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## Money Shot

*Continued from page 70*

- Courses are expected to promote the program through use of posters and displays provided by the GCBAA.

- Courses are expected to work with local media and businesses to promote the program.

Funding for the program comes primarily through proceeds raised at the

GCBAA's Auction of Champions, which is conducted during its annual dinner held in conjunction with the GCSAA Conference and Show and during a raffle at GCBAA's annual summer meeting. GCBAA also seeks companies or individuals to donate new or used sets of clubs or to make direct donations to the program.



**Program participants receive expert instruction.**

"If you like the game and are involved in the commercial side, it's a way to help grow the game," Kirchdorfer says.

Hetrick and Landscapes Unlimited's Vice President of Operations Brad Schmidt recently conducted a three-day Sticks For Kids workshop for youngsters aged 9 to 15 at Jim Ager Junior Golf Course in Lincoln. Hetrick videotaped the workshop to serve as a model for courses interested in hosting similar events.

The three-day event featured education in golf fundamentals from area golf pros. Guest speakers included Knox Jones, the Nebraska State Match Play Amateur Champion, who got his start at the junior course. Each child received clubs to use during the workshop and a club to take home after the event.

"Tiger Woods has these kids wired," Hetrick says. "They love the golf atmosphere and were attentive to their instructors. We encourage them to keep playing by giving them three free rounds of golf at the Jim Ager course."

Courses interested in being Sticks for Kids host sites should contact a local GCBAA member. Anyone interested in donating golf equipment or auction items can reach Hetrick at 402-476-4444.

*Peter Blais, a free-lance writer who operates a golf media relations firm in North Yarmouth, Maine, can be reached at pblais@maine.rr.com.*

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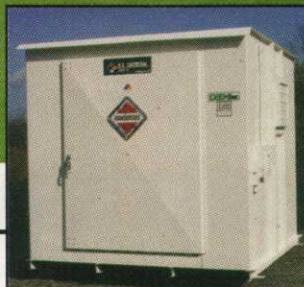
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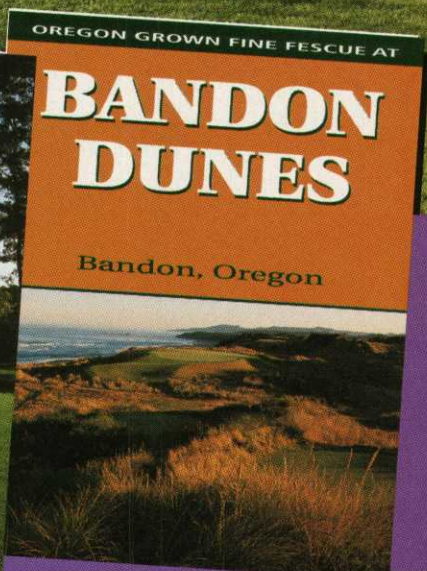
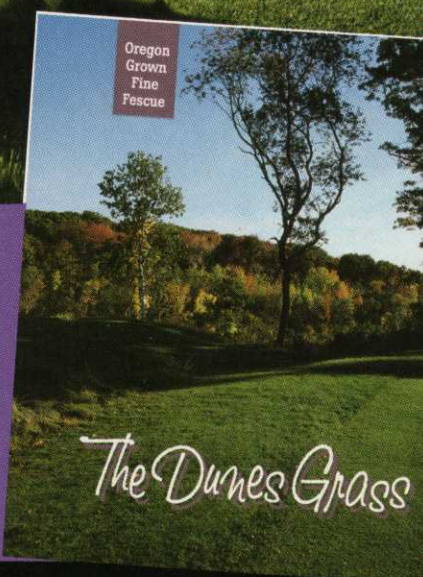
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# Pre-Emergent Pause

**BY FRANK H. ANDORKA JR.**  
ASSOCIATE EDITOR

**D**on't plan on seeing any new out-of-this-world pre-emergent herbicide products on the market any time soon. Experts say the current in-this-world products work just fine and that research for pre-emergent technology peaked five years ago.

But this doesn't mean current technologies can't be tweaked and that there aren't tricks of the trade (such as creative tank-mixing) that will help superintendents increase the efficacy of existing products. And it doesn't mean that pre-emergent manufacturers won't try to fill niche markets and replace products destined for the Environmental Protection Agency's blacklist.

Peter Dernoeden, professor of turfgrass management at the University of Maryland in College Park, Md., says that although current products work well, there are trends to suggest that even the old chemistries could stand some improvements. Despite the advances, pre-emergent herbicide products still seem to fail superintendents once every five years, he says.

Dernoeden says that's not because the products on the market are bad. It's just that researchers don't have a full understanding of the interaction between environmental factors — such as wind, rain and soil temperatures, among others — and those products. Therefore, when the environmental conditions combine to inhibit a product's effectiveness, problems occur.

"Most of the products on the market are good performers," he says. "It will be hard to improve on what is being used already, but there are some opportunities."

**Above: Experts say herbicide companies will tweak old chemistries and move into niche markets, such as pre-emergent products for putting greens.**

**While there are no new chemistries available, you can still increase the efficacy of your springtime herbicide applications**

Dernoeden says a niche market for companies would be pre-emergents for putting greens. Superintendents are wary of applying pre-emergent herbicides on greens for fear of killing them, he says. A product that alleviated that fear would be a significant breakthrough.

Tom Watschke, professor of agronomy at Penn State University in State College, Pa., says more products that combine pre- and post-emergent control would also be valuable additions to the arsenal. If the two control mechanisms were combined, it would allow superintendents to wait longer before applying the chemicals because they could kill whatever had sprouted while still controlling weeds in germination. In addition, they could target specific areas of a golf course instead of spraying it entirely.

In an era when government restrictions will limit the amount of chemicals that golf courses can use, the surgical-strike approach will find favor with regulators, Watschke says.

"We're moving into a world where a blanket approach to weed management will no

*Continued on page 76*



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## Herbicides

*Continued from page 74*

longer be acceptable," Watschke says. "The EPA is looking for precision in treatments, and a pre/post emergent combination helps do that."

Some superintendents successfully mix pre-emergent herbicides with post-emergent products to maximize the control, Watschke says. Herbicides could also be fine-tuned to focus on specific types of grasses, such as goosegrass.

"If you get south of the transition zone, goosegrass is a bear,"

he says. "None of the products [available] control it enough."

Nick Christians, professor of turfgrass culture at Iowa State University in Ames, Iowa, says there will also be a move to biologically based products, such as corn-gluten meal. The EPA's increased restrictions on chemical use has spurred more research in this area. Christians is researching the efficacy of corn-gluten meal and other grain byproducts.

"Corn-gluten meal seems to have many of the same pre-emergent capabilities as some of the synthetics," Christians says. "We're still studying the long-term effects."

But superintendents shouldn't expect any radical breakthroughs soon. Roch Gaussoin, associate professor of turfgrass at the University of Nebraska in Lincoln, Neb., says the industry has hit a down cycle in developing new pre-emergent herbicide products. More energy is spent on insecticides and fungicides because that's where manufacturers make money more quickly.

"Companies are sitting back and asking themselves whether the industry needs another pre-emergent product," Gaussoin says.

Part of what is inhibiting new products is cost, Christians says. The cost of development of a new compound is nearly \$40 million. Without a proven plan to make that money back, most companies aren't willing to take on that commitment, Christians says.

"Developing a turf-only product means taking a great financial risk," Christians says. "That's why you see so many products that can be used in a number of different markets. The companies are trying to maximize their return on investments."

Watschke says the recent consolidation of chemical companies has also inhibited work on new products. The last chemical breakthrough for pre-emergent herbicides was the creation of a compound that was safe for creeping bentgrasses, Watschke says. Now the goal of most companies is to tweak current chemistries to comply with government regulators' concerns.

"What you're going to see in the industry is a move to lower the rates of pre-emergent herbicides necessary for control," Watschke says. "The industry is heading toward making existing products more affordable and safer without hurting the efficacy." ■

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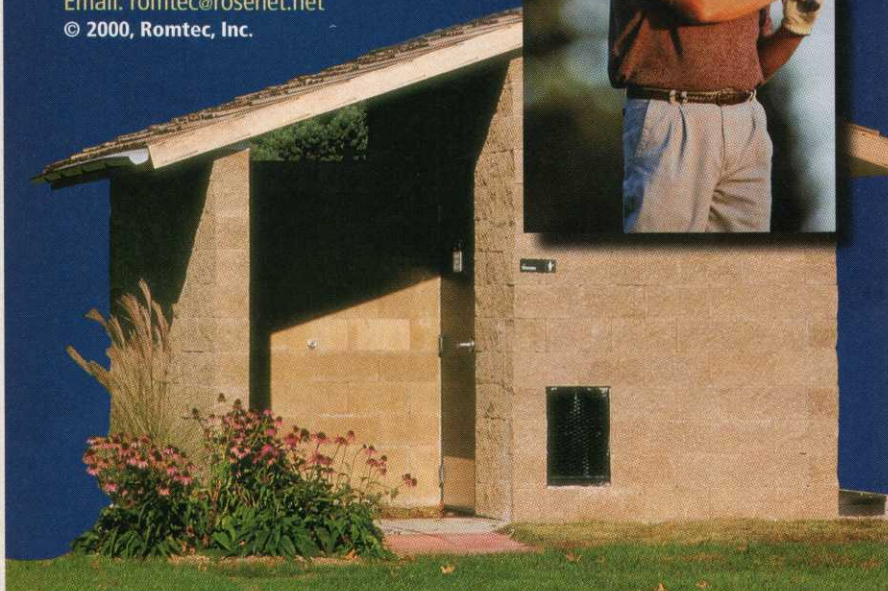
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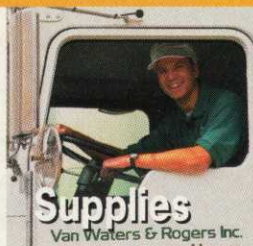
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**T**he one drawback to having children is that once they reach school, they can make you feel ignorant at times. Of course, that's because they're learning things that you learned some time ago but have since forgotten. That's the situation I'm running into with my 10-year-old son, Ryan.

Recently, he reminded me about an important lesson about machines. As part of his fifth-grade science curriculum, he's learning that levers and fulcrums make up simple machines. Those simple machines can be grouped to produce complex machines that can do large volumes of work more efficiently.

The lesson, of course, is that machines are more powerful working together than they are individually. The same lesson should apply to the computers that have taken over superintendents' lives, but it doesn't. For that, the golf industry should feel ignorant, too.

Computers help you do your job daily. They provide you access to the Web, help you produce budgets and streamline communication. They run your irrigation systems and can map your golf course using global positioning so you can locate every tree, bunker and sprinkler head.

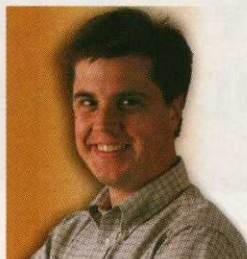
Yet no one in this industry has designed a way for all those disparate computers to communicate with one another. Computers that can't coordinate with each other are no better than the rudimentary machines that Ryan is working with in his class.

Dan Dinelli, certified superintendent at North Shore CC in Glenview, Ill., says his club researched having computer programmers write software to integrate all of his stand-alone machines into one network to achieve the goal of all superintendents — top-notch golf course maintenance. He even convinced the owners that the cost — between \$15,000 and \$20,000 — would be a good investment. But then he learned one of the major difficulties of computer integration.

"The programmers told us that once we had this system in place, it would be risky to upgrade any individual part of the system," Dinelli says. "One upgrade on one part of the system could mess the whole integration up."

## Why Can't They Work Together?

BY FRANK H. ANDORKA JR.



COMPUTERS THAT  
CAN'T COORDINATE  
WITH EACH OTHER  
ARE NO BETTER  
THAN THE MOST  
RUDIMENTARY  
MACHINES

Dinelli says it's frustrating to have all these computer controls available to him without having the ability to wield them as an integrated system. He wishes he could collect data about problems on his course, download them to a central site and have the computer make the adjustments necessary to solve them.

"We're still not even scratching the surface with the power of these machines," Dinelli says. "Integration would allow you to micro-manage your golf course in a way that's practically unthinkable right now."

Dinelli says the computerization of certain aspects of course maintenance would allow superintendents to be more proactive. Once superintendents can collect historical data about problems on their courses and store it on their desktops, they will harness more fully the power of the computers to predict when problems might arise. Armed with this information, superintendents would be able to prevent the problems before they became the crises that plague them during their day-to-day operations. Unfortunately, that day seems a long way off, Dinelli says.

"We don't have the tools available to us to integrate all the computers from the different systems," Dinelli says. "I don't see why, as an industry, we can't do that."

I can't either. With all the advances in the Internet and computers, why is that we in the golf industry can't get our computers to talk to each other? It's done in other industries all the time, and it's time the golf industry joined them.

Maybe I'll go back to Ryan and see if he can't devise a system to get all these computers on the same page. It's a solution that can't come too soon.

---

*Frank H. Andorka Jr., associate editor of Golfdom, can be reached at 440-891-2708 or [fandorka@advanstar.com](mailto:fandorka@advanstar.com).*



# Golfdom

**February 2001**

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- 07  60 Golf Course Architect
- 08  70 Golf Course Developer
- 09  90 Golf Course Builder
- 10  105 University/College
- 11  100 Others Allied to the Field (please specify) \_\_\_\_\_

**2. Which of the following best describes your title? (fill in ONE only)**

- 12  10 Golf Course Superintendent
- 13  15 Assistant Superintendent
- 14  25 Owner/Management Company Executive
- 15  30 General Manager
- 16  35 Director of Golf
- 17  70 Green Chairman
- 18  45 Club President
- 19  75 Builder/Developer
- 20  55 Architect/Engineer
- 21  60 Research Professional
- 22  65 Other Titled Personnel (please specify) \_\_\_\_\_

**3. What is your facility's annual maintenance budget?**

- 23  A More than \$2 Million
- 24  B \$1,000,001-\$2 Million
- 25  C \$750,001-\$1 Million
- 26  D \$500,001-\$750,000
- 27  E \$300,001-\$500,000
- 28  F \$150,001-\$300,000
- 29  G Less than \$150,000

**4. If you work for a golf course, how many holes are on your course?**

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- 31  B 18
- 32  C 27
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