niehaus is head gardener for the treatment plant's 23 acre park.

"I'll probably never work on a job where landscaping receives a higher priority," says Landscape Project Manager Linda Sullivan, Seattle.

The goal of the project was to install the plant on a linear piece of land. Sullivan says the landscape designers promised to hide the plant from the perspective of the shoreline trails that are popular with visitors to Discovery Park. To achieve this goal many of the tanks were submerged on the 32 acres dedicated to the plant facilities. The inside of the plant includes three acres of landscaping



while the outside doubled the public area to 20 acres of landscaping, trails and beach access.

Beyond the goal to create a landscape that blends with Discovery Park, the landscape screens the plant from view, increases wildlife habitat and diversity and creates a tranquil and passive environment where people can enjoy nature, undisturbed by the sewage plant. A tall order considering the old plant, built in the 1960s, included acres of concrete surrounded by chain link fence.

"She's sculptural in approach," says Sullivan of Danadjieva. "What you see instead of an industrial facility is the undulation of wetlands, wall, trail and water, blended by the use of native plants."

One of Sullivan's responsibilities was managing the growing contracts for the project.

Working with regional nurseries was important because the job was so large planners couldn't be certain plants would be available through the conventional bidding process. To obtain the right plants (80 native species) all the right size at the right time, she negotiated growing contracts after a selection process in which nurseries submitted qualifications, growing plants, financial plans and, finally, prices. Price was a factor, but only about 30 percent of the qualification process, says Sullivan, adding, "it was more important to get high quality materials."

The plant list for the project included 10,000 trees, mostly willow and pine, 50,000 shrubs and 100,000 plugs of American dunegrass and wetland grass. Because of the strong commitment made to the public that



Park grounds feature native plants

Bald eagles soar over the park's bluffs, noisy sea lions gambol in the surf while a great blue heron stands on the shore poised like a statue. On a sunny day 13,000-foot-high Mount Baker looms large as wood ducks splash in the wetlands pond near the heron.

The new landscape surrounding the West Point Secondary Treatment Plant in Seattle, Wash., looks natural, with a little help from head gardener Lisa Niehaus. She and staff maintain the 23-acre park on Puget Sound.

Niehaus is the former senior gardener and horticulture crew chief for Seattle City Parks, and Seattle's Woodland Zoo, but she has her hands full at the site of Puget Sound's largest restoration area. The area is divided into the three acres within the treatment plant with their planters and green buffer, as well as the outside 20 acres.

Drainage is the biggest problem inside the facility due to the shallow soil atop a number of submerged treatment tanks. To expedite better drainage, Niehaus is interplanting with smaller plants around the 80 different varieties of native plants already in place. She hopes the roots on these plants will spread and form a cachement for Seattle rains.

Tending the long, linear park, which includes a 1.1-acre pond and wetlands, Niehaus fights a battle with weeds, critters, irrigation and wind damage. Using a summer staff of five along with volunteer gardeners, she attempts to weed enough so that eventually young plants can compete. Similarly, about all she can do is monitor for pests. Her goal is to let population levels of insects control themselves.

"The end result is a natural habitat that people can enjoy. It doesn't need to be perfect like a formal rose garden," says Niehaus.

Niehaus and crew keep an eye on 20 miles of temporary irrigation lines, observing which plants are prospering and which need more water. Still, getting familiar with the site and drawings and keeping 250 sprinkler zones functioning is one of her biggest challenges.

Another challenge is wind. It whips and curves around the beach and inside planters and walls. The larger hemlocks and willows on the windward side of the park suffered tremendous windburn last winter. Where these need to be replanted, Niehaus plans to use smaller, one-gallon trees that won't be as susceptible to wind. By the time they are tall enough to be affected by the wind they will have developed sufficient roots to survive the assault.

To prevent voles (mountain beaver) and deer from stripping bark off of new trees, Niehaus uses products like Ropel and Deer Away.

While some of her maintenance techniques are commonplace, like using only slow-release fertilizers, some are unique. For instance, in March and April she floods the wetlands about one foot higher than normal to control cattails and keep their roots from choking out other vegetation.

The most exciting future prospect for the park, says Niehaus, is that the site may one day use reclaimed water for irrigation. If the permit process continues as planned, she should be able to use reclaimed water in the summer of 1998. □

In March and April, Niehaus floods the wetlands to control cattails and keep roots from choking out other vegetation.

PHOTOS BY LESLEE JAQUETTE

To do this contractors used a temporary dock and maneuvered soil in all kinds of weather and conditions.

Even though the materials were planted during a year that included one of Seattle's wettest winters, the park is quickly achieving its goal as a screen, habitat and public space.

"Even though Danadjieva was under tremendous pressure to simplify things by using more straight lines, she was absolutely single minded in her realization of her vision. She surrounded herself with highly technical people who were able to communicate within the limits of construction documents," says Sullivan.

"Danadjieva imagined, communicated and then saw this project constructed." □

the sewage plant be screened immediately, the plant material was planted very close together. The design calls for the material to gradually slope from the flat, sandy spit and intertidal lagoon up toward the treatment plant and forested hillside.

To achieve best growth, 110,000 lineal feet of irrigation was submerged in 30,000 yards of topsoil. Compatible with the subgrade, this soil is a mix of 60 percent sand and 40 percent Groco.

"We realized we needed to have a sandy, loose soil to be successful and forgiving during winter construction," says Sullivan.

Sullivan credits Ohno Construction of Seattle with a job well done, particularly given they had to bring in the topsoil by barge to minimize impact on the neighborhood and park.

Making waves in the desert

When clients in the red-hot Las Vegas market want action from Par-3 Landscape and Maintenance, one call is all it takes.

by DON DALE

Mark Rockwell isn't just riding an unprecedented wave of growth in Las Vegas, he's helping to create it. Par-3 Landscape and Maintenance, the company he founded just over two years ago, took off even faster than Rockwell had envisioned.

He credits much of this success to the business philosophy that he and partners Shawn Buckley, Paul Jaramillo and Charlie Norton, subscribe to—do quality work for clients who appreciate and can afford quality work.

"When I do a bid for somebody I tell them I'm not the cheapest, but I'll do a good job," Rockwell says. His clients now include such high profile properties as the New York New York casino, McCarran Airport and The Gardens, an exclusive residential subdivision. His company has gone from five to 35 employees in just the two years.



Rockwell, right, with Mark Murphy in front of one of their most visible clients, New York, New York. Murphy is the Par-3 Landscape and Maintenance foreman at the site.

The real secret to Par-3's success, in addition to the quality of its work, is the promptness and thoroughness of its service.

"Call-backs have to be gotten back to," Rockwell emphasizes. "If they call you, you need to be back there that day. Property managers don't want to wait three or four days."

That might not be the case on an athletic field or a strip mall, but a hotel or homeowner's association demands excellent service in order to maintain a manicured look. That's what sells their business, and that's what Rockwell provides.

Make it glisten in the sun

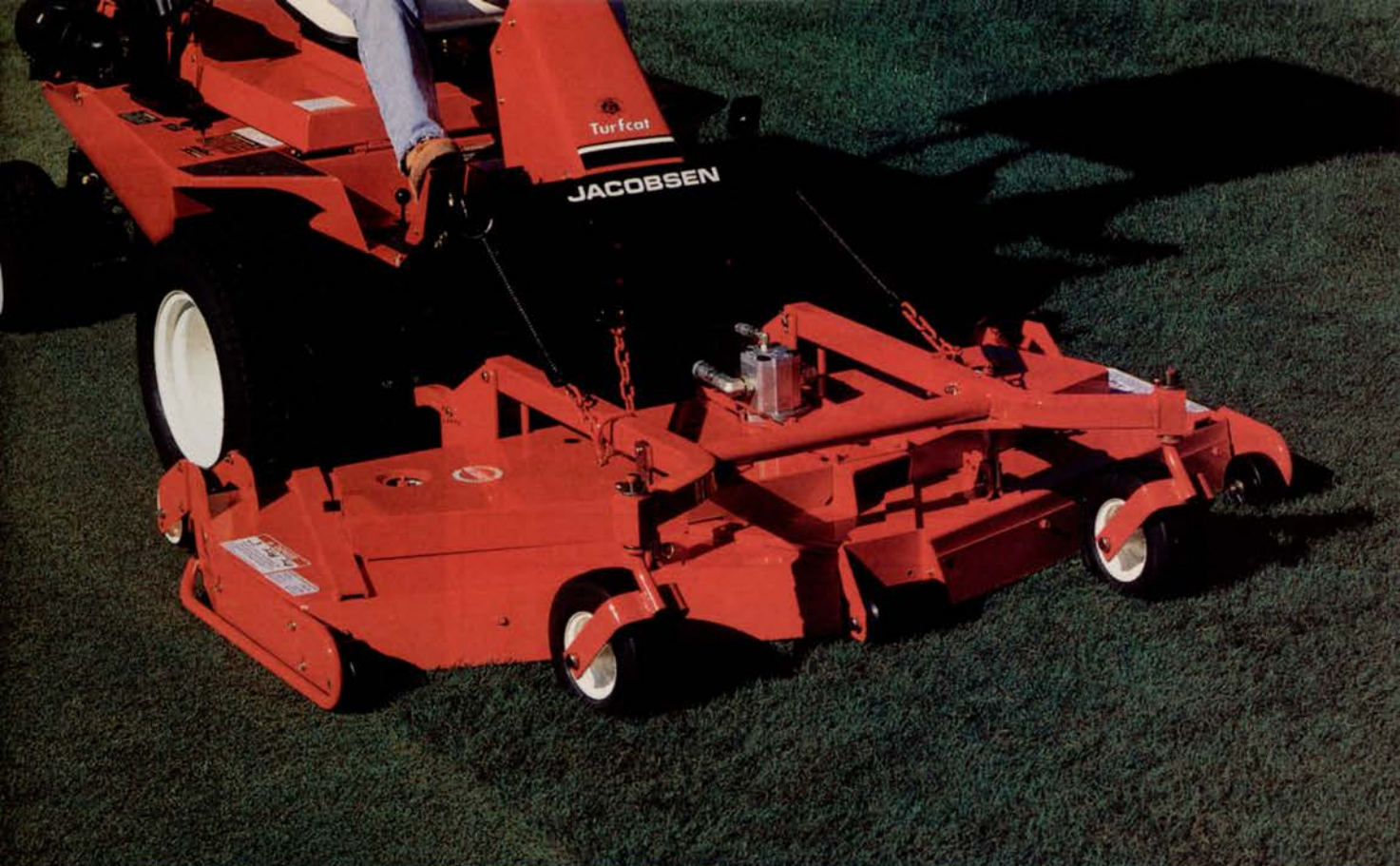
"A property manager wants that property to shine," and a broken sprinkler head spraying ten feet in the air isn't a good advertisement for them—or for their landscaper.

"I know it takes time, but we have a separate employee who just takes calls," Rockwell says. In fact, he's set up his company to respond to service calls as quickly and efficiently as possible.

cont. on page 6L



A Par-3 Landscape residential construction site in the Mountain Trails subdivision—workers installing mature trees to give a finished look to an upscale job



The beautiful cut is easy to see. The clippings, however, are another story.

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cont. from page 4L

First, he has a roving supervisor who oversees his six crew foremen. That supervisor also either handles service calls himself or gets somebody else on it right away.

Another set of eyes

"He's actually another set of eyes for me," Rockwell says of Clinton Aldana, his mobile supervisor. It's easy for a crew to overlook details on a maintenance job, and the man-

ager on wheels helps spot defects just as Rockwell does.

Since irrigation problems are by far the number one call-in for service, Rockwell has a small truck set up just for irrigation projects. It is stocked with heads, risers, pipe, fittings, valves and other commonly used parts—plus a good irrigation man.

This truck darts all over Las Vegas, responding to irrigation emergencies. When



Rockwell at a site he designed and installed in the Desert Trails subdivision.

there's no emergency, the irrigation man helps out on other jobs or follows the mowing crew to fix any damaged sprinkler heads.

"Now that it's hotter, I may have to provide another guy to ride with him," Rockwell says of summer, when irrigation problems mount up quickly.

The other common call-in problems are turf hot spots and physical damage to landscaping or equipment. Making those service call-backs make Par-3 shine in Las Vegas. The rapid accumulation of contracts is proof that the company satisfies its clientele.

Maintenance secrets

As far as quality maintenance goes, mowing, weeding and edging are all pretty standard practices. But Rockwell has a couple of secrets for doing an excellent job.

cont. on page 8L

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LM

cont. from page 6L

The first is with flowers, which are often used by upscale developments.

"Annual color has to be fresh all the time," he says. He says he not only has a nice eye for designing beds and variety mixes, but he also goes the extra mile to keep flowers fresh for the four months that a bed typically has to last. He puts down good, balanced fertilizer that gives immediate

growth and sustains the plants over the long term. He also selects varieties that will stretch their color longer.

"I can plant something in October and have it last until March or April," he notes. By selecting pansies and flowering kale, for example, he will get good longevity in the winter. In the summer those will change to vincas and salvia. He also has his crews do a lot of "dead-heading," or plucking off

dying flower heads so that plants regenerate new flowers promptly. That keeps a bed fresh past its prime.

"That's something that makes the property manager say, 'Wow, I love this company.'"

Another secret is to keep shrubs trimmed, Rockwell says. If he has a contract to trim once a month, he may trim more often on a site that wants that manicured look. His crew at New York New York will also wash off dusty plants to keep them fresh looking.

Rockwell's own secret is that he likes the design and construction end of his business more than the maintenance end. And he wants the company to grow there too.

One job at a time

Currently he has a five-man crew devoted to installation, specializing in upscale residential projects. He does only one construction job at a time, and wants to add another crew to double his capabilities.

"There's a lot of work out there flowing our way," he says, and he loves residential design. Large maintenance jobs earn the company the most money, but he has to keep his creative spirit energized too.

Word of mouth is bringing a lot of design business his way, though he likes the informal rather than the blueprint approach. He has a technique for pleasing top-end residential clients: bigger plants.

"When you do an upscale looking job you want a more mature landscape immediately," he says. Thus, a canary palm tree may cost \$200 per foot, but if a new homebuilder is spending over a million dollars on a house he will also spend \$6,000 on two mature canary palms.

Rockwell also features commercial-grade irrigation systems for upscale homes and proper soil-building. In a region where the heat and terrible soils are a given, these are ways he can insure that a homeowner will remain happy with his landscaping job over the years.

Growth is good, Rockwell says, and Par-3 wants more of it. And a company that does quality work to attract quality clients will certainly grow. □



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- Roundup Pro In The 21st Century.
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Make newsletters work harder for you

These marketing tools should promote your landscape company through information, education.

By MARLENE EICHHOLZ

Newsletters are popular in the green industry, but if used incorrectly, they can become a waste of time and resources. If your company is thinking about starting a newsletter, or if you currently mail a newsletter, make sure that yours is actually helping your company and your readers.

There are three purposes for a newsletter:

- 1) **Promotional**, for marketing or public relations.
- 2) **Informational**, for updating employees, customers, vendors and friends.
- 3) **Educational**, subscription newsletters.

They can take the form of a paid subscription or free for customers or contacts. Most companies' newsletters are free promotional items. Make the most of your promotional newsletter by ensuring that it is also informational and educational. Even if it's free, it might not be appreciated by your customers unless they feel like they're being taught as opposed to being sought after. This will make your newsletter a more effective marketing tool.

Another important way to add to the effectiveness of your newsletter is to make sure your newsletter is consistent with your company's philosophies; people won't find your organization as credible if you are inconsistent.

How many of us have been turned off by environmental protection groups send-

ing hundreds of "trees worth" of solicitation material to our homes.

Once you've decided to produce a newsletter, you need to examine the costs. Newsletters can be very expensive but if you plan ahead there are many ways to produce a professional yet inexpensive newsletter:

- ▶ produce it in-house.
- ▶ keep it short and simple; a shorter newsletter costs less, takes less time, paper and postage.
- ▶ shop around for a quality, less-expensive printing company.
- ▶ ask your printer if there are alternatives which are most cost effective (i.e. preprinting color, using a standard color, avoiding bleeds, choosing a different type paper).
- ▶ don't go crazy on colors. Color increases printing costs dramatically. Try to stick to one color; you can always give the perception of different colors by changing the screen tints.
- ▶ do self mailers; lowers cost on envelopes.
- ▶ don't waste; avoid overprinting. Put a lot of thought into how many newsletters you will need.
- ▶ if you have a web page, save postage; put your newsletter on-line.

Make the most of your people resources. Get your staff involved. This is a good way to improve morale, and learn about hidden talents of your staff. Get your clients involved. Ask them what they would like to read about. You can even include a survey with your newsletter mailing, asking for feedback and ideas. This will help you out and ensure that they'll be more interested in actually reading your newsletter. This is also a great means for expanding your mailing list; ask your

clients to supply you with addresses of people who might like to receive your newsletter.

Remember that feedback should always be encouraged. If you remain flexible, you will be able to learn from your mistakes and have more fun with your newsletter. And stay on top of your competition by doing market research. It's important to know what others in your market are up to. Call up your competition to see if they have newsletters. If they've been sending newsletters out for two years and you're just starting, they have the advantage. Have a friend call and ask for a copy to be sent (preferably to the friend's address) so you can learn from their experience and, hopefully, from their mistakes.

Other tips:

- ▶ frequency is vital; you should send it out at least quarterly. This extra visibility ensures that your company's name comes to your customers' minds ahead of the competition.
- ▶ be on time. Make the newsletter production a consistent scheduled time. Customers are impressed by promptness.
- ▶ make the most of your newsletter. Keep it handy for whenever anyone asks for company information.
- ▶ And finally, make sure it gets read.

When you speak to your clients, ask them if they've read your newsletter. Make them aware of how important it is to you and (if you include coupons and seasonal specials) how worthwhile it is to them.

People today are on so many mailing lists that their mailboxes are being clogged with junk mail. If your newsletter doesn't stand out, it's going in the garbage even before it's read. If it's unread, it's worthless. As a "keeper," it's a valuable, cost-effective advertisement for your company. □



photo: Fred Bird

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Hammered turf

Sand-based turfgrass field at the University of Missouri withstands pounding of track and field events.

Not many events top the hammer throw in destroying sports turfgrass. Imagine what happens to grass when a 235-pound athlete throws a 12-pound hammer (a steel ball on a chain) into it.

"When it hits, it goes all the way into the sub grade," says Brad Fresenburg, sports turf researcher at the University of Missouri. But the hammer throw is just one of several track and field events that challenge the university's track/soccer area.

Even so, the field stays in excellent shape, says MU Track Coach Rick McGuire who describes it as "state of the art".

Fresenburg and McGuire give a lot of credit to Missouri's grounds crew for the work it does on the sand-based field. But, credit must also go to the designers of the field and the contractors who installed it.

Sand base, fibers for stability

The track/soccer field contractors installed a herringbone-design drain, which they laid into the sub grade and packed with pea gravel in the trenches. Then they put a 4-inch sand base above the drains. It can drain 15 inches of water in an hour.

The field was brought back to grade and sodded. The sod, which came from S&S Seed/Evergreen Sod operated by Gene Sanders, Rocheport, MO, is a blend of Kentucky bluegrass varieties. Turf-grid fibers tilled into the sand add stability to the base.

"We only have a four-inch sand base above sub grade, so when a hammer hits, it's like a cannonball coming into the turf at a 45-degree

angle," says Fresenburg.

"That's the best angle for maximum distance," says MU Track Coach Rick McGuire. He says his best throwers are Judd Price who flips the 12-pound

hammer 159 feet, and Heather White who flings the 8-pound, 10-ounce ball and chain 167 feet.

Once the ball hits, it slides more than half way under the sod. Meet officials just pull it out and get the hammer back to the athletes. Later the grounds crew fills in the holes with sand and tamps it down. In a couple of weeks, the hole is sealed shut by growing turf.

"The hammer does the most damage. The discus does very little and the javelin may actually be beneficial for aerification," says Fresenburg. "In fact, when our three-point-hitch aerifier wasn't working, we suggested to Rick McGuire that his team members take about 20 javelins and aerate the field." (Note: the aerifier was fixed before they had to do that.)

Field replacement job

The MU grounds crew maintains a lot more than just the track/soccer field. It also cares for all the grassy athletic areas between the MU golf course and the Hearnes Center. And MU's football field, unlike the track/soccer field, is crowned.

This season marks the third year that Missouri football players will be competing on real turfgrass at Faurot Field. After several attempts to patch damaged areas on the field, it was decided to renovate that field as well.

"We replaced the middle of Faurot Field from hash mark to hash mark, goal to goal, after the spring Black and Gold Game," says Fresenburg. "We removed all the sod and the silt loam soil down to the sand base and brought the field back to its original grade. Then we laid new sod."

Fresenburg says MU coaches cooperate when it comes to field maintenance. For instance MU Baseball Coach Tim Jamieson "spends a lot of time taking care of his field. If he sees a disease or sees something that needs to be done, he gets on the phone to us or takes care of it himself. In fact, he's so good at this, we've been thinking of giving him an honorary horticulture degree."

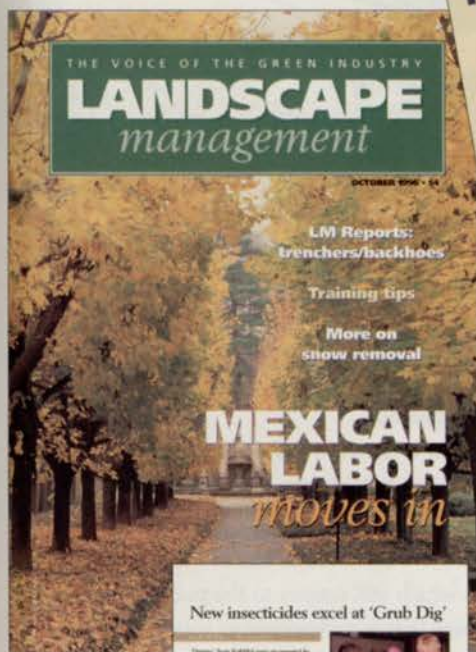
The next major task by Fresenburg and the grounds crew is the new softball diamond. "We'll lay the sod in April or May of '98 and the team will play on it in '99," says Fresenburg. □



"When a hammer hits, it's like a cannonball coming into the turf at a 45-degree angle," says Brad Fresenburg.

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**1st Place to Graphic Designer,
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Merit Award to Ron Hall,
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Merit Award to Ron Hall,
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AN IMPARTIAL panel of journalists, photographers and graphic designers has confirmed something we've known for some time now, and have proven over our 35 year history.

Six awards for writing and magazine design were presented to LANDSCAPE MANAGEMENT during the Turf and Ornamental Communicators Association (TOCA) annual meeting in May of this year. Entries were judged on innovation and style; clarity of message and grammar/punctuation.

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Junk mail jewels?

Don't sniff at those packets of coupons you get in the mail. They're a form of advertising known as cooperative direct mail, and some landscapers say they help to find customers.

By AMY K. REAVIS

Owning and operating a lawn care or landscape company today is a smart business venture. With the increase in one-parent households, and couples having to work outside of the home, people are

often too busy for yard work. The percentage of households using lawn care and landscape companies continues to rise. Even so, landscapers and LCOs are battling more fiercely for new customers every day.

One innovative form of advertising that many of them use to pinpoint specific geographic markets is called cooperative direct mail advertising. With this cooperative marketing concept the landscaper or LCO shares advertising costs and envelope space with other local businesses such as restaurants, dry cleaners, and automotive centers. As part of a cooperative direct mailing, with national companies such as Super Coups, Val-Pak, Money Mailer or United Coupon, each participating business has a customized coupon which is mailed in an envelope to a designated number of homes in a targeted area. Local residents gain valuable savings with the coupons.

Relatively inexpensive

Cooperative direct mail advertising is, compared to other advertising mediums, relatively inexpensive. The overall cost of a mailing is less than 4 cents per home. Generally this cost includes creative assistance from a cooperative direct mail sales consultant to design the coupon, as well as the printing, production, and mailing of your coupon to a designated area. Often the sales consultant will help you design



With cooperative mail, the landscaper or LCO shares advertising costs and envelope space with other local businesses, says Amy Reavis.



Direct mail coupons

are especially effective in advertising special offers and promotions to ignite the interest of potential customers.

a coupon which will convey to the public an image and message that is appropriate to your business.

Karen Heffner of Karen Heffner Landscape Design in Davidsonville, Md., has been advertising with Super Coups for the past five years and says, "I always have good results." She participates in a mailing twice a year, spring and fall, and found at first that she probably lost business because she included an expiration date. "I have stopped putting an expiration date on the coupon because of the seasonal nature of my business. People often aren't in a hurry to get landscape work done, but they do save the coupons, so this way they can use them whenever they want to."

A benefit of direct mail is the ability to reach the people you feel would most likely benefit from or partake of your services.

You can geographically target specific communities by zip code, those areas you feel should bring a greater response rate. Most businesses target between 20,000 to 50,000 homes, but generally you can start out mailing to only 10,000 homes in your local area.

When looking for a national cooperative direct mail company, make sure to ask whether your business will be given exclusivity. In other words, you want to be the only landscaper or lawn care company in the mailing for your particular mailing zone. This advantage will narrow your competition and bring you the customers you desire.

Make it colorful

A benefit of direct mail coupons is that you can personalize them with color. Several of the companies have available for your use a collection of clip art and stock photograph. That's important, believes landscape designer Karin Heffner.

"If you have a catchy logo and an eye-catching coupon, people tend to keep them and use them. I've seen my coupon on people's refrigerators," she says. "The sky's the limit and you can be as creative as you'd like, or you can simply tell your consultant what you'd like and the consultant will have it designed for you."

Direct mail coupons are especially effective in advertising special offers and promotions to ignite the interest of potential customers. Perhaps an offer of a free service with a seasonal agreement, or dollars off a project for new customers. Use your own judgment when determining what kind of offers to promote. As a general rule, coupons usually work best when targeting new customers who aren't aware of your business or service. Once you bring them in with the coupons, you will have an opportunity to impress them with your expertise and service.

Heffner has been successful in her local area with a promotion that she has been running in which she donates 10 percent of all proceeds to the Kevin Reichardt Scholarship Fund. The foundation was set up in this student's memory after his death several years ago. "Kevin was a star in the community and people want to contribute to his foundation. It gives me a good feeling to be able to do this for his family," says Heffner.

Build name recognition

It is well known that the key to successful advertising is repetition. It's beneficial to keep your company's name fresh and recognizable within your community. Consistent mailing with annual agreements involves higher redemptions and lower advertising costs. By advertising in each mailing, you inexpensively repeat your ad to the public creating name recognition, each time bringing in new customers. And since you attempt to attract a local, consistent

market of customers, it's only appropriate that you consistently target your advertising to the same general group of residents. Remember, repetition is the key to success.

According to a study by Frankel & Company and published in *DIRECT MARKETING MANAGEMENT MAGAZINE*, more than 99 percent of American households use coupons in their everyday shopping for both products and services. Of this group, more than 94 percent use direct mail coupons. With a high percent age of households guaranteed to use direct mail coupons, you can not afford not to invest in this successful type of personal marketing that allows you to enter a prospective customer's home, sometimes before they even know of your business.

Cooperative direct mail is personable, professional, of high quality and is proven to be effective. To learn more about it, look in your local Yellow Pages under Direct Mail Advertising or call one of these resources: Super Coups Cooperative Direct Mail at 800/626-2620; United Coupon at 800/368-3501; or Money Mailer at 800/624-5372. □

—The author is director of marketing for Marketing Solutions in Fairfax, VA, and an avid amateur gardener.

Tips for couponing success

- ▶ **Plan annual direct mail advertising budgets:** A preplanned yearly budget will reduce the cost of your overall campaign and will help keep your advertising consistent and repetitive.
- ▶ **Introduce new products and services:** If you have a new service, display a pertinent photo, or highlight the service on your coupon to draw in customers. Make sure your coupons say what the customers need to know.
- ▶ **Use full color:** Studies show that consumers prefer full-color ads 3-to-1 over black and white ads. Ad recall after 24 hours has been shown to be almost 70 percent for full-color ads versus 41 percent for black and white. Work with direct mail companies that can print in color for maximum results.
- ▶ **Use quality photos and clip art:** People tend to be attracted to photos first, then they read headlines before deciding if they want to search further for the specific details of an offer. Work with couponers that offer full-color art libraries as an extra free service to you.
- ▶ **Order coupon overruns:** An inexpensive way to get even better results from your coupons is to order an extra 2000 or more to display at your location, or to place in area businesses or restaurants where the public has access to them. You can also give them to clients to share with neighbors and friends. □

—by Glen Liset, vice president of Super Coups



Crabgrass is a culprit on athletic fields. By waiting until the grass is up and growing before spraying a field, Carey avoids reapplications.



One-man team MENDS LACROSSE FIELDS

John Carey, owner of Field Goal Athletic Turf, Peabody, Mass., does the fields over every spring, and aerates often to mend wear and tear.

Lacrosse players tear up an athletic field worse than any other team sport, says John Carey, owner of Field Goal Athletic Turf, Peabody, Mass. "They have only three areas of play—the face-off area and two goals," Carey adds. "Players put so much pressure on these areas that I usually end up rebuilding the fields every spring."

Among Carey's pet peeves are football and soccer coaches who run their drills on the same end of the field every time they practice their teams. "If the field is set up with one end nearest the locker room, they stay on that end to practice," he explains. "So you wind up with one end of the field really chewed up and requiring a lot of

work. If they would only move them up and down the field and outside the pre-emergence hash marks it would wear the field evenly."

Busy in Boston

A veteran of 14 years in athletic field maintenance, Carey has an intimate knowledge of many of the football, soccer, Little League and lacrosse fields within a 60-mile radius of Boston. Though he started the business with a partner, he bought him out seven years ago and works as a one-man operation for about 45 communities and schools. He specializes in field maintenance but finds himself moving into field construction as time goes on.

"When I first take on an account, I often begin by rebuilding the field," says Carey, a licensed turf manager who regularly attends turf seminars and workshops through the University of Massachusetts. "Generally, I strip out the area, regrade it, bring in some loam, crown it off and resod or reseed it. I use tractor-driven equipment and seed in several directions, paying special attention to the low spots. Athletic fields have to have a more solid root system be-

cause of all the wear and tear. It's not the same as caring for a lawn. Sports turf maintenance is a very specialized industry."

Educating customers

Field Goal Turf's basic program includes four scheduled visits each year, but Carey tries to call on each customer three or four times in between the planned applications. He evaluates field conditions and educates his customers regarding mowing, watering and general maintenance. His motto is: "We grow it, you mow it!" Most of his customers soon learn not to water at night during hot, humid weather and to keep mowing heights at 2 1/2 inches in warmer temperatures.

Aeration is the most crucial component of athletic field maintenance, says Carey. He subcontracts deep-tine aeration for the majority of his fields once a year in the spring. Without aeration, it would be difficult to get proper nutrients and plant protection materials into the root system because of the severe compaction on most athletic fields. So Carey begins his program each year with aeration and slice-seeding sometime in the spring.

"I slice-seed with a 75/25 mix of bluegrass and ryegrass," he explains. "Then I take soil samples from various areas and begin fertilization and weed control in June. I try to put down four pounds of N each year, but I don't apply pesticides unless I absolutely have to. In fact, I can't use crabgrass materials because I'm always seeding. I control crabgrass on a post-emergence basis, making sure the weed is up and growing before treating so that I don't have to come back to reapply."

Carey began using Acclaim 1EC Herbicide for postemergence crabgrass control when the product first came on the market eight years ago. He applies it at the rate of ¾ oz. per 1,000 square feet using a three-wheel Cushman vehicle. He sprays four acres to the tank and normally gets about 16 acres sprayed before the wind picks up each morning. As situations warrant, he

tank mixes Acclaim 1EC with fungicides, insecticides and broadleaf herbicides. "It's great to be able to apply a herbicide just when you need it and to only make one application," says Carey.

Fall treatments

Fall fertilization goes down in September just before football and soccer season starts. His fourth and last treatment is in mid-November, just before the Thanksgiving Day games. He began using Nutralene controlled release nitrogen two years ago: 1 pound of N per 1,000 square feet in his second and third visits and 1 ½ pounds on the fourth visit, with added lime if necessary. "This last application gets me through the first six weeks in the springtime, allowing me to concentrate on aerating and slice-seeding instead," he says.

In recent years, Carey's business has shifted to 35 percent field construction and

65 maintenance. He travels to other New England states to carry out various construction assignments, hiring local laborers and renting out bulldozer work. "This work is basically tearing up the old field, recrowning, putting back the clay and re-sodding the field," he says.

The marketplace has been kind to Field Goal Turf. Carey hasn't made a cold call since his first year in business. "Turf managers are a tight group and they ask each other who's taking care of their fields," he says. "I get all of my work through word of mouth now. But people also get to know me at conferences and shows, where I often give talks or have a booth. That's the great thing about the athletic field industry—business is booming." **LM**

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Wisconsin Federation starts 'Hall of Fame'

The Wisconsin Landscape Federation's Green Industry Hall of Fame was established in July, as 22 inductees were publicly introduced at an induction dinner.

Forty-four names were submitted for consideration. In subsequent years, no more than three persons will be added each year to the Hall of Fame. A permanent site has not yet been selected, but several sites are under review, according to Joe Phillips of the Wisconsin Landscape Federation.

Inductees include:

Ken Altorfer, McKay Nursery Co. Altorfer started a landscape design program to reach middle-class home owners through a volume approach;

Patrick Buckley, tree expert credited with initiating IPM for trees;

Sam Ferguson, founder and past president of the Horticulture Inspection Society;

Tom Lied, Lied's Nursery Co., a founder and past president of ALCA, and for many years the leader of the industry's "Crystal Ball" Committee;

Arnold Sieg, head of the landscape maintenance division of Bruce Co., who has been active with ALCA and the Wisconsin Landscape Contractors Association. □

Irrigation Assoc. supports Ill. contractor case

The Irrigation Association has voted to start a matching fund of \$7000 to help the Illinois Turf Irrigation Association pay legal fees in a case before the Illinois Supreme Court.

At issue is the right of irrigation contractors to assemble irrigation components downstream of backflow prevention devices. The issue centers around where a plumbing system starts and where it ends. In the past, the backflow device was considered the point where the plumbing system ends. However, a Chicago irrigation contractor was cited in 1995 for assembling an irrigation system downstream of a backflow device, which is legal according to common industry practices.

Contractors say they are being picked on because the Illinois Health Department does not require licensed plumbers to install overhead fire sprinklers, water conditioners and softeners and agricultural irrigation.

"If the Supreme Court does not correct this mistake, then our industry will be prevented from pursuing our trade and the price of irrigation system installation in the state will rise dramatically," says Michael Clark, irrigation manager for the Brickman Group, Ltd.

"Licensed plumbers charge twice as much as landscape contractors to install turf irrigation systems. Furthermore, the error might set a precedent for other states to follow. That would be devastating to our industry."

Dan Cassidy, president of the Illinois Turf Irrigation Association, says it takes five years of apprenticeship to become a licensed plumber, and there is only one question on the plumbing exam about irrigation systems. Cassidy says the backflow device manufacturers contributed to the heightened fear of backflow potential in the state health department, which led to this controversy. □

OTF has new address

The Ohio Turfgrass Foundation has a new address: P.O. Box 340546, Columbus, Ohio 43234; 614/760-5442; fax: 614/760-5431. □

New officers at Ore. Seed Trade Association

The Oregon Seed Trade Association has named Jay Burr, The Scotts Co., Gervais, Ore., as its new president for 1997-98. Vice president is Galen Tryer, Ampac Seed Co.; Nancy Aerni of Turf Merchants serves as secretary-treasurer.

Elections were held at the Association's annual convention in Sunriver, Ore.

The Hysop Professorship at Oregon State is nearly a reality, according to Dr. Leah Brillman. A fund of \$300,000 will be available for scholarships and turfgrass seed research, once all donations are realized and state matching funds kick in. □

NJ Alliance auction helps out

The Alliance for Environmental Concerns, Warren, NJ, added \$2900 to its coffers during a recent silent auction. The monies help support AEC operating expenses and programs.

Product contributors include Lebanon Turf Products; DowElanco; Novartis Turf & Ornamental Products; W.A. Cleary Co.; Barenbrug Seed Co.; Plant Food Company, Inc.; Wilfred MacDonald, Inc.; Lesco; and White Beeches Golf & Country Club.

The AEC tracks and reports on developments in legislation that directly affects product applicators. It supports reasonable pesticide regulations and sound application practices. □

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Prestonwood shop a champ

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Students catalogue course wildlife

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The team at Grand Traverse

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'Carbo load' fights winter kill

GOLF

The Everglades Golf Course Superintendents Association and Olde Florida Golf Club are establishing a test green for four new varieties of "ultradwarf" bermudagrasses.

The four varieties planted on the 2,500 square foot chipping green are FloraDwarf, Champion, TifEagle (TW-72) and MS-Supreme. Each variety will be planted in duplicate to insure the results can be validated.

Golfers are the driving force behind the project. As golfers demand faster, more uniform

greens, the existing varieties of bermudagrass cultivars for greens (Tifdwarf and Tifgreen) are becoming less acceptable. These two varieties were developed in the 1950s and 60s when golfers were happy with higher mowing heights.

Researchers are studying several new varieties of new dwarf bermudagrass hybrids that spread vigorously with little vertical leaf growth. All three varieties originated from Tifgreen. FloraDwarf and

Champion are both fine-textured mutations found on existing Tifdwarf greens. FloraDwarf was selected from a green in Hawaii and Champion was discovered in Texas. MS-Supreme was found as a fine-textured mutation on a Tifgreen (328) green in Mississippi. TifEagle is unique in that it is a mutation that was induced by gamma radiation from Tifway II, a common fairway turfgrass.

The existing green was being renovated as of mid-July. Basamid soil fumigant, donated by BASF, was used to kill the existing bermudagrass. The top six inches of greens mix were removed, and replaced by a mix from Golf Agronomic Supply and Handling. The new varieties will be planted in vertical strips later this summer, in equal amounts on the same date, and will receive

identical treatment. Aerification and vertical mowing will be done separately to reduce the risk of cross contamination. The project will officially run three years from the date of grassing.

The green will be mowed at about 1/8-inch, the preferred height for these "ultradwarfs."

Light, vertical mowing, and light, frequent topdressing will control thatch.

USGA Regional Director John Foy says this is an exciting time, but he urges caution.

"They are still unproven, and we must exercise caution to determine which ones are best suited for each location," says Foy. "It is side-by-side comparisons in a controlled test area, such as this, that will help determine that."

"TifEagle will require more thatch control than Tifdwarf to produce quality turf," adds the USDA's Dr. Wayne Hanna, developer of TifEagle. "However, with proper management, it will produce better quality and more dense turf at 1/8 inch than Tifdwarf."

"The test plots are going to be extremely valuable for our area," says Rick Tatum, superintendent of The Forest Country Club, Fort Myers.

"These new varieties are originating from areas all over the country, and by having them side by side in our climate, we will be able to determine which ones are best for our conditions."

Darren J. Davis is superintendent at the Olde Florida Golf Club, Naples, Fla. LM

Testing the 'ultradwarfs' for modern golf greens



Darren J. Davis

DARREN J. DAVIS
Guest Columnist



Each one of Prestonwood's superintendents and maintenance supervisors had a hand in fine-tuning the Club's new maintenance building.

A 'championship' maintenance facility

Prestonwood Country Club near Raleigh, NC, is one of the Nike Tour stops, but when it built its new maintenance building, it was the members it needed to please.

By RON HALL/Managing Editor

It's about 3 p.m. on a steamy Carolina afternoon. Laborers dressed in work boots, blue work pants and short-sleeve shirts swarm around compact tractors and large fairway mowers.

Some are refueling their machines. Several are blowing dirt and debris from them with air hoses that they pull down from overhead reels. Others are washing equipment. Each unit is readied for tomorrow's jobs. Then, the machinery is parked inside

the adjoining building. This maintenance program is truly a *program*.

Its heart is its maintenance building, and that heart has to be both big and efficient when that program is responsible for 54 holes as it is at Prestonwood Country Club in Cary, NC.

Indeed, just about every important function or decision related to golf course maintenance at Prestonwood CC radiates from the low-profile, 23,250-square-foot building.

The two-year-old maintenance building here is more than concrete block and steel, copper wires and plumbing. It's the hub of three 18-hole golf courses that, themselves, are surrounded by new, upscale residential neighborhoods. That's because the sale of homes and building lots drive Prestonwood CC development. The attraction, of course, is the golf and related recreational and social amenities at the Club. It's probably the largest private country club in North Carolina.

Hot economy spurs boom

There is no end in sight to development in and around Prestonwood CC. Nearby Research Triangle Park's concentration of high-tech industries is transforming Cary and other once-tiny communities surrounding Raleigh and Durham. Nobody knows when construction will stop. Or slow. Professional people are flowing into central Carolina to snatch up high-paying jobs. Many are eager to play year-round golf too.

"This is home to most of us. It seems like we spend more time here than we do at home," says John Hilton. He's referring to Prestonwood's maintenance building. He's head superintendent at Prestonwood CC, and he jokingly refers to himself as "the grandfather" of the staff.

While most golf or country clubs can't afford the maintenance facility's price tag, almost all of them can learn something from the cooperative effort that went into designing and building the facility.

Memories of dirt floor, no room

In a sense, the building reflects the strides that golf course maintenance has taken in the 30-plus years since Hilton started his career in golf.

"I can't help but remember the first building I ever worked with. It was open on two sides, had a dirt floor and was about 40 feet long and 10 feet wide," says Hilton, a genuinely pleasant man who sees his role at Prestonwood as contributing the practical experience he's gained over the years while fostering a spirit of "family" among the 66 fulltime golf maintenance employees.

It wasn't that long ago that Prestonwood CC itself was working out of a building that never really met its needs either. Not from the beginning. Not from 1986 when the initial developer of the country club bought 1200 acres of mostly farmland, and 1 1/2 years into the project, hired veteran superintendent Hilton to team with Ron Gilmore, director of golf course operations, to finish off 27 holes of golf, plus a 4-hole, par-3 addition.

"The construction was difficult because it was being done in a flood plain. It was kind of a tough project to do," recalls Hilton. Creeks criss-cross the property. Sustained rains make them overflow their banks. (Hilton estimates the 54 holes are now traversed by 17 to 20 miles of drainage.)

Prestonwood's first 9 holes opened in June 1988, the second in August 1988 and the third in September 1990. Since then, 9 holes have been added to each course, along with two practice greens (one of 23,000 sq. ft. and the other 11,500 sq. ft.), and a one-acre practice tee built to USGA greens specifications.

Early in construction Gilmore and Hilton started building the management team: Robert Coiley, superintendent of the Fairways Course; Bob House, Highlands Course superintendent; Jon Allen, superintendent for the Meadows Course; Christopher W. Griffith, Irrigation Superintendent.

In 1991 Prestonwood CC took a huge step forward when James Goodnight, Ph.D., bought the country club and dou-

bled the size of the original development. Dr. Goodnight owns SAS Corporation, a NC-based, global software company.

"It was Dr. Goodnight's intention to improve it, expand it and make it bigger and better," explains Gilmore. He did. But, golf course maintenance struggled to keep up working out of the 20-by-100 foot maintenance building.

"You really couldn't put anything inside of it," recalls Gilmore who, at one time, tried to maintain 49 holes of golf out of the 2,000-square-foot building. (Later a 20-by-40 foot mechanic's shop was added.) Equipment sat outside. Chemicals were stored in a vacant house on the other side of the development. They had to be brought to the shop to be mixed.

Getting started

By 1994 it was evident that Prestonwood needed a bigger and better maintenance facility to continue delivering championship-caliber conditions to members.

"Our members pay a lot of money to belong to the club and play golf. We recognize that they deserve a lot for it," says Gilmore.

Final approvals by General Manager Don Thomas and Dr. Goodnight allowed the Bobbitt Construction Company to begin work on a new maintenance building in October 1994. However, Goodnight and Thomas insisted that:

- ▶ there be a single maintenance building,
- ▶ it be low-profile and unobtrusive,

Room to move

The new maintenance building at Prestonwood is made of concrete block with steel studs. The interior is finished in fire-proof sheetrock. It's 310-by-75 feet (23,250 square feet) and contains:

- ▶ offices for the superintendents and two receptionists,
- ▶ a five-bay maintenance and equipment storage area;
- ▶ a chemical storage room with recessed concrete floor;
- ▶ a fertilizer storage room;
- ▶ a wood working and signage shop;



Eastern bluebirds thrive at Prestonwood CC thanks to nesting houses built in the wood shop by Norman Banks, Ph.D., a retired nuclear scientist and longtime club member.

▶ it be landscaped so that surrounding home owners don't resent living near it. (A task performed by former landscape superintendent Bill Mason, and maintained by current superintendent Kurt Nitschke.)

"Once construction started we all felt like this building was 'my' building. We all volunteered information and requests. Everybody had a hand in it," says Hilton. He insists that the team approach led to many improvements in the original design.

The one thing that everybody agreed upon is that the facility had to go beyond

- ▶ an employee lounge with full kitchen;
- ▶ an equipment repair shop with grinding room;
- ▶ a set up room with ice maker and washer and dryer. There's also a covered wash pad adjacent to the building.

The building also houses a central controlled computerized irrigation system for all 54 holes and surrounding landscape totalling 55 satellite field controllers. This Toro Network LTC system is maintained by Christopher Griffith, irrigation superintendent. □

RH



Equipment lift is a great time and labor saver, say Prestonwood mechanics.

existing statutes, including the pouring of the 5-inch concrete pad upon which the building rests—a single pour to avoid joints and seams. Then there's another 1½ acres of concrete surrounding the building with reinforced fiber mesh for added strength.

Liquid storage a priority

"All areas in this building are of great concern to us, but there are three areas in particular that we wanted to take extra care with," says Hilton. They are: chemical

storage, the wash pad, and the fuel system.

"The fuel system has made my life a lot nicer," claims Joe Seagroves, equipment superintendent and one of four equipment mechanics. He says the ignition key of each piece of equipment is coded so that the "Fuel Master" system records the amount of fuel each unit uses and how many miles of hours are on it. The system provides an accurate fuel inventory, prevents operators from putting the wrong fuel in their vehi-

cles, and aids in tracking PM.

Not that everything is rosy in the mechanics' lives in spite of working in a new building and with practically new mowers and tractors.

Since all the equipment is about the same age (finishing the first year of a three-year John Deere lease), routine maintenance on over 100 units all happens about the same time. "In a way, it's kind of a maintenance nightmare," admits Seagrove.

Nor, did everything associated with the maintenance building turn out perfect. For instance, nearby homeowners complained about the night lights at the facility—too bright. "We had to go to a different type of light," says Hilton.

But these are minor glitches, and Hilton says he and his team of superintendents and their crews can maintain Prestonwood's 54-holes more efficiently and, ultimately, to a higher-quality level because of the state-of-art facilities.

The superintendents and mechanics that use the building daily come up with new suggestions to make the facility more efficient and safer.

"We stress safety and sanitation here, and try to put things in place that allows us to have those things," says Hilton. "Everybody is free to put their ideas on the table. It's a real good environment here." □



Workers try to keep everything in its place in the maintenance building.



Equipment Supervisor Joe Seagroves (left), Superintendent John Hinkle (center), and Ron Gilmore, director of golf course operations, have room to work efficiently.



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Circle No. 131 on Reader Inquiry Card

Students kickstart sanctuary program

Innovative Texas A&M program can put superintendents on the road to Audubon Wildlife Sanctuary certification.

Many golf courses throughout North America are attaining certification under the USGA/Audubon Society Cooperative Sanctuary Program.

When they become certified, they join select company.

As of late spring, only 95 superintendents had completed the strenuous six-part program, says Marla Briggs, an ecologist with Audubon. The program has been in existence since 1991. About 2,000 golf courses in the U.S. and Canada have paid a \$100 membership fee as the first step in qualifying for the wildlife sanctuary designation.

One of the hot spots for the program is Texas where some 70 of the state's 900 golf courses are involved in the wildlife sanctuary certification process.

"It's the right thing to do," says Charles Joachim, superintendent at Houston's Champions Country Club, believes the program is "the right thing to



Seventy of the 900 golf courses in Texas are in the Audubon certification program.

do." His course was built in the late 1950s, after it was literally cleared of its trees, and "civilized," so to speak.

"Now we *know* we're in the city, and we have gone 180 degrees," Joachim says. "We're trying to make it be more like it was in the natural setting."

Helping out

In Texas, turfgrass students at Texas A&M University are teaming with turfgrass researcher Dr. Richard White to help superintendents in their initial steps toward certification. The group offers to conduct surveys to document wildlife and plant species that are present on participating

courses as they begin the road to sanctuary status.

The service is offered at-cost, but donations are appreciated, says White. "The students know this is important for the environment," he explains. "They see the golf course as a whole—not just the turf—and start thinking about ways to make it better. They get to begin applying principles they are learning in class."

White says that other turfgrass schools may want to consider starting similar services. "It's not as difficult as it may seem. It's something that would fit in many university wildlife/turf programs."

Adds Audubon's Marla Briggs, "We've talked to some other university's about this, but Texas A&M has been the leader so far."


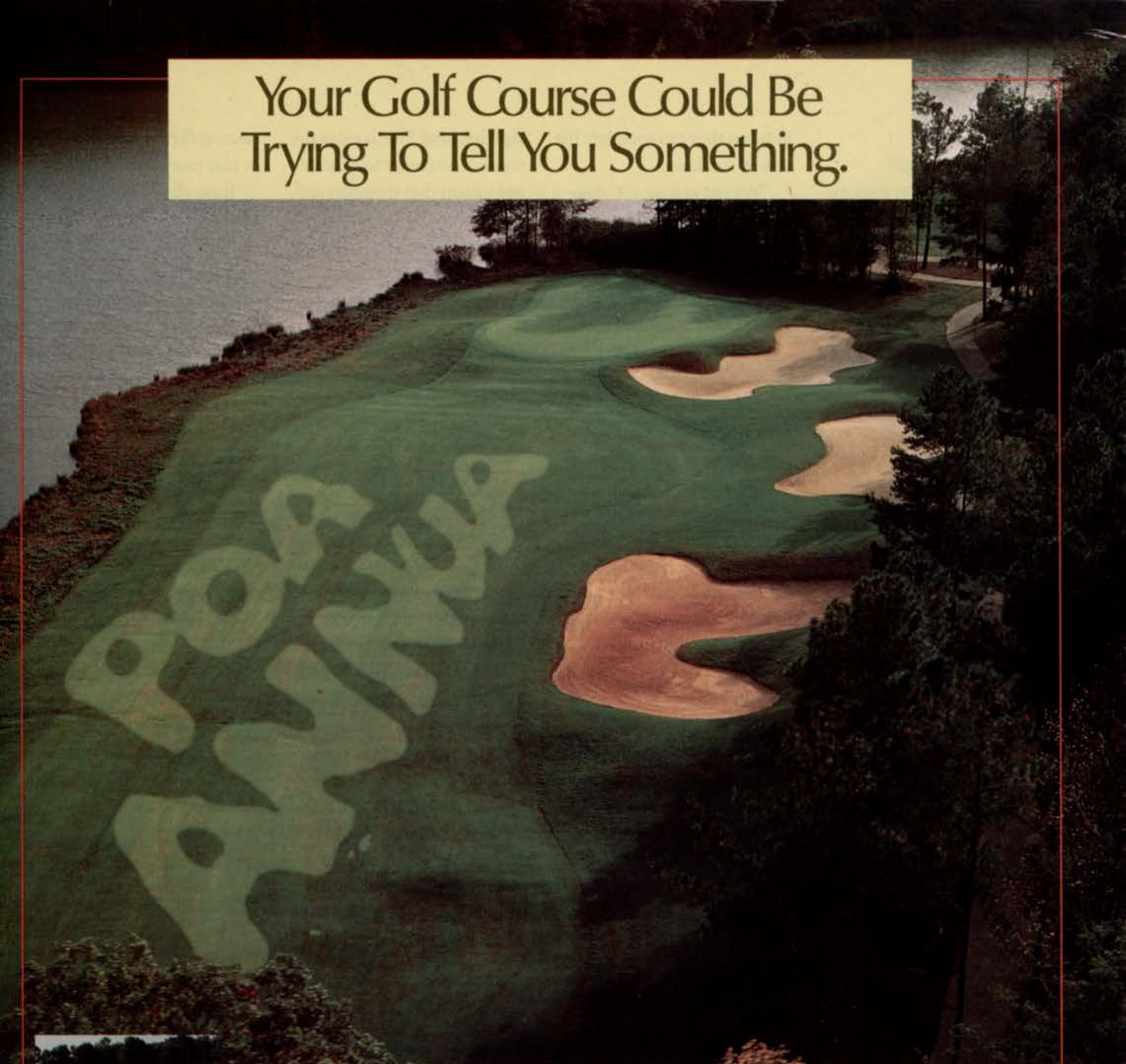
This initial involvement by the Texas A&M Turf Club can be a great service to superintendents.

"The golf course superintendent wears a lot of hats," says White. "The students can supply some of the expertise that the superintendent might not have." When an unfamiliar plant or animal is located the students can bring it back to campus and do the legwork to get it identified, White says.

cont. on page 8G

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Circle No. 103 on Reader Inquiry Card

cont. from page 6G

"Working with golf courses—where most students hope to land jobs after graduation—is an excellent teaching tool."

Teeing off

The Turf Club students begin the process by dividing into teams for photography, property/adjoining land use, plant inventory and superintendent information. By working

in teams they can complete the task by sundown.

"We put at least 100 man-hours in during one day," White reports. "That's something a golf course superintendent would find difficult to do given time commitments."

Joachim agrees, "I gave the students some pointers on where to find wildlife and native plants, but I would not have had time to do it myself."

On the green

Another environmental success story is unfolding at Bent Tree Country Club in Dallas. When Keith Ihms took over as superintendent there he made the sanctuary certification one of his priorities. He said having the students available to do the initial resource inventory allowed him to concentrate on the other duties in his new position.

"Some people have the impression that we (at golf courses) spray with a lot of pesticides and waste water, but we are doing what we can to change that," says Ihms. He

says that Bent Tree is using the resource inventory to educate and inform club members and the surrounding community about wildlife on the course.

This project has increased the students' awareness of environmental concerns, says Dr. Richard White.

He's also looking into partnering with a local private school to build nesting boxes for the different types of birds that live on and around the golf course.

White points out that an open-door policy for wildlife has some drawbacks too, things like bird droppings, damage done to turf and ornamentals by large mammals, or the establishment of natural habitats in unsuitable locations that will

cause golfers to lose more balls or play more slowly.

Ihms agrees, but he says Bent Tree can learn to work through these problems. For instance, he contracts with an experienced trapper to humanely catch problem animals and relocate them on neighboring ranches. Recently, in fact, personnel at the course rescued some baby beavers orphaned because of unusually heavy rains. They ended up in an animal rehabilitation center to be nursed back to health.

That's a great learning experience, says White, as is participation in the sanctuary program in general.

"The exposure is great. This project has increased the students' awareness of environmental concerns and is something they will carry with them through their careers," says White. □

Audubon in review

The wildlife sanctuary certification program begins with the resource inventory. From that, the Audubon Society of New York writes a report on environmental planning specific to the particular golf course. Next, a workbook is given to the course, with five areas of concentration:

- ▶ water quality management
- ▶ water conservation
- ▶ integrated pest management
- ▶ wildlife and habitat management
- ▶ outreach and education.

Full certification may take one to three years, depending on the environmental condition of the golf course when it begins, says Marla Briggs.

"A golf course can do all five at once, or one or two at a time." "When they finish the workbook, we review and, if all is satisfactory, accept it for full certification.



Keith Ihms, superintendent at Bent Tree CC in Dallas said students' help with the initial resource inventory of the Audubon wildlife sanctuary program allowed him to concentrate on his other duties.



GRAND TRAVERSE growing strong

Two hotels, multiple condo units, two golf courses, and two more courses being built, all make it essential that the GTR management team and staff be on the same page and ready to go.

by TERRY MCIVER, Editor-in-chief

PHOTOS BY JOHN PAYNE

Grand Traverse Resort is the Midwest's largest full-service, year-round resort and conference center.

Located at the 1400-acre Grand Traverse Resort Village, in the northwest corner of Michigan's Lower Peninsula, it has been rated among the top 20 mainland resorts and top 50 travel destinations in the world.

Landscape management responsibilities include the grounds around the Tower Hotel and the smaller Resort Hotel; 236 condominiums; and the two Audubon Cooperative Sanctuary championship golf courses. The Bear Course was designed by Jack Nicklaus. Spruce Run was designed by Bill Newcomb.

A Gary Player signature course ('Northern Knight') is expected to open in 1998. Another, Lee Trevino signature course has yet to be named, and is planned for a 2000 tee time.

Everybody on the same page

Mike Meindertsmas, director of golf at the Resort, is into the people and business management side of things.

"I manage our superintendents and assistants and golf professionals, and even our construction, so my success rests squarely on the shoulders of the people who work with me.

"Being involved with all the aspects of golf operations is a real benefit," explains Meindertsmas. "It's a little bit atypical to have a director of golf who oversees golf maintenance, golf pro shop operations and golf development operations, but it makes all the sense in the world. At times, at some courses there can be a polarity between maintenance and the professional staff, whereas having one person lead the charge for both entities gets you away from that 'early tee time you didn't know about', or 'why are they aerifying today'?"

"The communication systems are there so that everybody knows what everybody's doing. There's no intentional or unintentional surprises."

Many equipment colors

Meindertsmas is not a brand loyal equipment buyer.

"When we buy equipment, we buy the piece of equipment that's going to work best for our situation," he explains. "Some

▲ Fairways at the Bear Course have ample landing areas, but it takes a precise approach to avoid mounds, bunkers and ponds.

of it happens to be red, some of it happens to be green, some of it happens to be orange, some of it happens to be a different shade of green. That's the most logical way to do it, in my opinion. The maintenance of the grounds is diverse enough to warrant different types of equipment."

New courses going in

James Bluck II has managed Spruce Run since April. Prior to that time, he was assistant at The Bear.

Bluck coordinated the resort's certification efforts for the Audubon Cooperative program. With those duties completed, his attention is focused elsewhere.

"We're involved mainly with the construction of the new golf courses going in," says Bluck. "We have four or five holes going through the existing course, which keeps us quite busy. We're losing one hole and having to use a practice par 3 until it gets replaced, and we're building different sets of tees to direct players away from construction.

cont. on page 12G



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The foundation of good disease management.



cont. from page 9G

"We're building an additional pond and drainage through to the clubhouse parking lot. A lot of the drainage goes through Spruce Run, so we've put an additional 100 feet or so on the pond, and two foot underground piping for drainage."

Bunkers a challenge

Doug Kendziorski has been superintendent of the Bear Course for three years, during which time he's seen the need for changes in bunker design. The high bunker faces are a Nicklaus trademark, but they're tough to tend, and are trouble for guests.

"Golfers have torn chunks of turf out as they climb out of the bunkers. We've been going around and fixing them as we go this summer. We want to bring that edging down to the very base of the bunker. We'll pull the sand down, put in new edging, add topsoil to it, and sod it. We've done it extensively at Spruce Run for the past three or four years. They're so much easier to maintain if they're flat-bottomed bunkers.

"Taking some trees out where we can get better morning sun has helped greatly," says Kendziorski. "I can't stress enough the importance of morning sun. Number 3 is probably the healthiest it's been in five years because we removed 10 or 12 trees."

Wetting agents work

Both golf course crews are using wetting agents again, with good results.

"We've had great success this year, versus the past three or four years when we

got off the wetting agent program," says Kendziorski. "This year we jumped back on the program, and started out with one of the new generation of wetting agents (Primer 604, from Aquatrols).

"The wetting agent really makes a difference in the man-hours we have to spend maintaining the hot spots on the greens. On the tees we probably use 25 percent less water, or close to it. On greens, we probably use 10-15 percent less."

Kendziorski is committed to giving golfers the best course conditions possible.

"There's nothing the golfers like more than having a golf course that's true from green to green, where the bunkers are raked and level, trees are nicely trimmed and everything's in place," he says.

"And it really doesn't take a lot more time to train someone to do the job right every time."

Lots of work needs good people

As superintendent of grounds, John Meyer keeps the hotel and condo properties in shape, which he claims is a simple task compared to finding enough good



Mike Meindertma, director of golf at Grand Traverse Resort, knows the environmental and financial concerns connected to product applications.

workers.

"The easy part of the job is mowing the grass, pruning the bushes and planting the flowers," says Meyer. "The hard part is finding qualified employees in sufficient numbers when you need them."

Meyer advertises in the local paper and by referrals.

"The grass doesn't stop growing in August," says Meyer, "and I need people to work up until November 15, to help put up Christmas lights. I have probably 600 man-hours in Christmas decoration work."

Meyer's 20 employees manage flowers, trees and shrubs. They fertilize the grounds, install irrigation; mow and mulch; service the interior plantscapes of the hotels; conduct spring and fall cleanups and apply control products. In winter comes the snow-related work.

The impression one gets after visiting the Grand Traverse Resort is that it's staffed with a dedicated team of people who are hands-on, people-oriented and friendly.

And, they are clearly tuned in to customer service.

"Everybody's got the same philosophy," says Bluck. "Quality comes first. Concentrate on guest service, have as nice a golf course as you can." □



Grand Traverse Resort has four silver medals from *Golf Magazine* in the golf resort category.

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Winter kill linked to carbohydrate levels

by BILL KNOOP, Ph.D.

Now that the hottest days of summer are nearly over, it might be time, at least for those in the South, to start thinking about getting their warm-season turfgrasses through the winter. Fall management programs have a great deal to do with winter survival.

When a warm-season turfgrass dies sometime during the dormant months, the term "winter kill" is used. The term is not easy to define, and there are many points to consider. The best way to understand "winter kill" is to understand how the system works under ideal conditions.

Carbohydrate deficiency

In the fall after the first cool days, plant growth significantly slows down. The plant is still green and is capable of manufacturing carbohydrates. When plant growth is high, the demand for these carbohydrates is very high, but in the fall the carbohydrate supply exceeds the demand so carbohydrates

are available for storage. This can be critical. The warm-season turfgrass plant must store enough carbohydrates during the fall to get it through the winter. Remember the dormant plant is not dead, but very much alive, and uses its carbohydrate reserve at a low rate. How long the plant can stay dormant has a lot to do with the stored carbohydrates.

In spring, the plant must have enough carbohydrates to grow a new set of leaves. If winter has been exceptionally long, and the spring is then cool, the plant's carbohydrates may be fully depleted before it greens up. This is called "winter kill."

This may be the case when bermuda greens are over-seeded and over-seeding is allowed to remain too long. Thick over-seeding may tend to help keep

the green cool. A slightly different form of winter kill may take place if the plant greens up in the spring, but is "killed back" by a period of below-freezing weather. If this happens once or twice, it's usually not serious but if the green up/freeze back cycle is too frequent, the plant may run out of carbohydrates and die. This may be the most common form of winter kill. The plant uses a high amount of its carbohydrate reserve to establish its leaf system. As soon as bermuda begins to green up, everything must be done to get rid of the overseeding.

Spring dead spot

The dormant plant may be attacked by a disease sometime during the dormant period. The best example is "spring dead spot" disease.

These are areas of grass that simply do not green up. The spots

may be from a few inches in size to more than a foot. It seems to be a random disease, mostly confined to the upper south. A turf area may have spring dead spot for a few years in a row and then never have it again.

Low temperature

Direct low temperature is another form of winter kill. It may just get cold enough to kill a warm season turfgrass. It's hard to say just how cold it has to get before a warm-season turfgrass can be killed. A lot depends on how fast it got cold. A plant that is too dry or too wet may be more susceptible to low temperature injury.

Warm-season turfgrasses that do not survive their dormant period may not have died for just one reason. Most times, several factors may combine to cause the death of the plant.

Management factors have been found to contribute to winter kill. Turf on compacted soils tends to be more susceptible. Other factors: low mowing height and too much fertilizer (especially soluble nitrogen).

Sensible management is the best way to prevent problems, including winter kill, but sometimes it just gets so cold that nothing could have been done to prevent it. **LM**

Knoop is LANDSCAPE MANAGEMENT'S technical editor.



Spring dead spot may appear for a few years, then never again.

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IA supports Illinois contractor case

The Irrigation Association reports it will start a matching fund of \$7000 to help the Illinois Turf Irrigation Association pay legal fees in a case currently before the Illinois Supreme Court.

At issue is the right of irrigation contractors to assemble irrigation components downstream of backflow prevention devices. The issue centers around where a plumbing system starts and where it ends. In the past, the backflow device was considered the point where the plumbing system ends. However, a Chicago irrigation contractor was cited in 1995 for assembling an irrigation system downstream of a

backflow device, which is legal according to common industry practices.

Contractors say the Illinois Health Department does not require licensed plumbers to install overhead fire sprinklers, water conditioners and softeners and agricultural irrigation.

"If the Supreme Court does not correct this mistake, then our industry will be prevented from pursuing our trade and the price of irrigation system installation in the state will rise dramatically," says Michael Clark, irrigation manager for the Brickman Group, Ltd. "Licensed plumbers charge twice as much as landscape contractors to

install turf irrigation systems. Furthermore, the error might set a precedent for other states to follow. That would be devastating to our industry."

Dan Cassidy, president of the Illinois Turf Irrigation Association, says it takes five years of apprenticeship to become a licensed plumber, and there is only one question on the plumbing exam about irrigation systems.

Cassidy says the backflow device manufacturers contributed to the heightened fear of backflow potential in the state health department, which led to this controversy. □

GCSAA/USGA/NTEP pick research greens

The GCSAA and USGA and National Turfgrass Evaluation Program have begun an on-site research project to evaluate new and widely-used cultivars of creeping bentgrass and bermudagrass. Trials will be conducted on golf courses where the cultivars can be maintained at the exacting standards of today's golfer.

"On-sited testing of turfgrass cultivars is not a new concept," reminds Dr. Bob Shearman, NTEP executive director,

"however, the joint sponsorship of on-site putting green trials to evaluate creeping bentgrass and bermudagrass cultivars by [the three associations] is new. That's why we like to refer to this program as 'back to the future,'" says Shearman.

Golf course superintendents have been asking for some time to have information that bridged the gap between small-plot university trials and their end-use needs. This program will do just that and will be

NEW OTF ADDRESS

The Ohio Turfgrass Foundation has a new address: P.O. Box 340546, Columbus, Ohio 43234; 614/760-5442; fax: 614/760-5431.

based on sound research approaches," continues Shearman. "It really brings the industry together in a cooperative effort to meet its informational needs."

Research sites include: CC of Green Valley, Green Valley, Ariz.; Westwood CC, Vienna, Va.; Westchester CC, Rye, N.Y.; The Missouri Bluffs, St. Charles, Mo.; The Jupiter Island Club, Hobe Sound, Fla.; The Country Club of Birmingham, Birmingham, Ala.; SCGA Members Club, Murrieta, Calif.; Purdue University North, Purdue Univ. West, Ind; North Shore Country Club, Glenview, Ill.; Lakeside Country Club, Houston, Texas; Fox Hollow at Lakewood, Lakewood, Colo.; Crystal Springs Golf Course, Burlingame, Calif.; Country Club of Mobile, Mobile, Ala.; Boone Links/Lassing Pointe Golf Course, Florence, Ky.; Bent Tree Country Club, Dallas, Texas.

Seed company sponsors are: Tee-2-Green Corp; Lofts Seed, Inc.; E.F. Burlingame; Seed Research of Oregon; Zajac Performance Seeds; Pickseed West; Jacklin Seed Co.; Turf Merchants, Inc.; Lesco; Sunbelt Seeds; International Seeds, Inc.; Seeds West, Inc.; Cascade International Seed Co.; Thomas Bros. Grass Co. □



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 28 20 **Manager/Superintendent**- Arborist, Architect, Landscape/Grounds Manager, Superintendent, Foreman, Supervisor
 29 30 **Government Official**- Government Commissioner, Agent, Other Government Official
 30 40 **Specialist**- Forester, Consultant, Agronomist, Pilot, Instructor, Researcher, Horticulturist, Certified Specialist
 31 Other Titled and Non-Titled personnel (please specify) _____

3. SERVICES PERFORMED (Check ALL that apply)

31 A Mowing
 32 B Turf Insect Control
 33 C Tree Care
 34 D Turf Aeration
 35 E Irrigation Services
 36 F Turf Fertilization
 37 G Turf Disease Control
 38 H Ornamental Care
 39 I Landscape/Golf Design
 40 J Turf Weed Control
 41 K Paving, Deck & Patio Installation
 42 L Pond/Lake Care
 43 M Landscape Installation
 44 N Snow Removal
 45 O Other (please specify) _____

4a. Do you specify, purchase or influence the selection of landscape products? Yes No

4b. If yes, check which products you buy or specify: (check ALL that apply)

46 1 Aerators
 47 2 Blowers
 48 3 Chain Saws
 49 4 Chipper-Shredders
 50 5 De-icers
 51 6 Fertilizers
 52 7 Fungicides
 53 8 Herbicides
 54 9 Insecticides
 55 10 Line Trimmers
 56 11 Mowers (reel/rotary)
 57 12 Snow Removal Equipment
 58 13 Sprayers
 59 14 Spreaders
 60 15 Sweepers
 61 16 Tractors
 62 17 Truck Trailers/Attachments
 63 18 Trucks
 64 19 Turfseed
 65 20 Utility Vehicles

5. Do you have a modem? Yes No

6. Do you subscribe to an on-line service? Yes No

7. Is CD-ROM available in your workplace? Yes No

101	119	137	155	173	191	209	227	245	263	281	299
102	120	138	156	174	192	210	228	246	264	282	300
103	121	139	157	175	193	211	229	247	265	283	301
104	122	140	158	176	194	212	230	248	266	284	302
105	123	141	159	177	195	213	231	249	267	285	303
106	124	142	160	178	196	214	232	250	268	286	304
107	125	143	161	179	197	215	233	251	269	287	305
108	126	144	162	180	198	216	234	252	270	288	306
109	127	145	163	181	199	217	235	253	271	289	307
110	128	146	164	182	200	218	236	254	272	290	308
111	129	147	165	183	201	219	237	255	273	291	309
112	130	148	166	184	202	220	238	256	274	292	310
113	131	149	167	185	203	221	239	257	275	293	311
114	132	150	168	186	204	222	240	258	276	294	312
115	133	151	169	187	205	223	241	259	277	295	313
116	134	152	170	188	206	224	242	260	278	296	314
117	135	153	171	189	207	225	243	261	279	297	315
118	136	154	172	190	208	226	244	262	280	298	316



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August 1997

This card is void after October 15, 1997

NAME (please print) _____
 TITLE _____
 FIRM _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP _____
 PHONE (____) _____ FAX (____) _____
 INTERNET/E-MAIL ADDRESS _____

I would like to receive (continue receiving) LANDSCAPE MANAGEMENT free each month: Yes No

Signature: _____ Date: _____

1. My primary business at this location is: (check ONE only)

- 01 250 GOLF COURSES
- CONTRACTORS/SERVICE COMPANIES**
- 02 255 Landscape Contractors (installation and maintenance)
 03 260 Lawn Care Service Companies
 04 265 Custom Chemical Applicators (ground and air)
 05 270 Tree Service Companies/Arborists
- 06 275 Landscape Architects
 07 280 Land Reclamation and Erosion Control
 08 285 Irrigation Contractors
 Other (please specify) _____

INSTITUTIONAL FACILITIES

- 09 290 Sports Complexes
 10 295 Parks
 11 300 Right-of-Way Maintenance for Highways, Railroads or Utilities
 12 305 Schools, Colleges, Universities
 13 310 Industrial or Office Parks/Plants
 14 315 Shopping Centers, Plazas or Malls
 15 320 Private/Public Estates or Museums
- 16 325 Condos/Apartments/Housing Developments/Hotels/Resorts
 17 330 Cemeteries/Memorial Gardens
 18 335 Hospitals/Health Care Institutions
 19 340 Military Installations or Prisons
 20 345 Airports
 21 350 Multiple Government Municipal Facilities
 Other (please specify) _____

SUPPLIERS & CONSULTANTS

- 22 355 Extension Agents/Consultants for Horticulture
 23 360 Sod Growers/Turf Seed Growers/Nurseries
 24 365 Dealers/Distributors/Formulators/Brokers
- 25 370 Manufacturers
 Other (please specify) _____

2. Which of the following best describes your title? (check ONE only)

- 27 10 **Executive/Administrator**- President, Owner, Partner, Director, General Manager, Chairman of the Board, Purchasing Agent, Director of Physical Plant
- 28 20 **Manager/Superintendent**- Arborist, Architect, Landscape/Grounds Manager, Superintendent, Foreman, Supervisor
- 29 30 **Government Official**- Government Commissioner, Agent, Other Government Official
- 30 40 **Specialist**- Forester, Consultant, Agronomist, Pilot, Instructor, Researcher, Horticulturist, Certified Specialist
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117	135	153	171	189	207	225	243	261	279	297	315
118	136	154	172	190	208	226	244	262	280	298	316

Events

AUGUST

15-17: TAN-MISLARK Convention, Texas Assn. of Nurserymen, Dallas Convention Center; Patti Willey, (800) 880-0343.

21: Indiana State Lawn Care Association Field Day, Oak Hill Mansion and Northern Beach Park, Indianapolis, (317) 575-9010.

21-24: Associated Landscape Contractors of America, Sales Symposium Fairmont Hotel, Dallas, Texas. Contact: ALCA, (800) 395-2522.

27: Ohio Turfgrass Foundation Field Day, The

Ohio State University Turf Research Plots, Columbus, Ohio, (614) 760-5442.

27: Georgia Turfgrass Field Day, Georgia Experiment Station, Griffin, GA; contact Douglas Moody, (770) 975-4123.

28: Michigan State University Turfgrass Field Day, Hancock Turfgrass Research Center, MSU Campus, East Lansing, MI. Contact Kay Patrick (517) 321-1660.

SEPTEMBER

2-4: The Sports, Amenities and Landscaping Trades Exhibition, Royal

Windsor Racecourse, England; Andy Center +44 (0) 1932 564455. E-mail: indexh@compuserve.com.

4-5: Southwest Horticultural Trade Show, Phoenix Civic Plaza, Phoenix, AZ; Arizona Nursery Assoc., (602) 966-1610.

4-6: GrowTech, International Trade Exhibition and Conference on Horticulture, Miami Beach Convention Center, Miami Beach, FL; (617)-720-0656.

10-13: Florida Nursery Growers and Allied Trades Show, Orange County Convention Center, Orlando, Fla.; (407) 295-7994 or (800) 375-3642.

16-18: Virginia Turf and Landscape Field Days,

Virginia Tech Campus, Blacksburg, VA; contact David McKissack (540) 231-5897 or turf1@vt.edu.

17: LCA SuperShow, Howard County (Maryland) Fairgrounds; LCA; (301) 948-0810.

18: Mid-Atlantic Athletic Field Managers Field Day, MacGruder High School, Rockville, MD; (410) 290-5652.

24: Va. Tech. Hampton Roads Ag Research Field Day, Extension Center, Virginia Beach, VA; Dr. Bonnie Appleton, (757) 363-3906. **LM**



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Golf Course Superintendent
Oak Hills Country Club
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people like. Like other organic mulches, it starts decomposing and turns itself into organic material which feeds the roots of the plants. There are some fungi that can form on the mulch, though, if it is left alone. A simple way to prevent this is to freshen your mulch (by raking it or redistributing it) about once a month.

► Pine or cypress bark mulch is a slower decomposing mulch than hardwood bark. They are popular to use as a cover-up, such as flanking a sidewalk up to a front door.

► Straw is most often used as a winter protection and as a summer mulch in fruit and vegetable planting. It may carry weed seeds, and it is flammable. Don't use hay.

► Stones, rocks or pebbles

have their place in mulching but usually in small amounts for color contrast or to highlight a certain area.

There are many other mulches such as black polyethylene, sawdust, and buckwheat hulls, that are used for specific plants and areas. But, keep in mind that whatever the mulch, two to three inches is enough, or the mulch will interfere with the root system's oxygen. Also, to prevent insect infestation, don't spread mulch right up to a house. Leave six to eight inches of bare dirt around the foundation.

One more thing to remember about mulch—if it's already there, and you're going to plant, rake it off. If the soil is poor and needs some organic matter, you can rototill old organic mulch into the soil, but don't use new. Otherwise, the mulch will use the needed nitrogen to decompose instead of leaving it for the plants.

You can get more information on mulch from your local extension office, or at Ohio State University's web site (<http://hortwww-2.ag.ohiostate.edu/hvp/HVP1.html>). **LM**

Mulch is a material, organic or inorganic, that's spread on the soil around and under plants. This is, admittedly, a broad definition, and makes for a lot of choices. All of the products have their pluses and minuses, so what it comes down to, in most cases, is what your customers want to see in their yards or gardens.

All mulches, from peat moss to rocks, do three basic things: hold soil temperature steady, reduce moisture loss, and help reduce weed growth. But mulch does these things in different ways. Here's a glimpse at some of the more popular mulches and their benefits:

► Peat moss is generally available and ideal for mulching evergreens and other plants that grow

best in acidic soil. It remains effective for one or two years, depending on the amount applied.

► Hardwood bark mulch is shredded hardwood, such as oak, and has a dark color many

Mulches: take your choice

by HEATHER FRANTOM, Ohio State University

Sprayer made for the "Gator"

John Deere offers a new 50-gallon sprayer designed for its Gator Utility Vehicle. The square, poly tank has a locking lid and air gap filler. Features include: heavy-duty skid assembly with straps and hose lock, a 3.5-hp B&S engine with manual start and a Hypro 4 roller pump. Jet agitation and 25 feet of ½-inch high-pressure hose with an aluminum trigger grip spray gun provide the power and tools required for optimum performance. The 50-gallon sprayer is also avail-



able with optional equipment including speed-0-meter, electronic speedometer/odometer/hour meter and digital readout of miles per hour or distance traveled per hour.

Circle No. 264

Unit removes dangerous infield ridge

Kromer now offers an economical pull-type groomer/liner/sprayer. It may be used as a groomer only, or as a groomer and line painter with the same attachments as used on the Kromer AFM. Features include a spring tooth harrow, leveling blade, and nylon broom to make infields safe for athletes because the unit eliminates the dangerous infield ridge that often develops. Line football and soccer fields quicker and easier while riding. Contact the Kromer Co. at 800/373-0037, or

Circle No. 266



Davey Tree offers line of premium tools

The Davey Tree Expert Company now offers Davey Yard and Garden Tools. The premium line of tools, being sold retail, come with a life-time limited warranty, gardening tip booklets provided with each sold item and an 800 number which connects customers to Davey's technical support center for answers to tree, shrub and lawn care questions.

"We've positioned Davey's Yard and Garden Tools as a premium line that independent lawn and garden product dealers can sell without worrying about seeing the same tools in a national discount chain or home center," said Gordon Ober, vice president. For more information about the new line of tools, contact Ober at 800/447-1667, ext. 7, or

Circle No. 265



> PRODUCT REVIEW

Grotech spreader for all seasons



Grotech's MPS-125 is a multi-purpose, multi-season spreader. Spread seed, fertilizer and granular chemicals on turf in season, then turn the MPS-125 to winter maintenance, spreading ice melt and sand on your parking areas when the weather turns cold. This spreader also

mounts on any tractor, front mower, utility vehicle, golf cart or truck.

The spinner height adjusts 24" vertically, on a 3-pt. hitch mount. The spreading pattern adjusts from 4 to 40 feet. The MPS has a 9 cu. ft./600 lb. capacity. A single lever joy stick allows the operator to control the spreading pattern from his/her

seat. Other features: thermoplastic hopper with stainless steel throat liner, enclosed 12V hi-torque motor mounted inside a sealed housing, stainless flow control gate, weather-proof electrical connector.

Call Grotech at 800/725-8377 and mention Landscape Management, or

Circle No. 267

Powerhead trims around sprinkler heads

Powerhead is a new cutting device for high speed trimming around irrigation sprinkler heads. It fits all power trimmers using just a bolt and washer. Once positioned over a sprinkler head, the grounds maintenance operator simply revs the

power trimmer motor, trimming the turf around the sprinkler head within 2 to 3 seconds.

The Powerhead trimming disk is a one-piece nylon unit with four

vertical cutting blades and 24 vanes that create a vacuum, pulling grass into the cutting blades helping to give a clean, precise cut. Powerhead is distributed by United Horticultural Supply which can be reached at 503/678-9000. Mention Landscape Management, or

Circle No. 268



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Turfco cuts tight circles

The Turfco Pro Lite Sod Cutter is powered by either a 5-hp Briggs & Stratton or Honda engine and will cut angle slot to install brick edging. Since there are only two controls, it is easy to operation. This unit will cut tight circles, even corners. It weighs just 170 pounds. Call Turfco and tell them you read this in Landscape Management, or

Circle No. 269



Sprinklers for large areas needing water

Rain Bird's new 70, 80E and 85E series of impact sprinklers are designed for large-area watering. Depending on the nozzle type, the 70CWH and 70CSPH "full circle" models can be adapted for a wide range of golf course irrigation settings.

The 80E "full circle" and 85E "part-circle" models are specially designed for operation in dirty water and windy conditions. The sprinklers are made of cast bronze and heavy brass for durability.



The full-circle, one-inch 70 series features a modified three-washer bearing assembly. Large nozzles and higher flow rates can be used to help ensure a large watering radius, such as on a driving range or wide fairway. A medium trajectory angle of 21 feet and non-clog straightening vanes in the body range tube help maximize distance of throw.

The 70CSPH has a rear spreader nozzle for close-in watering. A plugged spreader nozzle on the 70CWH creates low precipitation rates.

Engineered for high performance in dirty water and windy conditions, the 1.25-inch 80E and 85E series sprinklers can be used for a variety of field applications. The 80EHD-LA (full-circle) and 85EHD-LA (part-circle) "Tough Bird" models feature single nozzle construction, locking friction collars, heavy-duty trip components and a durable "H" bearing. A specially drilled low 17-foot trajectory and non-clog straightening vanes deliver reliable performance in high winds.

For more information about these and other Rain Bird Golf Division products call (800) 984-2255, or

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- ❄ Overcoat fungicide applications on greens, tees and other highly managed turf sites.

> PRODUCT REVIEW

New hole digger has 'Comfort' handle

General Equipment Co.'s new model 330T Hole Digger is powered by a 6-hp Tecumseh VLV60, 4-cycle gasoline engine which features a cast-iron cylinder sleeve, a patented modular carburetor with start primer system and a dual-element air cleaner.

The 330T features the Comfort-Flex op-

erator handles, fabricated from a high-tensile plastic. The handles flex under load to help absorb and dissipate shock and stress. The unit also features an enclosed spur gear transmission with an all-metal centrifugal clutch designed to slip upon normal overload or sudden impact with buried obstructions. Augers up to 16 inches



in diameter, in standard 3-foot effective digging length, are available with Pengo-type boring heads for use in a variety of unconsolidated and semi-consolidated earth formations.

For more information call General Equipment at 800/533-0524 and mention LM, or

Circle No. 271

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Fax: 770/578-6071 Phone: 770/973-8019

LM

Truck-mounted bark blower

Finn's new truck-mounted Bark Blowers are self powered, pneumatic conveyors designed to convey wood mulches, saw dust, compost and other bulk materials containing a high concentration of long fibers. Powered by an 80-hp John Deere 4039 diesel engine, these units can generate 750 cfm of air flow at a maximum of 12 psi to move up to 20 cubic yards of bulk material per hour through a 4-inch distribution hose at lengths of up to 300 feet. Made to directly mount onto a truck chassis, the two models hold 8.2 and 15.7 cubic yards, respectively. Contact Finn Corporation at (800) 543-7166 and mention LM, or

Circle No. 272





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of the blades

the strength

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the tolerance

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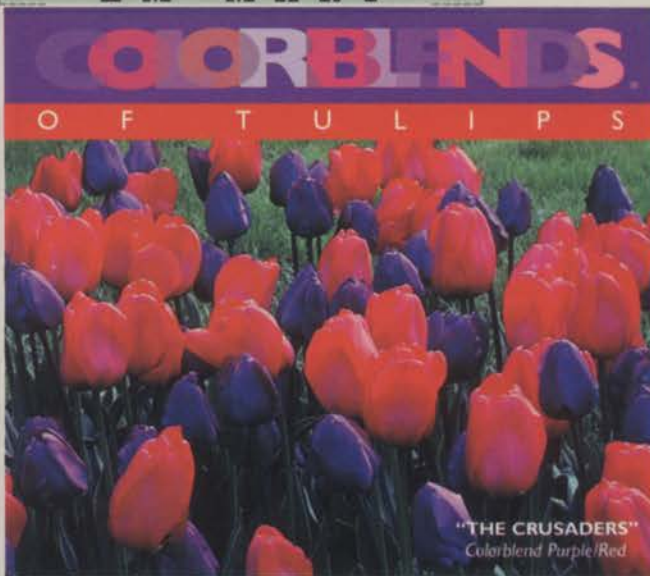
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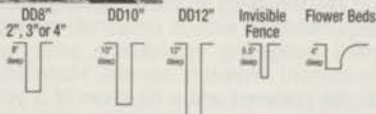


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