

may stunt the growth and weaken the plants.

Embark, on the other hand, is a PGR in the strict meaning of the word. It is absorbed through the blades and translocates to the growing point (at the base of the blade), where it acts to suppress seedhead development and stem elongation. The energy which would normally be used to produce rapid growth of leaves, stems, and seedheads for you to mow, is diverted to root and rhizome development.

Timetables and program for using Embark PGR on ornamental turf

A tank mix of Embark, Ferronem AC, and Trimec is applied in the spring, ideally timed to catch the seedheads. This would be a window of about 4 to 6 weeks between the time when the grass begins to green up and when you can feel the seedhead in the boot.

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After this year's Memorial Tournament in May, the turf around the 18th green and concession area was bare from attendees trampling on the rain-dampened turf. With intense overseeding, by September it was perfect.

JACK'S BABY

Muirfield Village Golf Club is the home of the Memorial every year, and in 1987, the Ryder Cup. It is a well-maintained course—some say the best in the country. It has to be. It's the course that Jack built.

by Jeff Sobul, assistant editor

This is a stadium golf course. Not in the sense that Pete Dye's courses are stadium golf courses, with embankments contoured into grandstands and the like.

Rather, Muirfield Village Golf Club was designed to handle the 40,000 to 50,000 daily spectators who each year attend the Memorial Tournament. The Dublin, Ohio, course was essentially built for the Memorial, and was also the site of 1987 Ryder Cup matches.

When LANDSCAPE MANAGEMENT visited superintendent Michael McBride on September 1, the course was entering final preparations for the Ryder Cup, about two-and-a-half weeks away.

Play on the course would soon be limited to member play only, up until the day before the week of the Cup. Guest play would be cut off two weeks before the Ryder began.

From the day the Memorial ended on May 31, preparations began for the Ryder Cup.

Rain on the third day of the Memorial caused problems. "There was no turf here at the end of May," McBride says, indicating with a sweep of his arm the areas around the 18th green and the main concession area adjacent to the clubhouse. "It was bare. We did a pretty intense overseeding program right after the tournament. I've been happy with the way it turned out so far. A couple of weeds in

it yet, but we'll take care of those."

Standing along nearly every hole are television towers. Usually after the Memorial they are removed from their permanent in-ground foundations and placed in the outside TV complex until the following year. But with the Ryder scheduled, they were left in place to avoid the hassle of putting them up again just a few months later.

Alterations

"This is one of my favorite holes," McBride says, standing on the tee of the picturesque par-three eighth hole. Thick trees line the right side of the hole, providing a buffer between the course and the expensive houses just



McBride's staff raised the left side of the eighth green slightly to aid drainage and reduce wear on the walk-off area.

on the other side. The cart path winds down the left side to the green.

"We made this little mound here right after the Memorial," he says a few minutes later, standing just off the left side of the green. "This was raised about two inches because (water) came off and it was really flat here and we didn't have any good surface drainage. The water would sit here and we couldn't grow good turf.

"We contoured it just a little bit—not a lot, just enough to get good surface drainage. Actually, the surface drainage comes in toward the center of the green and then out the front (through a drain tile in a bunker and into a catch basin). It was that or reconstruct the whole (left) side, which wasn't going to work.

"We just brought this together and put a drain in there. We top dress this (left) side about every four days to bring it up and keep the level of the green together. Once we take it down to tournament cutting height, it all has to be even. You can't have any scalped areas or areas that are too low getting growth that's too long and hairy. It's important to keep an area like this top dressed and the transition area top dressed so it all smooths out." At the time, the cutting height was at $\frac{9}{64}$ of an inch. It would be taken down to $\frac{5}{64}$ for the Ryder.

"This has always been a tough green to maintain," he says of the eighth. "One of the problems on this green is that we don't have enough air movement. Usually, you have a wind coming out of the west. We've thinned out this whole area through here just to get additional air movement. Especially working with bentgrass, you've got to have some air movement, you've got to have a lot of sun to grow

good turf. We've got another area on 12 that's stagnant as far as air movement goes."

Work on 12 is more extensive than just thinning the trees. The par three covers 160 yards over a sprawling pond below the elevated tee. The worn walk-off area straddling the bunker to the back of the green has been dug and painstakingly leveled. "We'll get the sod in there, pin it, and use a good starter fertilizer high in phosphorous and potassium," McBride explains. "That stuff's just like glue. It'll stick. (The roots) will be down in there in another four or five days, and in two-and-a-half weeks you won't even know it was sodded."

Tickling the fairways

A lightweight triplex mower cuts across the seventh fairway at a 45-degree angle, making the alternating

light and dark green pattern so appealing to TV cameras. McBride takes a couple of golf balls from the golf car and drops them onto the freshly-cut fairway.

"It's a nice lie," he comments from one knee. "It's only at a half an inch. I'm not a real believer in having them (cut) too tight. You ever want to hit your three-wood off a tee without a tee? Would you think you could hit the shot? Even for some pros it's tough. They need to have a little cushion."

He walks ahead to an uncut area on the fairway. Grooves are visible from verticutting. "It brings it up real nice," he says of the verticutting. "Then you just cut it off. You see how it brought it up?" McBride runs a hand through the bentgrass then motions toward the mower operator. "He's taking off a lot more than he normally would if he weren't verticutting.

"I'm a firm believer in verticutting. This summer, because it was so dry, we couldn't go out because it would bruise (the turf) too bad. So I didn't get to verticut as much as I wanted. This is really a greens verticut unit (on the fairway). So we're just tickling the top to try and train it. It makes a difference, though. If we do this once or twice before the Ryder Cup, then they'll be just where we want them."

Good luck, bad luck

During the summer, central Ohio went through a period of about seven weeks with less than a half-inch of rain. "We went out a week ago and fertilized the rough for the Ryder Cup and then it rained." McBride shrugs his shoulders and smiles. "I mean, what more could you ask for?"

How about a broken hydraulic hose on one of the triplexes, at the



McBride is a firm believer in verticutting. In preparation for triplex mowing, an operator uses a greens verticutter on the 10th fairway without interfering with the golfers.

time grooming the 15th green?

It happened on August 23, just a month before the Ryder. A portion of the green was a mess. "It happens," McBride says with the comfort of knowing that it will recover in time for the players and the cameras. "You don't know when it's going to happen. But it always seems to happen at the

most unfortunate time." A few years ago, he recalls, the same thing happened on the approach to the 18th green. Worse yet, it was on the Friday of the tournament. "At least this time I have a couple of weeks to recover."

Indeed, on hands and knees, the green of fresh bentgrass is invading the brown area. "It's coming back. I'll

have to plug out a few areas. It looks terrible but it's not as bad as it looks. There's a lot of new growth coming in. It won't take long for that to really run in."

And it won't take long for McBride and his staff to have Jack's Baby in perfect health for the Ryder Cup either. **LM**

A BACK-DOOR CAREER MAN

Six years ago, Michael McBride was selling computer systems. The rapid transition he's made to superintendent at Muirfield Village Golf Club is something no computer could figure out.

As an undergraduate at Bowling Green State University, McBride worked the summers of 1973 and 1974 at Muirfield, while the course was under construction. "I guess what I liked was that I could do something with my hands, labor, and you could see it evolve, emerge," he says.

Except, he was a political science major. At the time,

he considered switching to agronomy. "But I was so far along I said, 'Aw, I'll just get my degree.' It wasn't a very good attitude at all."

He graduated, he sold and he did well for himself. "But I had a problem," he explains, "especially in the springtime.

"I was on straight commission as a computer salesman. But I'd go by a golf course and—zoom—there I go, sharp turn into the front drive. It hurts your livelihood. You're not bringing home the money you should. You should be out working."

Things had to change.

He wrote a letter to friend and mentor Ed Etchells, Muirfield's superintendent at the time McBride worked there. Etchells, now Jack Nicklaus's right-hand maintenance man for all his courses, suggested contacting Muirfield.

McBride began as seasonal labor. He was eventually hired on full-time and then sent to school at Rutgers. He would work in the summer and go to school in the winter while his wife remained behind in Columbus. "It was tough on us. But I came back, got the assistant's job and worked my way up. It was definitely a different avenue, but everything's worked out."

He has been superintendent for two years now. And he now has his job and his life in a clear perspective.

"The attention to this golf course and the importance of the (Memorial) Tournament, really comes from the top (Nicklaus). That's my job, to try to keep him happy. It's his baby.

"It may be 99.9 percent perfect but that's not good enough. It has to be better than that. That's why it is what it is. He won't settle for anything less than that. As long as we have the people, the resources, the funds, we're always doing something. If you have all that, there's no reason why it shouldn't be perfect. That's what makes it challenging for me."

McBride seems a natural for his job, relying as much on instinct as on pure facts to make proper decisions about managing the course and its staff. He willingly accepts these challenges.

"You work your way to be Number One as far as course condition. But once you get up to the Number One spot, trying to maintain that spot is the most difficult because there are hundreds of great golf courses that all want to have that recognition.

"When you've been publicly recognized as the best that puts a little more challenge into the job of keeping it the best year in and year out. That's what I try to instill in these 40 to 50 people, and they understand that. They'll put in that extra effort because they have a lot of pride in it."

So does McBride. There's no where else he'd rather work, and with good reason. "If you feel you're at the best golf course, where else would you want to go?"

Perhaps the first tee? —Jeff Sobul



Michael McBride (right) instills in his staff, the pride he holds for Muirfield. He checks the progress of verticutting on the 10th fairway with the operator of a greens verticutter, used on the fairway to stand up the bentgrass before mowing to control lateral growth.

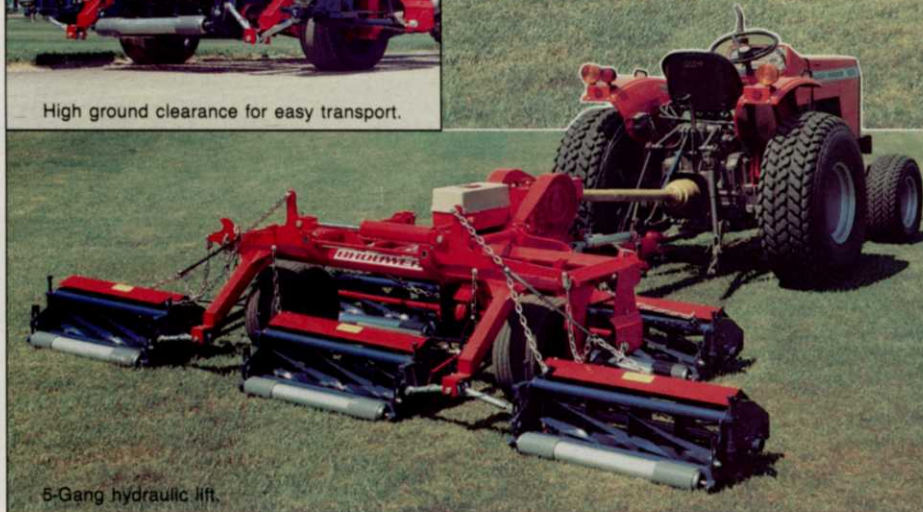
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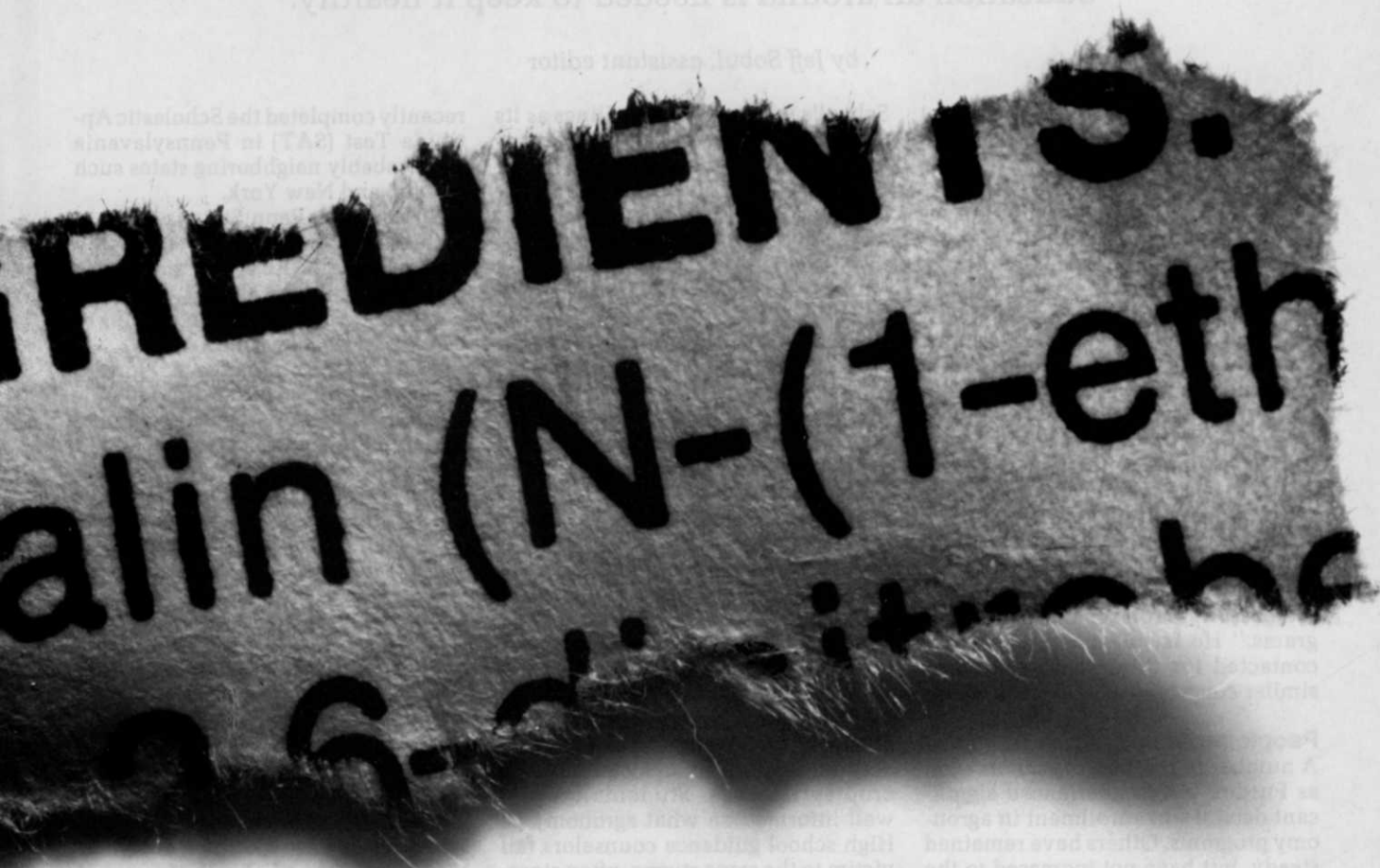
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DECEMBER 1987/LANDSCAPE MANAGEMENT 27

A GOOD ROOT FEEDING

Yes, the green industry remains strong as 1987 ends. But a good diet of education all around is needed to keep it healthy.

by Jeff Sobul, assistant editor

As the green industry closes out a dynamic year, it becomes obvious that education is needed.

Education not only within the industry, but for the public, the customer and potential customer.

The healthiest segment of the green industry remains the golf course segment. "I've never seen as many golf courses being built or reconstruction jobs done," says Gerald Faubel, superintendent at Saginaw (Mich.) Country Club. "It's wonderful to be associated with such a growth industry." (For more on the golf course boom, watch for a special section next month.)

There is, however, a flip side to this growth, Faubel notes. "I've seen no increase in students in university programs." He is not alone. Everyone contacted for this report expressed similar concerns.

People problems

A number of prominent schools such as Purdue have experienced significant declines in enrollment in agronomy programs. Others have remained steady, but have not increased to the point of nearing industry demands for graduates.

John Street, Ph.D. at Ohio State University, reports 110 students enrolled in agronomy, an increase of five from last year. Fifty of them are in turfgrass management. "This (enrollment) is pretty good considering other schools are down," he adds.

The Agronomy Department uses a strong state show (2,000+ attendees from 35 states) and the Agriculture

School's informational mailings as its chief methods of spreading information.

Penn State University is in a similar situation. Tom Watschke, Ph.D., has seen no increase in agronomy enrollment, with about half of the 38 students in the program studying turfgrass management.

Watschke says he would like to see about 150 students in agronomy, with the same 50/50 ratio of turf to non-turf. By his estimation, the program could place about 20 graduates a year—more this year, he says, if the grads were there. "There are barely, if ever, enough graduates to meet industry demand," he says.

Graduate students generally range from four to six. This year there are seven.

Why the shortfall of students? Education. "The opportunities are not being delivered to the high school students," Watschke says. He feels part of this is a stigma attached to agronomy because of its association with crop agriculture. Students are not well-informed on what agronomy is. High school guidance counselors fall victim to the same stigma, often steering away potential agronomy students because of it.

Richard Akerman of Oregon Landscape Maintenance echos this sentiment. "The industry is not perceived as glamorous or well-paying," he notes.

Watschke says university and college programs need exposure and visibility at the high school level. Part of Penn State's information program is a new brochure mailed to students who

recently completed the Scholastic Aptitude Test (SAT) in Pennsylvania and probably neighboring states such as Ohio and New York.

In addition, Penn State is going to increase the activity of its agronomy alumni now in the green industry—between 1,200 and 1,500. "We know our course of action and we're going to take it," Watschke states.

Marvin Gross of Sarasota, Florida-based Marvin's Garden and Landscaping Service also sees the shortage. "There is a need for skilled, trained managers and sub-managers in the landscape industry," he says. With the public putting a greater emphasis on harder-to-maintain native ornamentals in landscapes, he notes there is a need for "more schools putting out better people." The industry needs to make employment opportunities more attractive, highlighting management and training opportunities, Akerman adds.

"Industry organizations should combine to promote, encourage and market careers in the industry," says Jeff Bourne, chief of the Bureau of Parks in Howard County, Md., and 1987 president of the Professional Grounds Management Society. "We must look to the future, to the foundation of the industry. Self-preservation of these organizations is a basic reason."

Some indications show that relief from the small graduate pool may be in store. Akerman reports that freshman enrollments in horticulture-related majors in northwest colleges, mainly Oregon State and Washington State, increased this year by 25 per-



Jeff Bourne: Contractors will diversify



Ron Kujawa: Mount public relations campaign.



John Street: Enrollment is up some at OSU.

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Eliot Maras: Local media is positive

cent. Whether that increase is still reflected four years from now remains to be seen.

More PR?

The rest of the green industry needs to take the example set by the Professional Lawn Care Association of America with its recent campaign to beat back negativism directed at the industry.

Elliott Maras, editor of *Lawn Care Industry* magazine, notes that the PLCAA ran a sophisticated national public relations campaign which offset much of the negative publicity the industry was receiving as a result of attacks on 2-4,D and other chemicals.

"Local media ran more favorable articles and the national media did nothing, which was an improvement over the negativism of last year," Maras says.

He adds that as part of the campaign, education of existing customers also helped retain business. With the campaign, "existing customers put more credence in what LCOs were doing, not in negative media."

Ron Kujawa of KEI Enterprises feels the entire green industry should band together in an effort such as the PLCAA's, mounting one public relations campaign a year to battle such issues as unfavorable pesticide legislation or tax laws.

"We have to have ways of surviving," he states. "Get together as one voice. One guy writing doesn't mean a thing. A thousand, that's different." He calls on the major industry organizations to mobilize their members for such an effort, perhaps for a period of just one or two months a year, deluging Congress with letters and working to get favorable press.

Labor pains

The labor pool overall seems down in the green industry, partly because of the new federal immigration laws, partly because unemployment is down.



Rich Akerman: Perceptions aren't glamorous

Immigration laws have affected the South Central region (Texas) and west into California the most.

David Marsh of Industrial Landscape Service in San Jose, Calif., says the labor pool is a chief concern in the West. Marsh, who is Region 2 director of the Associated Landscape Contractors of America, says "there used to be two or three people outside in the (company's) yard every day looking for work. They're not there anymore."

He notes the biggest effect is on larger businesses, which can't afford to try and skirt the new law. Smaller businesses, however, have an advantage because the law is harder to enforce on them. Marsh adds that many industries now are competing for the same reduced labor.

With unemployment down nationwide, Akerman notes, there is a smaller pool of employable people without jobs to hire seasonally; a double-edged sword if there ever was one.

Business sense

As with most businesses or industries, the health of the green industry is dependent on that of the U.S. economy.

Now things are going well, though the day most of the people were contacted for this report, the Dow Jones Industrial Average had just dropped 500 points.

But the industry is still attractive to outside investment. The lawn care industry can attest to this. It has consolidated extensively in the last year through takeovers such as Ecolab's purchase of ChemLawn and Waste Management's purchase of Tru Green (see *LANDSCAPE MANAGEMENT* November, 1987).

Though lawn care market growth has slowed some, it remains at a healthy 15 to 18 percent annually, down from a high of 25 percent. Maras says this is a result of market saturation and not negativism, though.

Even with a downturn in the economy, the green industry generally



Tom Watchke: Programs need exposure

isn't affected for at least six to 12 months, when housing starts are completed and new starts slow.

This reaction time should be used wisely, Bourne notes. A lot of contractors, he feels, will be looking to diversify their services, such as a design/install contractor adding maintenance as a service. Akerman sees LCOs adding lawn maintenance as well.

A result of this is a greater need for business skills, Akerman adds. He says ALCA has begun a management seminar series to address this. Also, looking at the schedule for most state shows, management sessions are becoming more and more common.

Akerman says this increased awareness is something that has been going on most of the decade. "Without it, the industry would not have grown as it has in the last five years."

Industry growth has had a few unpleasant outgrowths as a result. Doug Fender, executive director of the American Sod Producers Association, has seen a lot of "me-too" entries into the sod market, people not sure what they're getting into, and worst of all, not sure what they're doing. "It's dangerous for them and the people in that immediate area," he says, with poor quality product being produced. "The long-term effect is negative in many cases for the professional sod market."

Contractors share similar concerns. Bourne terms them "Midnight Gypsies:" someone with a pickup truck, a lawn mower and a rake who calls himself a contractor. Bourne hopes that professional organizations can establish professional standards: quality—not quantity—for price.

For the most part, though, the quality is there, and the growth is continuing, though maybe a little slower. However, Kujawa summarizes, "if the whole economy goes to hell then we just suffer. We can't do anything about it. But as long as the economy is good, we can adapt."

So start adapting.

LM