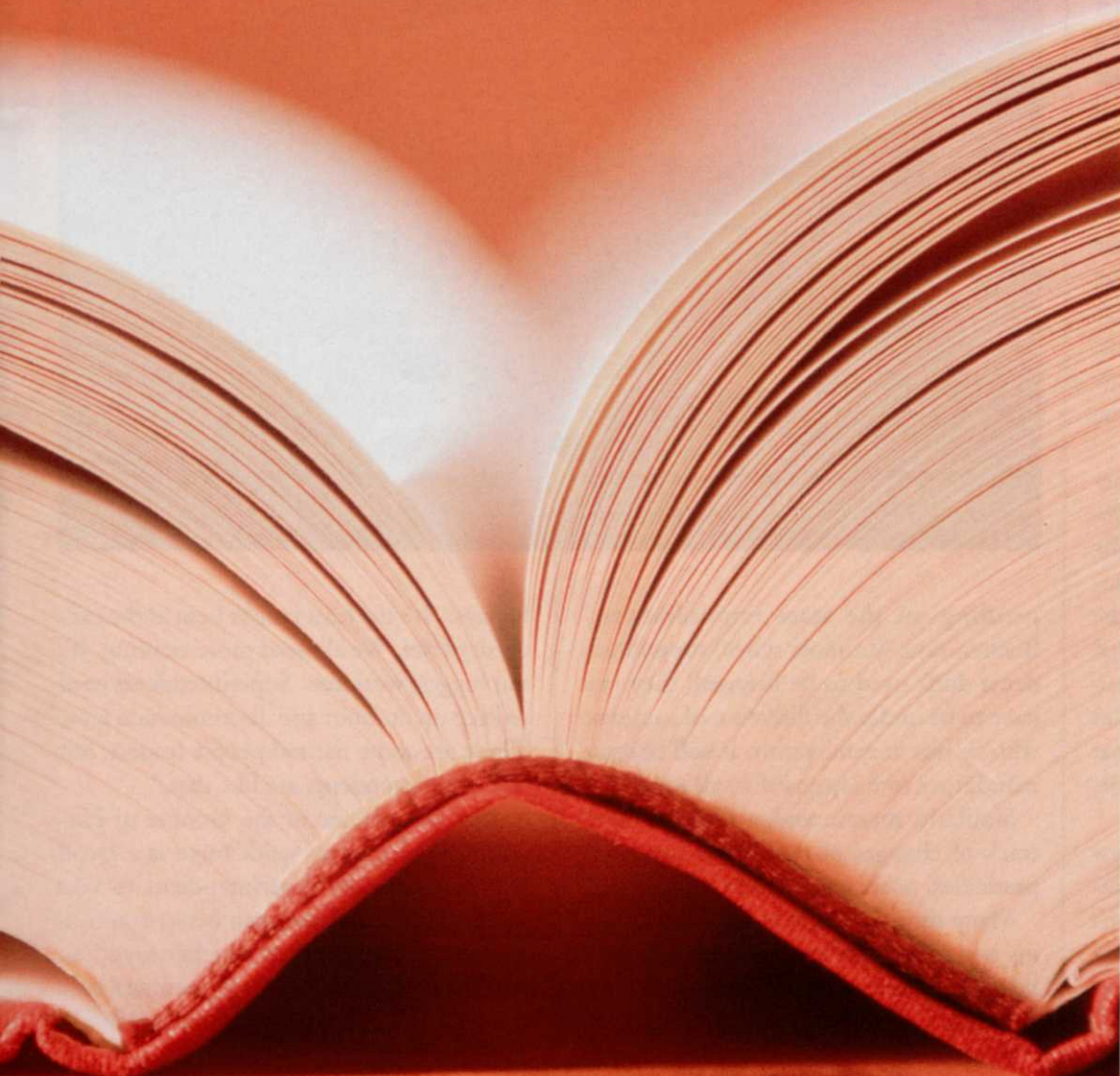


Up to snuff

SUPERINTENDENTS NEED TO FURTHER THEIR EDUCATION TO DO THEIR JOBS EFFECTIVELY AND REMAIN COMPETITIVE

by JOHN WALSH



To say continuing education is important for golf course superintendents is an understatement. A number of academics in the turfgrass field say education has become critical to the success of a superintendent's career because aspects of the job constantly change and competition for good jobs is stiff.

The Golf Course Superintendents Association of America (GCSAA) encourages its members to earn four-year degrees, according to Bruce Clarke, director of turfgrass science and extension specialist in turfgrass pathology at Rutgers University in New Jersey.

"While a four-year degree is no substitute for experience on golf courses, the basic level of professionalism has been raised," Clarke says. "The four-year degree programs are starting to become the foundation. It will be a trend for the next 10 years, definitely among the younger men and women who want to become superintendents. Sharp, young superintendents need to have four-year degrees, and there are a lot of four-year programs across the country to provide them with that level of education."

Nick Christians, professor at Iowa State University in Ames, says there's no substitute for in-depth training at any stage of a superintendent's career. Christians says the GCSAA's continuing education program, which has more than 100 offerings, is the most recognized in the industry.

"Continuing education gives the superintendent advantages," he says. "Some employers value continuing education more than others, but it has always been important. It's more important now because technology is changing things so rapidly."

"We all work with more rapid change," adds Terry Buchen, president of Golf Agronomy International and a consulting agronomist. "We're in a business that is very professional. As a result, in the last 10 to 15 years, there has been a need for more education. There is a constant learning process about pesticide use and regulation."

Education has become more important because the golf course industry is dynamic and education is the only way to keep abreast of the changes, according to Milt Engelke, professor of turfgrass, breeding, genetics and management at Texas Ag Experiment Station at Texas A&M Systems in College Station. Education also exposes superintendents to different operational philosophies.

"I really credit the GCSAA," Engelke says. "Its curriculum has done a good job of bringing quality education to superintendents. But GCSAA has gone overboard with some issues. The program needs a core curriculum before it can get into other topics, but overall, GCSAA made a very important contribution to the industry through its educational programs. GCSAA educational programs have brought the quality of superintendents up well beyond being just greenskeepers."

GCSAA education consists of several components. Hannes Combest, senior director of membership and professional development for the GCSAA, says superintendents can learn using online resources, attending seminars in person or reviewing programs for external use (nonrelated GCSAA education). Superintendents are responding to these options. During 1997, fewer than 60 partici-

pated in GCSAA training. Last year, from January through May, there were less than 100 applications for education programs. This year, for that same time period, there have been more than 600 applications.

Agronomy and beyond

Because agronomic change is constant, a priority for many superintendents is working to keep abreast of new technology. Biocontrol systems—genetically modified organisms in turf—is one popular topic, Engelke says. But more basic education also is necessary. For example, the industry doesn't educate superintendents enough about the process of what equipment does to grass and soil. Grooming and aerification are examples of cultural practices that have effects on soil agronomically, physically and biologically.

Superintendents should take refresher courses about the basics because they are what help them keep core job knowledge in agronomy up to speed, Engelke adds.

"Superintendent jobs are lost when the golf course fails," he says. "Superintendents need to reconnect back to the roots—root-zone maintenance. We tend to lose contact with that over time, but we always need a basic understanding of the way things are and how we can get out of balance. We need to understand the turf life cycle better. For example, diseases don't occur under natural circumstances, we create many of them."

"It seems like there is always some new disease and new approaches to controlling the older diseases," Clarke says. "Yes, there are new species of fungi and new mutations. In many cases, it's the way superintendents change their turf management that exacerbates diseases."

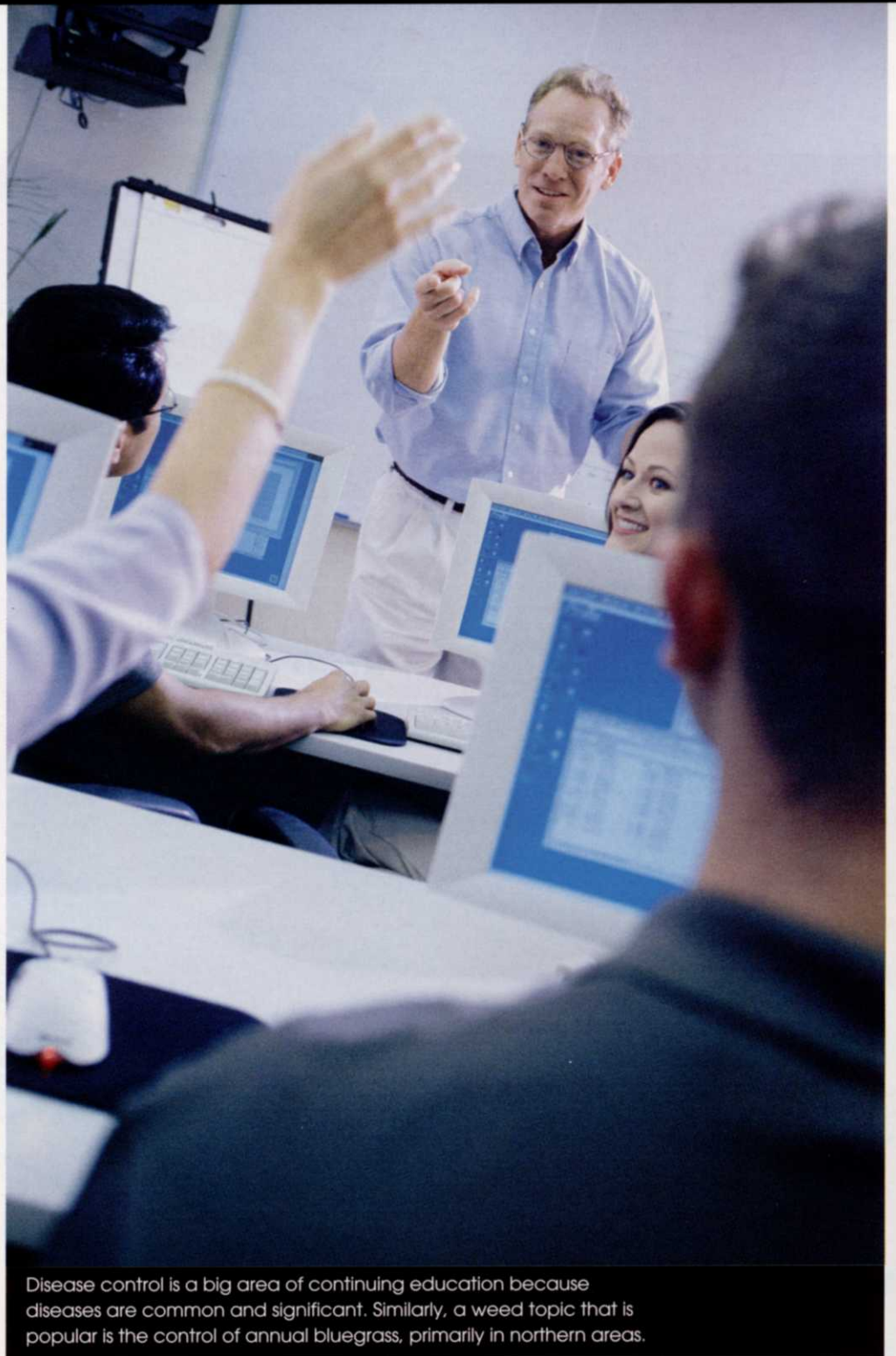
An example is the height of cut that's being lowered dramatically because of the demand for faster green speed. Lowering the height of cut reduces the amount of nitrogen and water in the soil and weakens the grass, making it more susceptible to diseases.

Disease control is a big area of continuing education because diseases are common and significant. Similarly, a weed topic that is popular is the control of annual bluegrass, primarily in northern areas.

"*Poa* is a major issue," Clarke says. "New control measures are popping up. Superintendents will be left behind if they don't keep up."

Additionally, Buchen says weed-, disease- and insect-related continuing education often counts toward the recertification credits superintendents need to maintain their pesticide licenses.

"Every one to three years, superintendents need to get a new license for pesticides, de-



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pending on the state requirements," Buchen says. "In most states, superintendents don't need to be licensed, they just have to be under the direction of someone who is. But at some point, it will become mandatory to be licensed in all states."

Similarly, superintendents need to keep track of changes of pesticide labels, new pesticides, fertilizers and turf seeds.

Many times, superintendents' core training is in an area like agronomy, so most need help with business fundamentals, such as accounting and personnel management.

Buchen says personnel management is the hardest thing many superintendents have to do and the aspect of their jobs of which they spend the most time.

"We can't do anything without people,"

he says. "It's the least taught item at the university level. We all need more training. It's our biggest weakness. Superintendents need to keep up on labor and discrimination laws. There are some natural people leaders, but few superintendents are like that."

Also, an increase of the number of Hispanics in the green work force is a trend that has led more superintendents to take Spanish lessons so they can better communicate with their workers, Buchen says. Do-it-yourself Spanish language seminars are a popular way to learn enough to communicate day to day.

Water usage is another important topic in which education is needed. Bob Carrow, professor of turfgrass science at the University of Georgia in Athens, says the No. 1 issue facing

the turfgrass industry is water conservation and increasing demand and competition for water, which has created a need for golf to exhibit good stewardship in action.

"There is a shift toward alternative water sources, but that often involves poorer quality water that contains various nutrients and salt," Carrow says. "Many courses use water run-off. Surface run-off is pretty high quality water, but you do have to be careful of sediments."

The quality of wastewater varies from being quite good to pretty poor and varies from site to site. Wastewater also will have more nutrients than run-off or potable water, which means superintendents have to watch the fertilizers they use. That adds complexity to the fertilizer program.

"It's an ongoing issue," Carrow says. "Water conservation will change the type of grass we use. For example, Seashore Paspalum can withstand poorer water quality. We're getting pressure to shift to poorer water quality, and that will change turf management."

Carrow says pest management is another topic superintendents need to keep educated about. He says that throughout the past 25 years, superintendents have made sure they don't contaminate ground water with pesticides, and the same philosophy of pest management will apply to water conservation.

"There are going to be changes in irrigation design and operation because of water conservation," he says. "There are a lot of spin-off issues of water conservation that are complex, but we won't have the length of time for pesticides that we will have for water conservation. The pressures are higher. Everybody is concerned about water. Today, there are statewide water conservation efforts across the country."

Time and money issues

In spite of the need for education in so many areas, limited time and money are barriers that prevent some superintendents from taking as many continuing education courses as they would like.

"Superintendents are too busy to leave golf courses," Buchen says. "Most work too many hours. It's a 24/7, high-pressure packed job."

Still, superintendents should aggressively seek out education whenever possible, Clarke says.

Superintendents should take every opportunity they can get to continue their education, Christians agrees.

"It's a good idea during the off season to attend one continuing education class, something totally different than they've done be-

fore," he says. "I highly recommend superintendents make time and budget the money to do it."

Engelke says that because there are many demands put on superintendent's time, they need to get the most out of continuing education classes. Taking regional classes in the off-season is a good way to do this.

Buchen says the GCSAA and the United States Golf Association have regional seminars that are easier for superintendents to attend because it reduces the time and cost to take a class. There's also a lot of information that can be gotten for a small fee.

"Superintendents need to set aside money in their maintenance budget to attend seminars every year," he says. "There's a lot of informal stuff out there. The Web can help to some extent, but that doesn't mean the information is good, it just means it's there."

Many superintendents also read trade magazines and file articles for future reference, Buchen says.

"There are now more books about turfgrass and golf course architecture," he says. "We're inundated with books. Superintendents are building their libraries more than ever."

With increasing educational options, cost can become less of an issue unless the training involves traveling, for example, to attend GCSAA's International Golf Course Conference and Show.

"An increasing number of superintendents have contacted me about giving talks locally," Buchen says. "Superintendents have to maintain a certain number of credits for their GCSAA membership."

But Engelke says the cost of continuing education is irrelevant because of its importance.

"Education should be viewed as an excellent investment in their future," he says.

GCSAA certification is another focus of education for superintendents. In 1997, 1,650 superintendents were certified. Today, 1,911 golf course superintendents throughout the country are certified, according to Combest.

Clarke says certification shows a certain level of education has been attained and demonstrates a superintendent's level of expertise.

"Certification is one of the greatest things going," Buchen says. "Some superintendents don't think getting certified is beneficial because it won't get them more money, but a GCSAA survey shows it will."

Superintendents also should strive toward

certification because it is a validation of the continuing education process, Engelke says.

"It sends a message to the employer that someone is going the extra mile," he says. "There a lot of guys who have been in the business 20 or 30 years and are not certified, and guys that are three or four years out of school who are not experienced enough yet to enter the certification program. It's not essential to get certified, but it opens doors."

Clarke says certification gives superintendents the recognition that they gave the effort to continue their education.

And the higher a superintendent move up, the more important certification will be, Christians says.



Clarke

Customized training

Combest says GCSAA's education program format has changed: It used to be a two-day format, and now it's a day or half-day program.

"Now we're engaging people more," she says. "They want questions and answers and want to be more involved. Continuing education continues to play a major role in their lives. The challenge for us is how to meet that need. In response, we're looking at new ways. For example, online education that is synchronous and nonsynchronous and starting Web casts. They are still intimate experiences. They are only open to 50 people."

GCSAA regional seminars also are popular, and chapters are offering more education.

"I don't expect the chapters to do Web casts and distance learning," Combest says. "They don't have the bodies to do that. Members tell us three reasons they come to the national show: education, networking and new products."

Combest says people coming out of school often have a good theoretical knowledge of turfgrass management, and 95 percent of association members younger than 30 have some formal education. Seasoned professionals are still taking classes because this is an important part of their jobs.

"It's going to continue to be an interesting profession, she says. "Superintendents are, by nature, fraternal. They like contact with experts in the field. But it will be interesting to see how owners react to education needs if economic difficulties take hold. Education is often the first thing to go in the budget." GCN

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Buchen