Small budgets leave little room for superintendents

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Pat Blum, golf course superintendent of Colonial Acres Golf Course in Glenmont, N.Y.
Over the past 30 years, more major tournaments have been held on the Penn bents than all competitive bentgrasses combined.
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Cover photo: Gary David Gold

EDITORIAL MISSION STATEMENT:
Golf Course News reports on and analyzes the business of maintaining golf courses, as well as the broader business of golf course management. This includes three main areas: agronomy, business management and career development as it relates to golf course superintendents and those managers responsible for maintaining a golf course as an important asset. Golf Course News shows superintendents what’s possible, helps them understand why it’s important and tells them how to take the next step.

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The purchase is expected to expand adoption and sales of controlled release fertilizers and enhance product offering for customers.

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Profile Products and Dryject offer soil aeration services that seem to compliment each other, which is why the heads of the companies thought it would make sense to combine their services.
Fuel effects

Last year there was a lot of buzz and media coverage about high fuel prices and their impact on golf course maintenance. Although there doesn't seem to be much coverage or buzz about the topic this year, it's still negatively affecting golf course superintendents, forcing some to tweak their budgets.

In June, golf course managers in California were paying more than $3.25 a gallon for petrol. Some in Florida were paying more than $3.00 a gallon. Higher fuel prices affect golf course maintenance in several ways. The most notable is that they're driving up the cost of fertilizers and pesticides because fuel is used to manufacture and distribute those products. During a recent fertilizer plant tour, LESCO and Turf Care Supply officials said the price of urea, the primary raw ingredient in fertilizer, increased 30 percent from 2005 to 2006. Higher fuel prices also affect equipment operations on the course, mainly through the use of mowers and utility vehicles.

As a result of these price hikes, some superintendents are changing their practices to soften the financial blow. For example, some are switching from gas-powered golf cars and utility vehicles to electric or hybrid ones. Others are switching from gas-powered greens mowers to electric ones. Some are using more plant growth regulators to help reduce the number of mowings per week. Still, others are expanding native areas and reducing areas of maintained turf, which helps reduce labor costs, too.

However, it seems not every golf course superintendent is negatively affected by higher fuel prices. In fact, it seems superintendents at private golf facilities are less affected because members at those clubs don't want to see a decline in the quality of course conditions and are willing to take the financial hit until fuel prices come back down. Prices will decline because of market conditions. It's just a matter of time. Using alternative fuels, drilling for oil in places such as Alaska, building nuclear power plants in less-populated areas of the country and a more steady Middle East are a few market factors — no matter how far off in the future they seem to be — that could help ease fuel prices.

Up to this point, it doesn't seem like any portion of the increased fuel prices are being passed on to golfers. But how long can that happen? Golf course owners are relying on skillful superintendents to do wonders with their maintenance budgets. On the other side of the golf course equation are the golfers who have high expectations of course conditions. So, something has to give. Either the golfer pays higher green fees or course conditions slip a bit. Maybe this has happened already at some public golf courses.

If course conditions slide, some golfers will become unhappy and play elsewhere. ROUNDS and revenue will decline, and a few more courses will go out of business in saturated markets. According to the National Golf Foundation, 68 golf courses closed in 2003, 63 courses closed in 2004, 94 closed in 2005, and 90 are predicted to close in 2006. See a trend here? High fuel prices might be the straw that breaks the camel's back, so to say, and could be one more factor of course closings.

Fuel prices will undoubtedly have an impact on course quality at some facilities. The question is whether golfers will accept that or even draw a connection between increased costs and conditioning. The challenge for those facilities will be to educate golfers about that connection or to justify increased green fees. Either of those options are a tough sell in a highly competitive market.

NGF predicts 130 course openings this year. Subtract the number of course closings projected, and there's a net gain of 40 courses this year. That's not much growth. Nonetheless, it's still growth. It's a tough time for the golf course business, but the industry will get through it, no doubt.

An economic climate like this is forcing managers to adopt better practices and run better businesses. Will facilities revert to their previous practices if times get better? I doubt it. The industry has entered a new era in which doing things "the way we've always done them" just isn't good enough.

The impact of fuel prices is just part of the equation that's pushing the industry to reinvent itself. It's not fun, and it's not easy, but it has to be done for the golf industry to survive and thrive in the 21st century, GCN.
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Spending money wisely
I appreciate Jim McLoughlin's column about the Golf Course Superintendents Association of America board perks ("GCSAA board perks," May, page 20). His opinions are pretty much where I was at during my two years on the board. While many of the perks are reasonable, some were a bit excessive. Obviously, not everyone at the GCSAA believes that, or they would have been changed. I know most GCSAA members have no idea about how many dollars are being spent to support the board each year.

The perks are only part of the story. The other issue is about some of the locations where meetings are held and some of the social functions related to those meetings. While I agree some of these meetings are a part of conducting business, I don't think we really get our dollars worth when we send multiple attendees to many events where we don't even have any significant meetings planned or outcomes expected. I know there are others who will disagree about the value of us being at such events, but all too often some of these trips involve very little real business. As I stated earlier, this is just my own personal opinion, and I know others disagree.

At our board budget meeting last fall, I challenged my fellow board members to think about where we held our meetings and how we spent our members' dollars. I don't think anything has changed since that time, but I hope the new board members and future boards recognize it as an important issue. It's the duty of the elected board members to use the members' money wisely.

I want to thank Jim for putting this subject in the spotlight where hopefully more GCSAA members will give it some thought. I want to thank him for caring about our industry, staying involved and providing quality education to many of our members in his local programs.

Gary K. Carls, CGCS
Sunnyvale (Calif.) Golf Course

Ha! Ha!
I read Pat Jones' piece/commentary ("The politics of golf," March, page 62) and got a good chuckle out of it, even though there's more than humor there. Sometimes truth is stranger and funnier than all the fiction we see on the boob tube. Actually, as I was reading the commentary, the columns written by David Feherty came to mind. Feherty's humor and Jones' run in the same vein. (That was a good one about the sheep!)

Anyway, keep up the good stuff and keep it in the short grass.

David Wheatel
Golf course architect
Hudson/Fry
Columbus, Ohio

I read Pat Jones' bobblehead piece ("Bobbleheads," http://www.golfcourse-news.com/news/news.asp?ID=2385) and thought I was listening to Andy Rooney on 60 Minutes. Some sense of humor. It's somewhere between Louis Grizzard, Dave Barry and Jack Nicholson in The Shining. He must be spending a little too much time with writers Geoff Shackleford and Brad Klein.

Ed Walsh, CGCS
Shelter Harbor Golf Club
Charlestown, R.I.

Clarification
The marketing column in the May issue ("Electronic marketing," page 16) was co-authored by Phil Wiggins of Wiggins Golf Consulting in Pinehurst, N.C. GCN
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College curriculum shift means interests vary

by John Walsh

It's no secret managing a golf course involves much more than managing turfgrass. Because of that, university turfgrass professors are helping students become more well-rounded in preparation for the real world. They're doing this by tweaking their curriculums and offering more business and communication courses. Kansas State University in Manhattan made significant changes to its turfgrass program in 1998, and as a result, the number of students who entered the program increased. It all started with professional golfer and KSU alumnus Jim Colbert giving back to the university by helping fund and build a golf course for the school to help attract more students, according to Jack Fry, professor in the horticulture division at KSU.

KSU had a turfgrass program for decades but wanted to improve it, so some of the university's professors asked the Golf Course Superintendents Association of America for direction to develop a cutting-edge program. As a result, KSU incorporated a business minor into its program and added six to nine credits of communication that involved writing and speaking.

"We had a different twist on the turfgrass program," Fry says. "We also had the students take 12 credits of hotel and restaurant management, which gave them an idea of what it's like to work in the clubhouse even if they don't want to work there."

KSU turfgrass students also have to complete two internships worth six credits. Students can complete both internships on the golf course, or complete one on the golf course and one in the clubhouse.

If a student completes the program, he will earn a B.S. in agriculture with a major in turfgrass management, according to Fry. With that degree, students inevitably receive a minor in business. The revamped program was implemented in 1998 and had 40 to 50 students enrolled, then it jumped to 160 in the early 2000s, and now it's down to 110, partly because of the golf market economy.

"We hope to put out better quality students," Fry says. "One thing the change in the program did was broaden the pool of students, such as those who like golf, want to work in the pro shop, or in sales for manufacturers or distributors. But we tell those students to keep their options open with the possibility of becoming a golf course superintendent."

Since the program's inception, the school has worked to improve it. For example, the department brought back 30 graduates to have them tell the university where improvements could be made. The graduates said an introductory course to mechanics was needed. Based on that response, the university is looking to partner with a company to provide that education, according to Fry.

KSU also received feedback from other universities.

"Most of the feedback we got when we started the program was from institutions with high enrollment, such as many of the Big Ten schools who found it difficult to change their turfgrass programs because they have a long history of focused turfgrass programs and because of political reasons," Fry says. "However, we were encouraged to do this from the top down - from the president's office."

Despite the perceived difficulty, change is occurring at The Ohio State University in Columbus. If a student majors in turfgrass science, there's a 25-hour minor component to that. At least half of the 100 students minor in agriculture or business, according to turfgrass professor Karl Danneberger.

"We're also working with the hospitality school so the kids can get experience with food and beverage," he says. Iowa State University in Ames offers its students majoring in horticulture a minor in business, which is 15 credits and taken through the business department. Some-one who doesn't want a minor in business can be directed into more business-related classes. There are also business majors who minor in horticulture, and all students take accounting, according to Karl Danneberger, professor of horticulture at Iowa State.

Danneberger says the classes students take are changing based on their interests not because Ohio State is mandating change.

"As advisors, we encourage them to do that," he says. "They're given advice, and a lot of students are moving that way. We introduced a sports-turf class involving budgeting and communications. We would have never done this years ago. We are adjusting to the market."

"Most students in turf come into this business to work outside," he adds. "It's what they like to do. But as they progress, they realize they need to communicate, budget, deal with people, etc. As advisors, we push them into professional support areas such as human resources, communication and accounting."

Fry says this kind of change to a school's turfgrass program is long overdue and more of it is needed at other turfgrass programs throughout the country. However, there are drawbacks.

"There's no doubt you have to give something up, such as a biochemistry class for an accounting class," he says. "But it can be difficult to do that because of the politics involved and because so many students are enrolled in business classes there's no need to require additional students to take them."

Overall, recent turfgrass science students are more well-rounded compared to students in the past, Danneberger says.

"Students should have a more global view," he says. "Golf course management is more than cutting greens one-eighth of an inch. It's about dealing with people. Our job is to expand the students' views."
by Heather Wood

Justin Peloquin learned about bentgrass and Bermudagrass in college, but only recently did he learn what it really takes to be a golf course superintendent or assistant superintendent.

“It’s not just growing grass,” says Peloquin, assistant superintendent at La Quinta Resort & Club in Palm Desert, Calif., of the job. “You have to have good financial, public relations and human resource skills.”

This is one of the reasons the Green Start Academy was formed. Bayer Environmental Science and John Deere have teamed up to present the program for aspiring assistant golf course superintendents who want to further their skills and network with colleagues.

A maximum of 50 applicants will be accepted into the inaugural program, which will be held Sept. 27-28 at the Bayer Environmental Science Training and Development Center in Clayton, N.C., and John Deere’s Turf Care Factory in Fuquay-Varina, N.C. Education sessions, a tour of the John Deere factory and an evening of entertainment are on the academy’s syllabus.

“We wanted to be able to help assistant superintendents who want to further their careers,” says Matt Armbrister, segment manager at John Deere’s golf and turf group and one of the lead organizers of Green Start Academy. “When you have somebody who has a willingness to commit to their career, it’s crazy for us not to assist them to get to a higher level.”

The golf course management industry can be competitive, and the two companies want to help those who are committed to their careers, Armbrister adds.

Aaron Wells is one of those assistant superintendents who is committed to his career. He started working on a golf course when he was too young to drive and now has been an assistant superintendent for seven years. Currently, he works at Belmont Country Club in Ashburn, Va.

Because there are fewer golf courses in cooler, northern climates, there are less top positions available, and thus, more competition, Wells says. He remains positive about his chances of advancing, though.

“I’ve been an assistant for quite a few years, and I do a lot of the things that a superintendent does at other courses,” Wells says. “I’m just waiting for the right opportunity to advance to the superintendent role.”

Still, having a program like the Green Start Academy on his resume couldn’t hurt, Wells says.

“I would be interested in seeing how my skills would compare to other assistant superintendents’ skills,” he says. “I don’t think there are any other programs like that out there.”

Todd Marten, an assistant golf course superintendent at Pine Hills Country Club in Sheboygan, Wis., agrees that networking is an important tool.

“It’s good to be able to sit with other superintendents or others in the business and talk about our experiences,” Marten says. “You learn a lot that way.

“Just being in the group of assistants can be an accomplishment today,” he adds. “It seems like there’s not as many jobs to go around as there used to be.”

Meeting with colleagues always has paid off for Peloquin. People he has met through various professional channels have remembered him years later.

“It can never hurt to network,” he says. “Anything you can do to get your name out there in the industry is a plus.”

Interested assistant superintendents need to be recommended by a superintendent and must write an essay. Entrants will be judged by a panel of golf course superintendents. For more information, visit www.johndeere.com/academy.

Green Start Academy
Networking and education for assistant golf course superintendents. As many as 50 golf course superintendents will be chosen. Sept. 27-28, 2006 Clayton and Fuquay-Varina, N.C. www.johndeere.com/academy
High fuel prices force operational tweaks

By John Walsh

Superintendents still are paying high prices for fuel, and public facilities seem to be more affected by the higher prices than private facilities.

At the private, nine-hole River Isle Golf Course in Bradenton, Fla., golf course superintendent George Cook, who has a 250-gallon storage tank on site, purchases fuel from suppliers Bradenton Fuel and JH Williams. Cook shops around for fuel because he needs to buy it from more than one source in case one of the suppliers doesn't have it available. For Cook, fuel prices have increased 50 percent more than what they were last year, he says.

"Everybody is experiencing high fuel prices," he says.

Despite the increased fuel price, Cook has maintained much of his mowing practices, however, he has increased the size of the rough areas. And by using Primo Maxx, a growth regulator, he can reduce fairway mowings from three or four times a week to two or three. By reducing the number of mowings, Cook can have a staff member trim trees or edge bunkers instead of hiring another person to do those tasks.

Samuelson, too, says he's been consistent with his mowing practices for areas of maintained turf and has applied plant growth regulators to decrease the number of mowings by one time a week.

Yet the increased fuel price hasn't forced Cook or Wright to change any other areas of their budgets. But that hasn't been the case for Samuelson, who has a maintenance budget of $2.1 million.

"I've been borrowing from other categories such as labor and supplies," he says. "I've cut back on seasonal workers."

Even though fuel prices have increased, Wright hasn't changed his mowing practices, however, he does try to save money by carpooling workers in utility
vehicles, each of which holds seven gallons of gas.

"Anything helps," he says.

Because of the fuel-price hike, Wright is looking into convert his gas-powered utility vehicle fleet to electric or hybrid vehicles.

Additionally, when one of the facilities' golf courses was renovated recently, low-mow or low-maintenance areas increased, so now 5 percent to 8 percent of the course is considered low maintenance.

Wright says Laurel Oak members don't want to change course conditions and are willing to suck up the increased fuel cost and deal with it until the price comes back down.

Overall, Wright says high-end clubs haven't been affected by the increase in fuel prices and superintendents at those type of clubs aren't changing their maintenance practice much. However, some facilities are more affected by the fuel price hike and are using more plant growth regulators, changing mowing practices and switching gas-powered utility vehicle fleets to electric ones. Samuelson says the city of Sacramento wants to purchase more electric utility vehicles.

If one of the courts at Haggin Oaks is $50 with a cart on weekends and the other is $29.

At the same time, Samuelson says the Sacramento market is struggling a bit - one course went out of business last year, and he says he wouldn't be surprised if another went out of business this year or next.

For next year, Cook says he'll prepare the membership and budget for a worst-case scenario regarding fuel prices. If he doesn't spend the budgeted amount because of cheaper fuel prices, it will be an unexpected plus.

"In the past, fuel prices have gone up and down, but not as significantly as recently," Cook says. "The effect of fuel prices on the conditions of the course are ultimately controlled by the membership. They will determine how far back to cut." GCN
t long last, golf course owners and managers are becoming more marketing savvy. Most know their operational business well, but I'm receiving more pointed questions about specific areas of golf course marketing instead of questions about general problems. Here are 10 often-asked marketing questions:

1. At what price point would golfers play my course more frequently?
2. What do I do when I know I have a problem with member attrition but don’t know why?
3. Are the discounts being offered at my competitors’ courses affecting loyalty at mine?
4. Where are my core golfers coming from?
5. How do I determine what amenities to offer members and in what priority?
6. How far are golfers traveling to play my course?
7. How do I compete effectively with clubs that offer more amenities?
8. What do I do when my competitors’ courses seem packed regularly and mine isn’t?
9. What other courses do my frequent players favor?
10. How should I react if my competitors discount rounds?

The simple answer – although it’s sometimes met with, “Yeah, I hadn’t thought of that” – is to survey your members or players. Ask them what’s missing, what they want or what would enhance the value of your club to them. A combination of member and player surveys and focus groups can reveal existing and potential problems of which management might not be readily aware. However, keep in mind the difference between a member survey and a player survey.

**Annual member survey**

A member survey helps reveal members’ opinions about the course and what changes they’d like to see. The survey should cover every aspect of a club’s recreational and business offerings, from course conditions to facility amenities and everything in between. Ask them what’s missing, what they want or what would enhance the value of your club to them. A combination of member and player surveys and focus groups can reveal existing and potential problems of which management might not be readily aware. However, keep in mind the difference between a member survey and a player survey.

**Quarterly player survey**

Semi-private and public clubs should implement a plan to survey the pay-to-play golfers, excluding members, to assess their opinions of the facilities’ conditions and determine what influences their decision to play the course, as well as the others.

The player survey has to be much more streamlined than a member survey. A member might spend as long as a week answering all of the survey questions and offering his opinions, but a player, perhaps, will spend barely a few minutes on a survey. So, limit the number of questions to 10 and provide multiple choice answers only. Cover general topics such as handicap, age, sex, preferred times to play, number of rounds played annually, what’s most and least liked about the course, and the distance traveled to play the course.

Because each facility’s greatest resource for increased play is repeat and referral business, your facility should conduct a quarterly review of its customer base. Here are steps to take for conducting a player survey:

- The manager should schedule a survey week each quarter of the year. The survey should be handed out for seven consecutive days so it can represent all segments patronizing the course.
- The manager should determine an effective and appropriate incentive, such as a free beverage or daily drawing, to reward customers for filling out a survey and returning it. The returns on this kind of a survey are low (5 percent to 10 percent), so it’s important to have the entire staff encouraging customers to fill them out.
- The atmosphere should be friendly while handing out the surveys. You’re asking customers to do you a favor, so you should make sure they realize the information is important and meaningful to the operation and service to them.

**Valuable insight**

Whether the survey you conduct is for members or players, the research information you gather will be used as a barometer to gauge real and/or perceived problems that might need to be addressed at your club. The first few surveys will provide basic insight into your audience. However, with the compilation of repeated surveys, you’ll begin to gain valuable insight into who’s playing your course and why. The information will go a long way to help you market your course more effectively.

Your members or daily-fee players can provide you with much-needed insights that will allow you to make critical decisions for the future success of your course. Ask them.
The Superintendent's Guide to Controlling Putting Green Speed

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**Introducing native areas**

Using native areas to save money and be environmentally friendly is becoming more popular. While native areas aren’t maintenance free, the savings are substantial enough, according to Pizzo and Associates. (See chart below.)

In theory, a 10-acre turf reduction could save $46,000 annually and benefit the environment by filtering golf course inputs; increasing wildlife population; and reducing irrigation, mowing and fuel consumption. Often, the contrast of colorful natives compared to green turf enhances course aesthetics.

However, there are practical considerations when adding natives to a course, including the trade-off between less turf and slower play. So, where do you reduce turf without increasing the time it takes to play a round of golf?

<table>
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<th>Year</th>
<th>Turf</th>
<th>Native</th>
<th>Savings %</th>
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<td>Planting year</td>
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<td>Years one through three</td>
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<td>Year four and beyond</td>
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Presumably, reducing turf areas increases the time it takes to look for lost balls. However, a recent USGA-sponsored study about lengths and dispersions of tee shots provides clues to minimize that time. The study was conducted on a public course in New Jersey on a 323-yard par 4 that has a bunkerless, 35-yard-wide fairway. Of 200 players, 20 used the back tee, 30 used the forward tee, but the 150 players who used the middle tee were the only ones measured. (See chart below.)

Twenty-two percent of tee shots didn’t make the chart because they were hit shorter than 130 yards. Presuming most drives are 90-percent carry and allowing some play corridors keep four of five tee shots successful. Here, the picture looks rosier: 80-yard play corridors keep four of five tee shots in play, 70-yard corridors are acceptable, and 60-yard corridors or narrower cause too many lost balls. If you’re retrofitting a course, the corridor width should be tailored to your irrigation system. A double-row system covers about 45 to 55 yards, a triple-row system 65 to 70 yards, and a quadruple-row system 90 yards or wider. If you’re using native grasses, part circles are recommended on the edges because watering natives often creates a weedy mess in the area nearest the fairway, while outer areas are thinner, helping golfers who go further off line. And the maintenance of additional weeds caused by irrigation might eat up any cost savings.

Other considerations – soils, sunlight, traffic and drainage – are typical of any crop. Selecting the right plant mixture for your conditions is imperative. Most areas have a native seed nursery that will have a practical plant list and mixes to consider.

On an existing course, it’s wise to start small and carefully introduce natives to test establishment, maintenance and acceptability from golfers before implementing the complete program. Perhaps keeping corridors wider at the 190- to 240-yard range and narrowing beyond this might be the best.

Each course should examine the savings – $46,000 seems high and would most likely be allocated to other worthy maintenance needs. You can estimate, based on play levels, what the extra half-hour might cost you in tee times and revenue to determine whether adding native areas helps or hurts you financially.

Losing a half hour of tee times every weekend day could easily be 12 golfers a day or about 1,000 golfers a year directly through slower play and others indirectly because your course is less fun to play. If you average $46 per golfer, you lose the maintenance savings, and perhaps some golfer goodwill. That’s why a careful study of how a native grass planting program would impact your facility is critical before you take the leap.

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**USGA one-day driving distance study – distribution**

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<td>Percent of tee shots successfully making the forced carry</td>
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<td>71</td>
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Finally, A Precision Short-Throw Rotor
That Won't Crack Under Pressure

So durable, so precise, so easy. The EAGLE™ 351B is the first golf-quality irrigation rotor, with a 5-year warranty when installed with a Rain Bird® swing joint. Adjust the arc for part- or full-circle coverage with a twist of a screwdriver, and dictate your water's throw with unmatched precision. The EAGLE 351B is fully top serviceable, too, so you can leave the shovel in the maintenance building.

Set it and forget it: Isn't that what everyone wants from a short-throw rotor? Precisely.

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* warranted for three years with any other swing joint
Rating golf club boards

Traditionally, when golf course programs face problems, golfers instinctively look to their leadership groups (typically boards of directors) to provide appropriate remedies. History shows, however, that golf’s operational leadership teams, even with the best of intentions, often become more a part of the problem than the solution. It's important to ask ourselves why this happens and must it continue.

The basic problem facing private club boards of directors (and in a similar manner but to a lesser degree the boards of men's and women's groups playing at public courses) is that their members generally lack the management, leadership and communications experience needed to effectively address the challenges their facilities face regularly.

The underlying reason why America's deep talent base doesn't find its way to club boards is because people with the relevant skills and experience working within the private business sector understandably don't join clubs (or play at public golf courses) to be asked to address the same tasks they perform at their day jobs. This creates a leadership vacuum throughout golf. Like any political vacuum, once a void is created, people will rush to fill it. In this case, it's the less experienced among us.

Because it's an innate desire of mankind to manage people and things, positions on golf's boards of directors are sought consistently by those looking to fulfill a personal management need they can't address in other ways. Consequently, golf's boards consistently attract well-educated, successful singular professional-type people who generally control their own time — lawyers, doctors, accountants, airline pilots, salespeople, nonprofessional women, younger "dot-comers" — whose career paths offer little personnel-based management opportunities.

A common trait of these relatively inexperienced aspiring board members is viewing their jobs as board members the only way they know how — through the eyes of their personal agendas, not through the prism of a club-need-based agenda. This approach produces the spiraling counterproductive operational performances that we often see, such as program declines that generate fiscal pressure, which leads to member assessments, escalating dues and a diminished, aging membership.

On a scale of one to 10 (with 10 being the highest rating), I would give the approximate 4,600 private golf club boards' collective performances throughout the country an informal seven rating (C+). However, there are two mitigating circumstances that lend clarity to the situation:

1. Golf clubs that hire a true general manager to complement a board's expertise will be well managed, perform at a high level and earn informal board-performance ratings within the eight to 10 range.

2. Similarly, because golf clubs that respect the game won't allow it to be embarrassed, these clubs also will always be well managed, almost without exception. (See my February 2006 GCN column.) Again, I'd assign the clubs that respect the noble traditions of golf an informal board performance rating within the eight to 10 range.

However, if only about 40 percent of the boards at private golf clubs throughout America fit within the two aforementioned (eight to 10 rating) categories, at what level does the balance (60 percent) of private golf club boards throughout the country perform? Does the term "bogies and higher" ring a bell?

Status quo?

Because the inexperience factor that's persistently undermining the effectiveness of club boards isn't about to disappear soon, how does golf escape from this debilitating scenario to provide the quality leadership it needs and can have?

Fortunately, there's a clear and direct answer to this question: Educate those (mentioned above) who are willing to serve on club boards, who have the time flexibility to do so and who possess the educational breadth to assimilate the necessary bodies of knowledge effectively.

How big a challenge would this be? In today's high-tech communications world, the suggested educational programming would be relatively easy to package and deliver through the Internet to facility administrations throughout the country.

For example, the following specific disciplines would be required programming for each board member within a national club board certification program:

- Long range planning because it negates personal agendas and best insures continuous thinking
- Bylaw analysis to negate the strong
- Hold internal club politics too often has on club governance
- The nominating process because all boards are direct products of their club's nominating process
- Board and committee mission statements because if you don't see the final objective, you won't get there
- Officer and committee chairmen job descriptions because this is the only way to hold individuals serving on club boards accountable; and
- A comparative management study to identify the benefits, or lack thereof, for committee-, general manager- and contract-driven management formats.

Finally, there's a need to complement the above mentioned educational profiles with an Internet-based, 101-level multicourse curriculum that wouldn't be required programming for all board members — only for those whose chairmanship and officer assignments correlate with the following areas of study: club budgeting and finance, club legal issues, facility renovations, membership/player development, food-and-beverage operations, agronomics and turf management, golf program and pro shop management, and personnel management.

National board certification would be earned on a club-by-club basis once some combination of each board's members has covered all the educational bases profiled herein. This approach would virtually guarantee that golf's leadership vacuum wouldn't be appropriately filled and the evolving quality of board performance would significantly elevate golf course operational performance throughout America — while at the same time cutting combined operational and capital spending from 20 percent to as much as 40 percent, annually.

A national certification program of this scope would generate revenues that would far exceed cost of development concerns. Borrowing on a phrase I have used before, but only on special occasions, the educating of club boards is a party waiting to happen, and the invitations are now in the mail. GCN
New 3336 PLUS™ Fungicide from Cleary works up to 50% longer — so you don’t have to.

Now you can add up to an extra week between applications with new 3336 PLUS®. Power-packed with ClearTec Activation Technology®, this revolutionary, broad-spectrum disease control solution works up to 50% longer on tough fairway diseases. Re-engineered from 3336® (the fungicide superintendents have trusted for over 30 years), new 3336 PLUS is a unique formulation breakthrough. 3336 PLUS makes more effective use of the active ingredient thiophanate-methyl, resulting in longer lasting disease control when compared with products containing the same ingredient.

Couldn’t you use the week off? Find out all the benefits of new 3336 PLUS with ClearTec Activation Technology by calling 1-800-524-1662, then press 6 or visit www.clearychemical.com.
Golf course superintendent Jim Kelllogg hardly contains his frustration when he finishes inspecting the Water and Sands Golf Course, which has been the pride of the community for decades. It's best known to golfers for tree-lined fairways winding around two small lakes. The maintenance crew has done a great job—the 12 holes in the woods have never looked better.

The opening three holes and closing three holes, however, are on an open, flat plain. These holes—characterized by large, eye-catching bunkers—are the face of the course to the community. But the bunkers frustrate Jim. The crew just can't get them right. Too often, the edges are irregular and the symmetric contours that characterize the course are frequently absent. After Jim chastises the crew, the bunkers look better for a few days, but then performance slips. Jim doesn't want to chastise the crew again and is looking for a different approach.

The problem doesn't appear to be training because the crew knows how to do the job—they just don't do it consistently great. The crew doesn't focus on bunker quality long enough to develop the routine to do an exceptional job continually. Jim needs to address three issues and revise his approach to the problem.

Learning doesn't ensure performance.

Think about what happens when someone changes his golf swing. It only takes hours or days to learn a new swing. However, it takes weeks or months to use the new swing consistently. For those weeks and months, the golfer must concentrate on using the corrected swing continually. Eventually, the new swing becomes a habit.

For whatever reason, Jim's crew doesn't have the right "swing" for the bunkers. The procedures they often use are flawed. Correcting them will be like a golfer changing his swing. Relearning the correct procedures is easy, but focusing on the correct procedure until it becomes a habit is challenging.

Jim excels at learning/relearning but lacks the follow-through to maintain the crew's focus until the learning/relearning becomes a habit. The focus must be maintained through positive redirectional feedback (correcting without blaming because the employees are trying).

Jim's chastising probably hasn't worked because he hasn't followed through to coach the crew until the relearned bunker procedures have become a habit. Jim must focus on continual, positive redirectional feedback to maintain focus until the correct bunker procedures become a habit.

Keeping score. Jim's friends and I play golf almost every Saturday morning. Every week we keep score, but we really don't care who wins. So why do we keep score? Because keeping score increases our focus. Jim needs to record performance similarly. By using the score to maintain focus, everyone can "win." For most work tasks, there's no obvious score, but green speed and golfer satisfaction ratings are used at some golf facilities.

Jim has a clear picture of excellent-looking bunkers. The crew has a fuzzier picture, so Jim needs to provide clarity for his bunker expectations. Given that circumstances have brought bunker improvement to the top of the priority list, some type of scoring system would signal this importance to the crew and help maintain focus.

Consequences for poor performance. I recently was asked to go to lunch by a colleague, and when I arrived, he was visibly upset. I asked him what was wrong, and he said: "Because you're so late, we'll have to wait at least a half-hour to get a table." I was frustrated because I thought I had arrived when expected. My perception was that I had been treated unfairly. Fairness is the key to excellent employee relationships. Employees perceive they're being treated unfairly when unexpected consequences are imposed, just as I did when I was reprimanded for arriving late. The key to fairness with reprimands is to be clear in advance about what constitutes unacceptable performance and what the consequences will be. It appears that Jim's chastising occurs when his frustration gets to a certain level. I suspect the crew perceive they're being treated unfairly.

When poor performance is specified clearly and the consequences for unexpected performance are spelled out, employees can make a choice to perform and not incur the consequence or not perform and incur the consequences. They still won't be happy when the consequence is imposed, but they're much less likely to feel they've been treated unfairly because they made the choice to not perform and the consequence was a result of that decision.

Currently, there are no effective consequences when Jim's crew performs poorly. There's no clear definition of poor performance, so Jim's chastising appears random and unfair to the crew. So Jim decides to do the following:

Step 1: Develop scores such as:
1. The bunker has perfectly smooth edges and is beautifully contoured;
2. The bunker has smooth edges and is contoured nicely but lacks the striking beauty that can be achieved only some of the time;
3. The bunker looks as good as it can given the current unfavorable weather conditions; and
4. The bunker has uneven edges and/or unsightly contouring.

Furthermore, Jim has taken pictures that represent scores one through four and decided good performance means no No. 4s and at least 50 percent No. 1s.

Jim also decides that if increased focus doesn't improve the bunkers, he'll impose the following consequences:
• First failure: The bunkers will be redone using the usual equipment; and
• Second failure: The bunkers will be redone using only hand rakes.

Step 2: Jim meets with the crew to discuss the importance of bunkers and to detail his new system of identifying great bunker performance and his expectations for great-looking bunkers.

Step 3: Jim uses positive redirectional feedback to maintain the focus on correct procedures to ensure great-looking bunkers. He forces himself to maintain this coaching as a priority until procedures for great-looking bunkers become automatic to the crew.

Step 4: Only if the crew doesn't respond to steps one through three does Jim mention the consequences. This keeps the initial focus on the positive. The first consequence of unacceptable performance is the introduction of the consequences. They're enforced when the next failure occurs.

Fortunately, steps one through three in Jim's plan are successful, and step four isn't needed.

This example might seem unnecessarily cumbersome and structured to you, but it best illustrates the issues: learning doesn't ensure performance, keeping score and consequences for poor performance. Only you can determine how to implement these at your facility most effectively.

GCN
When it comes to your greens, it's all about the color

It's not easy keeping all your greens, well, green. Turf Food granular fertilizers not only feed the turf, but also improve the life of the soil at the same time. So you get greener greens, tees and fairways and overall healthier turf... and a lot more.

- Outstanding and consistent color response
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University of Wisconsin research tells the story.

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The Roots Challenge provides season-long turf management solutions using Roots products to attain the healthiest turf possible – even in the most stressful conditions.

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Attend a local Roots Challenge Technical Conference for all the details.

Take The Roots Challenge and see for yourself – Consistent color by the numbers.

... Our Name Says It All
Do you use any organic fertilizers or pesticides as part of your turfgrass management program?

YES 83%

NO 17%

Source: GCN online poll of 110 respondents

by the NUMBERS

Many people in the industry talk about ways to grow the game of golf and the need for that. The First Tee is one organization encouraging young people to play the game. Here’s a look at The First Tee’s reach and revenue.

unaudited
Year ending Dec. 31, 2005

Revenue:

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<tr>
<td><strong>TOTAL</strong></td>
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"Superintendents need the courage to tell ownership they’re in a tough situation and have to change mowing heights for a few weeks to get through a tough period until they can get the course back to where it needs to be." – Mike Stamey, golf course superintendent at the 18-hole Maggie Valley (N.C.) Club Golf Course

"We’re the only golf course in U.S. history to be accepted into any EPA program." – Pat Blum, golf course superintendent at Colonial Acres Golf Course in Glenmont, N.Y.

"The whole staff, from the general manager to part-time employees, needs to understand what the reality of a small budget is. We all want the best possible product to give to the public/membership, but the reality is that we’re going to have to compromise on most all facets of the operation." – Teron Bay, CGCS, at The Willows at Kenton County in Independence, Ky.

"Golf course management is more than cutting greens one-eighth of an inch. It’s about dealing with people. Our job is to expand the students’ views." – Karl Danneberger, turfgrass professor at The Ohio State University

300,000
The number of students in The First Tee National School Program during the 2005-06 school year

209
The number of affiliated relationships The First Tee has with golf courses

217,000
The number of young people introduced to golf through The First Tee in 2005

52
The number of dedicated golf-learning facilities opened worldwide by The First Tee in 2005

800
The number of schools in The First Tee National School Program during the 2005-06 school year
Golfers will work around just about anything to play a well-conditioned course. It's that commitment that motivates Syngenta to provide you with what you need to enhance play. Products like Heritage* fungicide ensure that turf is disease-free and best able to respond to your agronomic plan and course schedule. It controls a broad spectrum of diseases from the inside out so that neither weather nor mowing can hinder its effectiveness. Heritage is an important part of a preventive spray program, which you can find for your area at GreenCastonline.com.

At Syngenta, we understand why golfers schedule their lives around ideal conditions. Our job is to create products that help make those conditions happen most often.

Go to: www.golfcoursenews.com/readerservice - select #18
Back to basics

WHY ONE GOLF COURSE SUPERINTENDENT SHUNS THE QUICK-FIX CHEMICAL CURE FOR TURFGRASS PROBLEMS

Mike Stamey's path to become a Class A golf course superintendent was a bootstrap journey.

In 1982, Stamey's first job after high school was on the maintenance staff of a resort course, the Great Smokies Hilton in Asheville, N.C., where he worked for superintendent J.W. Tipton. Tipton started his career at Asheville Country Club, which his father helped build. After leaving Asheville, Tipton helped build the Maggie Valley Club Golf Course. In fact, he sowed the seeds for Maggie Valley. He worked his way up the ladder and became a Class A superintendent in 1988, even though he had no formal turfgrass education. It's difficult to do what I did these days.
Mike Stamey says superintendents can't just keep mowing low to get a fast green speed. They have to have a program that fits the conditions.

Q Have you modified your aerification program?
Now that we have the greens where we want them, we did a small-tine aerification with a Ryan GA-30 this spring. In spring, many golfers are coming back and want to play. We use a smaller aerator because the greens heal much faster. We used one-half-inch coring tines and applied fertilizer when the holes are open. After aerifying, we go right behind with a greens mower to clean up the top surface.

The GA-30 comes in handy at other times. If the greens need to breathe a little bit, we put on solid quad tines and poke holes in the greens during the evening. After we've mowed the next morning, no one knows we've aerified.

We do the greens first, then tees and fairways. We don't pick up cores on fairways. We let them dry and mow at one-half inch. Then we blow off the tufts of grass into the roughs.

Q Which aerification period is most important?
Fall is the most important time for a golf course. In summer, it's hot, and we're irrigating and mowing every day. The soil is being compacted. In fall, the turf is going through a transition period, and it needs to breathe and get nutrients. One aerification in spring doesn't do enough to prepare the course for the hot weather in summer. It needs a fall aerification, too.

What you do in September is what your course will look like the following season. The goal is to develop the roots and plants before cold weather hits. We can have frost in October, but we want four weeks of good growing weather. Some courses around here push their aerification into late October. By doing that, the holes stay open all winter, and the greens struggle.

Aerification and fertilization get the turf back to top condition before winter, which is just as stressful as summer. If we can make it through summer and prep the course in fall, we'll have it in great condition for winter and ready for freezing temperatures and rain.

Q Is mowing a cultural practice?
Absolutely. We usually mow our greens at 0.155 of an inch. But in summer, when it's starting to get hot and there are thunderstorms, we raise the cutting height a bit. We'll take off the grooved rollers and put on solid rollers. We want to let the grass grow and thicken a bit because the summer heat is already thinning out the turf. We don't need a grooved roller to thin them out anymore— the grass is in a stress period.

Superintendents can't just keep mowing low to get a fast green speed. They've got to have a program that fits the conditions. If you have to raise cutting height to keep a quality surface, then that's what you need to do. Sometimes you have to give up a little speed. If the greens are at eight or nine on the Stimpmeter, maybe they need to be at seven for a while to keep a good, quality green throughout the season.

Q What is your irrigation philosophy?
Again, I consider this part of my cultural practices. I look at each green individually. If I insist each green get 20 minutes of water one night, some might be getting too much, and that creates disease or compaction. If part of a green is in shade and gets too much water, there will be problems. I change irrigation heads or nozzles to find the balance each green needs. I stay on top of issues and fix potential problems before they come up.

Good turf management is about seeing what can happen if you don't do certain things.

Q Is most of the work done by your staff?
Besides myself, I have an assistant, Robbie Henderson; a mechanic, Horace Downs; and six full-time, year-round employees. We do everything in-house. I guess that's another part of being old school, and it can pay big dividends.

The owners had a four-year plan to complete the infrastructure, renovate the bunkers and construct a large tee complex on hole No. 1. They asked if we needed to hire an architect, and I said no. I redesigned 32 existing bunkers, built 12 new ones and completed the other two projects all in one year.

Conservatively, I'd estimate that doing as much as possible in-house saved the club more than $150,000.

Q What other cultural practices do you use?
I use growth regulators on fairways and tees only. Our cool-season grasses come on pretty strong in spring. However, I don't use growth regulators on the greens. They're managed strictly by cultural practices. As for wetting agents, we apply them through our irrigation system.

I rotate fungicides, but I don't use a lot of biostimulants such as kelp or microbial inoculants. I call this witch-doctor stuff. I've tried them but have never gotten any results.

I'll spoon feed my fertilizer in the summer with liquid growth products and do this every two weeks from June through August. Finally, I take soil samples every year and send them to three different labs, then take an average of the results.

Q What advice would you give to young superintendents to become proponents of using cultural practices instead of seeking quick-fix, chemical cures?
They've got to get back to the basics. What grows grass? It's good aerification, irrigation, fertilization and topdressing programs. It's the basics of turf management. Don't buy and try everything the chemical salesmen bring around. My soil analysis tells me what the turf needs, and that's what I give it.

There are no quick fixes. It takes time to solve problems or reverse trends. Develop a program that best fits your golf course. The environment and situation could be totally different 20 miles down the road.

Mike Stamey can be reached at mstamey@maggievalleyclub.com.
THE PAST IS THE FUTURE:
New Breeding Improves Upon Tried-and-True Turf Varieties

Since the 1950s, Penn State University has been developing seed varieties that are universally respected and proven reliable due to a half-century of turf trials and widespread use by superintendents. Today, through state-of-the-art breeding techniques, those dependable breeds are taking on new, desirable traits while retaining the attributes that first made them popular.

The latest advanced bentgrass varieties - resulting from research at Pure-Seed Testing, Inc. - are PennLinks II and Penneagle II, the namesake offspring of their well-known predecessors, PennLinks and Penneagle.

**Trials and Tributes**
Both varieties, PennLinks II and Penneagle II, score well on mean turf quality ratings for creeping bentgrass entries in fairway and tee evaluations. Similarly, both rank well in color, leaf texture and summer density ratings. However, resistances to brown patch and dollar spot - two of the most common diseases found on fairways and tees - are the characteristics by which PennLinks II and Penneagle II distinguish themselves.

As the graph entitled “2004 Mean Brown Patch Ratings” indicates, PennLinks II exhibited no signs of brown patch in fairway/tee turf trials in Illinois and New Jersey; PennLinks II also demonstrated superior resistance. Furthermore, the graph entitled “2004 Mean Dollar Spot Ratings” shows that PennLinks II possesses strong resistance to dollar spot, while Penneagle II also ranks above-average. Finally, the graph entitled “2004 Mean Dollar Spot vs. Brown Patch” records that, of all the varieties tested in the 2004 turf trials at Pure-Seed Testing facilities in North Carolina, Penneagle II displays the best overall resistance to brown patch, and PennLinks II displays the best overall resistance to dollar spot.

Disease resistance actually turned out to be a fortunate side benefit while seeking other traits in what would become PennLinks II and Penneagle II. While seeking to quantify endophyte levels in the parent cultivars of the original PennLinks variety, Pure-Seed Testing and Rutgers University screened for and found good resistance to dollar spot, which became a primary characteristic of the next generation. In the meantime, Pure-Seed Testing president Crystal Rose-Fricker and Dr. Duich were working to improve turf quality and seed yield in Penneagle, at which time they discovered brown patch resistance in the variety, leading to its new incarnation.

**Mix and Match**
From there, it was a short leap of logic to blend the two, creating a stand of turf with resistance to both diseases. “The PennLinks II and Penneagle II, in side-by-side plots, looked like they would blend well, and because of those two disease resistances, that’s why we’re recommending blending them,” observes Rose-Fricker.

Blending is beneficial especially if the seed is to be used in more than one location, which is usually the case, creating a more uniform result across the entire area. Using a blend also hedges the turf’s performance bet against multiple pressures that could cause problems, and it allows for less fungicide and herbicide in the long run, saving associated labor and material costs.

Rose-Fricker cautions, “Unless you have some new super variety that tolerates everything and doesn’t die or get disease, you’re open to a number of problems. Whereas if you blend varieties that have distinct genetic backgrounds, you really help yourself in the long run.”

The best thing about this new blend is that, at its core, it’s not so new at all. What was reliable about PennLinks and Penneagle in the past remains so for their combined descendants.

The new options only improve upon what superintendents have relied upon for so long.

Meanwhile, those superintendents who remain cautious of new varieties are wise to do so. The latest entrants to the market are generally university tested, but such trials don’t fully evaluate performance in real world conditions.

“Some of the other bentgrass varieties look really nice in turf trials, but then you get them under a little pressure of disease and they blow up and you’ve got to apply a lot of fungicide,” explains Rose-Fricker. “Why would you want to have that risk, have that worry, and spend a lot of money on a bunch of fungicides when you can use proven varieties that will tolerate things a little better, and give you peace of mind in the long run?”

Penn bentgrasses not only look beautiful in turf trials, but they’ve been fully tested for years - in the lab and in the field - so there’s no guessing at what you’ll get when you seed with them.

---

**2004 Mean Brown Patch Ratings**

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9 = no disease

**2004 Mean Dollar Spot Ratings**

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9 = no disease

**Dollar Spot vs. Brown Patch**

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Go with the flow

A FIELD-DESIGN APPROACH YIELDS COST SAVINGS FOR DEVELOPER

by PETER BLAIS

While many golf course projects are the result of hours spent on computer screens and drafting tables, a more field-design-oriented approach can yield high-quality layouts and substantial cost savings for developers. An example is the nine-hole addition at the Golf Club at Devils Tower, which is scheduled to open this month in Hulett, Wyo.

Working with developers James and Jim Neiman and project manager Darten Flanagan of The Golf Course Co., Kevin Atkinson of Phelps-Atkinson Golf Design crafted nine holes and renovated the existing nine into an 18-hole layout.

"The organization of the construction contract at Devils Tower was created with the understanding that many of the greatest golf holes weren't necessarily designed in detail on a plan but discovered in the field during construction," Atkinson says.

The construction contract was structured so shapers Greg Martin and Ben Chambers, along with Flanagan, were paid a fair monthly fee, while the owner supplied most of the equipment, materials, fuel and some local labor, according to Atkinson, who estimates the owners saved as much as 35 percent on earth-work costs.

"This unique structure allowed all the people involved to concentrate on creating the best golf holes possible within a reasonable budget, without the worry or hassle of change orders and the heartburn typically associated with them," Atkinson says. "The arrangement also allowed the owner to use his own heavy-construction equipment and local operators to clear trees and complete the heavy earth work."

Flanagan, who has built golf courses throughout the world, says this concept was something he wanted to try in the United States.

"The joy is that it minimized the cost to complete the project," he says. "We could make changes and field adjustments without the ownership absorbing additional costs through change orders. Given a choice, I would build 90 percent of my courses this way."

Preserving natural beauty

During the development course, the Neimans wanted to maintain the area's cultural and natural history as much as possible. For example, the family requested Atkinson and Flanagan preserve a stand of trees that grew from seeds that sprang roots in tracks along a high bluff used by wagons making their way West in the late 1800s. The family also restored the 1800-era Charlie Maze cabin located between the 16th green and 17th tee.

The Neimans encouraged Atkinson to use as many native plant species as possible.

"Doing this the way we did gave us the ability to protect certain areas and enhance their natural beauty," Jim Neiman says. "To capture the natural beauty of an area is difficult to do from a map and blueprints. You need some flexibility to work with the trees and the landscape."

The Neiman family - who operates Devils Tower Forest Products, the area's largest employer - was focused on helping the community grow. Their idea was to draw visitors and second-home buyers to the area. So, they hired Dick Phelps to build the first nine holes, which opened in 1998.

"The family's plan was to tie the golf course in with a recently built neighboring airport that has a 5,500-foot airstrip, allowing it to accommodate small- and medium-sized jets. Those flying into Hulett can land, be picked up in a golf cart and be standing on the first tee within five minutes."

"When I started looking at the best group of visitors to attract to our community, pilots, golfers and hunters seemed an ideal mix," Jim Neiman says.

The original nine ran over fairly open, high-prairie land. The new nine was slated for a more challenging piece of ground incorporating large red-rock canyons and cliffs, along with dramatic views of the surrounding Black Hills and Devils Tower - a monolith that rises 1,267 feet above the meandering Belle Fourche River that was dedicated 100 years ago as the nation's first national monument by President Theodore Roosevelt.

Local help

When Atkinson started the project, he didn't have much time to develop construction documents for the new nine holes. The only drawing he did was a basic routing plan.

Atkinson also planned renovation work to the existing nine: rebuilding bunkers; adding a few tees; upgrading the irrigation system; widening fairways; incorporating native grasses; and transplanting and removing trees that yielded a more open, high-prairie feel to the existing front nine. Flanagan figured out how to implement these plans cost effectively.

"When we first looked at the site, we
During the development of the Golf Club at Devils Tower, much of the area’s natural history was preserved.

Photo: Phelps Atkinson Golf Design
Plans call for the addition of another nine holes to the Golf Club at Devils Tower.

started thinking about the high mobilization costs of getting equipment into the area," Flanagan says. “We noticed the Neiman family had a lot of equipment, scrapers and track hoes. We convinced them they could use the equipment and local operators under our direct supervision, which would allow us to create the new nine and the renovations more economically without the need for the administration of work orders and projects that were not specified in the contract.”

The owners liked the idea because it allowed them to participate directly in the project development. James Neiman built all the stone walls with large boulders he’d been collecting for 10 years from various construction projects in the area and during construction of the golf course. He used one of his logging trucks with a claw-like loader to place each stone.

Using scrapers, bulldozers, lumbering and specialized golf-construction equipment, local labor and six golf-construction specialists assembled by Atkinson and Flanagan, the pair basically designed and built the course in the field. Flanagan characterized the golf-construction veterans as a group of experienced shapers and drainage experts who were good at what they did and adaptable to changes in daily equipment and labor conditions.

“We brought in the experienced personnel we needed, and using local labor minimized the overhead,” Flanagan says. “We saved them 20 to 25 percent on the total job cost.”

From a design and construction standpoint, Atkinson says he couldn’t have been happier with the project. “There was something great about just starting a golf hole without a piece of paper and figuring out what you wanted and needed to do on the fly,” he says. “I hope to do more projects like this because of the quality that resulted from field design. Sometimes we moved a little bit of dirt, decided after a couple of hours the hole wasn’t right, and then made a change in a different direction.”

Golf course superintendent Jeremy Christensen joined the construction crew in July 2005. Christensen came from Rochelle Ranch in Rawlings, Wyo., where he grew in the new 18-hole course. “They had just seeded three holes and were getting started on the renovation when I arrived,” he says. “The big difference [between this project and the last one] was the design philosophy and amount of owner participation. Kevin would design the hole, look at it, make a few changes, and he and Darren would just work together on the final product. Jim Neiman did a lot of the dirt work, moving gravel and sand.”

**A course blend**

Although the two courses were built eight years apart, the renovations to the older nine helped reduce the number of differences between the older and newer holes. “We changed some bunkers and added some additional bunkers on the front nine to match the back nine,” Christensen says. “The soil types are pretty similar. The new nine uses some of the newer bluegrass blends, which are a little darker, but most people will never notice the difference. The old nine has Penncross bentgrass greens, and the new nine has Pennlinks 2, so they’re slightly different texture. The older greens have a little more organic texture simply because they’re older. Otherwise, the two nines present little difference.”

Additionally, retrofitting the greens and tees on the old nine holes with dual-irrigation heads to match the new nine holes will help save water, a scarce resource in the arid West.

**Pros and cons**

Everyone involved with the project agrees the advantages of field design and combining the owner’s equipment and labor resources with specialized equipment and personnel far outweighed the disadvantages.

The only disadvantage of using inexperienced golf-course workers and construction equipment not specifically designed for golf course construction was the operators’ lack of knowledge concerning the importance of grade and how it ties into other areas, such as surface drainage, according to Flanagan. But even course-construction companies working with only their own personnel will have newer workers with little specific golf-construction experience.

Another minor inconvenience was that a few operators could only work limited hours.

The most obvious advantages were design flexibility, cost savings and avoidance of administrative headaches associated with change orders.

Another advantage was having access to equipment that could be used for golf and road and residential projects that are an
30th Anniversary of Stores-on-Wheels

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LCOMMITTED

Meeting customers’ needs remains company’s goal. BY CINDY CODE

ESCO’s foundation was built on its people. Founded in 1962 by Bob Burkhardt and James FitzGibbon, the company and its founders became integral to the success of turf managers big and small.

Now, 44 years later, the national formulator and distributor is striving to return to its roots. With 311 Service Centers and 114 Stores-on-Wheels vehicles, the company’s scope is far-reaching. Yet, its focus throughout the past few years wasn’t always squarely on the customer.

With much-publicized personnel changes at the management level and the elimination of its tenured direct sale reps, LESCO is committed to snatch back its core philosophies.

“Sound customer service … we got away from it in the past five years,” says Jeff Rutherford, president and c.e.o. “The problems were never about the people in the field, but the support of them. In the middle of that, we lost good people.”

Part of the problem stemmed from rampant growth. In 2005, the company expanded its Stores-on-Wheels fleet from 75 to 111. To accommodate this growth, the company had to move people from outside sales or regional management positions to staff the larger fleet. These moves eliminated the tenured golf sales reps, which created some lapses in the field and, in turn, sales losses.

In anticipation of turning the tide, the company now strives to reinstate its direct sales representatives and put it in the best position possible for the 2007 season.

“The decision to disband the sales representative program did not adequately take into consideration our customers’ needs,” Rutherford says. “I have spent considerable time talking to current and former LESCO customers, and many have taken business elsewhere because they lost their relationship with LESCO’s sales representatives.”

Working the direct sales representatives back into the fold will take some time. Twenty to 30 positions were immediately created. Half will be filled internally, and the remainder will be filled from outside the company. Most of the internal moves reflect employees, who had been reassigned in the organization, returning to their former roles.

In addition to the disbandment of its direct sales reps in early 2005, field-level personnel also were disparaged by corporate decisions to shift capital from the Stores-on-Wheels fleet to the manufacturing side of the business. However, by the end of 2005, the company sold its manufacturing assets and is now focused on its distinctive tandem of the Stores-on-Wheels fleet and Service Centers.

“I can’t stress enough that we haven’t lost focus in the field,” Rutherford says. “Our company was split culturally between the field, who were “Our No. 1 value is field focus – getting back to people who can make decisions.”
focused on customers, and corporately, who were focused on other things."

The company is working every day to change that culture.

“Our number one value is field focus – getting back to people who can make decisions," Rutherford says. “Stores-on-Wheels has been around for 30 years. We have a history of customer service and what it should be."

In addition to reinstating the direct sales reps, the company is strengthening its sales model even more. Direct sales rep and national account teams will be led by Steve Vincent, channel vice president, golf; and Paul McDonough, channel vice president, lawn and landscape sales. Both will report to Richard Doggett, senior vice president of sales.

While the company’s overall financial projections have been revised because of the sales losses stemming largely from a lack of a direct sales force, the company has added three Stores-on-Wheels vehicles this year and plans for more. In contrast, it will open about 39 Service Centers this year. For the next five years, the company’s strategic plan calls for an overall increase per year. Service Centers will be added in markets that include golf courses and lawn care customers.

The company’s model is a seamless, coordinated effort between Service Centers and Stores-on-Wheels vehicles.

"The new models may not carry all the bells and whistles, but we have Service Centers nearby that can plug any gaps," Doggett says.

Field reps are given latitude to find product to fulfill customer requests. In some situations, a golf course superintendent might stop by a Service Center on the way home and pick up a product for the next day’s use.

“We want our customers to go where they’re most comfortable and where it benefits them,” Doggett says. “Our reps have turf and product knowledge. If a superintendent needs a product that we don’t have on the truck, our rep will find the product he needs at one of our Service Centers and vice versa.”

In a turf market that’s continually changing, the company is committed to supporting superintendents and suppliers.

“There’s more pressure on superintendents today than every before," Doggett says. “Superintendents are being asked to do more with smaller budgets.”

Field reps make sure superintendents understand product availability and choices. Whether through field testing, understanding product needs or partnering with vendors to help end-users receive chemistry training so they’re comfortable with the products they’re using, the company wants to be there for its customers.

As competition in the golf market remains stiff, the company differentiates itself through its people, size and products.

“With relationships comes trust," Rutherford says. “We're going to be here. We're not going anywhere. This is our business.”
COVERING THE COUNTRY

Company improves and expands distribution through its Stores-on-Wheels approach. BY JOHN WALSH

During the early 1970s, LESCO had a problem with its distribution system. What the company did to remedy that problem changed the way it did business for good. To this day, no distributor or supplier delivers golf course products to superintendents the way LESCO does on a national level. That way is the Stores-on-Wheels vehicles.

As the company was expanding from Northeast Ohio to Michigan and Pennsylvania, it was having trouble shipping materials to its customers on time. Bob Burkhardt and Jim FitzGibbon, co-founders of the company that started in 1961, realized 300 miles was the furthest they could travel delivering products in a timely manner weekly. When the company entered the Chicago market, materials never got there on time, according to Burkhardt.

Then, in 1975 at the GCSAA Conference and Show, FitzGibbon met a distributor from San Francisco who was using a beverage truck to deliver products to superintendents at their courses, however, he was only covering the San Francisco market. There was also a distributor doing the same thing covering the San Diego market.

"The beverage trucks worked because the weather was nice, but we knew we had to have a truck that people could get in and out of," says Burkhardt, who's director emeritus of LESCO's board of directors and a consultant to the company's management team.

The company ended up using a one-ton pickup truck with a 32-foot cargo trailer that had electric brakes. The trailer held enough supply for deliveries for one week. The original trailer truck, which contained parts, accessories, pesticides and fertilizer, lasted two or three years. Then the company switched to gas mobile-home toters. In the 1980s, the company began using mid-range, diesel, single-axle trailers.

Burkhardt and FitzGibbon chose to expand their distribution with the cargo trailer in Florida because of the number of golf courses in the state and the fact they could conduct business 10 straight months.

"In 1976, we put the first truck and trailer in Florida with a guy who had been in the industry, but he didn’t work out because he was using the truck as a warehouse instead of driving around to the courses," Burkhardt says.

That first sales rep in Florida was replaced by Ed Williams, who worked for the company in inside sales. Williams worked in Florida for a year, then Phil Gardner, now manager of international and national accounts, replaced him. The original sales route, which still exists today, was a three-way turn in which the sales rep would visit all three areas in his territory every week but visit different customers in each area.

"Nobody had it like the way we eventually did it with routes and territories," Gardner says.

When the first Stores-on-Wheels truck started in Florida, the only other thing that was going on similar to that was in California where a LESCO customer was carrying various products around in small vans, Gardner says, referring to the distributor FitzGibbon met at the GCSAA Conference and Show. At the time, conventional sales reps were driving around in station wagons or pickup trucks but didn’t have the selection Stores-on-Wheels offered, and few carried a complete package, according to Gardner.

Shortly after the Stores-on-Wheels concept worked in Florida, FitzGibbon put a truck in Ohio and sales improved quickly, according to Gardner. Stores-on-Wheels also entered markets in Chicago; Erie, Pa.; and the Carolinas.

"There were a few competitors that tried to copy the Stores-on-Wheels approach, but they never seemed to make it work."
The Stores-on-Wheels concept exceeded the expectations of the company’s co-founders, Jim FitzGibbon (left) and Bob Burkhardt.

“In fact, there have always been a number of Stores-on-Wheels reps who are former superintendents.”

The growth of Stores-on-Wheels happened quickly at times, according to Burkhardt. For example, LESCO bought a liquid fertilizer company in Marietta, Ohio, in the late 1970s, and that purchase gave the company a foothold on the East Coast and into areas it wasn’t distributing.

“Most of the outer areas didn’t have much support,” he says. “We had fertilizer plants in Wellington, Ohio; Windsor, N.J., and Sebring, Fla. But we would never be able to expand the Stores-on-Wheels if we didn’t use the warehouses. Warehouses in Ohio, New Jersey, Florida and Dallas covered the country. Throughout the years, smaller warehouses were opened in North Carolina and Alabama.”

The growth of Stores-on-Wheels concept still is growing 30 years after its inception. A new style truck was unveiled in February 2005 at the Golf Industry Show. Until last year, the Stores-on-Wheels vehicles were tractor trailers. The new trucks have evolved and include air conditioning and heat in the trailers, are easier for superintendents to enter and exit, and are easier to navigate around golf courses.

“We’re improving their shopping experience,” says John Schmidt, zone vice president of the Southeast who has been with the company for 25 years and who drove a Stores-on-Wheels vehicle for 10 years. “We’re always looking at the product line, such as fertilizers and pesticides...
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that change based on the turfgrass superintendents are managing. We continue to evaluate the products and take things off the truck that become obsolete.”

Currently, there are 114 Stores-on-Wheels trucks nationally, 14 of which are in Florida and cover every golf course in the state. Last year was a big year for growth because the number of trucks increased from 75 to 111.

Presently, the company’s growth is more deliberate, and it’s increasing its focus on servicing customers. Three new Stores-on-Wheels vehicles have been added this year: one servicing central Virginia, one servicing Minneapolis, and one servicing Western Iowa and Eastern Nebraska.

Also, one truck was relocated from Connecticut to New Hampshire and Vermont.

As new golf courses are built each year, the company re-evaluates the size of each territory because a truck can only handle so much, according to Schmidt.

Looking toward future growth, additions to LESCO’s fleet transpire based on market needs.

“We’ll be circumspect about it,” Rutherford says. “From a capital perspective, it’s not an issue. It’s leased trucks and inventory. We add them if markets really need them. We’re currently settled into getting the 114 we have operating effectively.”

FROM THE BEGINNING
One of the first Stores-on-Wheels representatives grows with the company. BY JOHN WALSH

Thirty years ago, Phil Gardner was a golf course superintendent looking to move to Florida. LESCO gave him that opportunity.

Gardner, now manager of international and national accounts, started with LESCO in 1976. For 10 years before joining the company, he was the golf course superintendent at Blackhawk Golf Club in Galena, Ohio, and Minerva Lake Golf Club in Columbus, Ohio.

While a superintendent, Gardner developed a relationship with Jim FitzGibbon, the co-founder of the LESCO. FitzGibbon accompanied the company’s sales representative that called on Gardner and attended the Ohio Turfgrass Conference & Show and several turfgrass field days in the area. They talked and hit it off.

At the time, Gardner wanted to move to Florida. FitzGibbon told him about his idea of delivering various products to golf course superintendents with a truck.

“Jim explained the Stores-on-Wheels concept to me, and it was interesting,” Gardner says. “At the time, there was no showroom of products for superintendents. You always went through the manufacturer. There was no place to look around and shop. The reason why I went to Florida was to see about breaking new territory with the truck.”

Before Gardner went to Florida, FitzGibbon already had a sales rep there, but he didn’t work out because he used the truck as a warehouse instead of visiting courses with it, according to Gardner.

“At that time, we didn’t know if the truck would work,” he says. “I wanted to go to Florida, but I didn’t know much about warm-season grass. So I figured if working on the LESCO truck didn’t work out, I would learn about warm-season grass and go back to being a golf course superintendent. But in the first three or four months, we knew it would work, and there was no turning back.”

Gardner spent 10 years in Florida. His territory started out as the entire state. He spent three years on the truck and started calling on way too many golf courses - 200 or more a month. Once superintendents started buying products, they wanted to do so more frequently, so Gardner needed to make more stops. The Florida territory eventually was split in two, and Gardner became a regional manager.

When Gardner was regional manager, the company built a fertilizer plant and warehouse in Florida to support its business. He oversaw the operations of both.

“There was a lot of competition in the state, so the truck, warehouse and plant gave us advantages,” he says. “The advantage of the truck was that you could sell odds and ends right there in front of the superintendents, then work your way up to selling them pesticides, fertilizer and controllers.”

Gardner says the key to making the truck work now is the same as making it work back then – consistency.

“You need to keep a route of consistency,” he says. “Every two weeks, I’d always be back to the same courses regardless of what the superintendents were buying. I always believed a salesman who didn’t make it on the truck didn’t follow that consistent path.”

Gardner believed that even though some superintendents might not buy much, or anything at all, that shouldn’t deter a sales rep from consistently visiting them. The course might find new money or the superintendent might move on to another course with a much larger budget. Either way, building a relationship was the key.

After his success in Florida, Gardner was asked to relocate to Cleveland to work in the corporate office.

Gardner has been with the company for so long because he enjoys the work, has worked hard to develop many relationships throughout the country and loves the company.

“One of the things during my 30 years with LESCO is that I was fortunate to be with the company when it was in a growing mode,” he says. “I did a lot of different things, such as work in plants, service centers, the lawn care division, and my job never became boring. One key to my success is that I always remember who the customer is and who the important people are.”

In short, he never forgot his roots as a superintendent and those early days pioneering the Stores-on-Wheels.
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SAVING TIME
AND MONEY

National Accounts program allows customers to manage their businesses more efficiently. BY STEVE AND SUZ TRUSTY

With LESCO's National Accounts program, one-stop shopping saves golf course management companies time and money. That consolidation of purchasing is an element management companies seek to run their businesses better, and LESCO has the products to fill 80 to 90 percent of their needs, according to Dave Wolfard, director of national accounts for golf.

“Our private LESCO label has grown tremendously,” he says. “We're constantly introducing innovative new products and new formulations. We have multiple categories including fertilizer, quality seed and control products. We can bring the best to the market in a larger sense in dollars and distribution.”

The broad range of products is an advantage for development companies building new golf courses. The company works with architects and builders to provide services and products from construction through the grow-in, as well as for the management program once the course is opened.

In its seventh year of operation, San Diego-based Heritage Golf Group has partnered with
Thirty years and a million miles of memories.

We've traveled many roads since the first LESCO Store-on-Wheels® vehicle began calling on golf course superintendents in Florida 30 years ago. And we've made a lot of friends and memories along the way. Through the years, golf course superintendents have come to expect us — and respect us. Not only for our consistent, at-your-door service, but also for our huge selection of trusted brand-name products and technical expertise. Providing the best service and the best products has been our focus since the company began. It continues to drive us today.

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Lesco from the beginning, Heritage is a firm believer in consolidating purchases into one basket as it relates to product, according to Norm Goodmanson, vice president of development.

"We consider a national account agreement more than establishing the purchasing pricing," he says. "We're basically getting married to the company, doing business with them exclusively within that agreement. It gives us the ability to control and lower our pricing; and secondarily, it frees the golf course superintendents from price shopping and gives them more time to do what they should be doing - managing the golf course."

Lesco's national accounts program has grown during the nine years of its existence.

"When I came on board about eight years ago, we were around the $5-million mark," Wolfard says. "We've grown that to more than $30 million. The largest golf course management companies probably handle around 80 percent of the managed courses, and we do business with the majority of them."

Wolfard works directly with four national account managers: Tom Comalli, Les Guedel, Eddie Fatica and Phil Gardner, who split the U.S. golf market. Additionally, Fatica covers Mexico and the Caribbean, and Gardner serves Canada, Europe, Australia and Asia.

But it's the combination of the big picture and the local footprint that ties it all together.

"With 311 Service Centers and 114 Stores-on-Wheels vehicles, we have the ability to provide personalized service for the superintendents delivered by individuals with a solid agronomic background and the latest technical training," says Bob West, the company's director of communications and industry affairs.

The first Service Center opened in Fort Lauderdale, Fla., during the 1980s. By the end of the '80s, there were 39. The '90s brought even more growth, and there were almost 200 by the end of the decade. Lesco has 311 Service Centers in 39 states - 85 of them were opened during the last three years. Another 40 are planned for 2006, increasing the level of service to current customers and extending services to new customers.

The basic concept of the Service Centers is one-stop shopping. Superintendents can call, e-mail or fax in an order directly to their local Service Center to be picked up at a specified time. They can take advantage of the new LescoDirect feature at www.lesco.com and have the order delivered to their local Service Center for pick up. They also can stop into the Service Center and personally shop for products. Many superintendents use a combination of these methods.

Personal service is another important factor, according to Stan Wreyford, senior vice president of agronomy for Century Golf. He says the Service Centers are a great resource, especially for unplanned needs.

"One of our superintendents told me a scheduling change meant they could put some spray down before the golfers hit the course on Saturday morning, but they needed more material to finish the job," he says. "He went into the local Service Center, figuring he'd get the material as soon as they opened and try to get back in time for his crew to wrap up the procedure. The manager was already inside working when he pulled up. He unlocked the center and got him what he needed so he was back on the road and at the course in plenty of time to get the job done."

That kind of service, the broad assortment of products and the addition of new Service Center are vital building blocks for growing the company's overall golf course sales.
Keep your greens Poa-free and they’ll be looking for another excuse for their missed putt.

Fall prevention is the secret to smooth greens in the Spring. With weeds like Poa, goosegrass, and crabgrass your best control strategy is prevention – just don’t let ‘em get started.

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National account customers can get whatever they need so they’re able to manage their businesses more efficiently and profitably.

Program components can include monthly purchasing reports, tracking by product categories and product, with comparisons to the previous year and to the projected budget.

The LESCO relationship has served Heritage well financially and logistically, according to Goodmanson. The superintendents have the personal service on the local level and can track their own courses’ budgets.

“I get detailed, up-to-date financial information, so I can look at what the volume is as it relates to all of our courses covered by the national accounts,” he says. “They have to be thinking about our business and how we can make our business more successful and be nimble enough to make suggestions and act on them.

“One of the things we do in our budgeting process is ask the superintendents to give us a very detailed checklist of fertilizers and chemicals for their course,” Goodmanson adds. “We zero-base our budget for those areas. We asked LESCO to look at those lists and review their product line to see if there would be any items in their inventory that would be as efficient but more cost effective. They were able to come back to us with a substantial amount of savings. Not making those suggestions would initially have generated more revenue for LESCO. But by doing so, they showed the strength of their commitment to serving our business.”

National Account customers can get whatever they need, from a broad overview to the specific details, so they’re able to manage their businesses more efficiently and profitably, at a higher level of service, according to Wolfard.

“That goes right to their bottom line,” he says.
We salute LESCO for two things we value greatly

customer service & innovation

LESCO's Stores-On-Wheels concept was novel when it was introduced back in 1976, but at its core were two principles that Nufarm Turf & Specialty values greatly, seeking ways to be innovative and using those methods to serve customers better.

Our goal is to align with like-minded companies such as LESCO to ensure that golf course superintendents across the country continue to be treated in a professional manner and have access to quality protection products for a reasonable value.

Here's to LESCO and the other innovators in our industry - may all our customers benefit from our combined efforts.

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PRODUCTION PARTNERS

Company teams with a manufacturer and growers to bring fertilizers and seed to market. BY JOHN WALSH

Even though LESCO sold its supply chain assets and consumable products inventory to Turf Care Supply Corp. last year, the manufacturing plants that were part of that sale are still vital to the company’s business.

A seed plant in Silverton, Ore., and three manufacturing and blending fertilizer plants — in Martins Ferry, Ohio; Hartsfield, Mass.; and Sebring, Fla. — were part of the sale. Currently, LESCO is the only customer of TCS.

Part of the reason why LESCO sold its manufacturing assets is the company wanted to invest in opening new Service Centers and Stores-on-Wheels vehicles to boost sales, rather than invest in equipment and machinery in the manufacturing plants, according to chief operating officer Bruce Thorn. The company has 311 Service Centers and 114 Stores-on-Wheels vehicles throughout the country.

“We’ve been doing this for a long time,” says Brian Rowan, associate vice president of merchandising, referring to the company’s distribution business. “It takes a long time to bring good products to market, and the sale of our assets won’t affect that.”

Currently, LESCO is going through a transitional period with TCS, which has been smooth. There have been no changes or impacts that have distracted from the company’s business, according to Thorn.

“We still have strategic partnerships with Turf Care Supply, and it’s only going to improve,” Thorn says. “The only time that we would go to another manufacturing company other than TCS is when the net cost would be better than...
what Turf Care can supply us, i.e., a remote market we want to enter."

Part of the company's continued growth is a pipeline of new granular and liquid fertilizer products, according to Rowan. "We're looking for more economical products and distribution," he says.

**FERTILIZER PRODUCTION PROCESS**

Fertilizer sales account for 25 percent of LESCO's business, so it's no surprise fertilizer production is important to the company. The plant in Martins Ferry, Ohio, is the biggest of the three fertilizer plants now run by TCS. There are 135 permanent workers, 30 supervisors and as many as 30 temporary workers there. The plant blends pesticides and fertilizers and produces sulfur-coated urea.

The plant, which is an old pipe-coupling factory that LESCO purchased in 1987, doesn't have a perfect layout because it has been expanded throughout the years, according to Paul Ferrell, director of formulating. Urea is brought up the Ohio River and unloaded at the plant — dumped onto a conveyor below ground that takes the urea above the plant via an elevator. About 100,000 tons of urea a year go through the plant.

During the past three years, the price of urea has increased 50 percent because it's tied to natural gas.

Two tanks, each containing 30,000 gallons, heat the sulfur to 280 degrees. The urea is about 75 degrees. Because the process involves adhering them together, the urea needs to be heated. The coating occurs continuously in large, long rotating drums. When the sulfur-coated urea comes out of the drum, it's 160 degrees. Then, the polymer is coated in another drum to seal the sulfur-urea mix.

During the process some particles stick together. These are called "popcorn" and are unusable for the lawn care and golf markets, so the company sells them to farmers, who don't need a specific size particle. One-half percent of the product produced is "popcorn."

The urea is produced in three different sizes: the largest for the lawn care market, the smallest...
for greens and tees in the golf market, and the size in between for fairways in the golf market.

Another section of the plant contains bins that hold as much as 1,100 tons of fertilizer. All bins are filled by overhead conveyors.

For packaging, limestone is used as filler in the bags because the nitrogen-phosphorus-potassium ratio won't equal 50 pounds. Bulk density and particle size factor into producing bags of fertilizer. Corn cobs, nut shells and clay also can be used as filler, but clay tends to stick to the product, according to Ferrell.

Labels on the fertilizer bags aren't pre-printed because state regulations can change. The labels are approved by the Environmental Protection Agency and then stuck on the bags at the plant. The bags are color coded — red for insecticides, green for fertilizers, blue for post-emergent herbicides, yellow for pre-emergent herbicides and orange for fungicides.

**SEED**

Although it might be overshadowed by the fertilizer business, LESCO has a strong foothold in seed, which is 15 percent of its business. The big difference between the fertilizer and seed segments of the market is that with seed, the company is competitively in the same boat as everybody else because the majority of seed is grown in Oregon, according to Thorn.

"We work with a number of individuals to grow and test seed," he says. "Right now, we have the No. 1 [National Turfgrass Evaluation Program]-rated bentgrass — Authority creeping bentgrass. From our contract research and development folks, we'll have 15 to 20 new varieties a year. We're constantly looking for more seed varieties. When we see trends taking place, we can redirect our own efforts."

Despite all the new varieties, no contracted researcher and developer for the company is working on seashore paspalum.

Thorn says the company, now that it has sold its manufacturing assets, can be more focused on developing new products and look to other partners to manufacture them.
SOME THINGS JUST WORK WELL TOGETHER.

Hannay Reels congratulates LESCO on 30 years in the business of turf and landscape care.

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Example below of reduced shoot growth and enhanced bud development of the treated Jasmine on the left, and untreated on the right.
important part of the Golf Club at Devils Tower.

Goodwill generated within the community by using local labor and resources was another positive. An example of the goodwill that continued throughout the project was The Golf Course Co.'s decision to donate the construction of a running path along the main road for local high school and community use.

Future growth
The grand opening of the course was scheduled for July 15, which is when a conversion from a public to a private course with limited public play will begin. Additional plans call for a nine-hole, daily-fee course designed by Phelps-Atkinson Golf Design. The start of construction on the third nine depends on future market conditions and sales of private memberships. Initiation fees will start at about $25,000.

Potential members and homebuyers generally are in awe of the new back nine and the renovations to the old nine, according to club general manager Mike Saye.

“We explain what we have done in terms of design and construction, and they really like the way things turned out,” he says. So, too, do those who were directly involved with the project.

“This design and construction philosophy might not work perfectly on all projects, but it will work more often than most people think,” Atkinson says. GCN

Peter Blais is a freelancer writer based in North Yarmouth, Maine. He can be reached at pblais@maine.rr.com.

The new nine holes at Devils Tower were built on a challenging piece of land that incorporated large red-rock canyons and cliffs.
Not much to work with

SUPERINTENDENTS WITH SMALL BUDGETS DO WHAT THEY CAN TO PRODUCE THE BEST PRODUCT POSSIBLE
"Doing more with less" is a mantra heard a lot these days. Not every golf course superintendent has the luxury of a $750,000 budget or more to keep the track he maintains in the best condition possible. The average golf course maintenance budget is $427,500, according to the 2005 GCN subscriber survey; but 40 percent have budgets less than $250,000, so there are plenty of superintendents throughout the country who face significant challenges producing a desirable product with what they have.

When working with a small budget, everybody at a facility needs to be on the same page, according to Teron Bay, CGCS, at The Willows at Kenton County in Independence, Ky. "The whole staff, from the general manager to part-time employees, needs to understand what the reality of a small budget is," says Bay, who has budget of $275,000 for the 18-hole course. "We all want the best possible product to give to the public/membership, but the reality is that we're going to have to compromise on most all facets of the operation. This means all management team members have to be on the same page when it comes to expectations of the facility."

The Willows is part of the 54-hole Kenton Golf Course, which has a maintenance budget of $800,000. A superintendent manages each 18-hole course, and one of them oversees the entire facility.

Of the $275,000 Bay works with, $190,000 is spent on labor, of which is tied up among three guys, $40,000 is spent on chemicals, $30,000 is spent on city water and $15,000 is spent on miscellaneous items such as flags and cups.

Because of the size of the budget, Bay, who's in his fourth year at The Willows, says he and his staff run a strong integrated pest management program and carry out more curative applications than preventive ones.

"Sometimes it works well, but sometimes we lose grass," he says. "Being a public facility, we have acceptable levels of grass loss before losing customers. The acceptable level on the bentgrass greens is zero, but on the bentgrass fairways and tees, it's about 10 percent. We're blessed with large tees."

Operating with a small budget makes it difficult for superintendents to be on target at the end of the fiscal year. Last year, Bay says he met budget; but this year, he says he'll be a little over because of the dry fall the area experienced last year. Bay lost a lot of grass, so he spent money to grow it back.

Budget pressures

With a budget of $100,000, $57,000 of which is spent on labor, staffing is the biggest challenge that faces Cameron Tuss, golf course superintendent at the nine-hole Signal Point Golf Course in Fort Benton, Mont. During the winter, Tuss is the only one working at the course. However, he has three part-time employees who work from April through November. Because of the small staff, it's a challenge to get everything cleaned up and in shape in the spring, he says.

"I usually do daily maintenance work that, on other courses, a general laborer would do," he says. "I spend a lot of time on the mower, and because of that, I get behind on paperwork; and projects fall behind sometimes, too. Right now, I'm working on expanding a tee box. I work on it for a couple of hours whenever I can."

"Things might not get done as often as on other courses, but we get compliments about the course because the golfers know how small our budget is," he adds.
Aside from staffing, rounds have put pressure on Signal Point's operation. During the past five years, Tuss' budget has decreased $10,000, mainly because of the decline of the number of rounds played and annual memberships. The city-owned facility has 105 members. A single membership is $350, and a family membership is $550.

"We average about 10,000 rounds a year, but the average age of the people in the community keeps increasing, and we're losing memberships," Tuss says.

Competition also is putting pressure on Signal Point. It's coming from Great Falls, which is 36 miles away and has two city courses, one private course and one executive course. There also are many nine-hole courses in a 200-mile radius.

Additional pressures are caused by the local economy, which isn't thriving because it's a farming town, according to Tuss.

Despite a gloomy outlook, Tuss says the golf course won't close because the members won't let it happen. The board of directors is trying to increase play through advertising, promotions and group play.

Just the basics

At the 18-hole Ontario (Ore.) Golf Course, golf course superintendent Mark Copley says the $230,000 maintenance budget, 60 percent of which is for labor, allows him to accomplish basic maintenance needs but few course improvements.

When Copley came to Ontario five years ago, the budget was $280,000, and the revenue fell way short of that, he says. For the past three years, the budget has been $230,000. Three years ago Copley was under budget considerably, but last year he was about $8,000 over budget, partly because of a green renovation project, sewer project and new heating and cooling in the clubhouse. So far this year, he's a little above budget.

Even though Copley doesn't have much to work with, golfers are supportive of Ontario, he says. When he arrived at the course, it was in bad shape. Since then, he has been making improvements, but the course is only half-way to where he would like to see it. Copley says he and his staff put a lot of pressure on themselves and set their own expectations, which are greater than the public's.

"I'm fortunate to have an extremely dedicated staff - they live and breathe this course," he says.

If he had a budget to finance improvements, the two biggest ones he would make would be on the bunkers and irrigation system. However, he does little things, such as bunker edging and refilling during the off-season to improve the course. He completed two minor irrigation improvements to get better coverage in some areas. He's also in the process of redigging eight bunkers that have been grassed in. He has finished three so far.

Even though Copley's budget is too small to finance a renovation or considerable improvement projects, he was able to rebuild half of a green that was damaged from black layer last spring. The project cost was about $10,000 including labor. Copley held a fund-raiser to generate money to help pay for the rebuilding of the green. Most of the cost was covered by the funds raised, but not all. Some funds came from the budget, but it didn't take that big of a hit, he says.

Ontario features bentgrass and Poa annua on the greens, which are push up and sand-based; tees are bluegrass, bentgrass and Poa; and the fairways are a mix of Kentucky bluegrass, ryegrass and Poa. Courses with larger budgets most likely would spend the time and money to eradicate the Poa, especially on the greens, but at Ontario, it's too costly to remove.

Despite not being able to make the improvements he wants, Copley says the conditions of the course won't slip too far.

"If we need it, we'll get it," he says. "The bottom line is the golf course, and we don't willingly take from that." GCN
Dollar saved is a dollar earned, right? Well, golf course superintendents with small budgets are trying to earn thousands of dollars. They're reducing expenses in areas of their budget – equipment, labor, pesticides, fertilizer and water – without negatively affecting course conditions too much.

For Pat Blum, golf course superintendent at the nine-hole, semiprivate Colonial Acres Golf Course in Glenmont, N.Y., the environment is the driving force behind his budget. Last year, he spent $61,399, including labor, maintaining the course, which has been certified by Audubon International and is part of the Environmental Protection Agency's National Environmental Performance Track.

"We're the only golf course in U.S. history to be accepted into any EPA program," Blum says.

As part of the Performance Track program, Blum set three goals to reduce outputs – such as waste, volatile organic compound emissions and synthetic pesticides – and is trying to meet those reduction goals in three years.

Blum's first goal is to reduce the total amount of waste produced by the maintenance staff, which used to produce 3,000 pounds of waste annually. Blum wants to reduce that to 2,100 pounds. Currently, the staff is producing 2,500 pounds and has done so by recycling, using more plastic containers and reducing the amount of paper waste.

Blum's second goal is to reduce the amount of synthetic pesticides used to 1,000 pounds a year. In 2004, Blum and his staff used only 438 pounds. In 2005, they used a little more than 1,000 pounds because they were part of a regular-pesticide-use study.

Blum's third goal is to reduce the energy used in the pump house to 1,000 kilowatts a year, and currently is within 50 kilowatts of that goal. To reduce usage further, the pond aerator will run one hour less a day.

Last year, Pat Blum spent just $61,399 maintaining the nine-hole Colonial Acres Golf Course.
financial management

"When we first started the environmental goals, a lot of people said that it couldn't be done, which motivated me even more," Blum says. "It's a snowball effect. You start saving in one area, and that leads to savings in another. Colonial Acres is a course where I found a way to make it happen. Other courses can do it, too, understanding that soil profiles and energy capacities are different."

The savings from Blum's environmental efforts have kept the course in business. In the spring, play declined partly because of weather and fuel prices.

"We would be out of business right now if we were spending what we did in 1998," he says.

Selling the idea of a more environmentally sound course to Colonial Acres' 20 stockholders wasn't difficult, according to Blum.

"I needed to get this place environmentally sound and wanted to do it for my daughter, and that was my pitch to the owners," he says. "They all have grandkids, so it was an easy decision for them."

Not so well equipped

Aside from savings through sound environmental practices, superintendents can stay within a tight budget by using equipment wisely. Because The Willows at Kenton County in Independence, Ky., is part of the 54-hole Kenton Golf Course, its staff shares maintenance equipment, such as tractors, aerifiers, topdressers and sprayers, with the other two courses that comprise the facility. Sharing equipment that isn't used daily results in noticeable savings, according to Teron Bay, CGCS, at The Willows. He estimates sharing equipment saves each course $200,000 a year.

Bay and his staff also make due with old equipment.

"The general thought is that equipment should be turned over every five or six years," he says. "We have tee and greens mowers that are in the 15- to 20-year-old range. We also have to adjust our expectations because this old equipment doesn't work as well as newer mowers or give as fine a result."

Bay says he and his staff have a "beg, borrow and steal" mentality because they have to use every possible resource available to the facility.

"We borrow a lot of equipment from neighboring courses, as well as letting them borrow equipment from us," he says. "We also have to find treasure in what others would see as junk. We're able to rebuild and even build equipment and attachments from scratch."

At the nine-hole Signal Point Golf Course in Fort Benton, Mont., golf course superintendent Cameron Tuss hasn't purchased new equipment in five years. Tuss says he has the basics but doesn't have what he calls luxury equipment, such as a fairway aerifier, leaf blower or debris sweeper.

The equipment Tuss uses forces him to do things differently. When greens are top-
dressed after they've been aerified, he has to drive around in a truck filled with sand because the topdresser is so small.

Mark Copley, golf course superintendent at the 18-hole Ontario (Ore.) Golf Course, uses older equipment, too. His greens, grounds and rough mowers are 5 years old and the fairway mowers are 9 years old. Although older, Copley says the equipment runs well, thanks to the mechanic who keeps them in great shape. Yet even though the equipment is working well, Copley fears the fleet could go down all at once. Currently, he's working with the green committee to create a capital expenditure budget.

At Colonial Acres, Blum is saving money on equipment, mainly through wear and tear and fuel, because he's maintaining less turf. He hasn't bought a new piece of machinery in three years. Although older, Copley says the equipment runs well, thanks to the mechanic who keeps them in great shape.

**Short handed**

Labor is the biggest part of any maintenance budget, yet with smaller budgets, superintendent don't have many people to help them. The staff at The Willows includes three full-time workers other than Bay and three to five part-timers who work 24 hours a week from March 1 through Thanksgiving.

The staff at Ontario Golf Course consists of three people for grounds and two in the clubhouse – all are seasonal. Copley also has a mechanic that works 20 hours a week for nine months.

Blum's staff consists of two full-time employees (one of which is Blum) and one part-time employee. He has no full-time mechanic.

Blum says the labor line item in his budget has leveled off since 1998 because the amount of maintained turf went from 22 acres in 1997 to 14 acres. Pond and native area expansion contributed to this reduction.

Along the same line, increasing no-mow areas has helped Bay. "Over the past five years, we have let more than 100 acres of once mowed areas grow up as nature areas to save on equipment and man-hours," he says. "This saves us more than 40 man-hours a week."

Copley says that with a smaller budget, fuel prices hurt a course like his more than a bigger-budgeted course. "Fuel prices are killing us," he says. "We used to spend 40 hours a week cutting the rough, and now were down to 30. I'm letting the native grass go, but the golfers aren't responding to it well."

**Less input**

Management of smaller-budgeted golf courses also has to spend money wisely when it comes to pesticides and fertilizers. Because The Willows is a municipal golf course, the county bids on the chemicals used on all its courses.

"We get better pricing on the generic chemicals," Bay says. "The prices of [some name-brand] products are fixed no matter how much you buy."

Copley says he's able to make two full fertilizer applications that are nutrient specific.

"I'm lucky to get one-quarter of what should be put down," he says. Thankfully, Copley says he doesn't have to use insecticides. He applies two broadleaf herbicides and uses plant growth regulators on the greens. He also uses fungicides for snow mold and anthracnose. Most of the fungicide use is preventive rather than curative.

With a small budget, Copley says the threshold for acceptance of course conditions is high among the golfers that play at Ontario.

"We struggle with weeds in the fairways, but golfers understand as long as they see us spraying," he says.

Since Copley arrived at Ontario, he trimmed unnecessary items from the budget based on soil tests. For example, he eliminated the broad use of wetting agents and focused on hot spots.

Last year, Blum spent $4,800, reduced from $9,800 eight years ago, on pesticides and fertilizers. During that time, there was a trial-and-error period switching from synthetic pesticides to organic ones.

**Use sparingly**

Water use is another area that needs to be managed carefully. Bay says he keeps the course pretty dry.

"We do a lot of hand watering, even on fairways and tees, to keep water use down at times," he says. "There's some brown grass at times, but we keep it at an acceptable level before we start to lose golfers.

The water used to irrigate Colonial Acres is 100 percent runoff, which is collected in a holding pond. Well water or city water isn't used. Blum says the tees, greens and fairways are irrigated, but the fairways don't get irrigated as much as the greens and tees.

Other examples of getting by on a small budget include making your own tee markers, directional signs and benches, which Bay and his staff do.

"We do a lot of recycling," he says. "We're pack rats. If anybody in the county is throwing something away, we'll take it."

Cameron Tuss maintains the Signal Point Golf Course without what he calls luxury equipment such as a fairway aerifier, leaf sweeper or debris blower.
The choice is yours

PROJECT TIMELINES, CLIMATE AND COST DETERMINE TURFGRASS SELECTION

by JOHN TORSIELLO

Tips for turfgrass selection

• Gather as much information as possible. Think big picture and long-term.
• Understand the climate and weather conditions that affect the golf course and what it will mean for proper turf growth and maintenance.
• Find out what grasses have been successful at nearby courses or in areas of the country with similar climates and growing seasons.
• Consult with as many experts as possible – golf course architects, seed and turf distributors, agronomists and golf course superintendents.
• Plot test different grasses to get an indication of how well the grass will perform.
• Weigh the pros and cons of sod versus seed.
• When sodding a portion of a course, make sure the imported grass is pure, and purchase it from one source to avoid contamination of existing turf or new grass.

One acre of L93 bentgrass on the property to determine if the strain could withstand the sometimes-harsh climate of Omaha – and if members thought the turf was suitable.

“Turfgrass that I put into the bank when it comes to committee and after much research.”

Agronomists also are used when selecting turfgrass for a project.

“Almost every golf course architect I know will consult with an agronomist when developing specifications for grassing a new or renovated course,” says John Connolly, a consulting agronomist who has worked with Pete Dye and Palmer Course Design and in the Asian market. “Every owner will consult with somebody he considers an expert in the field.

“Twenty years ago an architect had a list of grasses he used in his last project and he selected from that,” he adds. “Now, while the species used on courses have remained about the same, the strains change every 12 months, or so it seems.”

Kevin Atkinson, a golf course architect with and partner of Phelps-Atkinson Golf Design in Evergreen, Colo., still relies on his own track record with certain grasses, as well as input from industry professionals, to determine what grasses will work best for a particular project.

“I lean on seed suppliers for information about the different and new varieties of grasses and what would work best in the climate the course is in,” he says. “Everyone is probably going to push their own seed, so I get two or three opinions. We rely heavily on the superintendent who needs to have a comfort level with the type of grass he’ll be managing. Some superintendents will have had success growing certain types of bentgrass fairways and others say it takes too much water and that ‘this isn’t the place for that type of bent.’ Usually, it’s a compromise of some sort.

“Golf is my passion, so when I’m out playing I’m looking at everything under the moon,” Atkinson adds. “I look at the quality of the turfgrass, the color, how well it recovers from ball marks. It’s all knowledge that I put into the bank when it comes to the next project.”

When renovating a course – when downtime means revenue loss or unhappy members – it’s crucial to get the course back in playing condition as quickly as
possible. That's why the PGA Golf Club at
PGA Village in Port St. Lucie, Fla., decided
to use Champion ultradwarf Bermudagrass
when it renovated the greens last year at
PGA Country Club, one of four layouts at
the facility. Champion also is being used on
green renovations on the club's North and
South courses this year.

"We aerified and verticut the putting
surfaces multiple times to beat up the or-
ganic material, and then removed about 80
percent of the matter on the greens at the
country club last year," says Bud Taylor,
director of golf. "We finally sprayed the
greens to kill them off and then put on a
thick layer of topdressing after seeding with
the Champion ultradwarf. In eight weeks,
we had perfect putting surfaces; and what
we did had a cost factor that was miniscule
compared to the traditional way of going
in, coring the greens and starting all over."

Because Champion is dense, tight grass,
it's highly manageable for the club's needs,
Taylor says.

"It's as close to bentgrass without being
there," he says. "We can have the greens at a
nine or 9.5 on the Stimpmeter or take them
to 10 or 11 for a tournament in 14 days.
We didn't have that ability or consistency
with the old greens."

Like Oak Hill, A4 bentgrass was an
ideal selection for the greens at the recently
opened Lederach Golf Club in Harleysville,
Pa., according to Anthony Cianci, vice
president of mid-Atlantic operations for
Billy Casper Golf, the management com-
pany that operates Lederach.

"We've gotten great root depth with A4," he says. "It likes to be cut low as opposed
to some of the more traditional bentgrasses
that will stress if they're cut too low. With
A4, we can trim the greens down to mi-
cro-inches, and the putting surfaces can be
superfast. Comparatively, older strains allow
you to take the blades down to perhaps only
an eighth of an inch."

The sod choice
An area's climate is always a consideration
when selecting seed for grow-ins on new
and renovated courses.

"We get triple-digit temperatures in the
summer, but it cools off at night with rain
during the winter months, so that's why
After much research, a committee will choose the turfgrass for the new nine holes being built at Saddle Creek Resort.

After much research, a committee will choose the turfgrass for the new nine holes being built at Saddle Creek Resort.

we have to be careful what bentgrasses we choose," Martell says about Saddle Creek, which is located 1,000 feet high in the foothills of the Sierra Nevada mountain range.

In some areas, grass grows from mid-April to the end of September, and other areas, especially those with elevation, have a much shorter growing season, Atkinson says.

That's when using sod becomes an option. Trucking in sod is more expensive, but it might be necessary if the climate or the project timeline doesn't allow for a suitable grow-in period.

"We had to do a little of both, seeding and sodding, when we redid the course for this season," says Jon Wood, general manager of the 108-year-old Waterville Valley (N.H.) Golf Course. "All the greens and tees were sodded, and the fairway areas were either sodded or hydroseeded. Because we wanted to make them playable this year - the project was started last October - we had to use a lot of sod. We are fairly high in the mountains, and winters tend to come sooner and last longer."

Another reason to use sod instead of seed is financial. While it might initially cost more, sodding can be beneficial.

"I'm working on a project where we're sodding 70 acres of fairways, rough and tees for a new private club," Atkinson says. "The biggest reason for doing this is to get the course open sooner and get the cash register going quicker. When the owner took into consideration the cost of labor, fixing erosion, fertilizing and the time sitting around waiting for the grass to grow, he saw it was a wash."

"This might also work for a high-end, daily-fee course that's charging $100 or more a round," he adds. "If the owners can get the course open six months earlier by sodding, it might be the wise choice. If you're charging $40 or $50 a round it probably doesn't make sense."

Another scenario in which sodding might be more effective than seeding is when a developer attempts to sell building lots around a golf course and wants the course open for use as advertising to entice buyers.

Some developers combine growing grass on a majority of the course with sodding areas around greens and portions of the fairway that are susceptible to washouts.

When sodding portions of a course, it's recommended to make sure the imported grass is pure and purchase it from one source to avoid contamination of existing turf or new grass.

Potentia pitfalls

With progress and technological advances in turfgrass come potential pitfalls. For example, it's imperative for owners and superintendents to think long-term when selecting fairway grasses, Connolly says.

"One of the biggest issues today is the desire to have a fairway in which the grass can be mowed to a quarter of an inch to provide the optimum playing surface," he says. "You can do some cool things to the golf ball on a fairway like that, but people need to be aware of the increased maintenance needed having a bentgrass variety that can be cut that short. You almost have to manage those fairways like you do the greens, with more topdressing and pesticide use."

"If it rains a lot, you topdress maybe three times a year when you should do it 10 times a year," he adds. "You start to get excessive thatch production in cooler climates where the thatch can't decompose as rapidly, and you start having problems."

Overall, it seems one can't go wrong gathering as much information as possible about grass types, new strains and the affect climates can have on turf growth and management, which usually means consulting an agronomist. GCN

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On the fence

IS INTERSEEDING A Viable TECHNIQUE OR JUST A PRACTICE DONE FOR PEACE OF MIND?

by KEVIN J. ROSS, CGCS
Photos by Kevin J. Ross

For many years, golf course superintendents have been trying to manipulate existing stands of turfgrass, primarily greens, by interseeding. Interseeding can be defined as seeding into a live mature turfgrass stand with the goal of having the seeded cultivar become dominant within that turfgrass stand. Although this practice has been used for many years, and is still a popular technique today, many in the golf course management industry question its effectiveness.

The limited research that has been conducted indicates the conversion of a turfgrass stand through interseeding is difficult, if not impossible. When a new turf stand is
"You have to seed bentgrass during the aerification process, even if nothing germinates. It makes you feel you have performed the correct agronomic practice." - JASON HABECK

developed, new seedlings have no competition and can develop or mature rapidly. When interseeding turfgrass areas, seedlings have to overcome tremendous competition from the existing turfgrass stand. The new seedlings must wage a battle for water, nutrients and sunlight against the existing turf stand. In most researchers' minds, the existing turf usually wins the battle.

Methods for success
For interseeding to be successful, most in the industry believe the management of the turfgrass stand must be manipulated to allow the competitive advantage to sway toward the seedlings or interseeded turf. This is accomplished by stressing the existing turf, which is usually accomplished by depletion of water or drought stress. Research shows stressing the existing turf, almost to the point of permanent turf loss, can favor the interseeded seedling dramatically. However, most golf courses can't afford to allow this to happen.

For those who interseed or want to interseed, there are three primary methods: broadcast seeding, slit seeding and spiking/aerification.

Broadcast seeding is the easiest and least disruptive to the surface. However, it's the most unsuccessful of the three.

Slit seeding can be accomplished by a slit seeding machine or another method such as verticutting and broadcasting into the verticut lines.

Aerification/spiking might be the most popular and successful method. When the aerification method is used, a small core is removed from the existing turf, then it's backfilled with sand and seeded. The removal of the small, existing core is advantageous to the seedling turf within the core-hole area, where the competition is much less than the surrounding turf stand. The core hole not only creates a void for the newly seeded turf, but also offers a prime germination microclimate. An aerification hole, made by a solid or hollow tine, offers a cool, moist, protected area for successful germination. It also offers protection for the crown of the plant during initial mowing, which can be extremely damaging to new seedlings.

Peace of mind
Regardless of the success interseeding can bring, many golf course superintendents achieve peace of mind when interseeding. For many years, interseeding has been a key part of an aerification program because the general consensus is putting bentgrass seed in the open aerification holes is better than no seed at all. Also, if no seed is present, a great Poa annua-germinating void is the result generally.

"You have to seed bentgrass during the aerification process, even if nothing germinates," says Jason Habeck, director of agronomy for Keystone Resorts golf courses in Colorado. "It makes you feel you have performed the correct agronomic practice. It gives you nice peace of mind."

Habeck believes constant interseeding, no matter what the technique, produces results.

"Each time you seed, if you gain a little, then after a while it all adds up to increased bentgrass population, and that's what we all look for," he says.

Dormant interseeding
The best results for some golf course su-
perintendents might be interseeding using 
a dormant seeding technique because it has 
been proven areas seeded during late fall 
are ready to germinate in the spring, about 
four to six weeks ahead of any area seeded 
during the spring. The dormant seeding 
technique happens primarily by the seed 
going through a priming process during 
this period. This is a great tool that gives 
bentgrass the jump over slower Poa annua 
in the spring. This jump-start in spring ger-
mination is what gives dormant-seeded turf 
such an advantage when interseeding.

"There is no question dormant interseeding 
is the way to go and provides the best 
results," Habeck says. "In the spring, the Poa 
annua is so sluggish, that dormant-seeded 
bentgrass areas have a big jump on being 
competitive against Poa annua."

The same thought process is echoed by 
Chad Wilson, golf course superintendent of 
the Harvester Golf Club in Marshalltown, 
Iowa.

"This is the only time I really feel incor-
porating seed is worth the money," he says. 
"Dormant interseeding, even just broadcast-
ning, works very well."

When Wilson aerifies his L-93 bentgrass 
greens in spring and fall, he believes his 
timing and agronomic practices allow for 
such a rapid recovery that interseeding isn’t 
worth the money.

Species differences

Most interseeding is used for greens, how-
ever, the same technique applies to other 
areas of a golf course such as fairways. Some 
of the same problems associated with inter-
seeding greens also are encountered with 
fairways, which is the competitiveness of 
Poa annua.

However, direct competitiveness factors 
among desirable turf species also have 
been found. For example, when looking at 
perennial ryegrass in fairway turf, it wasn’t 
many years ago perennial ryegrass was the 
grass of choice on fairways. The success 
rate of converting fairways was extremely 
high because of the ryegrass’ physiological 
competitiveness.

So, if one looks at the success of interseed-
ing a species such a perennial ryegrass in a 
fairway, it could be rated very high. The 
opposite can be said for Kentucky bluegrass. 
A research study conducted by Colorado 
State University showed trying to convert 
perennial ryegrass fairways to the newer 
low-mow Kentucky bluegrasses through 
turf management was unsuccessful. The 
general conclusions were Kentucky 
bluegrass, as a plant, couldn’t compete with 
perennial ryegrass head to head.

Regardless of whether interseeding is a 
truly viable seeding technique or just done 
for peace of mind, many superintendents 
will continue interseeding to try to manipu-
late their turfgrass stands.
The 2007 Builder Excellence Awards are presented to companies who continuously improve the profession of golf course construction in agreement with the GCBAA mission statement. The prestigious awards increase awareness of the contributions made by builders to the industry and the benefits of excellent course design and construction to the game.

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Here are many ways to solidify and increase business at golf facilities, and many facilities throughout the country have developed relationships with nearby colleges and universities to do that, as well as build solid reputations and grow the game. These relationships, which benefit both parties, take on many forms, from allowing golf teams to practice to hosting collegiate golf tournaments to creating fundraising opportunities for the institutions through charity tournaments.

In early May, 16 Division II college teams gathered in Duncan, Okla., to compete in the NCAA Super Regional Golf Championships. The stakes were high. For the host venue, The Territory Golf & Country Club, it was an opportunity to lend support to collegiate golf and showcase its two-year-old track.

The 7,100-yard course, which was designed by Oklahoma native Randy Heck enkemper, tries to set itself apart from other golf courses in the area by distinctively fitting into the landscape rather than being a typical parkland golf course that features parallel fairways and few trees.

Since the inception of the private club, the owners have received input and suggestions from Jerry Hrnciar, former athletic director and veteran golf coach at nearby Cameron University. Hrnciar's input helped form a strong relationship between Cameron and the club and has helped the Territory secure competitive events to strengthen the course's reputation.

For the Territory, the close relationship with Cameron University has been a win-win situation in the eyes of Tim Johnson, director of golf.

"We feel our golf course is setting a new standard for the quality of golf in this area of Oklahoma, and by hosting events such as the NCAA Super Regional, more players can see what it is we have to offer," Johnson says. 

"At the same time, by allowing the Cameron golf team members a chance to use all of our practice facilities, we're helping to develop a new generation of players. We also offer this opportunity to the high school golf teams in the area for the same reason. We want to encourage these young players' interest in the game of golf because they will be the golf club members of the future."

Hosting an NCAA event can put added pressure on the maintenance crew of the host course, but for Brad Babek, the golf course superintendent of the Territory Golf Course, the extra effort blends in well with his program.

"The event is held in the early part of our season, so we're just coming into our green-up time, which is a busy time for us anyway," he says. "We see this as a good chance to get the crew into gear for the season."

Gracious hosts

The relationship between The Territory and Cameron isn't unique. The Territory took a page from Sunriver Resort's operations book. Sunriver, located in Bend, Ore., hosted the 2006 NCAA Division I Men's Championship in late May. It's the fourth NCAA event the resort has hosted during the past 10 years. Sunriver, which features three golf courses, continues to host prestigious events like the NCAA Division I Men's Championship because the facility is perfect for such events, according to Mike Sizemore, director of golf at Sunriver Resort.

"One of the things we can offer college players is the opportunity to stay on site during the week of the event," Sizemore says. "The players also can use all of the facilities we have, including the swimming pools, bike paths and practice facilities."

"We first hosted the Women's NCAA Championship back in 2000 and have hosted the NCAA Championships twice since," he adds. "The feedback from the players helped us secure the bid for the men's event this year."

Sizemore views hosting events such as collegiate championships as a way to establish a reputation and a legacy for Sunriver. At the
same time, it's a way for the associates who work at the various golf courses to develop a sense of pride about where they work. "The collegiate championships are events that become unforgettable experiences for the players who compete in them," he says. "We want the players to have Sunriver as part of those memories. By hosting prestigious events, our employees also develop a sense of pride for what we offer to the competitors. This carries over during the summer to the service that we offer our guests. This makes all of the effort we put into hosting the NCAA Championships worth it."

Another type of collegiate relationship has been established at Superstition Mountain Golf Club in Scottsdale, Ariz., with Arizona State University. Superstition Mountain allows ASU players to hone their skills by practicing and playing on its two Jack Nicklaus-designed courses. Beyond that, Superstition Mountain sees an added value of drawing from the university's Professional Golf Management program that develops credentialed PGA professionals.

"The PGM program is one that was developed while I was on the board of directors of the PGA of America," says Mark Kizzier, president of Superstition Mountain. "This four-year B.S. program prepares students in all phases of golf course operations and leads towards securing a PGA Class A card. ASU is one of nine colleges nationwide that offers this type of program. This program offers an excellent source for new employees to our club's needs."

**Big course on campus**

Along with the many private golf courses that deal closely with local universities, many of the nation's top universities - Yale, Cornell, Rutgers, Ohio State, Michigan and Purdue - have their own golf courses on campus. The trend began during the early part of the 20th century when golf's popularity increased, and it has continued as more institutions have added golf courses to their campuses recently.

An example of this trend is the Walker Golf Course near the campus of Clemson University in Clemson, S.C. The course was built eight years ago on a 140-acre, leased plot of land just south of the main campus. Because the university is public, no state funds could be used to build a golf course. Instead, the Clemson University Alumni Foundation acted as a private entity and secured a lease for the property. The foundation is carrying the entire debt load and the management of the golf course until the debt is paid off. At that time, the foundation will donate the golf course to the university.

The Walker Golf Course, which generates more than 30,000 rounds annually, also is a practice facility for the men's golf team,
which won the NCAA title in 2003.
Additionally, the course serves as a living laboratory for many fields of study associated with Clemson. It's located right across the street from the research labs and classrooms for the nationally acclaimed turf school and can be used to field-test new ideas, theories, discoveries and products.

“We offer a marvelous opportunity for the turf school students because of our close proximity,” says golf course superintendent Don Garrett, adding that the research plots for turf studies are right next to the maintenance buildings. “Most of our staff are students. We even have a few graduate students who work on the course while they’re also working on their research projects.”

In addition to Garrett's duties at the golf course, he teaches an introductory course for turf school and professional golf management students.

“My lab gives students the hands-on experience with different pieces of equipment and practical application of everything from mowing a green to raking a bunker,” he says.

Garrett also allows students in the entomology, botany, environmental sciences and civil engineering departments to use the course for research.

**Precautions**

Although relationships between golf facilities and universities are beneficial to both, they should be dealt with carefully. While golf courses can be used for fund-raising and alumni functions, any golf manager still must understand that when dealing with collegiate athletics the potential for an inappropriate relationship with student athletes could develop.

“There are very specific rules dealing with student athletes that are strictly governed by the NCAA,” Sizemore says. “Any golf course that wants to help out junior players or collegiate players needs to be aware of them. You want to be supportive to student athletes in a proper way and not jeopardize their future.”

Brent Jessup, director of golf at the Walker Course agrees with Sizemore and says the NCAA rules can be clarified through discussions with a college's or university's athletic department and through the compliance office.

“Properly researching into potential pitfalls can save an embarrassing incident later on,” Jessup says. GCN

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Operating golf facilities as efficiently as possible is a common goal for owners and managers. It’s part of the equation for running a profitable business. Multiple golf facilities that are managed by the same company and are in close proximity can take advantage of numerous synergies to help them do that. This equates to spending money and using resources wisely.

An example of this concept is The Clubs of Kingwood in Texas. The Clubs of Kingwood consist of three golf clubs owned by ClubCorp: Kingwood Country Club, Deerwood Club and Atascocita Country Club, all within five miles of each other in a market of 130,000 residents. The three clubs feature 117 holes of golf, 34 tennis courts, three clubhouses and a private water park for members and invited guests. Kingwood and Atascocita offer golf and tennis. Deerwood offers golf only. Ten years ago, the clubs were completely separate.

Andy Miller, regional vice president and general manager of The Clubs of Kingwood, says there are many centralized systems within the three clubs, however, they maintain separate golf course maintenance operations, food-and-beverage operations and club managers, who address the specific needs of each club. Because Kingwood Country Club’s clubhouse is the largest among the three clubs, most of the events and gatherings are held there.

Even though the majority of members wanted social and dining privileges at all three clubs, members are usually most loyal to where they predominantly play golf or tennis, according to Miller.

From a corporate standpoint, ClubCorp is trying to be a better steward of the members’ investment in the clubs and better serve their needs by grouping the three facilities together, according to Miller.

“We have fiduciary responsibilities to members,” he says.

Additionally, management companies can use their size to save golf facilities money when it comes to purchasing, according to Brian O’Hare, regional vice president, Northeast for Billy Casper Golf, a golf course management company.

“As a company, we leverage our size to develop long relationships with those who provide us with national accounts pricing,” he says. “We pass that savings on to owners so they can improve the course.”

**People swap**

Staffing is another area in which management companies can be more efficient operating golf facilities. At The Clubs of Kingwood, all three clubs share one accounting department. Also, taking advantage of the synergies of employees in the each of the food-and-beverage operations saves money. Sharing staff among clubs has another advantage.

“The merger of the three clubs has opened up opportunities for employees to have a better chance to move up to management,” Miller says.

Billy Casper Golf shares staff among the clubs it manages, too. For example, Grover Alexander, the golf course superintendent at Hudson Hills Golf Course in Ossining, N.Y., also serves as a regional superintendent who helps consult with the other BCG-managed properties in Westchester County, New York.

BCG also shares maintenance staff. For example, Maple Moor Golf Course in White Plains, N.Y., is in a flood plain, and when there’s a flood, a tremendous amount of cleanup is needed.

“We send some of the Hudson Hill staff to Maple Moor Golf Course to help for a couple days,” O’Hare says. “We help the staff at Hudson Hills Golf Course sometimes helps out at neighboring Maple Moor Golf Course in Westchester County, New York. The two staffs also share equipment.
superintendent get up to speed on mowing as long as the help doesn't come at the expense of the other course.

"When we get into large capital projects, we use other resources and people to manage that," he adds.

**Share your toys**

Interclub relationships also involve sharing equipment, according to O'Hare. For example, for Hudson Hills and Maple Moor Golf, both in Westchester County, N.Y., share staff and equipment. The 18-hole facilities are about 20 minutes away from each other. One mechanic services the equipment at both facilities, and the courses share equipment that's not used regularly, such as aerators, verticutters, wood chippers and grinders.

Sharing resources is part of being part of a large company such as Billy Casper Golf, O'Hare says.

"There might be one large facility that has more equipment than a smaller one, and it shares resources with the smaller course," he says. "Besides, superintendents like to help each other out and share ideas."

The value of not needing to purchase certain equipment can save a course $20,000 to $40,000 annually, according to O'Hare.

Even though the three golf course maintenance staffs at The Clubs of Kingwood are separate, they share some equipment such as aerifiers.

**The best way to do it**

Aside from using the same resources, sharing best practices is prevalent throughout Billy Casper Golf. It starts with superintendents telling regional vice presidents and the word spreads via conference calls or meetings, O'Hare says.

"The key is that it's not a formality but an open line of communication," he says. "We have some new golf courses in the area with bentgrass, and the superintendents are fighting take-all patch. They were getting around to look at how take-all patch was controlled by different chemicals."

Best practices help shape standards for ball washers, rotating cups, heights of cut, etc.

"We also share best practices by consulting with Saxon Woods Golf Course in Scarsdale, N.Y," O'Hare says. "Each [BCG-managed] facility benefits from all the resources we have. We need to communicate best practices throughout the portfolio."

Billy Casper golf recently won the management contract for Saxon Woods.

**Promos**

Another area in which clubs can take advantage of synergies is marketing. The Clubs of Kingwood have been marketed as such for about five years. However, Miller says there's a delicate balance of marketing the three clubs together. A pricing strategy determines a member's golfing privileges. For example, a "masters" membership allows access to all three courses and a "championship" membership includes everything but Deerwood.

O'Hare says Billy Casper Golf has several marketing programs in place.

"We have the Buffalo Golf Trail and promoted them together," he says. "In Chicago, we have a frequency awards program to build affinity. In Connecticut, we're looking at reciprocal benefits, such as discounts on merchandising and green fees and benefits with tee times."

The Buffalo Golf Trail is a BCG program marketed in regions throughout the country where the company has clusters of courses. For example, in Cincinnati there are seven courses, and in Chicago there are 10 properties.

BCG also links its managed facilities that are further apart. Because there are many people who travel from Westchester County to Cape Cod, Mass., the company markets the Falmouth Country Club on Cape Cod to the New York metropolitan region.

**A common thread**

As far a trend, Miller says multicourse owners are aggressively pursuing the synergies among golf facilities, but he doesn't know if any independent owners are doing it.

No matter what type of course Billy Casper Golf manages, the quality of the staff, attitude of staff, attention to detail, cleanliness are aspects of course operations that shouldn't change, O'Hare says.

"The common thread with the staff is attitude and commitment to provide a better-than-expected customer experience," he says. "We work hard to make each other successful, and we need to work to maintain the open lines of communication. It's difficult as you get bigger. I don't have all the answers, but as a group we can get them."

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Kingwood Country Club in Texas is part of a group of three nearby clubs operated by ClubCorp.
A call to action

A new initiative spearheaded by industry leaders offers hope for basic turfgrass research. BY KEVIN N. MORRIS

The annual value of the turfgrass industry in the United States is estimated to be between $40 billion to $60 billion. This figure includes the cost of establishing and maintaining turfgrass on golf courses, athletic fields, parks, home lawns, roadsides, sod farms and grounds of commercial buildings. Turfgrass covers an estimated 50 million acres in the United States, making turf the fourth largest U.S. crop. There are more than 31 million acres of irrigated turfgrass in the country, making turfgrass the largest irrigated U.S. crop.

U.S. research

Turfgrass research in the United States is almost exclusively conducted by state universities or private, for-profit companies. Private companies conduct research on fertilizers, new grass cultivars, pest control products, etc., for their own internal use. The information obtained from for-profit companies’ research is proprietary and most often not released to the public. However, for-profit companies supply funding to university researchers to test products and help develop recommended rates and uses.

There are several nonprofit organizations such as the U.S. Golf Association, Golf Course Superintendents Association of America, National Turfgrass Evaluation Program and Turfgrass Producers International that also fund turfgrass research at state universities. The USGA has the largest research-funding program, averaging about $1 million annually. NTEP, GCSAA, and TPI collectively fund about $1 million in turfgrass research annually. There also are various state and local turfgrass organizations that provide funding to state university research programs. Private companies and not-for-profit organizations support an estimated $10 million in turfgrass research annually.

Many states have at least one university with a turfgrass research program to serve the needs of the citizens and the turfgrass industry in that state. Funds for those research programs come from the aforementioned entities; state government funding; and through the federal government’s Department of Agriculture, Cooperative State Research, Education and Extension Service. CSREES, which has an annual budget of $1 billion, provides funding to state universities for agricultural research, education and extension related activities. These funds are directed to scientific disciplines and crops, including turfgrass; however, most of that funding is used for faculty salaries or extension activities. Little, if any, CSREES funding is directed to turfgrass research. Therefore, the activities of state university researchers are limited to what the states, private industry and organizations are willing to fund.

Applied research

Almost all turfgrass research dollars are provided by the turfgrass industry or industry associations to fund applied research rather than basic research. Applied research involves solving problems that are seen in the field by end-users such as golf course superintendents or agronomists. The shortcoming of applied research is its reliance on short-term problem solving.

Basic research tackles the tough problems. For example, basic research unlocked the secret that day length significantly affects plant growth and development. Basic research resulted in the development of hybrid seed corn, a huge advance in corn production. And more recently, the Human Genome project, a successful effort to identify the location of genes for disease...
which conduct basic research scientists nationwide, most of ARS has more than 2,100 on crops and animals. of research might not pay future rewards, of understanding problems, development of breakthroughs resulting in quantum leaps man traits, is classic basic research. This type water. Drought conditions in many areas citizens: Western states, many areas have instituted lawn watering restrictions, including cities such as Las Vegas and Denver. Even the susceptibility, abnormalities and critical human traits, is classic basic research. This type of research might not pay future rewards, but if it does, the rewards are often large breakthroughs resulting in quantum leaps of understanding problems, development of new technologies and important improvements in management strategies.

Issues to face
There are significant issues in the turfgrass industry that must be addressed to ensure the benefits of turfgrass are available to all citizens:
1. Reduce water used and use recycled water. Drought conditions in many areas of the country have resulted in watering bans on lawns, landscapes and golf courses, as well as restrictions on planting turfgrass by local jurisdictions. Because of incredible population growth in the drier, Western states, many areas have instituted lawn watering restrictions, including cities such as Las Vegas and Denver. Even the wetter, Midwestern and Eastern states have enacted watering bans, or are considering doing so.
2. Reduce pesticide use and develop biological controls. Concerns about the impact of pesticides on human health have resulted in pesticide bans in some local communities. Toronto banned the use of pesticides on lawns, parks, golf courses and commercial properties. Additionally, more jurisdictions in Canada and the United States have enacted partial bans or are considering banning the use of pesticides on turf.
3. Reduce fertilizer use and protect surface water and groundwater. Nitrate and phosphorus pollution of waterways and groundwater supplies have prompted some states and jurisdictions to require reduced fertilization of turfgrass. Minnesota recently passed regulations restricting the use of phosphorus on turf because of the possibility of surface water and groundwater contamination. To improve and protect the quality of Chesapeake Bay water, the Maryland legislature passed nutrient management guidelines for turf. Other states are considering adopting similar proposals to regulate turfgrass fertilization.
4. Safety concerns on athletic fields and in parks. Overuse of athletic fields and budget cuts for maintenance have resulted in unsafe conditions on some fields. A recent report stated that 25 percent of injuries in high school soccer are playing surface-related. In some cases, these unsafe conditions lead to parental concern and action. The Parents United for D.C. Public Schools commissioned a law firm to study and report on public school athletic facilities in the District of Columbia. Their report states: "D.C. public schools fail to meet the most basic standards of adequacy for athletic programs and facilities ... and run the risk of millions of dollars in legal liability in the almost certain event of a student-athlete's serious injury."
5. Increase turfgrass genetic diversity. Turfgrass germplasm diversity needs to be increased and preserved for future generations. Germplasm especially important are plants with interesting genetic traits that might be useful in developing improved grasses. Germplasm improvement is a critical component of plant science and having a wide range of germplasm available is important for breeding better grasses. Unlike most other crop species, little turfgrass germplasm is collected and placed into public germplasm banks. Having less germplasm in the public domain also increases the potential of a major disaster, such as a new disease or insect wiping out turfgrass stands.
6. Better documentation of turfgrass's benefits. There's little understanding among the general public about the importance of turfgrass in protecting soil and water, heat reduction, dust control, etc., even though there is data to support these claims. One avenue to obtaining and releasing information about turf's benefits is through large, coordinated research programs.

Government help
The federal government, through the USDA, funds basic and applied research on many crops and for many agricultural industries. The USDA's Agricultural Research Service is the in-house research arm of the USDA and has a $1 billion annual budget and 2,100 scientists at 100 locations. ARS has significant programs for corn, wheat, soybeans, fish farming, and floral and nursery crops. Could the same be done for the turf industry?

Turfgrass research initiative
The National Turfgrass Research Initiative is the blueprint for a coordinated national research program to be funded through USDA-ARS and conducted through a coalition including the USDA, the university research community and the turfgrass industry. NTRI discusses the industry and the crucial need for this research and identifies priority research goals and key programs. Federal attention to the issues and research goals identified in NTRI is critical to the continued success of the turfgrass industry. A basic premise of NTRI is that federal research dollars should be directed toward programs that can't be funded adequately by states or industry, particularly for programs where the federal government can play a coordinating role not possible for any other entity. Certain research such as increasing the understanding of basic biological processes is too risky or long-term for private industry to fund. Other types of research, such as environmental research, are appropriate for government support because they clearly benefit society at large.

For NTRI to get off the ground, funding has to be appropriated by Congress. NTRI proposes $450,000 to be appropriated for each research scientist position within USDA-ARS — $300,000 to hire a researcher and staff and purchase equipment at an ARS location, and $150,000 for that researcher to conduct cooperative research with universities. If NTRI is fully funded ($32.4 million), (continued on page 57)
Catcher of the Grass

Mike A. Mongiello, Jr., CGCS, director of agronomy at The Estancia Club in Scottsdale, Ariz., came up with an idea: building a simple but effective portable grass catcher rack for Toro’s Greensmaster Flex 18 and 20 greens mower grass catchers. Brian A. Porcelli, operations manager at Estancia, designed and built the rack.

Forty-five feet of 0.75-inch-by-1.5-inch rectangular thin-wall tubing was used for the frame; six feet of 1-inch outside diameter, thin-wall tubing was used for the basket support brackets, which are 20 inches long; and 0.25-inch-by-3-inch-by-27.5-inch flat steel was used for the top support bracket. These parts were welded in place, primed and painted safety red. The 1-inch-outside-diameter-by-4-inch inserts are 12 inches apart – 16 are required.

It took about four hours to build the rack, which is 60 inches tall and can hold as many as eight grass catchers, and cost about $200 in materials.

Hang it up

Shawn Geouge, golf course superintendent, at the Charleston (S.C.) Municipal Golf Course has a talented small equipment mechanic, John Axtell, who designed and built two variations of a string line trimmer rack.

The first rack (see top photo at left), which is commonly used in the industry, is mounted to stakeholders on the side of a Cushman Turf-Truckster’s bed.

The second rack (see bottom photo at left) is mounted to a 2-inch-by-2-inch receiver hitch on an E-Z-GO Workhorse turf vehicle. Because the vehicle is leased, Geouge’s staff didn’t want to drill holes in the body. After the rack is mounted and secured with pins in the 2-inch receiver hitch, the front of the rack is bolted to the seat back rest for added stability. The 2-inch square tubing fits over the top of the tailgate through a notch. Two-inch-by-2-inch angle iron and 2-inch-by-2-inch square tubing steel is used to build the rack, which is bolted together.

The trimmer shaft mounted closest to the engine is secured with a quick disconnect pin purchased from Grainger’s for $16 each. The rear portion of the shaft is held by gravity on a 2-inch-by-0.75-inch-thick piece of steel bent at a 90-degree angle. The rack was primed and painted glossy black.

The spool of trimmer string is hung on a round, 1-inch-by-9-inch piece of steel. Face shields can be mounted over the 90-degree-angle piece of steel that holds the lower part of the shaft in place.

The rack took about three hours to build and cost $125 for materials.
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### Course Accreditation

- 7. Total Course Accreditation

### Course Renovation Plans for the Next 12 Months

- 8. Course Renovation Plans for the Next 12 Months

### What is the Name of the Architect Who Designed the Course?

- 10. What is the name of the Architect Who Designed the Course?  

### If Only a Partial Reconstruction is Planned, Please Indicate the Number of Holes

- 9. If Only a Partial Reconstruction is Planned, Please Indicate the Number of Holes

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- 2. What is your primary business at this location? (check one)

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- 7. Total Course Acreage

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this will allow ARS to hire 72 turfgrass researchers and allocate more than $10 million annually to universities through cooperative research.

NTRI will be implemented by research teams that will frequently involve multiple research locations spread throughout several states to ensure the right mix of scientific skills is available for a systematic research strategy. The research dollars will be coordinated by and through the ARS budget. In turn, ARS will work with university and private industry researchers to establish research teams.

NTRI envisions that research should seek to adapt results from other agriculture or biological research areas, rather than starting anew for each project. In addition, all aspects of grassland agriculture will benefit from a coordinated, national effort to collect, evaluate and preserve grass germplasm.

NTRI consists of six broad research areas: water, germplasm, pests, environment, soil and integrated turf management. Within each component are several research priorities. For instance, in the water component, there’s a need to improve turfgrass water-use efficiency and irrigation efficiency and to investigate the use of recycled or saline irrigation water. The germplasm component focuses on collecting valuable germplasm, developing a better understanding of the genetic systems and genes in turfgrass species, and using this material and knowledge to develop and release improved germplasm leading to improved turfgrass cultivars.

Progress to date
Throughout the past five years, the National Turfgrass Federation had many meetings and contacts with many government officials. It has stressed the size and scope of the turfgrass industry, the important issues facing the industry and the need for federal research dollars to solve these problems. The NTF convinced Congress to allocate funding for ARS to hire a research scientist in Maryland, conduct cooperative research in Utah and hire a full-time research scientist in West Virginia. And in the ARS budget proposed by President Bush for fiscal year 2007, an additional $1.88 million has been allocated for turfgrass research. If the additional funding is still in the final budget passed by Congress later this year, this will allow ARS to hire three to four researchers and develop cooperative projects with universities focusing on turfgrass water use issues. The NTF also is asking Congress to include funding for five additional research positions.

To learn more about NTRI, visit www.turfresearch.org or www.turfinitiative.org.

Contact your senators and representatives in Congress to let them know the importance of federal funding for turfgrass research by USDA-ARS. Ask them to support funding for the National Turfgrass Research Initiative. Ask your local and state turfgrass associations and supplier companies to make a contribution to the National Turfgrass Federation. The future of the turf industry is at stake. GCN

Agricultural engineer Kevin King examines discharge water from a turfgrass system in central Ohio as part of a research program designed to assess how land uses and management affect water quality.
It's a family affair

Have you ever seen the movie, "Ferris Bueller's Day Off"? It's the goofy, sophomoric tale of a teen who skips school and goes on a series of adventures and misadventures with a couple of friends. Basically, it's a cinematic ode to playing hooky creatively.

Well, we have a "Ferris Bueller" tradition in my family. Once a year, if one of our boys has done something terrific, I call them in sick from school, and we do something fun for the day. It might be a trip to an amusement park or a day at the beach. The point is it's a total surprise and it's a day just for them.

My younger son — a fourth-grader — earned straight As this year, so it was definitely time for a Bueller day. But, instead of the usual kid stuff, I decided to combine it with "Take your child to work day." So, I woke him early, threw his sleepy, confused little butt into the car and headed down to The Memorial Tournament at Muirfield Village Golf Club in Dublin, Ohio, to attend a mid-week practice round.

It was a fabulous experience for three reasons. First and foremost, it was a special day with my boy. Secondly, it was a chance for him to learn more about golf and why daddy is madly in love with this insane game. Finally, in the back of my mind, it also was a way to pay tribute to the special role that family plays in our business.

The Memorial is, of course, hosted by Jack Nicklaus, a man who always made his family a big part of his golf persona. And the certified golf course superintendent at Muirfield is a young fellow named Paul B. Latshaw. Hmmm ... where have I heard that name before?

A game played by millions of people on trillions of blades of manicured grass has, most wonderfully, spawned gazzillions of fabulous family trees. I seriously doubt scientists have identified a golf gene (or a turfhead chromosome), but it's pretty remarkable how much this business runs from father to son, brother to brother, grandparents to grandchildren, etc. Even uncles, aunts and cousins get in the act.

The Latshaws, Paul A. and Paul B., are just one example. Here are a handful more from the business side of golf:

- The thoughtful Cadetellis
- The amazing Alonizs
- The dynasty of Dye
- The fantastic Fazios
- Palmer, Dan and the huge Maples tree
- The giant Jenseks
- RTJ, Rees and Bob
- The empowered Powells
- The brilliant Baviers
- The Ohio Espositos

(Note: I know I'm leaving out a bunch of great folks, but I have to stop here. An e-mail request about this topic to about 30 friends throughout the country generated information about at least 80 more families who bleed green. Wow! That said, I'd love to hear your family story. Just e-mail me if you come from deep turf roots. We'd be thrilled to print your letters.)

Among superintendents in particular, the business is clearly a family affair. The question is: Why so many choose to follow in their kin's footsteps when the trail is such a difficult one to walk?

As my son and I wandered around Nicklaus' and Latshaw's course and marveled at its beauty, I thought about this question and all the times I've talked with second-, third- or even fourth-generation superintendents about it. Here are a few of the answers I've received in the past:

1. You grow up with it, and the craziness just seems normal. No summer vacations. Dad leaving at 4 a.m., coming home at 3:30 p.m. and collapsing into a La-Z-Boy.
2. You fell in love with it during those occasional rides around the course in the passenger seat of dad's Cushman. The sights, smells and sounds of course maintenance stuck with you. The sense that "dad's in charge here" impressed you. You liked chasing the geese or playing in the mud holes the irrigation workers left behind. For whatever reasons, simply being exposed to the process got you hooked.
3. You got a summer job working for

your dad, your uncle, your brother (or some other miscellaneous relative) and just stayed. You looked up 10 years later and realized it was your career for life.
4. You hated the business and went to college to major in engineering or English or anything but turf ... but you weren't passionate about that other stuff. You changed majors along the way and, voila!
5. You tried another career and wandered back into the family business in your late 20s or 30s, realizing there was more to life than sitting behind a desk.

Those are the standard answers, but the real insight came a few days later when I met a superintendent at a modestly budgeted muni in suburban Detroit. He's one of those overworked, understaffed guys who's way too busy trying to do seven different jobs or read GCN or any other turf magazine. He didn't know me from boo and wasn't sure what to make of some idiot purporting to be an industry journalist.

As we talked, I mentioned topics familiar to most frustrated superintendents: long hours, low pay, lack of understanding from golfers, weather, stress and so on. After a few minutes, he looked at me — it was as if a light bulb turned on over his head — and said, "Oh, you speak turf. Usually, it's only other superintendents or people in your family who understand. Most outsiders don't get it." Bingo.

This business is a family affair because, in most cases, only those who are that close to it can speak the native tongue. Maybe it's because of the Scottish roots of the game, but it feels like a clan: a family united by not only blood but a common purpose and shared history.

Golf brings people together in so many ways. On one day in May, it brought my son and me closer. In the case of family members who share the trials and joys of our profession, it's a special bond that lasts a lifetime. That's something to be appreciated, enjoyed and celebrated.

And, by the way, if you have kids and you're in the midst of the crazy season right now, I highly recommend a "Ferris Bueller" day with them. You won't regret it. GCN
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