20 billion years ago
The Universe tees off with a bang.

150,000 years ago
Neanderthal man shows up and starts thinking about what to do with all that open land!

Born in 1821
Old Tom Morris is born. He soon joins a foursome, gets hooked, and becomes a noon-time regular at St. Andrews — golf enters the modern age.

Turf School opens in 1928
The Turfgrass Agronomy program is born at Penn State University. Dr. Burton Musser begins search for quality putting bentgrass for golf course greens.

Unknown
Dr. Joe Duich is born — eventually joins Penn State’s Agronomy program, works with Dr. Musser, and assists his bentgrass breeding research efforts.

Debuts in ‘55
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The 80’s
PennLinks is developed for improved upright growth for superior greens and Penneagle for flawless fairway performance.

A’s & G’s 90’s
The Penn A’s and G’s are developed — trusted today to provide the finest quality, most consistent putting surfaces possible.

The 2000’s
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Cover: Taxel Image Group

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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Online-Only Features:

Get To The Root Of It
Altering cultural practices can optimize root growth for healthier turf.

Communication Is Key
Bill Maynard, CGCS at Milburn Country Club in Overland Park, Kan., conducted a seminar about communication at the GCSAA's educational conferences in Atlanta.
Cut 'em down

Trees are an integral part of many golf courses, and they add beauty to many facilities. However, I still can't figure out why many golfers are so attached to them.

I've heard Paul B. Latshaw, certified golf course superintendent at Muirfield Village Golf Club in Dublin, Ohio, and Dave Willmott, assistant golf course superintendent of The Sharon (Ohio) Golf Club, tell stories about how members of the clubs at which they work freaked out when they found out a tree—a favorite or not—was cut down or was going to be cut down.

Club members, many of whom pay a lot of money to belong to a club, are accustomed to their surroundings and most likely aren’t used to change, especially when they have a say in the matter. Despite that, I’m sure they realize the golf course is the most valuable asset of their club.

So, if golf is what they pay for and perfect course conditions are what they expect consistently, why do they get so upset when trees are removed to improve the health of turfgrass and better the course? Whatever the reason, they make what seems like an easy task difficult for you, the superintendent.

Latshaw once gave a presentation about tree management and said his experiences at the four clubs he’s worked at all had tree issues because many people forgot about the importance of light. Trees use light needed to grow grass. Light affects turf’s growth habit, root/shoot ratio, leaf thickness and density. And different grasses have different light requirements. For example, bentgrass need more light than Poa annua.

Because of this, tree removal is necessary at times. However, research is needed to determine which trees get the ax. Latshaw recommends tagging trees around greens to keep track of them and determine which ones provide the most shade. The first option to improve light and air movement is to prune a tree; the second option is to remove it. Monitoring shade—through time lapse photography and GPS—should be done until the light requirement for the turf on the greens is met.

Factors to consider before removing trees include:

• type of tree;
• health of tree;
• value of the hole; and
• the use of internal and external sources.

Because tree removal can be so sensitive, you should get input from golf professionals, architects, arborists, USGA Green Section agronomists and consultants if it’s feasible. And when seeking approval for tree removal, know the club’s organizational structure. Tips for securing membership approval include:

• Establish credibility;
• Make a good presentation;
• Emphasize the positive aspects of removing trees;
• Don’t give up; and
• Identify the people against it.

Once you’ve identified the problematic trees and the decision to remove them is made, discretely mark the trees, limit the visibility of their removal and clean up immediately.

Because you’re likely to run into opposition to removing trees, keep these points in mind:

• Communicate;
• Realize it’s not popular with members;
• Prepare for criticism;
• Be persistent;
• Remind the members of the positives of tree removal;
• Things will only get worse if nothing is done;
• Figure out what to do with the wood; and
• Don’t get upset. Some of you might need to hire a consultant for tree removal, others might not.

Regardless, it’s still a good idea to check the amount of sunlight and air movement greens are getting and developing a tree-management program.

So go ahead, prune or chop down the trees needed to improve the health of the turfgrass on your course; just do it thoughtfully and carefully, or else it could turn into a bigger headache than you thought. But I guess you can always blame tree removal on lighting. GCN

John Walsh
Editor
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Getting through
I’d like to thank John Walsh for his accurate and well-written editorial (“Take control,” January, page 6) about Dr. Thomas Nikolai and my seminar at the Carolinas Golf Course Superintendents Conference and Show. It’s always encouraging to get feedback and know the message is getting through.

In the seminar, we mentioned a new Web-based tool (www.gcisinc.com) superintendents can use to track green speed and golfer satisfaction, as well as analyze the impact of their maintenance practices. This site will help superintendents track their efforts, measure their success and communicate with course decision-makers. The site is designed for quick and easy data entry that’s secure, and the outputs are immediate.

Thanks again for your kind and supportive editorial.
Michael D. Morris, CGCS
Crystal Downs Country Club
Frankfort, Mich.

Here’s to Guido
I read Jim McLaughlin’s column about Guido Cribari (“Golf’s noble pioneer,” January, page 26). Jim did a great job and wrote a fine tribute to a true legend in the print media and the world of golf.
Peter Rappoccio, CGCS
Property manager
Silver Spring Country Club
Ridgefield, Conn.

Jim McLaughlin did a great job writing about Guido Cribari, who certainly deserves the recognition. There has been a void in the Met area since Guido retired. He was always good for an article or two about local superintendents.

We lost a great ambassador when he retired.
Joseph Alonzi, CGCS
Director of golf and grounds
Westechester Country Club
Rye, N.Y.

For those who wish to write to Cribari, letters can be sent to:
Guido Cribari
The Fountains
1 River Vue Place
Tuckahoe, N.Y. 10707

Jump to g.m.
I used to be a turf specialist with Reinders but resigned Jan. 1 to become the general manager of a small public course. It seems everyone I know who has read Pat Jones’ “Nightmare to remember” column (January, page 62) has seen fit to send me a copy. I now have 11 copies, and everyone thinks the schedule is just as he describes it … but not really. I don’t work that hard, I work harder. Maybe he can send me an autographed copy so I can display it in the clubhouse.
Bruce Schweiger
General manager
Marengo (Ill.) Ridge Golf
& Country Club

Relocation talk
The following is Jim McLaughlin’s response to Jeffrey Berg’s letter that appeared in the January issue:

While I respect Berg’s thinking about not relocating the GCSAA headquarters out of Lawrence, Kan. (“GCSAA taken hostage,” November 2005, page 22), the focus of the column wasn’t about relocation — it was about modernizing the GCSAA. However, my April 2004 column (“Relocating GCSAA,” page 27) presents my thinking about the issue. Readers can compare my 10 criteria for relocation with Berg’s 10 reasons against it. That would provide a meaningful education for all.

Berg suggests the GCSAA hasn’t moved because the members don’t want to relocate. However, it’s hard to judge this because, in the history of the GCSAA, members have never been given the opportunity to vote on the issue. This has been the case because political elements sense what a vote of an informed membership might indicate. GCN
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Industry news

Study to evaluate environment

Lawrence, Kan. - This spring, the Golf Course Superintendents Association of America is starting a project that will evaluate golf course environmental performance. The multi-year project – the Golf Course Environmental Profile – will collect information to allow superintendents and other facility personnel to become better managers, help facilities operate more efficiently and lead to the GCSAA developing more valuable programs and services. Information will include details about playing surfaces, natural resources, environmental stewardship efforts and maintenance practices.

The Environmental Institute for Golf and The Toro Foundation are funding the project.

The project will consist of several cycles of surveys conducted over many years. Each survey cycle will collect information about the physical features of a golf course, water use and quality, wildlife and habitat management, energy use, and nutrient and pesticide use. The first cycle of surveys will establish a baseline of information from which environmental change and progress can be measured. The second cycle will begin five years after the start of first cycle and will be used to document environmental change and progress.

Beginning this month, the GCSAA and nonmember superintendents will receive questionnaires regarding their facilities and golf course management activities.

Committee looks for innovation

Sylacauga, Ala. - FarmLinks introduced an innovations committee. The brainchild of Mark Langner, director of agronomy and applied research, and Dave Heegard, vice president of sales and marketing, the committee was formed to fill a need to be informed about new technology and products in the market.

The innovations committee is comprised of 10 golf course superintendents with more than 100 years of golf course knowledge and experience. They are: Mark Clark of Toon Golf & Country Club in Scottsdale, Ariz.; Sandy Clark of Barona Creek Golf Club in San Diego; Jeff Corcoran of Oak Hill Country Club in Rochester, N.Y.; Todd Daniel of Riverchase Country Club in Birmingham, Ala.; Pat Finlen of The Olympic Club in San Francisco; David Gourlay of Colbert Hills Golf Course in Manhattan, Kan.; Tim Kennelly of Baltimore Country Club in Baldwin, Md.; Rick Tegtmeier of Elmcrest Country Club in Cedar Rapids, Iowa; Tom Vlach of Greystone Golf & Country Club in Birmingham, Ala.; and Bruce Williams of The Los Angeles Country Club.

The committee is scheduled to meet at FarmLinks Golf Club this month.

"Our goal with this committee is to identify the most significant finds and compile a list of the top innovations in the industry," Langner says. "Based on these recommendations, our internal team will seek the involvement of sponsoring companies for our innovative solutions pavilion at FarmLinks."

Study examines ball-mark repair

Manhattan, Kan. – Kansas State University researchers concluded golfers should learn how to use their traditional ball-mark repair tool correctly or consider switching to a new tool.

Ball marks can kill grass and wipe out the possibility of a straight-rolling putt. Yet a large number of golfers have never understood the correct way to apply the tool. They use two-inch prongs topped by a thumb-size grip to dig in and lever up the smashed grass and compacted soil. This method often tears plant roots.

"Levering seems logical, but it's not the way the tool was meant to be used," says Kansas State Research and Extension horticulturist Jack Fry. "We found the digging and lifting has a more long-lasting effect than leaving the mark unrepaired."

The new tool used in the study is called a GreenFix, and it abandons the long prongs common to the traditional shape. Looking somewhat like blades from tiny pruning shears, it's too stubby to create the kind of damage an improperly used traditional tool can.

"You insert the blades at a 45-degree angle into the turf around the edge of the ball mark, and gently push in toward the center," says Kansas State Research and Extension horticulturist Steve Keeley.

The traditional divot-repair tool requires golfers to insert it into the edges of a mark and use a gentle twisting motion to bring those edges back together.

Researchers assessed their four treatments' results weekly on the basis of scar size, surface smoothness and turf quality. They found:

• Every ball mark leaves a scar.
• Initially, unrepaired marks cause the poorest surface quality. After healing, they retain a cavity shape that impairs the true
• For the first few days, surface quality is better on a well-handled traditional repair than on a GreenFix repair.
• Properly used, both repair tools can help make complete ball-mark recovery in two to three weeks.
• On greens with firmer surfaces, the scar shrinks faster, and recovery takes four days less with a GreenFix than with a traditional tool repair.
• Improper use of the traditional tool doubles the time ball marks need to recover. After healing, surface quality remains reduced, and the mark leaves the largest scar.

Course condition is primary driver for satisfaction

St. Augustine, Fla. – During the 2005 Golf 20/20 conference, results were released from a study conducted about golf's best customers. The survey, conducted by Golf Digest, looked at core golfers – adults who play 8 to 24 rounds a year – and avid golfers – adults who play more than 25 rounds a year. Asked to identify the principle drivers of their satisfaction with a round of golf, respondents overwhelmingly indicated the condition of the golf course has the most influence on a golfer's enjoyment of the game. Golfers also were asked if they generally prefer to play a course that's very challenging but not in top condition or one not as challenging but in very good condition. Eighty-eight percent of respondents say they would rather play a course that wasn't as challenging but in very good condition. Eighty-eight percent of respondents say they would rather play a course that wasn't as challenging but in very good condition versus 12 percent who preferred a very challenging venue not in top condition.

RISE launches grassroots effort

Atlanta - RISE (Responsible Industry for a Sound Environment) created a new grassroots program for managing local pesticide and fertilizer issues.
"Our goal is to strengthen and build alliances in towns and cities across the country and to increase public awareness of the benefits of our industry's products," says RISE president Allen James. "Pesticides go beyond beautifying our surroundings — they play a vital role in protecting people, animals and the environment. This grassroots program will help us tell our story in hundreds of communities across the nation, ensuring an informed public and a balanced public-policy debate about the use of specialty products."

RISE is hiring a grassroots manager and is encouraging industry associations, state and local chapters, individual members and distributors to get involved.

"Everyone working in the specialty industry has an obligation to educate their neighbors, friends and local policy makers about the products they make, sell and use," James says. "The program will help us speak with one voice and communicate one message: Our products are safe and necessary to sustaining public health and the environment."

Course news

**Devils Tower to expand**

Hulett, Wyo. – The nine-hole Golf Club at Devils Tower will be an 18-hole facility in July. The second nine, designed by Phelps Golf Design, is laid out on land incorporating red rock canyons and cliffs, along with views of Devils Tower National Monument and the Black Hills.

Architect Kevin Atkinson worked with The Golf Course Co. to renovate the existing nine by 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 feel to the existing front nine. The new back nine is a more traditional, mountain-style layout.

Developer Jim Neiman says the plan is to tie-in the golf course with the new neighboring airport.

Once the second nine opens, the facility will convert from public to private. Additionally, another Phelps-designed, nine-hole daily-fee course is planned.

**Bedminster adds second course***

Bedminster, N.J. – Construction on a second course at Trump National Golf Club, Bedminster will begin this spring. The 18-hole course will be designed and built by Tom Fazio II. Tom Fazio II Golf Design LLC will be the contractor.

The course, for which all municipal
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ClubCorp entered into a development and acquisition agreement with Pulte Homes to develop Applecross Country Club. Along with a Nicklaus design golf course, the club will feature a 22,000-square-foot clubhouse and a 19,000-square-foot community sports center. Construction of the golf course is slated to begin this spring.

Nicklaus course in development
East Brandywine Township, Pa. – ClubCorp entered into a development and acquisition agreement with Pulte Homes to develop Applecross Country Club. Along with a Nicklaus design golf course, the club will feature a 22,000-square-foot clubhouse and a 19,000-square-foot community sports center. Construction of the golf course is slated to begin this spring.

Weed completes Jacaranda rehab
Plantation, Fla. – Weed Golf Course Design completed a redesign of Jacaranda’s East Course. Last summer, Weed Design began a maintenance and renovation upgrade for the East Course, originally designed by Mark Mahannah in 1970. The updated par-71 layout, which endured four hurricanes during construction, stretches 7,245 yards and borders lagoons. Lepanto Golf was the golf course contractor.

The project encompassed comprehensive replacement of the drainage and irrigation systems along with substantial agronomic upgrades, including new greens and turfgrasses. Seawarf paspalum was planted on the tees and fairways, and Tifdwarf Bermudagrass is on the greens, collars and approaches. New concrete cart paths and enhanced landscaping also were part of the project. Five holes were rerouted.

Olympia Fields to be updated
Olympia Fields, Ill. – Olympia Fields Country Club’s South Course, which was built shortly after the club was formed in 1915, is going to receive a major restoration designed by golf course architect Steve Smyers. He intends to restore, yet modernize, the South Course – reintroducing its original style and strategy, which has been lost throughout the years and through two renovations.

About 500 yards will be added to push the championship-tee distance to more than 7,200 yards. Irrigation and drainage also will be improved.

Throughout the years, maintenance and upgrading of the South Course has suffered, according to grounds committee chairman Mike Drew. Greens have changed from their original shape, and bunkers have deteriorated and lost their style.

Permitting is under way, and Smyers hopes construction will begin in July or August.

Ross course to be renovated
New Smyrna Beach, Fla. – Weed Golf Course Design was retained to renovate the City of New Smyrna Beach’s golf course, a layout believed to be Donald Ross’ last design on paper. Originally, the course was completed in 1956, eight years after Ross died.

The city initially retained Bobby Weed and his associates to restore the greens and greenside bunkers and now has expanded the scope to include a more comprehensive renovation that includes new tees, fairways, fairway bunkers, greens, irrigation, cart paths and added length to the 6,377-yard, par-72 course.

Weed Design will work through the summer to have the facility reopened for the 2006-07 winter golf season.

El Niguel club remodels bunkers
Laguna Niguel, Calif. – A major bunker remodel project is nearing completion at El Niguel Country Club. The club’s green committee selected golf course architect Dale Voloshin of Voloshin Golf Design to develop the master plan and construction documents for the remodel.

The club originally opened in 1963 and has undergone several different green remodel projects by different architects. The result has been an inconsistent style of bunkering and greenside mounding that appears out of character with the rest of the golf course, Voloshin says. Plans call for softening the tall, steep mounding that surrounds most of the greens, while adding some soft, lower mounds and contouring around the greens that were fairly flat. Plans also call for enlarging and reshaping the small, deep bunkers so they’re more playable and accessible to members and easier to maintain for the maintenance crew. The flat, shallow bunkering that surrounds other greens will be reshaped and deepened slightly to be consistent with the new bunker style.

Ranger Golf Construction is shaping and doing the bunker construction. West Coast Turf is resodding the course with overseeded Bermudagrass. Brian Archbold, golf course superintendent, and his maintenance crew are providing irrigation adjustments and installing the new bunker sand.

Lehman course opens in Arizona
Tucson, Ariz. – Omni Tucson National Golf Resort & Spa’s new Tom Lehman-designed Sonoran Course, nestled in the foothills of Santa Catalina’s Mountains, opened to the public Jan. 1. The Omni resort now has two 18-hole championship courses.

Lehman also redesigned two holes on the Catalina course to lengthen and tighten the holes, as well as enhance their safety.

The Lehman Design Group redesigned the former nine-hole Green Ranch course and added nine holes to create the Sonoran course. Lehman’s design objectives were to use and protect the natural washes and native vegetation, to create a seamless appearance between the two parcels and a layout with elevation changes and rolling greens. The par-70 course, which features MiniVerdi Bermudagrass greens, measures 5,254 to 7,138 yards.

Wadhurst Golf Construction Co. completed the project in 10 months.

Ridge Creek to open in 2008
Dinuba, Calif. – City council selected KemperSports to serve as construction and operations manager for the area’s first-ever 18-hole championship golf course – Ridge Creek Golf Club. The upscale daily-fee layout will take ad-
The vantage of the Central Valley mountain ranges, abundant wildlife and native vegetation while strategically incorporating natural grasses and bunkers. John Fought Design is the architectural firm.

Construction of the par-72, 7,000-yard course is scheduled to commence in the second half of 2006. KemperSports will assume operations management upon the course’s opening in 2008.

People news

Joe Anderson, golf course superintendent at Center (Texas) Country Club, won the 2006 GCSAA National Golf Championship conducted at Redstone Golf Club in The Woodlands, Texas, Feb. 5 through 7.

Sean A. Hoolehan, CGCS, at Wildhorse Resort and Casino in Pendleton, Ore., was elected the 70th president of the GCSAA. Ricky D. Heine, CGCS, general manager and director of grounds at The Golf Club Star Ranch in Austin, Texas, was elected vice president. David S. Downing II, CGCS at Rivers Edge Golf Club in Shallotte, N.C., was elected as secretary/treasurer. Two new directors were elected to the board: Patrick R. Finlen, CGCS, director of golf maintenance operations at the Olympic Club in San Francisco and Sanford G. Queen, CGCS, manager of golf course operations at Overland Park (Kan.) Golf Club.

Ed Seay, partner of Arnold Palmer and president of Palmer Course Design, received the Golf Course Builders Association of Americas Don A. Rossi Award.

Supplier news

Fairmount Minerals added The Andersons as a partner in a national expansion of Nitamin-coated sand distribution. Additionally, Georgia-Pacific teamed with ProSource One to add Nitamin as the exclusive nitrogen source in its ProForma premium line of fertilizer products.

Jacobsen introduced the InCommand Control System - functional and mechanical upgrades to the handles and clutch system used on walking greens mowers of the PGM 22 and GK 500-series.

John Deere Golf and Turf launched John Deere Golf Irrigation, a full line of heads, valves, controls, sensing and communications systems available to One Source customers.

Related to that, John Deere and Signature Control Systems entered into an exclusive strategic alliance to jointly research, create and distribute water management products. Signature recently purchased the golf irrigation assets of Bear Irrigation, giving Signature additional expertise in sprinklers.

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Go to: www.golfcoursenews.com/readerservice - select #17
I n 1997, I worked for a client who had a vision of creating a unique golf course - all par-3 replica holes from famous courses throughout the world. As with many visionaries, he wanted to secure additional private funding for the project. I was asked to help write a prospectus for that purpose. While writing this portion of the investment offering, I focused on the need for player development facilities and the need to increase the number of players for the continued health of the game. This marketing angle seemed perfect for my client's offering. I knew course supply was weighing on golf demand, but I didn't know exactly how much.

At this time, golf equipment sales were booming, a golf course was opening every day, and being in the golf course industry was cool. However, once I had some basic research in place - annual rounds played and course supply growth in the United States from 1990 to date - the trends didn't look so wonderful from a golf course owner's view.

The health of the industry was showing signs of deterioration. Golf rounds played in the United States weren't keeping pace with the number of courses being built. Additionally, the industry was gaining 3 million golfers a year while losing 3 million a year. Some management companies and developers were opening, selling out and flipping their golf course amenities into a market without regard for oversupply.

I wondered who was right - the buyers or sellers? Even my client, and I by association, was to blame partially for not being able to recognize these warning signs of oversupply.

Projecting trends ... again
The research I conducted then should have been a learning experience for me. I was surprised by the accumulated data indicating that annual U.S. golf rounds declined significantly on a per course basis, even though I realized competition was heating up for rounds in almost all markets.

But at the time, no industry source was evaluating the decline or attempting to explain it to golf course owners. As a marketing consultant, I vowed not to make the same mistake twice. Now I attempt to project trends based on industry facts. You should too.

**Baby Boomers and Gen-Xers**

If I had a crystal ball, I would want to examine the playing habits and trends for Baby Boomers and what the group contributed to total annual rounds played in the United States, as well as my expectations for the group in my market.

I would also want to know the profile of Generation X and their propensity for golf. Who are the golfers of today, and who will they be in 2010 and 2015? What's their demographic makeup? As a percentage of the growth of the population, is golf keeping pace?

So, I called Stuart Lindsay at Edgehill Consulting to see what he and Pellucid Corp. had researched about Baby Boomers. (Note to owners and operators: Knowing the questions to ask is only one-third of your marketing solution for your facilities. Getting the answers and interpreting the data is the solution to marketing planning for success.)

Lindsay says, "The good news is we recently have completed our look at the fourth year of Baby Boomers turning 55. Their participation is strong, and their play frequency is increasing like it has with past generations at that age. This should provide a tailwind of between 1.5-percent and 2-percent rounds growth annually. This might not seem like a big increase, but that's between 7.5 and 10 million rounds a year.

"The bad news is that by 2010, more than 50 percent of the golf in the United States will be played by people older than 55," Lindsay says. "That's an increase from an estimated 42.7 percent in 2005 and an estimated 35 percent in 1985. This represents a significant shift. During the next five years, the skew toward older play will change as much as it did in the past 20 years. This was predicted by the National Golf Foundation but is accelerating faster than predicted because of Generation X.

"The potentially ugly news is many golf course operators have lowered the age for senior rates to capture play from that age group," Lindsay adds. "At a golf course generating 30,000 rounds at $30 and a 20-percent senior discount, the change outlined above will reduce revenues (and most bottom lines) by $14,940. And most operators won't know it happened until after the fact. To be proactive, all operators need to look closely at the age and percentage discounts used for senior play.

"Now here's the rest on the Generation X part of the equation," he continues. "The good news is Generation X is a smaller group than Baby Boomers, and that's the only thing good about it. The bad news is they're not participating as much in golf as a percentage of the population as the Baby Boomers did at the same age. The ugly news is their annual play frequency at age 40 is falling, not increasing as it did for the generations before them.

"As your clients look at marketing in 2006 and beyond, they'll need to remember an estimated 75 percent of all the golf in the United States is being played by people older than 43."

Well, considering Lindsay's data about Baby Boomers and Gen-Xers and all the initiatives targeting player development during the past five years, I'm betting the industry's demand and supply balance is in a corrective stage. The snapshots of relative data might appear to be declining or stagnant, but that's because the industry is slowing, hopefully reversing, its downward trends. Time and research will tell.

My bet is the industry is turning for the better. Let's hope the light at the end of the tunnel isn't another train. I'd prefer to do some extra work to know for sure.

So, to you owners and operators: Research your market. Know what trends are affecting your businesses positively and negatively. Learn how to better project local market trends for the future. It could mean the difference between your course being plowed under for additional housing and being the best golf value at your price point in your chosen market. That's success. GCN
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Architects' influences

The phrase "horses for courses" describes players likely to win at a certain venue. It also applies to selecting golf course architects to be successful on particular projects because each one is unique. Most designers have a style, and most clients pick them based on previous work. You’d hate to hear your golf course architect say, "Hold on, I want to try something new." Beyond investigating the past work of your proposed architects, consider the underlying conscious or subconscious influences of their designs as a barometer for how they'll perform. These influences might include personality, mentors, training, artistic influence, golf and professional background, and critics.

Personality

I’ve taken personality tests and have a classic designer profile. If I had never played golf, I’d be a city planner, furniture designer or landscape architect. But not every golf course architect has a designer personality. It's not required to obtain a landscape architecture degree. Nondesigners designing courses tend to have less flair. That might be fine if you need practical design, but it usually isn’t.

Mentors

I’ve been influenced by classic courses I’ve played throughout the world and learned there are different ways to design golf courses. A well-traveled architect is usually a better choice than one who isn’t interested in learning from others, but an architect’s mentors usually have the biggest influence. I still do many things similar to my mentors who ingrained these ideas in me:

• If it can’t be maintained, it won’t last.
• If it can be built, it can be drawn.
• If it can be drawn, you can predict a budget, which doesn’t have to be huge.

While much has changed, I still draw plans, estimate and usually opt for maintainable designs. While I never would have coined a name like minimalism to market my services, I came of age in the minimalist tradition of grading fairways only where required for vision, creating surface pitch for drainage or to flatten the fairways to playable slopes. Architects with different training strip more topsoil and move more earth, but nice golf courses can be built by moving less than 100,000 cubic yards of earth.

If you have a budget, consider an architect who’s also done that with good results. Architects with other training might draw on napkins, never meet a budget and disregard the cost of maintenance. Many are famous for doing that.

My beliefs came from my mentor’s mentor, who owned golf courses during the depression. His courses required only two maintenance workers – one for greens mowing and bunker raking, and another for gang mowing fairways. Like him, I’m influenced by career timing, having entered the profession in 1977 when golf economics were similar to today. I welcome the return to practical golf. Architects entering the industry in better times, apprenticing under famous architects or with bigger construction and maintenance budgets probably view those times as normal and the current need for practicality a nuisance.

Training

To become a golf course architect, I had the traditional training of studying landscape architecture, surveying, aerial photography, agronomy and drainage. Training is important because new courses require accurate plans and quantity calculations to meet environmental standards. Architects coming from other backgrounds might have to learn on the job but hopefully not your job.

If you want a course that looks and functions as well as it plays, consider someone with landscape architecture training, supplemented by a lengthy apprenticeship at an established firm.

Perhaps the greatest lesson learned in my apprenticeship is there are no bad golf course design projects. Once, I lobbied for a high-budget project over a lower-budget one to show off my skills. I was told if I couldn’t do a superior design on a lower budget, I wasn’t the designer I was thought to be.

Artistic influence

My artistic approach is influenced by my landscape architecture education, which taught me general art principles, but my courses most closely emulate those of 1950s architect Dick Wilson. Why? Because my mentors consciously emulated his design style to change their image from their mentor. I picked up that style, slowly making my own changes to distinguish myself from them.

Golf background

An architect’s golfing ability influences his design less than most people think. As a recreational golfer, I design for playability and interesting features. I’ve learned about shot values for great competitive players by collaborating with pros. Conversely, many good players consider their caliber golfers first but work to reduce difficulty for others.

A golf background might play a bigger role in design style. I was introduced to golf at a country club by a neighbor, but despite several membership drives, my father never joined, and I was soon golfing on public courses. I love public golf course design, knowing that turning budget or other limitations to a client’s advantage is fun, and generally helps the game of golf more than projects with extravagant budgets.

Some golf course architects refuse public course design projects, others don’t feel comfortable in a private-club setting, and some turn down small or technical projects.

Professional background

Throughout 20 years, I’ve realized good golf course design requires us to be forceful in our demands for golf course acreage – when housing developers or land planners don’t consider the golf course to be as important, or when club members don’t want to spend the proper amount to complete a project correctly. While being agreeable is generally a good thing for an architect, sometimes it pays to have someone with the experience to tell you no when needed.

Critics

Critics, magazine rankings and Internet discussion boards influence architects, too. An architect who’s been pummeled by critics more than usual might be more conservative, while one who has never experienced bad reviews might be overly aggressive. Usually, neither is good. An architect who has progressed through his career with an upward trend is a good barometer. You want one who can think outside the box but not take wild chances.

When interviewing architects, delving into these areas might give you a better picture of how your relationship will turn out, and more importantly, how your project will turn out.
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Golf’s unknown acronym

Which of the following organizations has been most valuable to the game of golf throughout the 20th century and the early years of the 21st century: the PGA, LPGA, NGE, CMAA, IAGA, NGCOA, GCSSA, USGA or the First Tee Program? If asked, the American golf community’s opinion would be divided among the mainstream golf organizations listed while the IAGA would barely be noticed.

Latest estimates indicate there are about 27,300,000 golfers in the United States, yet maybe fewer than 5,000 people throughout the country have even heard of the IAGA. Graciously, Dick Haskell — retired executive director of the Massachusetts Golf Association and one of golf’s respected historians — has made his knowledge of the IAGA’s many, but little known, core contributions to the development of golf’s foundational institutions available.

IAGA History

First, to answer the question many must be asking, IAGA stands for the International Association of Golf Administrators, which is the membership association for golf organization management personnel. The IAGA was established in 1968 in New York City when the following representatives of state and regional golf associations met to consolidate their diverse approaches to supporting the game of golf throughout the country: Carol McCue of the Chicago District Golf Association, John Riggle of the Arizona GA, Newell Pinch of the Southern California GA, Marshall Dann of the Evans Scholarship Fund, Peg Burnett of the GA of Philadelphia, Jim Standish of the GA of Michigan, Dick Haskell of the Massachusetts GA and this columnist representing the N.Y. Metropolitan Golf Association.

Presently, there are 98 IAGA-related member regional/state golf associations (17 that are more than 100 years old, and 55 that are more than 75 years old) within the United States. They’re complemented by another 14 golf associations throughout the world. Historically, the IAGA has been the major catalyst for the growth and cultural development of golf in the United States.

Service to Golf

The depth and breath of IAGA-related contributions throughout the past 100 years is one of the fascinating untold stories in golf. For example, during the late 1890s, the USGA and several regional/state golf associations were established for the sole purpose of conducting championship golf tournaments for their respective constituencies. As the years passed and player entries grew significantly, it became impractical for the USGA to provide experienced officiating support for each of its local and sectional-qualifying rounds throughout the country for its annual, multiple national championships.

Recognizing the scope of the challenge, the original and later-to-come IAGA state/regional golf associations assumed the responsibility (on a courtesy basis) to conduct all the men’s USGA local/regional qualifying rounds throughout the country, in addition to managing similar qualifying and championship rounds for each of their own districtwide tournaments.

In 2005, this responsibility to the USGA required the IAGA associations to schedule more than 700 golf courses countrywide to conduct the collective qualifying rounds for a total of 38,500 player entries for all of the 13 USGA national championships. The IAGA associations have made the concept of championship golf possible throughout the United States.

The concept of a districtwide, electronic handicap-computing program was born (in the early 1970s), cultivated and permanently established within the national IAGA association structure. At the request of the USGA in the late 1970s, these collective regional handicap programs were consolidated into one and passed on to the USGA to become what’s known as the national GHIN Handicap System. To its credit, the USGA has perfected handicap policy, but the core foundation of all GHIN mechanisms and data flow originated from within the IAGA’s creative culture.

Up to and through World War II, new golf course development was dominated by the private sector. Thereafter, the concept of public access golf blossomed and flourished to the point where now there are more than two public access golf courses operating for every one private club course.

However, private and public sector golf didn’t mix any better than oil and water until the Buffalo District Golf Association took the first steps in the early 1970s to take down the firewall that existed between private and public golf throughout the country. For the first time in Buffalo (and relatively soon thereafter throughout the country): public links championship tournaments were welcomed at private club courses; public-course golfers became eligible for and earned respect playing in districtwide championship events; and player groups at public courses were granted membership status within the regional/state golf association structure. Golf became a cohesive family because of these IAGA initiatives.

Until the first national oil crunch developed in the mid-1970s, golf course operations were loosely managed amid an “easy come, easy go” financial environment. Thereafter, management mistakes cost golf course operations a lot of money and created insurance liabilities that made it difficult for golf clubs to acquire insurance coverage.

To counteract this crisis, a small subcommittee within the N.Y. Metropolitan Golf Association pioneered new property/casualty and benefit insurance packages that provided readily available coverages at an astonishing 40-percent discount rate to clubs that elevated the quality of and reduced risk within their business operations. Copycat IAGA-related insurance programs quickly spread these cost-efficient guaranteed access insurance packages throughout the country. Clearly, the IAGA provided the incentive and leadership needed to take golf course operations out of the dark ages of the 1970s and into the critically necessary business environment that sustains the game currently.

The IAGA infrastructure consistently has lead the country to developing model industry programming, i.e., educational workshops for club/course officials, junior golf development, travel programs, local Rules of golf workshops, regional publications, caddie development/training programs, and by continuing to shape available insurance programs to address the golf club industry’s changing needs.

From developing essential culture changing programs to noticing curious statistics (i.e., about 3,000,000 golf balls are lost on a typical Saturday in July throughout the country), a proud IAGA never sleeps; and accordingly, golf can rest comfortably because the IAGA is always on sentinel watch.
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Off to a great start

The first day of work and the remainder of an orientation period are critical to job performance, satisfaction and turnover.

Most of us vividly remember our first day in a new position. Beginning a new job is a time of change and excitement, but also a time of apprehension. What happens during the first few days and weeks of employment sets the stage for the months and years to come.

You've invested time, energy and money to hire the best new employee. Orientation is the next step. Performed well, orientation builds on the employee's positive recruitment and selection experience. The first day on the job should be viewed as the beginning of the orientation process, not simply the first day of work.

The two most important attributes for a supervisor orientating an employee are empathy and planning. Empathy is to put yourself in the shoes of a new employee to consider how he's feeling. As a veteran, it's often difficult to appreciate what a new employee is experiencing. Issues such as bathroom location, break time, when to eat and access to first aid are old hat to you, but to a recently hired employee, everything is new.

An orientation, even for a basic job, is most effective when it's planned. As you make the plan, think about:

• How you can make a new employee feel welcome and comfortable;
• How you should familiarize a new employee with the course and course personnel; and
• What tasks a new employee will do first, and what tools and equipment he needs to be familiar with.

These and the following five points will help you develop and implement your plan for a new employee's first day:

1. Greet a new employee and put him at ease. To reduce the nervousness of a first day on the job, create a warm and friendly atmosphere that makes an employee feel comfortable and creates an environment to get the employee off to a great start. Reassure the new hire that based on the information from the hiring process you're confident he'll succeed in the job. Introduce a new employee to other employees, especially those he'll be working with most closely. A list of names also is helpful because a new employee has an entire staff to learn. If there's new employee paperwork to do, take care of it or explain to him how it will be handled. Explain what will transpire on the first day on the job.

2. Review key information an employee needs to get started on the job. Every new employee needs to know many basic things about the workplace - locations (restrooms, break/lunch room, supplies, time clock, first aid/emergency supplies), hours of work, pay check logistics (recording hours, pay check pickup/deposit), and neighborhood information. The list is long, unique to each facility, and items can be skipped easily. It's best to develop a checklist to use during orientation. You can give the completed checklist to a new employee when completed.

3. Provide a basic explanation of the job. Great supervisors recognize the importance of providing clarity about course policies, maintenance staff policies/expectations and expectations of the position. Providing clarity begins the first day on the job, which is most important. The introductory explanation of what an employee will be doing, his responsibilities, to whom the position reports and the performance expectations of the position should be introduced at the beginning of the orientation process. But it's equally important to provide the information in easily understood pieces. Remember, an employee likely will be somewhat overwhelmed the first day. The purpose of the initial presentation is to provide a new employee the clarity he needs to succeed and to impress on him that you'll be a great supervisor.

4. Teach the basic fundamentals of the first one or two tasks. A key to success for a new employee is early success. From the many or several tasks that comprise the position, select one or two the employee can master and produce results. For example, if the first task is mowing, you might have the mechanic describe the routine maintenance procedures (and provide a written description for later reference) and how to operate the equipment. You can then provide specific training and information to begin the mowing.

5. First day follow-up. You should be available to answer any questions a new employee has. Indicate to the employee you'll check back frequently to answer questions and see how everything is going. Use the follow-ups to reinforce key points and to assess how an employee is feeling about his first-day experience. It's important you check back as promised. This is how to develop the trust of an employee. Continually encourage a new employee to ask questions and become an active participant in the training program.

During an employee's first day, allocate time for orientation. Remember, you only have one chance to make a first impression as a new employee's supervisor.

Orientation isn’t a one-day process. Your plan should include continuing contacts to review and reinforce course policies, maintenance staff policies/expectations and expectations of the position. Perhaps the easiest mistake is to end orientation too soon. Remember, in learning a task, you should always know how to complete the task before you have the confidence to continually complete the tasks perfectly. Continuing reinforcement and coaching is important as you work with a new employee. Also, schedule a short weekly meeting for the first month to six weeks to assess how an employee is feeling about the job and so he can ask questions, seek advice or share concerns.

Successful entry of a new employee into your golf course staff will occur when he is familiar with all of the following:

• Logistics of the course and position;
• Golf course/club overview and engagement in the success of the course/club;
• Health and safety;
• Policies and procedures of the golf course maintenance staff;
• Job requirements and expectations for success in the position;
• Neighborhood information; and
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"If we're going to have proper stewardship of golf courses from an environmental standpoint, you can't be throwing water and pesticides all over the place just because somebody wants 14-foot Stimpmeter readings every day." - Jim Snow, national director of the USGA Green Section

"(The manufacturers) have us over a barrel no matter what the color - green, orange or red. We can't go to Wal-Mart to buy a part. I've even bought aftermarket parts and that has helped out, but you're still not getting an (original equipment manufacturer) part. Equipment parts continue to rise. I can't sustain an $80 seal that's two inches in diameter." - Rick Fiscus, golf course superintendent at West Chase Golf Club in Brownsburg, Ind.

"We're all tied to fuel prices, but we can't pass along those increases to golfers. It's about doing more with less, just like everyone else. Unfortunately, at some point there will be diminishing returns, and course conditions will be affected. We're rapidly approaching that time. We have to keep the game affordable, but at what point does the general golfing public understand this situation and accept lesser playing conditions? That's the million-dollar question." - Tom Alex, director of golf course maintenance at Grand Cypress Golf Club in Orlando, Fla.

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THE USGA GREEN SECTION OFFERS ADVICE TO SUPPORT SUPERINTENDENTS AND EDUCATE GREEN COMMITTEES

**by JOHN WALSH**

**Q** Explain your role as national director of the USGA Green Section. I'm responsible for all the Green Section's activities including the Turf Advisory Service, which is one of our major core programs; our turfgrass and environmental research committee; and our construction education program that's run by Jim Moore. I'm also editor of the Green Section Record magazine. My role is administrative to a large degree though I travel frequently, much of it to the universities where we're funding research and at meetings and conferences.

**Q** What's the relationship between the USGA and universities like? Most of the universities don't have large numbers of extension specialists today. In the '50s and '60s, they would hire extension specialists who would visit golf courses as part of their responsibilities. That was competition for us, but it worked out OK. As funds have become tighter at the universities during the last couple decades, they haven't been able to do as much field consulting. However, today we have a good relationship with them. It's a good collaboration.

**Q** Elaborate about the relationship the Green Section has with superintendents. It's a very amicable relationship for the most part. There's a lot of mutual respect and admiration. Many of our agronomists have been superintendents or assistants for quite a few years. All of our agronomists have worked on golf courses and have at least a fair amount of experience. So we're sympathetic and understanding of the issues superintendents deal with. It's not surprising that we have a good relationship with them.

On the other hand, we're there to help the course improve its facilities. Course officials pay to have us come, so naturally they're involved. We take a positive approach to our visits, but everybody has problems. Whether they're acute or long-term issues, we can offer positive recommendations for improvement, without making anybody look bad. The USGA agronomist has to have the right personality and understanding to pull it off, or else he won't last too long.

**Q** What disagreements exist between a superintendent and the Green Section? There are very few absolutes in this business. There's a lot of room for different ideas. One of the benefits of our Turf Advisory Service is that each agronomist visits more than 100 golf courses each year, and they bring a lot of ideas and perspectives to the table. Ultimately, the superintendent is the one who has to decide which ideas to use, but there's no doubt he has more ideas to choose from to help him make that decision. We're definitely not there to make anyone look bad. We want to help them, and that's what we're there for.

When an agronomist first visits a club, he has to be careful about how he states things. When he develops a good relationship with the superintendent over time, the superintendent and agronomist can be more honest with each other and disagree in a friendly way, if there's disagreement at all. Often times the superintendent will try a suggestion and see one way or the other whether they think it works.

**Q** Are most USGA visits concerned with problem-solving or maintenance practices? It could be both or either one. There are many reasons why a course might take a visit. Sometimes it's an acute problem. Last year, the phones were ringing off the hook in August, for example. We generally receive a majority of calls in August each year, but it was worse throughout the country last year because of the severe weather.

At many courses, we help course officials understand better what the superintendent's role is and the difficulties he has to deal with.

You might say we're a communications link between the grounds committee and the maintenance staff. The USGA can come in and say, "You really should be doing these things, but you need to provide the superintendent with the tools and resources he needs" to the course officials, or "You're doing a great job, but why don't you try these couple of things and maybe it will be even better." It helps the green committee members, who know nothing about turf management, to at least say, "We have had a second opinion, and it sounds like we're doing a pretty good job there."

**Q** Is your visit a blessing for superintendents because you're educating green committees? Yes, it certainly can be, and perhaps it's the biggest reason we visit golf courses. Superintendents who know us and trust us know it's good for them because 98 percent of what they do is probably exactly what they should be doing. But if you were on a green committee and didn't know anything about turf, you'd like a second opinion to make sure money is being spent wisely and effectively. That's what they want to know. In the process, they receive specific information about problems they're having.

**Q** How many golf courses does the staff visit throughout the country annually? About 1,700, depending on the year. We make multiple visits to some courses, so it comes close to about 2,000 visits. There's about a 30-percent turnover from year to year. The courses that don't have big budgets would like the service annually. Let's say we might go in and recommend 10 different things, however there may be no way they can do all those things in one year, so it takes them longer to adjust. As a result, they might go a year or two without a visit, and then they'll come back and take another one. It might be every other year or every third year. You have this rotation, but in the end, you still have about the same number of clubs every year.
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Q: How has the USGA changed its views about golf course maintenance?
Throughout the past 15 years, environmental issues have changed a lot, and we've been at the forefront of that, along with the Golf Course Superintendents Association of America. The environmental research program we started in 1990 has produced a lot of great information about the effects of golf courses on the environment. Many of the current best management practices have been based on that research. There are many other things that have changed, but we've put a lot of emphasis on environmental stewardship through our support of the Audubon Cooperative Sanctuary program, the research effort and our Wildlife Links research program.

Q: Are many superintendents following your lead?
It's a bell curve. There are some who jump all over the Audubon program and do everything they can. Then there are the courses that do some, and then less and less until you get to the other end where some don't do anything. It's hard to characterize the industry as a whole.

It's true superintendents are stretched in a dozen different ways, and it's hard for them to spend a lot of time on that. The bell curve is moving to the right, though. More people are doing more good things for the environment, which benefits the game of golf and the environment.

Q: What's an example of an environmental practice superintendents are doing more now because of the USGA?
There's a much better understanding of pesticides among superintendents. We've recognized, through research programs and other avenues, some pesticides are much more benign to the environment than others. Superintendents are learning which ones are more of a concern, and many more are making better decisions about which ones to use based on current conditions instead of just considering the effectiveness of a compound. This is one little thing, but it's an important one.

Q: What problems does the Green Section see repeatedly?
The biggest one we see consistently is the demand from golfers for perfect conditions or nearly perfect conditions all the time, or extremely fast green speeds all the time. That causes major agronomic problems for the superintendent during difficult weather conditions. Last year is a great example. Almost every superintendent had to deal with that issue in some form or another. Many superintendents lose their jobs because they can't provide perfect conditions all the time, but let's face it, nobody can.

Q: Does the USGA defend superintendents to help explain what's unrealistic?
Absolutely. I'll bet nearly every report that goes back to a club mentions this topic because good golfers want nearly perfect conditions all the time. They want championship conditions, yet it's likely most members don't want such extreme conditions. If we're going to have proper stewardship of golf courses from an environmental standpoint, you can't be throwing water and pesticides all over the place just because somebody wants 14-foot Stimpmeter readings every day.

Q: Are golfers listening to this, or are they disregarding it?
There are some who take the time to understand and recognize it's not possible. There are many people who don't care one way or another. There are plenty who do care but don't understand. It's difficult to educate 26 million people. You can't do that. So what our agronomists can do on their visits is point it out to the officials. Then it's up to the club.

Q: How often are the specs for a USGA green changed?
We introduced USGA green construction in 1960, and it works very well. There haven't been many changes - mostly tweaks. The latest one was just a few years ago in 2002. Before that, we made many small changes, but in principle, they weren't very different from what was introduced by Marvin Ferguson in 1960.

Q: Are there going to be many changes in the future?
We helped fund a big study at Rutgers University. We spent between a half million and three quarters of a million dollars since 1990 on research related to green construction and root-zone mixes. Dr. Jim Murphy is in his eighth year on these trials, and after seeing eight years worth of results, I'm pleased about how well the USGA green has worked. I don't see any significant changes in the near future. It's a well-designed method, and it's remarkable how close Dr. Ferguson was to having a terrific method of green construction. I give him a tremendous amount of credit because at that time nobody believed that sand-based root-zone mixes would work.

Q: Can a USGA green be built to specs at different courses for different prices?
Sure. Chances are, if the courses are in the same city, they'd probably be using the same materials, but there are many soil amendments that can be used. Peat moss is relatively inexpensive and effective, and there are good quality compost materials available in many locations. That's one thing that has probably changed a bit. There are more people using compost, but they still have to conform to our guidelines, so it's perfectly acceptable to do that. There's some tweaking as far as the cost goes, but to leave out the drain system or the gravel layer or something like that isn't a good idea.

There's also the California green, which was developed back in the '60s. It's used quite often, particularly in the Southwest. It's also used elsewhere in the country, and it works reasonably well most of the time, as long as you build it according to the recommendations.
Is there a USGA research project that stands out in your mind? We've funded more than 300 projects since 1983. Turfgrass breeding is a core part of our research program, but it takes a long time to get results. We're working with breeders on salt grass in the West. We have four or five breeding projects with different species of grasses going on right now. As time goes by, these breeding projects will make a lot of difference on how golf courses are maintained, helping reduce the cost of maintenance and having better turf with poor water quality. It comes down to the environment. I'd say 98 percent of the projects we fund are related to the environment.

What's the biggest criticism the Green Section receives? The main one, which we've had since 1953, is that it costs too much. We hear that every year.

What does it cost? In 2006, a half-day visit is about $1,800, a full day is $2,400; but there are discounts if you pay in advance. It's between $1,500 and $2,400 depending on what you want and when. In 1953, when we started the program, based on an inflation basis, it was more expensive than it is now. There are clubs that would like to use the service, but they don't have much money, or they don't realize they probably would get many times the value in good recommendations and money-saving suggestions.

Our fees cover only about 38 percent of the cost of having the staff do the work. So the USGA subsidizes the program to a large degree. This isn't a break-even program. Although it costs much more to operate the program than what we collect in fees, the USGA feels it's very important. The program does a lot of good for golf, and the USGA is willing to put money into the program. There are courses that complain about the fees, but how much can you cut back when you're only getting 38 percent of your cost covered by the fees?

Why would a course call on the USGA as opposed to other consulting agronomists? If you look at what our guys do, each of them visits more than 100 golf courses annually, and that's the key factor. When you visit that many golf courses and see what's going on every single day throughout the golf season, you know a lot about what's happening. Most consultants visit a tiny fraction of that many courses in a year. Golf courses recognize when USGA agronomists visit that many golf courses, they can bring a lot to the table for them. Also, we don't sell anything other than our service, so we're not biased when we recommend products or equipment or whatever it happens to be. That's not always the case with private consultants. They often sell fertilizer or pesticides or other products to supplement their income because it's tough to make a living being a consultant unless you sell something. Also, for us, it clearly helps to have the USGA name involved.

How are course conditions for a tournament implemented? We have 13 national championships each year. We set up each championship to be challenging based on the capabilities of the particular group of golfers playing in that event, so you can expect it to be difficult enough to allow the best golfers to rise to the top. Each course is handled differently, depending on many different things such as the length of the course, the bunkers, lakes, rough, the type of grass and many other circumstances. There's no one way to do it.

How do you address complaints about unfair playing conditions? When you're challenging the greatest golfers in the game at the U.S. Open, for example, you're approaching the edge for green speed, firmness, depth and density of rough, and fairway widths. What we try to do is make it very challenging but fair. Everybody remembers the instances where we fell over the edge, but there have been very few times this has happened. Every year there is somebody who will complain about course setup. Somebody will shoot an 80 and think it's unfair when somebody else will shoot a 68 and win the event.
The GCN staff presented the 2006 Golf Course News Builder Excellence Awards at the Golf Course Builders Association of America’s awards dinner, which occurred in conjunction with the Golf Industry Show in Atlanta. This year, four awards were presented. Landscapes Unlimited won the Creative Award for best new construction with Laughlin Ranch Golf Club in Bullhead City, Ariz. Ryangolf won the Heritage Award for best reconstruction with Boca West Country Club’s Course No. 2 in Boca Raton, Fla. McDonald & Sons won the Legacy Award for best renovation with Hermitage Country Club’s Manakin Course in Manakin-Sabot, Va. And Mid-America Golf and Landscape won the Affinity Award for best environmental project with Lambert’s Point Golf Course in Norfolk, Va. The following four articles are about these award-winning projects.

A rugged beauty

ELEVATION CHANGES AND WIND SHAPE THE DEVELOPMENT OF A DESERT COURSE

by JOHN WALSH

In Bullhead City, Ariz., nestled in the heart of the Mohave Desert and the Colorado River Valley, lies a master-planned community that features Old West charm as well as modern luxury and comfort. The centerpiece of the community is Laughlin Ranch Golf Club.

In the fall of 2003, golf course architect David Druzisky received a call from Laughlin Ranch’s owner, David Lords, who Druzisky knew, after Lords purchased the land. It was already partly planned and some permitting was in place.

“We just had to fine detail the course and route it,” Druzisky says. “Because part of the land was planned, it made the development go a lot smoother.”

The course has a lot of topography to the point that it would be hard to build anything without manipulating the land, according to Druzisky.

“We recreated some of the land and made it look more natural,” he says. “The land is stark but subtle in its beauty. It’s striking terrain.”

Golf course builder Landscapes Unlimited became aware of the project through Druzisky. The company had developed a relationship with Druzisky because both were looking into a golf course project in Kansas, according to Bob Armstrong, regional manager with Landscapes Unlimited based in Scottsdale, Ariz. They also worked together on a project in Las Vegas in 2000, Druzisky says.

Armstrong was impressed with the dramatic site the first time he saw it.

“For a desert golf course, there’s a lot of elevation change and rugged terrain,” he says. “David framed in beautiful mountain backdrops and did a fantastic job of taking a rugged piece of land and turning it into a beautiful golf course.”

Chris Sachen, the golf course superintendent at Laughlin Ranch, arrived at the course about a month after it opened from Seville Golf and Country Club in Gilbert, Ariz. He heard about the opportunity and thought it was too good a project to pass up.

“The golf course is fantastic,” he says. “The tie-ins are exceptional. The cart-path construction and the bridges were all done first-class. While driving the course for the first time, I remembered almost every hole.

“And the community will be one of a kind,” he adds. “It’s built on 11,000 acres, and there will be 100,000 people in the development when it’s finished. There are going to be three more golf courses built before the development is complete.”

Timing is everything

The timeline for the development of the course was short, and if the project was delayed any further, the course wouldn’t have opened for another year.

“We needed to have an asset that reflected the quality of the development,” says Morgan Neville, chief executive officer of Laughlin Ranch. “There was a lot of pressure to get it done.”

“It was a fast-track project,” Armstrong says. “The goals of the developer had been set. We started the project [Jan. 15, 2004] before the design was complete – they hadn’t finished the back nine. We budgeted as we went along. The goal was to open nine holes by the end of the 2004, and nine holes were opened in December.”

Druzisky says Lords had never built a golf course before, so a builder who could start in a big way was needed.

“Landscapes has the resources to get things done at this level,” Druzisky says. “We did a lot of work in a short period of time in a quality matter and introduced...
something to a market that hasn’t been introduced before.”

“We were convinced they would deliver on time,” Neville says about Landscapes Unlimited.

Because of the short timing, the entire course was sodded. MiniVerde Bermudagrass is on the greens and 419 Bermudagrass is on the fairways, tees and rough.

“The choice of overseeded sod, which was grown outside Phoenix, was because of the slope characteristics of the course and the timing of the project,” Druzisky says.

Armstrong says sod takes more time to lay down than sprigging or seeding — it might add a week or two — but the course can open sooner because of it.

“Ideally, you want 60 days between when you finished laying sod and when golfers play on it,” he says. “At Laughlin Ranch, the time was less than 30 days. We expressed a concern about the immature grass, but everyone was aware of the goals and realized it wouldn’t be perfect. We didn’t have problems after it opened.”

Everything wasn’t perfect for Sachen. He says the turf on the greens and fairways was a little long and some of the sod lines were showing when the course opened. Also, transitioning the sod was a bit challenging because it was overseeded already. Even though the transition wasn’t the best, Sachen says the course is off to a good start and the imperfections were remedied easily by getting the maintenance staff on the same page, mowing more consistently.

To grow turfgrass, good soil conditions are needed, however, soil conditions aren’t ideal for growing grass in the desert. So, 11 inches of topsoil were processed on site. Five inches is pure topsoil, and the top six inches is a mixture of topsoil and Profile Porous Ceramic, a soil amendment. The mixture is in all the fairways, greens and tees.

“By using Profile, we’re pretty confident that over time we’ll save money we would have spent on water and nutrient applications,” Neville says.

Maintaining the turfgrass’ color also is challenging, Sachen says.

“We’re using more organic fertilizers and are trying to build up organic matter,” he says. “We’re using wetting agents to hold the moisture in the fairways and rough. We’re also using a lot of liquid fertilization in the fertigation process.”

Irrigation

Even though the 400-foot elevation change throughout the property helps make the course scenic, it made installing the irrigation system challenging.

“When there are that many elevation changes, it’s hard to put in a reservoir because you need a flat piece of land,” Druzisky says.

Two pump stations were installed: one irrigates six holes on the front nine and the other, which is at a higher elevation, irrigates the other 12 holes. The transfer line that came into the site wasn’t in place when Landscapes Unlimited started, but the line was in place when Landscapes needed it, according to Armstrong.

The irrigation system features Toro’s new 835 sprinkler heads wall to wall. Because of the high winds, Sachen needs to be able to change the arc and trajectory of the water coming out of the heads. Also because of the wind, the sprinkler heads were installed 55 feet apart, which is closer than on most golf courses, Druzisky says.

Presently, the course is being irrigated with a mixture of well and reclaimed water, and as more houses are built, less well water will be used on the course. Eventually, 100 percent of the golf course will be irrigated with effluent water.

The crown jewel

Druzisky says working on the project was nice because Lords let him do his craft.

“David put trust in me,” he says. “I did what I wanted from a golf perspective. I worked with people who didn’t have agendas.

“Designwise, I was able to do things you might be afraid to do in other markets that are worried about what the golfer will accept in terms of fairness,” he adds. “There are some slightly hidden aspects such as tucked greens, or greens that fall away from the golfer, cross bunkers and some semiblind shots. We wanted to create a special, unique course harkening back to some of the things we see in Ireland, Scotland and England.”

Overall, the project went smoothly and turned out fine.

“Our contract started at $12.7 million, and we ended up at $13.5 million, which is good because we didn’t have the budget finalized going in,” Armstrong says.

“The golf course is the crown jewel of the development,” Neville says.
Familiar work

RYANGOLF CONTINUES TO EXCEED CUSTOMER EXPECTATIONS WITH THIRD RECONSTRUCTION PROJECT AT BOCA WEST

Members of Boca West Country Club know a good thing when they see it. They’ve seen Ryangolf reconstruct three of their four golf courses in Boca Raton, Fla. For the most recent project, Course No. 2, Ryangolf teamed with architect Jim Fazio, who it has worked with before.

Ryangolf has developed a unique relationship with Boca West management because it reconstructed Course No. 1 in 1997 and Course No. 3 in 1999.

“We developed a strong team approach, working together to come up with the best product possible,” says Phil Garcia, president of Ryangolf. “So starting this project almost felt like coming home.”

Steven Wright, CGCS, director of golf course and landscape operations for Boca West, director of golf Brad Luken, and president and general manager Jay DiPietro also were involved in the project from the beginning and were integral parts of the reconstruction team.

Boca West Country Club was willing to spend the money needed to achieve excellence, yet was committed to establishing sound budgets and monitoring expenses, according to Garcia. With the parameters clearly defined, it’s easier for the owner, architect and contractor to collaborate on a project.

It was decided early on to build a new course rather than substantially renovate the existing one.

“The property was a typical golf course of the 1950s and ‘60s, with flat fairways, flat greens and draining to the side,” Fazio says. “We wanted to develop a new, updated course, not spend $5 to $8 million and have the same thing.”

“There was sufficient acreage to design and build a new Course No. 2, updated to current standards, and at the same time, do something spectacular and creative for the members,” Garcia says.

Ryangolf starts each project with a flexible preconstruction plan based on the project development meetings with the architect and owner’s representatives. Three to five months before a start date, Garcia and the architect conduct an extensive site visit. Considerations for the Boca West reconstruction included determining which lakes or parts of lakes to backfill, where to expand for more water and where to excavate for new lakes.

“There were some mature oak trees lining the golf holes that Jim wanted to design around,” Garcia says. “We decided which trees could be left in place, which we’d want to take down, and which could be moved with an aggressive root pruning program.”

Following the master plan, Ryangolf had its purchase orders for materials in place well before the start date. Shipments were scheduled to arrive before the projected use dates.

“We start bringing in the construction equipment the week before the job was to begin, so when we start – we start,” Garcia says.

Preplanning is vital when the project time is as compressed as it was for Boca West, Garcia says. Ryangolf sprayed the turfgrass in February and moved the oaks before mid-March of 2005, though there was still play at that time. It broke ground in April and completed construction in September to meet the projected December opening date.

“With an accelerated project, we figure that any day we lose to a delay of any type is a 1-percent reduction in our overall construction time,” Garcia says. “So we always have an alternative plan to keep things moving forward despite weather conditions or unexpected problems.”

Interactive communication kept everyone connected. Ryangolf established a corporate satellite office on site, and Fazio was on site at least two to three days a week.

“Jim is a credit to the profession – a creative architect who knows what he wants to achieve and is hands-on throughout the process,” Garcia says.

“When issues arose, they were able to present all the options and walk through them with us so we could work together to make the best decisions,” Wright says. “Both understood we were building the course for playability for the members. That was our common goal.”

Fazio says one can make a course so hard that no one can play it, but the trick is to make it hard enough for the really good player, yet fun for the others.

“That’s what we did here,” he says. “Brad Luken and Jay DiPietro made this project a real joy for me by serving as the communications center for the club members and homeowners. They asked that any suggestions or complaints come directly to them so
they could bring any issues to my attention. That’s a huge factor. On a reconstruction, we take a developed golf course and change it when there are 600 to 700 people, or 150 to 200 homeowners, who are used to things the way they were. Our goal is to create a better course to play and a better view, so everyone wins.”

The scope of the project was like a new course. More than 400,000 yards of dirt were moved during the process. Many holes were rerouted. Some lakes were added on the interior and canals were dug between the golf course and the properties. Two rock waterfalls and creek systems were constructed, with the moving water adding to the overall effect.

A new computerized irrigation system was installed within 40 days of the construction start. The overall contour was reshaped, with mounds and undulations developed. New bunkers and greens were designed. Sealsle 1 paspalum was installed on the tees, fairways and roughs. TifEagle was used on the greens. About 45 percent of the course was sodded.

A major change was the decision to preserve a restroom facility, rather than destroy it. The structure was less than 10 years old and in good condition, but it was near the 18th hole. A facility of the same size and design was planned for construction on the 15th hole. The existing structure was moved on giant steel skids a mile and a half across three holes and placed on a newly constructed foundation for less than half the cost.

Ryangolf wrapped up construction in September and submitted its letter of completion on a Friday. That weekend, Hurricane Katrina came through.

"A lot of the landscaping came down, but we didn’t even consider leaving the site," Garcia says. "Our crew spent the next three or four weeks helping put things back together and fixing the ruts from putting the trees in."

Then Hurricane Wilma made a direct hit, with wind speeds exceeding 120 miles per hour. "Ryangolf had installed additional drainage where we thought we might have water runoff, but we had no washouts from Katrina," Wright says. "Even with Wilma, we had very minimal washouts. The tree damage, and the resulting removal and replanting process, was what hurt us.”

The tree damage changed the look of the golf course. Fazio had to select 55 oak trees to replace those that were lost. That cost close to $300,000. Ryangolf’s crews followed the tree installation crews, fixing the turf and any of the smaller landscape features that had been disturbed, as well as repairing cart paths that were damaged by the tree-moving equipment.

"They worked seven days a week from morning to dark," Fazio says. "They did it so fast no one saw it or realized how much they did.”

Repair from Wilma was completed Dec. 15, 2005, and the new course opened Dec. 16.

"We can never become satisfied with doing a great job on a course," Garcia says. "There’s always something new, better or harder to accomplish. I’m very lucky to have employees who are extremely motivated, embrace the challenges and are dedicated to our team approach to creating the best possible product.”

"This is the third golf course Ryangolf has done for Boca West and each time the finished product exceeds our expectations, which are very high to begin with," Luken says. "When was the last time you could say that about a contractor?" GCN

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Cooperative effort

DEVELOPMENT TEAM OVERCOMES EXTREME WEATHER, LATE CHANGES WHILE RENOVATING MANAKIN COURSE AT HERMITAGE COUNTRY CLUB

by ROB THOMAS

Mother Nature played a big role in the renovation of Hermitage Country Club's Manakin Golf Course in Manakin-Sabot, Va. No rain was followed by heavy rain, and an earthquake occurred on top of it all.

John Haley, director of golf course operations at Hermitage, joined the staff in November 2000. At that point, the 18-hole Sabot Golf Course was under construction, and the 18-hole Manakin Golf Course wasn't in good shape.

"Almost immediately we went to work on planning the Manakin renovation," Haley says. "Superintendent Eric Spurlock and myself had the task of creating a list of golf course architects for the board of directors to interview. We had about 10 names and quickly got the list down to three architects."

Keith Foster emerged as the architect of choice.

"The chemistry between Keith and our selection committee was there from the beginning, and he was immediately chosen to create a master plan," Haley says.

For Foster, the attraction to the selection committee was mutual, and the project was extremely attractive.

"[John Haley] and I had a connection and, after meeting him and the committee and talking about where they'd like to take the golf course, I instantly felt this was the right job for me," Foster says. "Basically, I do everything on instinct. It was very easy for me at that point."

With few alterations to the master plan, the club agreed to proceed with Phase I in 2003 – which included a $4-million renovation of the Manakin course and the installation of an upgraded irrigation system.

The task of building the course was given to McDonald & Sons. John McDonald II, vice president of McDonald & Sons, says the company looked forward to working with Haley and Foster, but had no idea what was ahead.

"It looked like a gem in the rough, and we were going to make a gem of it," McDonald says. "It's what we do. We do high-end stuff all the time. It didn't look like anything too difficult."

ISI Irrigation was chosen to install the irrigation and tie it into the new pump station. ISI was tabbed for several reasons, according
to Haley, but primarily because it works a lot with McDonald & Sons. The teamwork put the project in a favorable position before dirt was moved.

"As it turns out, we would need this because the year from hell was about to begin," Haley says.

The year began with the construction of the pump station and the draining of a 25-acre pond – and an earthquake.

"This is not a common event in Virginia," Haley says about the earthquake. "As I stood at the base of the dam and my feet wobbled, we all looked at each other confused. No damage was done, but needless to say timing is everything. We got through the pump station just in time to start the renovation, knowing the pump station was a critical piece because the sod and seed would need water."

Once the main line irrigation was installed – plagued by a few major line breaks – construction was set to begin almost. "In 99 out of 100 springs, the ponds would be full at the start of the year, but as soon as we drained the lakes, it stopped raining," Haley says. "This is the pattern we had for two years. When we needed water, it was dry; when we needed to shape or fine-grade, it rained."

With no water in the irrigation pond – because of the lack of rain – work began to pump water back to the pond that had been drained five months earlier. Once that was complete and construction was set to begin, it began to rain and the irrigation ponds filled.

As if weather wasn't enough of a problem, a change in personnel – at the Department of Environmental Quality and at Heritage's consulting company – delayed permits. A new person from the DEQ came in and forced the process to begin again.

"This caused a chain reaction of events, including the delays for all the contractors and forced us to go out of sequence or we had no chance of hitting our seeding window," Haley says.

McDonald says his company has worked on projects that had various delays – be it weather or permitting – but the delays at Hermitage were brutal.

"To have both happen at the same time on the same course is almost unheard of," he says. "We'd spend one whole day cleaning up after a storm and then another storm came."

The weather and delays made maintaining the morale of the crew difficult.

"At the end of the day, that's what I do … try to encourage people to produce something that we're all going to be proud of, trying to keep everyone's enthusiasm up while we were producing something that we all felt was worthy," Foster says.

More rains and high winds added to the delays and forced the team to change the grass type on the fairways to L-93 bentgrass.

"Three years earlier it would have been a more difficult decision, but our neighbor Pete Wendt at Kinloch Golf Club had already tried it in Richmond, and we felt confident it would work much better than our often unpredictable Vamont Bermudagrass fairways did," Haley says.

As work was completed on the Manakin Course, the Sabot Course was up and running – generating 40,000 rounds and dealing with the same weather. It was a strain, but by June 2005, the nine holes opened on the Manakin Course.

"We ran three nines almost the entire 2005 golf season, which is nothing short of organized chaos," Haley says. "That meant that we had to prepare 27 holes for golf and also keep pushing the new nine to be ready in the fall."

The back nine opened in October 2005 and has exceeded expectations, Haley says. With a full year in the books, all the hard work seems to have paid off.

"The golf course now rests for the first time after the difficult summer of 2005," Haley says. "The project was completed slightly overbudget, mainly because of the drainage and erosion control adjustments we made with the bentgrass fairways. The money was well spent, and our membership knew it was everything we could do to finish this project and get them back their golf course."

The team in place made the project a success, according to Foster.

"I knew it all along and in my head I had always anticipated that it would be where it is right now and it is," he says. "John and his staff have done an awesome job. I'm thankful for their effort and the job they did with us." McDonald agrees.

"This was one of the best cooperative efforts we've ever been involved with," he says. "It was good looking to start out. We had some bumps along the way, but it finished where we wanted it to."

"All in all, the entire project is a huge success, and now I kind of miss all of the commotion," Haley adds. "Imagine that." GCN

## AT A GLANCE

Manakin Course at Hermitage Country Club

- **Location:** Manakin-Sabot, Va.
- **Type of facility:** 36-hole private facility
- **Builder:** McDonald & Sons
- **Architect:** Keith Foster
- **General manager:** Ted Bartlett
- **Superintendent:** Eric Spurlock
- **Director of golf:** John Haley
- **Project started:** April 2004
- **Project completed:** June 2005 (front nine); October 2005 (back nine)
- **Total cost:** $4 million
- **Yardage:** 5,273 to 6,955 yards
- **Greens:** A1 and A4 bentgrass
- **Tees:** L-93 bentgrass and TifSport Bermudagrass
- **Fairways:** L-93 and Declaration bentgrass

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The highest point in Norfolk, Va., is Lambert's Point Golf Club, a nine-hole, Scottish-links-style course that offers golfers scenic views of the Chesapeake Bay Watershed, the Norfolk skyline and the Newport News shipyard.

Yet this course might never have been built. The 53-acre site was a dump containing a pile of unregulated trash that accumulated throughout the years. Closed in the 1970s, the ugly, dirty lot was vacant for almost 30 years and had no value to the community. It took a team with vision, expertise and the desire to overcome the challenges needed to turn a landfill into a golf course. It was Mid-America Golf and Landscape's first landfill project.

"That's part of what made the project appealing to us," says Mid-America president Rick Boylan. "We believe this proactive approach of turning landfills into desirable, community-friendly space is a growing trend. We also wanted to expand our operations in the East and work with Lester George of George Golf Design."

The third component of the team was the city of Norfolk. Chris Chambers, a design engineer with the department of public works was the project manager and city representative. Also on site throughout construction was the course's project manager, Mike Fentress, who now is head PGA professional and general manager for Lambert's Point.

Originally, the city determined a golf course would be a good use of the land and worked with an individual who wanted to lease and develop the site. After three years with no progress, Chambers addressed the situation because the project became extensive and detailed and had considerable surprises.

"Brownfield doesn't even begin to describe this site when we started," George says. "It took as much thinking as any project we'd ever done. The city was forthright in what they did and didn't want environmentally."

Additionally, Old Dominion University, which is in Norfolk, was involved with the development of the golf facility because it serves as the home course for the school's golf teams. A 6,000-square-foot clubhouse anchors the facility; along with a 4,200-square-foot, bilevel, heated and lighted driving range; a golf learning center; and a short-game practice center complex.

As construction started, the development team discovered grades had changed since the site was last mapped. Some topography had good cover material over the landfill, while other areas had the bare minimum of cap material. A separate contract confirmed and re-established the required cover material. Preserving the cap was a key part of the project.

"We couldn't cut because we'd break the cap, and trying to fill the sides would just make them steeper," George says. "It was an exercise in two dimensions. We had to build up, and then we could go down from there. We worked to get variety on the course and address safety issues because we couldn't plant trees because of the cap."

"The design required moving a lot of dirt," he adds. "Even the underground installations for drainage and irrigation needed to be coordinated and monitored to prevent breaking the cap. Beyond that, we put in many bunkers, added undulations to the greens and sunk the tees down within mounds."
The extensive fill created more challenges for Mid-America, which had seven months from mobilization to demobilization.

“We started the project before the final contracts were completed because so much material needed to be imported,” says Mid-America vice president Kirk Grego. “The soft opening was June 2005, so we had to be grassed and completed in October of 2004 to give them a strong grow-in period and time to complete the clubhouse and infrastructure before they opened. The schedule might have been slow getting started, and sometimes it lapsed in the middle, but the end schedule never moved.”

Mid-America’s commitment set the tone that carried the team for the rest of the project.

“The entire team had a great working relationship, making it an interactive decision process when conditions required some modifications of the original layout, such as fairway sloping, bunker placement or undulations,” Fentress says. “All those adjustments make the course more playable, and ultimately, easier for the superintendent to maintain.”

Getting to and from
The awkward shape of the property boundary presented a challenge circulating construction crews and equipment. A 40-foot-wide channel separated the property into two halves.

“Traffic had to go through the [Hampton Road Sewer District] sewage treatment site, which is gated and guarded,” Boylan says. “We had to have an armed guard check the trucks going in and out of the site. That included more than 100,000 yards of fill material, the gravel, sand for the bunkers, concrete for the cart paths and almost 32 acres of sod, as well as each piece of equipment moved through the site.”

By the middle of the project, there were as many as six contractors working on the course, infrastructure and building facilities. HRSD also had its material moved out as part of its day-to-day activities. As the main contractor on site, Mid-America took on much of the coordination responsibility, interacting with Chambers to keep everything moving forward.

Making things a bit more difficult was a 96-inch effluent outlet pipe for the sewage treatment plant that ran beneath the channel. Construction pilings would’ve been required to support the bridge as originally designed, but they weren’t used to avoid potential damage to the pipe. The alternative was a 110-foot-long, free-span bridge that could support emergency vehicles. The re-engineered bridge took months to complete. It came in two sections, was fitted together on site and set into place by a 220-ton crane. As the south side of the new golf course was being grassed, a sizeable area of the fairway on the third hole had to be left open to set the bridge. Mid-America came in afterward to repair the area and complete the work.

Additionally, Mid-America needed to be sensitive when dealing with water on three sides of the project.

“The property elevation from the highest point to the water’s edge had huge potential for run off,” Grego says. “Heavy rains during the summer of 2004 added to the challenge. It took a number of diversionary measures and constant inspection to meet all required codes. Vegetative buffers around the edges of the property were enhanced to control erosion.”

Because the course parallels a sewage treatment plant, a netting system was essential to keep nondegradable items, such as golf balls, from the containment area where waste is broken down into a fertilizer by-product, Boylan says.

In the end
Chambers says the finished product is a treasure for the city that could only have been achieved by all parties working together toward a common goal.

“There was a minimum amount of project variation and a lack of change orders,” he says. “It came in on time and within budget and is something to be enjoyed for many years.”

Lambert’s Point is an example of how wasteland can be turned into something useful.

“There are sensitive environmental issues to consider, but an unused piece of property that’s close to a populated area is a resource we’d like to think more people would be developing,” Boylan says. GCN —

Steve and Suz Trusty are freelance writers based in Council Bluffs, Iowa. They can be reached at sue@trusty.bz.
Even though there are few surprises in golf course superintendents' maintenance budgets from year to year, they still deal with line-item increases. This year, fuel seems to be the biggest increase for almost every superintendent. To compensate for increases, some line items are decreased to come up with budgets that owners approve.

Chris Gaughn, CGCS, at the private, 18-hole Eugene (Ore.) Country Club, has a maintenance budget of $919,000. Gaughn says the budget increases a little bit (2 or 3 percent) each year. Even though members would give him anything he wanted, Gaughn says his budget is less than most private clubs in the area.

"I don't spend as much on sand and fungicides," he says. "Sometimes members don't think I'm spending enough money on the budget."

Overall, Gaughn, who budgets in May, doesn't think his budget will change much this year compared with last. However, gas and oil is budgeted for the biggest increase at 28 percent. Gaughn uses local suppliers for gas and oil and has multiple options from where to buy, but that purchase is handled mostly by the mechanic.

Rick Fiscus, golf course superintendent at West Chase Golf Club in Brownsburg, Ind., also budgeted for a considerable increase in fuel and oil — about 15 percent — and he says there's not much he can do about it.

"Fuel went from $2.00 [a gallon] delivered to $2.50," he says. "I can't mow less. It's an area in which we have to increase play or eat the cost because I need to maintain..."
the course at a certain level. We’ve held the line on greens fees for the past four years.

“I shop distributors monthly for oil and gas,” he adds. “All of my petroleum for hydraulics increased 17 percent, and fuel will increase about 5 percent. But it’s hard to get comfortable with a price for the year because the price fluctuates so often. There was a 40-percent swing from April to July in 2005 for fuel and oil.”

In McKinney, Texas, Mark Johnson, CGCS, at the 18-hole TPC at Craig Ranch, says the most obvious cost increase in his budget for 2006 is fuel cost. Johnson budgeted a 12- to 13-percent increase compared with 2005. He’s also paying more per gallon for diesel and gas. But he says the bottom dollar isn’t huge compared to other line items such as labor.

Johnson budgeted a 10-percent increase for fertilizer and a 5-percent increase for irrigation supplies. The increases are because those products are manufactured with petroleum.

The biggest budget increase for Fiscus is fertilizer at 12 percent. He says it could increase as much as 30 percent, and fertilizer companies are telling him the cost of natural gas has increased and is the reason for the increased price of fertilizer.

Another considerable increase in Gaughn’s budget is topdressing sand. He budgeted a 33-percent increase because he recently finished a drainage upgrade, and he’ll continue to topdress the areas that have been upgraded to keep the profile firm.

Gaughn is budgeting a 15-percent increase for utilities, which is a bigger increase than in years past. Normally, that part of the budget increases slowly, he says. Utilities are the third biggest budget increase for Fiscus. but it’s a small item that doesn’t mean much, he says. The pump station and water well use most of the electricity.

The biggest dollar value in Johnson’s budget is payroll at $40,000. That increased 3 percent.

Johnson, whose budget increased from $659,000 to $759,000, says the budget increase is based on the increased cost of fuel, fertilizer and irrigation supplies ($70,000), as well as payroll ($30,000).

Because the TPC course opened in September of 2004, the 2005 budget had some extras, and the 2006 budget is more accurate, Johnson says.

The rest of the areas of Gaughn’s budget is payroll at $40,000. That increased 3 percent.

Johnson, whose budget increased from $659,000 to $759,000, says the budget increase is based on the increased cost of fuel, fertilizer and irrigation supplies ($70,000), as well as payroll ($30,000).

Because the TPC course opened in September of 2004, the 2005 budget had some extras, and the 2006 budget is more accurate, Johnson says.

The rest of the areas of Gaughn’s budget increase insignificantly — anywhere from 1 percent to 4 percent. Labor, which is 60 percent to 70 percent of his budget, is expected to increase 3 percent this year.

“Much of the budget is predictable because I’ve been doing this a long time,” he says. “The course is the main thing to the golfers, and the clubhouse isn’t as important. For example, we have lakes that are shallow and need to be sealed, but that’s a $1-million job the members don’t want to touch right now.”

Compensating

To combat the increases, superintendents are balancing their budgets with line-item decreases. Gaughn’s biggest cutback, at 28 percent, was uniforms. He had been using a service but now the staff’s uniforms are washed at the club. Each employee receives five shirts and two pairs of pants. Gaughn was spending $9,000 a year, and this year he budgeted $6,000.

Other declines in Gaughn’s budget include landscaping at 28 percent.

“I was tracking what [the landscaper] was spending, and he wasn’t spending what was budgeted,” he says. “We weren’t spending that much on plants. We’re using a lot of perennials and not as many annuals.”

Gaughn also reduced money spent on tree trimming. The budget was reduced from $42,000 to $32,000 because a tree-trimming cycle was completed.

Johnson also reduced the golf course landscaping line item. His declined 15
percent. He and his staff converted four acres of mulch beds to grass.

Water is another line item Johnson budgeted to decline. He says he's hoping there won't be a repeat of last year's drought.

All the bids Fiscus received on the chemical side were very small increases, if any, but he purchases numerous generic products to help offset the increase in fertilizer.

"I've actually decreased the chemical end of the cost but haven't decreased applications," he says. "I can put up with a touch of dollar spot to save $2,000."

Fiscus also cut back two full-time workers to part time, but the savings is minimal, he says.

"I rolled back on the crew a bit to offset the fuel and oil price increases," he says. "My owner came to me and asked me to hold the line on certain items. The owner hasn't asked for a decrease with anything, but I try to stay a step ahead of him."

Pricing

Even though superintendents deal with line-item increases and decreases, there are items that remain relatively the same year after year. Those include cleaning supplies, tools, flags, cups, sticks, ball washers - the stock items that increase about 2 percent a year. The cost increase is mostly related to shipping, according to Fiscus.

Fiscus also says irrigation and drainage, although expensive, remain consistent each year. Despite that, the price for machine parts is one big complaint he says superintendents have.

"[The manufacturers] have us over a barrel no matter what the color - green, orange or red," he says. "We can't go to Wal-Mart to buy a part. I've even bought aftermarket parts, and that has helped out, but you're still not getting an [original equipment manufacturer] part. The equipment parts continue to rise. I can't sustain an $80 seal that's two inches in diameter. A lot of superintendents lease their equipment. We purchased our equipment, and luckily it's paid for, so I'm hoping to get a few more years out of them."

The cost of chemicals, fertilizer, gas and oil change a lot, but superintendents have
Eugene (Ore.) Country Club’s budget increases a little bit each year.

no control over those costs, Fiscus says. “I did research and priced fuel and oil pretty well but still went over,” he says. “Utilities, too, have increased because of deregulation. Price uncertainty and fluctuation can cause difficulty when budgeting.”

Aside from maintenance, superintendents capital expenditure budgets can fluctuate as well. Gaughn’s cap-ex budget is between $100,000 and $250,000. Part of that budget is being spent to contract-out the design and shaping of 10 new tees. This is being done because Gaughn is trying to keep up with technology. The course is on a tight piece of land, and some of the tees are becoming irrelevant because golfers are hitting the ball further.

Gaughn also will spend between $75,000 and $100,000 to replace bunker sand in 2007 as he prepares to host the Junior Amateur in 2008.

Johnson says he doesn’t get a lot of capital expenditure money because the TPC at Craig Ranch is two years old. However, he did get some cap-ex money for a piece of equipment and to pour a slab as a base for an organic dump.

Even though budgets are different, they all come down to expectations related to course conditions. Johnson started budgeting in July and wasn’t finished until September.

“What I noticed about the budget process was that the g.m. and his bosses were scrutinizing everything,” he says. “We broke down every job task to determine how many man-hours it takes to complete. They were looking at the product for the golfers and were asking if we were overproducing or underproducing the product.

“We’re a high-end private club expected to produce,” he adds. “We have high-expectations daily because of our association with the PGA Tour. A public course with $50 green fees will base its budget on the expectations of their golfers. They might use triplex greens mowers instead of double-cut hand mowing the greens like we do.”

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Fighting a new foe

GOLF COURSE SUPERINTENDENTS TURN TO RESEARCHERS TO DIAGNOSE AND HELP BATTLE EMERGING DISEASES

by ROB THOMAS

Golf course superintendents are no strangers to battling turfgrass diseases, which are top of mind daily—whether fighting an outbreak or spraying preventively.

Snow mold is common in the Northeast United States. Fairy ring can be found throughout the prairie states. But what happens when a disease makes its presence known in an area for the first time? Emerging diseases aren’t recognized easily, so it’s important superintendents treat one correctly, or the results could be disastrous.

Dave Zahrze, certified golf course superintendent at Santa Ana Country Club in Southern California, dealt with an emerging disease. He sprayed his greens with a broad-spectrum fungicide on a Friday and went about his normal schedule. During the weekend, his assistant superintendent noticed something on the 15th green that looked strange. When Zahrze returned to the course Monday morning and looked at the green, 35 percent of it was affected by something new.

"It looked like nothing I’d ever seen before,” he says. “It just didn’t look right. I couldn’t figure out what the heck it was.”

Like Zahrze, Michael Coranci, superintendent at Candlewood Country Club in Whittier, Calif., also battled a mysterious disease on his Poa annua greens. He noticed the affected areas in late spring when he was preparing the greens for the hot season and started hearing about other courses in the area that began getting it shortly thereafter.

"They looked like dry patches on the green— with no specific configuration,” he says. Both men later learned the disease was rapid blight.

Hunt for a cure

Larry Stowell, Ph.D., of the PACE Turfgrass Research Institute, was called in on both cases.

In a research paper submitted to the American Phytopathological Society, Stowell writes, "the foliage of the affected turf was yellow and brown and had a water-soaked appearance, while the roots of the plant seemed unaffected.”

Under the microscope, the samples revealed none of the usual winter time Poa diseases such as Fusarium patch, and there were no obvious signs of fungal pathogen invasion such as mycelia or spores. No insect or nematode pests nor the damage they cause were observed, and nutritional and cultural problems such as anaerobic soils or nutrient imbalances also were eliminated as
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turfgrass management

Turfgrass researchers such as Larry Stowell, Ph.D., took a close look at rapid blight samples. With samples now coming from California, Colorado and Nevada, the search for a diagnosis and cure broadened. The late Houston Couch, Ph.D., of Virginia Tech was contacted for input on potential control strategies. He suggested mancozeb might be an effective control agent because of its mode of action as a general membrane disruptor. Shortly after, mancozeb became the first recognized treatment for prevention and to limit spread of the disease.

Zahrte, Coranci and other superintendents who've faced rapid blight now have definitive answers, but that's not the case for Ryan Batz, superintendent at Trump National in Bedminster, N.J.

Batz battled a mysterious turf condition in September and October of 2005 on several greens and tees. Some cases were severe, and others were minor. Though it was never officially diagnosed, it's thought to be a relative of take-all patch. A little more than three weeks after a hollow core aerification, Batz noticed blemishes on the 14th and 15th greens. Batz says he changed pins Sept. 17 and saw nothing on the eighth green. The following day there were a few patches, and by the third day, it was a full-blown outbreak on the eighth green and increased activity on several other holes. Banner Maxx and Daconil Ultrex were applied, but resulted in little change.
Bruce Clarke, Ph.D., at Rutgers University and Paul Ramina, superintendent at Hamilton Farm Golf Club in Long Valley N.J., were among the turfgrass professionals to examine the condition while visiting Trump National.

Initially, the disease was thought to be bentgrass dead spot, but when samples were checked in the labs, dead spot was ruled out. Batz says the spots appeared to be two-inch blemishes that were bleached in the middle and had a yellow ring on the outside. A mobile disease, it seemed to affect the higher areas of the greens and worked its way down to lower sections, according to Batz.

In addition to the visits, Batz sent samples to Clarke and Turf Diagnostics in Westchester, N.Y. Upon the recommendations of turfgrass professors, he also applied Insignia and then Medallion, but again with little success.

More samples were sent to the University of Maryland, University of Georgia, North Carolina State University and the
Chicago U.S. Golf Association for testing Sept. 21.

With the problem persisting, the staff applied Terrazole and Banol.

When Batz received the results of the soil samples, he saw high pH ranges of 6.8 to 7.1 on the infected greens. Potassium sulphate was applied to correct the pH level, and within a week the symptoms were relieved.

"That's going to be our starting point from now on," Batz says of checking the soil conditions for a healthy pH range.

In addition to bentgrass dead spot, rapid blight and pythium were considered as possibilities before deciding on a relative of take-all patch.

**Pythium root dysfunction**

At North Carolina State University, Lane Tredway, Ph.D., has been working for the last few years on an emerging disease he's calling Pythium root dysfunction.

"We suspect the pathogen is Pythium..."
turfgrass management

voluum, and we're in the process of verifying that scientifically," he says. "This disease has become a widespread problem for golf course superintendents in North Carolina and other Southeastern states. The disease specifically attacks newly constructed putting greens. The susceptibility of the turf seems to decline six to eight years after establishment."

It's early, but Tredway thinks he has a grasp on the disease.

"Based on our observations, Pythium voluum attacks the creeping bentgrass roots in the fall and spring when they are actively growing," he says. "However, no symptoms are usually seen at this time. Turf stress - from heat, drought, low mowing, nutrient deficiency, etc. - is required to induce symptom expression. As a result, symptoms are most common and severe during the summer months."

"This problem has been brought on by an increase in new green construction and the use of excessively well-drained root-zone mixes," he adds. "These mixes hold very little water and nutrition, and as a result the turf becomes much more susceptible to these root infections."

Superintendents have been able to manage this problem with an integrated approach including fungicide applications and cultural practices, Tredway says. Cultural practices include increasing mowing heights, increasing fertility levels, avoiding severe drought stress and regular cultivation to control organic matter levels.

"The most effective fungicide for control of this disease has been pyraclostrobin (Insignia)," Tredway says. "Some efficacy has also been seen from azoxystrobin (Heritage), fosetyl-Al (Signature), and mefanoxam (Subdue Maxx)."

These products can be used on a curative basis when symptoms appear or on a preventive basis in the fall and spring, according to Tredway.

Advice
When dealing with emerging diseases, superintendents should seek help right away. Batz says he and director of grounds Greg Nicoll were fortunate to have the support of the membership and green committee through the entire process.

"Contact somebody," he says, pointing to the tight-knit fraternity within the golf industry. "Have them come over and see what they see."

Coranci, who has stayed on a preventive program, advises superintendents to not take this on themselves. Seek help.

"Get it diagnosed," he says. "Too many times people spray the wrong thing."

"We're educated to take care of the turf, but we're not plant pathologists," he adds. "If you see something that looks weird, take care of it."

Maintaining an ongoing dialog with club management, the green committee and concerned members is important. Also, communicating with outside turfgrass professionals is key to overcoming an emerging disease. GCN

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In many golf markets throughout the country, competition is stiffer than ever, and course management is doing everything it can—from maintenance to customer service—to separate its courses from the competition.

When Grand Cypress Golf Club in Orlando, Fla., opened in June 1984, the primary competition was Disney World. Presently, there are at least 20 courses of comparable quality within a stone's throw.

In Greenwich, Conn., Fairview Country Club competes for members with seven other clubs in the same township; and there are at least 20 golf courses, mostly high-end private country clubs, within a 10-mile radius.

At its peak, there were more than 120 golf courses around Myrtle Beach, S.C. The battle for rounds forced the closing or sale of about 10 courses during the last two years, and at least six more are expected to close this year. Most are purchased by real-estate developers who offer golf course owners three to four times their value. The courses are bulldozed for high-rise condominiums and other redevelopment projects.

Stiff competition
Grand Cypress' competition includes Greg Norman's 36-hole ChampionsGate facility, the Rees Jones signature-design Falcon's Fire Golf Club, the Marriott World Center and Arnold Palmer's Bay Hill Club.

“Ours rounds declined substantially after 9/11, but during the past two years, we’ve leveled off,” says Tom Alex, director of golf course maintenance at Grand Cypress. “The economy has gotten better, the Orlando market is balancing out, and we’re seeing more play.”

To help differentiate itself from other courses in the market, Grand Cypress’ quality assurance committee stresses guest service.

“To succeed, we have to create an environment that is equal to, or better than, what’s out there,” Alex says. “That’s difficult because the golf courses around us have great superintendents. They’re doing the same things we are, so we just have to work harder.”

Alex says it comes down to customer service.

“When a guest comes through the gate, we immediately call the front desk and say, ‘Mr. Jones is on his way,’” he says. “The valet greets him and takes his bags. He receives that same courtesy from everyone in the bag room to the concierge, golf shop, restaurant and security. We even instruct our maintenance staff to smile and wave to all our guests. We make sure everyone feels at home, and the easiest way to do that is to look them in the eye and greet them. When people go on vacation, they want to be in a friendly atmosphere, and that’s what we try to provide. It makes a difference.”

Tight budgets
Providing top playing conditions helps distinguish a course, but that usually is accomplished within a tight budget.

“Everyone has more fiscal responsibility than they’ve ever had,” Alex says. “Chemical prices keep going up; seed prices, depending on the crop, are going up; and fertilizer has gone sky high because of petroleum. At the same time, rounds and fees are basically flat. That’s what happens when supply exceeds demand—things get cheaper, so we have to be extremely efficient in everything we do.”

Labor is an obvious area of concentration. The Grand Cypress staff of 50 maintains 48 holes and two driving ranges. To reduce labor costs, roughs aren’t mowed early in the morning because too much cleanup is required. Instead, a crew comes in at 9 a.m. and mows the grass when it’s dry.

“I’d rather mow in the morning to stay ahead of play and then go back and clean up, but we can’t afford that,” Alex says. “Our staff has been flexible about accepting these circumstances for the quality we want to deliver.”

Other tasks are accomplished differently, too. Those who mow greens also fix and seed ball marks, repair divots on tees, rake greenside bunkers, remove pine cones from nearby landscaped areas and service water coolers.

“We’re very lean, but we manage to get the job done,” Alex says. “We have to be extremely efficient with our labor, or we’re in big trouble.”

Alex chided a chemical sales representative recently about how much prices have increased for his products, yet Grand Cypress can’t raise its green fees to offset those prices. The representative reminded him how much more it was costing his company to put product in plastic bottles because the...
Mike Mongon, golf course superintendent at Fairview Country Club in Greenwich, Conn., says it's easy to fall into a pattern of ramping up for the weekends and then dropping off during the week.

"They have their issues, too," Alex says. "We're all tied to fuel prices, but we can't pass along those increases to golfers. It's about doing more with less, just like everyone else.

"Unfortunately, at some point there will be diminishing returns, and course conditions will be affected," he adds. "We're rapidly approaching that time. We have to keep the game affordable, but at what point does the general golfing public understand this situation and accept lesser playing conditions? That's the million-dollar question."

Maintaining consistency
Fairview's golf course superintendent, Mike Mongon, believes the club's reputation for service and top course conditions gives it a competitive edge.

"I have never liked managing a golf course in peaks and valleys," he says. "It's easy to fall into a pattern of ramping up for weekends and then dropping off during the week. I've always felt that top conditions should be delivered to members all the time. You never know who'll be at the course on a given day. And, the last time I checked, all members pay the same amount. People who don't play on weekends should enjoy the same conditions during the week and vice versa. I try to keep the course consistent day in and day out."

Mongon subscribes to what he calls "The Noah's Ark Theory" of golf course maintenance in which at least two pieces of each type of equipment are used. The bottom line is that Mongon wants the golf course to be consistent on the front and back nine.

"Years ago there was one rough mower," he says. "The operator would cut six holes a day, so golfers were playing in rough that was anywhere from four inches to two inches thick. I don't want that. Our roughs are always consistent."

Other conditions also are consistent at Fairview. All the bunkers are raked and all the fairways are mowed at the same time. "We have enough equipment and staff so we can complete those tasks in a timely..."
Amid the efforts to separate from the pack, golf courses are first and foremost a business, and the successful operations understand their market and the competition, according to Richard Singer, a consultant with the National Golf Foundation.

"They target their audience and offer a good product," he says. "Like any successful business, when the cycle turns down, they communicate better and offer the right price. It's important to understand the problem and what causes it."

One of the best ways to check the pulse of golfers is with a well-crafted survey, Singer says. Questions should allow participants to rate their satisfaction with individual components of the course, such as the playing quality of bunkers; the conditions of greens, tees, fairways and roughs; and the enjoyment of the course's layout. Given the right circumstances, it also can be appropriate to include questions pertaining to the course's unseen infrastructure, such as the maintenance facility and irrigation system. Additionally, a good survey should identify specific capital improvements that are most important to golfers and their general willingness to pay for these projects.

"Courses and clubs have to look closely at all aspects of their operation," Singer says. "What does the market want, and what are your disconnects? It might be as simple as getting rid of an employee or as complex as making a substantial investment in your facility."

David Wolff is a freelance writer based in Watertown, Wis. He can be reached at dgwolff@charter.net.
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GCN’S TOP 25 LIST

Much has changed since the last time *Golf Course News* published its management company listing several years ago. The following, compiled in January, is a list of the largest companies in the golf industry. GCN made every effort to identify and contact the 25 biggest companies. Certain companies are absent because they neglected to participate.

If you know of a company that should be listed, contact John Walsh at jwalsh@gie.net.

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Globetrotting consulting agronomist Terry Buchen visits many golf courses annually with his digital camera in-hand. He will share helpful ideas relating to maintenance equipment from the golf course superintendents he visits— as well as a few ideas of his own — with timely photos and captions that explore the changing world of golf course management.

Smooth sand

Brian Bowles, golf course superintendent at the 27-hole Delaire Country Club in Delray Beach, Fla., is also a golf course architect. In 1979, Joe Lee designed the three nine-hole courses at Delaire. In 2002, Lee and Bowles redesigned the Orange, Brown and Blue courses.

Bowles likes to maintain bunker sand as smooth as possible without any furrows in it. His staff drags corded, slotted drainage mats, which are corrugated on top and smooth on the bottom, with a riding bunker rake. The 36-inch-by-76-inch rubber mats are designed for use on commercial kitchen floors.

The original equipment manufacturer’s bunker rake teeth are removed, but the remaining five feathering rakes are left in place. Then the rubber mat is bolted on top of the rake. The mat is rolled up and placed on top of the rake when moving from bunker to bunker.

Also, the three knobby OEM tires on the rake are replaced with triplex greens mower tires to keep the sand smooth. The mat and rake are used only on fairway bunkers. The mat has lasted five years and is still in good shape.

The rubber mat (part number 6894T12) costs about $150 and is available from Atlanta-based McMaster Carr (www.mcmaster.com).

Carpet on a stick

When raking bunkers, Robert M. Randquist, CGCS, director of golf course and grounds at the Boca Rio Golf Club in Boca Raton, Fla., likes to make the hand-raked portions of the bunkers on the course as smooth as possible without furrows. To accomplish this, his staff uses an 18-inch-by-24-inch piece of Berber carpet attached to the back of the rounded portion of an Accuform (or similarly manufactured) bunker rake head with machine screws. Randquist’s staff rakes large portions of the bunkers by pulling a large piece of carpet behind the riding bunker rake to produce a smooth surface without furrows.

However, the club’s membership wants a slight furrow pattern on the sand surface, so the staff uses a brush attached to the rake. The “carpet on a stick” is still used around the perimeters (about three-feet wide) because the smooth bunker surface it produces tends to allow golf balls to repel off the slopes around the bunker edges, while reducing the number of fried-egg lies that occur close to bunker edges.

The carpet can be purchased from Lowe’s or Home Depot. The strips are replaced about once a month. GCN
Disarm strobilurin fungicide
• Offers systemic and protectant properties
• Offers broad-spectrum control
• Alone or in combination, it controls brown patch, summer patch, snow mold, target spot and southern blight
• Low application rate
Arysta LifeScience
For more information, visit golfcoursenews.com/readerservice #200.

Field & Fairway Emerald topdressing
• Ideal for native soil topdressing applications on fairways and tee boxes
• Emerald color helps camouflage worn areas
• Prevents muddy conditions and helps turf survive under intense traffic
• Also available in a natural color for construction and renovation use
• When used in fairway capping, it adds porosity to the root zone and provides a balance of air and water pore space that increases drainage and aids in the prevention of soil compaction
Profile Products
For more information, visit golfcoursenews.com/readerservice #207.

Headway fungicide
• Designed especially for fairways
• Provides broad-spectrum protection against dollar spot, brown patch and other turf diseases
• No tank mixing required
• Includes root and leaf intake for complete systemic action
• Has little or no odor
• Fairway dollar spot and brown patch are controlled for 14 days at 0.75 ounces per 1,000 square feet
Syngenta
For more information, visit golfcoursenews.com/readerservice #202.

Dismiss herbicide
• Provides effective postemergent control of yellow nutsedge, purple nutsedge, green kyllinga and broadleaf weeds
• Well tolerated by 13 warm- and cool-season turfgrasses including: bahiagrass, buffalograss, carpetgrass, centipedegrass, kikuyugrass, seashore paspalum, zoysiagrass, Bermudagrass, creeping bentgrass, fine fescue, tall fescue, perennial ryegrass and Kentucky bluegrass
• Provides 81-percent control in as few as seven days and as much 96-percent control 75 days after treatment
FMC Corp.
For more information, visit golfcoursenews.com/readerservice #203.

Razor Burn herbicide
• Liquid premix formulation of glyphosate and diquat
• Offers broad-spectrum, nonselective control of many annual weeds, perennial weeds, woody brush and trees
• Measuring, pouring and mixing have been simplified with the use of the 64-ounce, squeeze-and-measure container
• Moves through the plant from the point of foliage contact into the root system to provide complete systemic control
• Effects can be noticed visibly on most annual weeds within one day and on most perennial weeds in two days
• Requires no mixing, won't settle out in solution and has no soil residual activity
• May be applied through most standard sprayers after dissolution and thorough mixing with water according to label instructions
Nufarm Americas
For more information, visit golfcoursenews.com/readerservice #204.
Sand Pro 5040 bunker rake
- Features a quick attach system, which allows operators to switch from among 17 different attachments in less than a minute
- Equipped with hydraulic flex blade, which allows for optimal maneuverability in tight areas
- The blade’s hydraulic capability eliminates the need for operators to adjust the blade manually
- Equipped with an 18-hp engine and hydraulic power steering

The Toro Co.
For more information, visit golfcoursenews.com/readerservice #205.

TriWave 60 overseeder
- Blade spacing at 1.5 inches creates closer slits for greater density
- Three, 18-inch-wide, patent-pending floating heads move independently, allowing them to follow the ground contour
- It won’t miss the low spots and won’t destroy the high areas
- WaveBlade technology creates optimum clean slits for improved seed-to-soil contact while minimizing turf disruption
- Seed-delivery system places seeds into slits, increasing germination
- Infinite depth adjustment allows for easy adjustment of seed depth on-site without tools

Turfco Mfg.
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Sea Isle Supreme paspalum
- Rapidly spreading semidwarf used on tees, fairways, roughs or greens
- Low-growing
- Excellent cool-weather color retention
- Tolerates most types of alternate water sources including wastewater, effluent gray water, brackish water and ocean/fresh water blends
- Requires less nitrogen and water than other warm-season cultivars

Sea Isle Supreme Growers Assn.
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*Rain Bird Golf*
For more information, visit golfcoursenews.com/readerservice #208.

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- Contains 4 percent iron
- Provides balanced nutrition with dose of iron for greening
- Increases plant performance and stimulates root growth
- Controlled-release feeding system combines organic-based fertilizer, biostimulant compounds and microbes
- Feeds and enhances soil microbial activity while providing a balanced fertility base for overall nutrition

*Novozymes Biologicals*
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**Tartan fungicide**
- Provides contact and systemic turf protection
- Contains StressGard formulation technology
- Controls dollar spot, leaf spot, summer patch, rust, strip smut, pink snow mold, brown spot, anthracnose, gray leaf spot, red thread, southern blight, fusarium patch and pink patch
- Compatible for tank mixing with foliar fertilizers and insecticides
- Provides preventive and curative disease control for 21 days

*Bayer Environmental Science*
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**Wireless monitoring system**
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- Collects data from sensors strategically placed beneath greens, tee boxes and fairways
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- Can be accessed from the office, home or the Internet
- Wireless sensors install in minutes

*Turf Guard*
For more information, visit golfcoursenews.com/readerservice #211.

**AGC irrigation controller**
- Features a 120VA transformer with a 14-valve capacity and automatic circuit protection
- Operates on either 120 or 230 volts
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- Completely programmable from a removable faceplate
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The politics of golf

Golf is perhaps the most politicized of all sports. Google "golf and politics," and you'll get 24.5 million hits. Google "golf and Palmer," and you get only 2.5 million pages. Google "politics and bowling," and you'll find a couple of strange pages involving Richard Nixon.

Face it: Golf and politics are inextricably intertwined. So, let's take a quick look at the history of this symbiotic syllogism of sport and statesmanship.

The love-hate relationship between government and golf goes back to at least 1457 when King James II (clearly a frustrated high handicapper) officially banned the activity because it was interfering with the training of his famed longbow archers. This forced Scottish 15th-century golf junkies to resort to the earliest golf-related lies: "Hey McDuff, let's sneak out for a wee round of archery (wink, wink) practice."

Another famed political figure, Mary Queen of Scots, is said to have coined the word "caddie" to refer to the French army cadets who escorted her around the course during her rounds while in exile in Normandy. This seems appropriate because Mary was later beheaded for being a lousy tipper.

(As a historical aside, this seems like the right time to address the recent claim by a Chinese professor that golf was invented in China more than 1,000 years ago. He says his ancestors played a game called "chuiwan" that involved hitting a ball with a driver-like stick back in the 9th century. I'm sorry, but with all due respect to our friends in China, I'm not buying it.)

Let's skip forward to the New World, where the first published reference to golf in America was, not surprisingly, some weenies in local government bitching about it. In a 1659 colonial newspaper article, it was reported: "The Honourable Commissary and Magistrates of Fort Orange and the village of Bererwyck, having heard divers (diverse) complaints from burghers of this place against the practice of playing golf along the streets, which causes great damage to the windows of the houses, and also exposes people to the danger of being injured. Therefore (we) hereby forbid all persons to play golf in the streets."

Actually, when you think about it, every superintendent in America owes a debt of gratitude to the anal-retentive bureaucrats running this podunk New York village for kicking the game out of the streets and into the green grass and open spaces of the county. Window manufacturers and personal injury attorneys are, however, probably still pissed.

Let's hit the fast-forward button again and skip through a bunch of arguments about which U.S. golf club came first (Do we really care?) and a gaggle of chubby presidents with goofy mustaches and jump right to the modern hero of golf and politics, Dwight D. Eisenhower.

During his presidency, Eisenhower reportedly played an average of 150 rounds of golf per year. Presidents are supposed to be role models, but this was truly conduct above and beyond the call of duty. Ike's slavish commitment to the game makes one wonder how much better shape the country might be in if some of his successors -- particularly Clinton and Bush II -- would have followed suit? History might have been different.

Clinton: "Thanks for the offer Miss Lebinsky, but I have a tee time in 15 minutes, and I'll need that cigar during my round. You look very nice in that blue dress by the way."

Dubya: "OK, Saddam, let's settle this whole mess over at my club. How about $10 Nassau plus loser bails out of Iraq? Heh, heh, heh."

The sunny post-Eisenhower days of golf and politics in America were darkened by the carbon-colored clouds of scandal again in 1990 when Hall Thompson, the chairman of Shoal Creek Golf Club, shot us in our collective foot right before hosting the PGA Championship at the club. Basically he said, "We all don't have a problem with black people. We'll just don't want them doing anything hereabouts besides shining our FootJoys or bringing us mint juleps after the round."

Doh! Fortunately, by inserting his apparently well-shined shoe directly into his mouth, the remaining few restricted golf clubs were prodded into opening their doors to minorities. Enter Tiger and a few million of his closest friends.

Also in the '80s, golf came under fire for political crimes against nature. No, we weren't molesting sheep. Instead, we were accused of randomly dumping toxic poisons on the ground to kill defenseless insects and weeds that somehow spoiled the perfection of gated playgrounds for ultrawealthy bigots. Or at least that's according to Greenpeace. Anyway, we were once again branded with the label of political incorrectness and had to pay pence for our perceived sins.

This also turned out to be a pretty good thing. Anyone who's selling "Bio-This" or "Organic-That" should thank their lucky stars politics screwed golf once again.

Then came Martha Burk and the great debate about Augusta National and its policies toward female members. Ms. Burk proved that Andy Warhol was absolutely right about fame when this critical discussion lasted all of 15 minutes. Golf, as a whole, had long before said, "Hey ladies, welcome to the club. Got some money? Come on in."

(Another aside: We should adopt a new phrase, "to pull a Burk," meaning "to show up very late at a party and drunkenly start a lame argument about some issue that's already been decided.")

Presently, golf faces its latest politically scandalous moment thanks to Jack Abramoff. Unless you've been under a large rock (with no cable TV), you might be aware of the primary tools the disgraced lobbyist used to coerce and cajole congressmen was golf. Trips to St. Andrews, junkets to Florida resort courses and access to the Beltway's best private clubs were primary weapons in his influence-peddling arsenal.

As a result of the ensuing tempest, The Washington Post noted that our distinguished senators and representatives now run away screaming like scared little gits anytime the word "golf" is mentioned.

To steal a thought from Laurel and Hardy, "This is another fine mess golf has gotten us into."

But, you know what? During 600 years of golf's continuing conjugal relations with government, we've overcome bans, beheadings, bureaucrats, bigotry, Burk and baseless biobashing. We certainly can survive our one-night stand with this idiot.

That's all for now folks ... I'm off for some archery practice.
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