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COUNTERPOINT

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**BAYER ES BEGINS ’03 AS UNIFIED FIRM**

By ANDREW OVERBECK

MONTVALE, N.J. — After an aggressive integration process combining Bayer and Aventis CropScience, Bayer Environmental Science is ready for business as a unified firm.

“We were able to pull it together in about 100 days,” said new turf and ornamental market manager Peter Farno. “It is amazing considering the business doubled in size. It was important for us to have a unified presence starting Jan. 1.”

While the company’s required divestiture of fipronil insecticides to BASF was still pending at press time, Farno said the company has been able to go ahead and integrate its sales force outside of insecticide products.

“We still have [the Federal Trade Commission’s order of] hold separate on fipronil, so the former Aventis representatives are still handling it,” Farno said. “But that really only affects the Southeast. Otherwise the sales force has been integrated.”

The biggest organizational change that Bayer ES implemented was increasing its focus on the green industry.

The company’s Chipco Professional Products division will be dedicated to the turf and ornamental business and a separate division will handle pest control products. Previously, one division covered both product lines.

Continued on page 27

**Arredondo named GCSAA chief operating officer**

LAWRENCE, Kan. — The Golf Course Superintendents Association of America’s chief financial officer, Julian Arredondo, will become the group’s chief operating officer effective March 1.

Arredondo, who came to GCSAA as its chief financial officer in December 1993, will replace Chuck Borman, who has left to become executive director of the Carolinas Golf Course Superintendents Association (GCN, Jan. 2002). GCSAA CEO Steve Mona said he would begin a search to fill the chief financial officer spot immediately, however no timetable has been established to name Arredondo’s successor.

In his new position, Arredondo will supervise numerous GCSAA member programs and services in the areas of education, research, environmental stewardship, career development, member/chapter services, communications, government relations, information services, conferences, events, and publications.

“He has been an integral part of the Continued on next page

**Solheim to receive GCBAA’s Rossi Award**

LINCOLN, Neb. — The board of directors of the Golf Course Builders Association of America (GCBAA) has selected the late golf club manufacturer and industry benefactor Karsten Solheim as its 2003 Don A. Rossi Award winner.

The Rossi Award recognizes individuals who have made significant contributions to the game of golf and its growth and who have inspired others by their example.

Solheim, who was a mechanical engineer by trade, began playing golf in 1954. Frustrated with putting, he became enamored with the Continued on next page

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**GOLF COURSE NEWS**

FEBRUARY 2003 3
Court rules Coastal Commission unconstitutional

BY DEREK RICE

SACRAMENTO, Calif. — In late December, the Third District Court of Appeals for the state of California declared the 30-year-old California Coastal Commission unconstitutional because it violates the state's separation of powers clause. Eight of the commission's 12 members are appointed by legislative leaders, and can be removed almost arbitrarily.

According to the Sacramento Bee, if the ruling stands, it could wreak havoc on the process of deciding who gets to build, along with what they build on California's 840-mile coastline. Unless the state appeals the decision, which triggers an automatic stay of the ruling, landowners will find themselves in a catch-22 of sorts. As written, California law requires approval from the commission before any coastal construction can begin. If the commission is unconstitutional, it can't conduct its business, so no construction can take place.

At issue is the "at-the-pleasure" term of commission members. In its ruling, the court suggested fixed-term appointments, which would, presumably, make commission members less beholden to legislators for their jobs. Although the decision didn't directly account for whether past commission decisions could be declared unconstitutional, it did indicate that parties who hadn't protested earlier commission actions at the time may be precluded from future relief. It throws into question several of the commission's key decisions for 2003, including a $100 million expansion at Pebble Beach Golf Links, which would add an

Continued on page 14

Arredondo

Continued from previous page

management of GCSAA, both in terms of financial operations and programmatic execution," said Mona. "This move provides for continuity in the delivery of programs and services to GCSAA members." Arredondo's arrival at GCSAA coincided with Mona's selection as its CEO. In his chief financial officer position, Arredondo oversaw GCSAA's corporate marketing and sales efforts, Internet strategy development, The GCSAA Foundation, accounting and management information services, as well as organizational planning and budgeting; he will continue to oversee the majority of these functions as well. He will also continue to report to Mona.

Rossi Award

Continued from previous page

mechanics of the construction of golf clubs and, specifically, the putter. Solheim designed and hand-crafted a putter in his garage in Redwood City, Calif., that would one day revolutionize the design of golf clubs. His original putter was easily recognizable because when it struck a golf ball, it would reverberate with a clear "ping." His putters became a success without any advertising or marketing.

When Solheim turned his attention to the manufacture of "heel and toe and perimeter weighted" golf clubs, the PING brand was born. Golfers around the world now use his golf clubs and his Color Code Fitting System bridged the gap for fitting golf clubs to golfers of any height or stature.

In addition to golf club manufacturing, Solheim gave back to the game of golf by sponsoring LPGA tournaments in Oregon, Arizona and Massachusetts. He also founded the Solheim Cup, a biennial team competition played on alternate continents that is staged by the LPGA Tour and the Ladies European Tour.

Solheim's wife, Louise, and his son Allan, who is now the executive vice president of PING Manufacturing, will accept the Rossi Award at the GCBAA awards dinner Feb. 14 in Atlanta.
Little Thunder looks to grow game
Foundation seeking endowment to allow children to play scaled-down course for free

By DEREK RICE

MADISON, Ohio — With rounds played numbers down in 2002 and competition to attract golfers to courses fierce, the industry is seeking out ways to draw new players into the game.

If golf is to survive into the future, many of those new players are going to have to be children. However, this is a double-edged sword, as children, as well as other beginners, are not welcomed with open arms at most courses, especially those with members.

Joe Biscotti, a 42-year PGA professional and president and chairman of Little Thunder Kids Golf Foundation Inc. thinks his employer has the right idea to skate that thin line between bringing new players to golf while making them feel welcome.

"The biggest thing that I can see is kids are not welcome at country clubs and other golf courses," Biscotti said. "How many times have you seen kids out there playing and you see four old members standing on the tee with their hands on their hips? Even if the kids are educated and have etiquette, they just don't seem to want them out there."

The non-profit Little Thunder Foundation operates Little Thunder Kids Golf Course and Learning Center in Madison. The course is a 3,160-yard 18-hole course designed and built on 60 acres for children ages six to 12. It features six par-3s, six par-4s and six par-5s. The longest hole is 310 yards and the shortest is 46 yards.

The course is the brainchild of Fred Slagle, a real estate developer who owns and designed Thunder Hills Golf Club, which is right across the street from Little Thunder. Slagle built the course after his own children complained about the length and difficulty of Thunder Hills for kids.

"He decided to go across the street and build a little golf course because his kids said to him one day, 'Dad, we can't play that big golf course. We can't hit it over the lakes,'" Biscotti said. "He spent $2 million of his own money to build a golf course to scale for kids between the ages of six and 12."

Biscotti estimates that in the nearly three years Little Thunder has been open, Slagle has put close to $3 million into the course. He said the foundation would like to establish an endowment to fund the upkeep of the course and allow kids, who pay around $10 to play all day, to play for free.

"We need somebody to give us some help," Biscotti said. "Fred Slagle has funded this thing for three years and he's put up almost $3 million, so we'd like to get an endowment and let the endowment pay for it. He's done a hell of a lot more than other people in golf are doing."

Most of the donations the foundation receives go to necessary expenses, Biscotti said, leaving nothing to help with greens fees.

"We don't have any money to speak of. All the money we get in, we have to use it for maintenance and taxes," he said.

Biscotti likens Little Thunder to some of the smaller-scale athletic fields located around the country.

"To teach kids soccer today, you go out and build a little soccer field. That's easy. You go out and get a 100-yard piece of dirt and grass and you put two nets up and play," he said. "It's more difficult to go build a $2 million golf course where kids are the members."

With Cleveland only 28 miles away, Little Thunder also reaches out to the inner city. Biscotti said.

"We have a lot of programs though the schools, through churches and the YMCA. We do some things with the inner cities and minorities," Biscotti said.
Necessity is the mother of invention

I first met superintendent John Farley in 1998, when he was working at Fairways and Bluewater Resort and Golf Club on the island of Boracay in the Philippines. Being on an island in a developing country made certain resources scarce (including water), so Farley had to use his creativity to make things work.

He recycled anything that would decompose to make his own compost, carved notches into wooden tee markers so they would double as cigar holders and made trash cans out of sections of PVC with pored concrete bottoms that were wrapped in seamless wicker. He also showed me a prototype of his hand-held spot herbicide applicator he called “Clappy the Weed Killer.”

Farley, who now works at Teal Bend Golf Club in Sacramento, Calif. (see story page 9), was just the first of many innovative superintendents I would meet.

In the March issue of Golf Course News showcases several superintendents who have used their inventive smarts to stay ahead of the game.

Frank Dobie, superintendent at The Sharon Club in Sharon Center, Ohio, uses the latest in plumbing technology to take a look underground and find blocked drain tiles in his greens. While you can rent a “See Snake” from your local plumber, Dobie plunked down eight large and bought one for his club. He said the unit has saved the club time and money and has improved the quality of its greens — which he added also leads to increased job security (see story page 9).

Job security was one of the things superintendent Paul White’s mind when he took over the superintendent’s position at Olds Mill Golf Club in Portage, Michigan.

After looking at the fungicide budget and noticing no improvement in the quality of the greens, he decided that he needed to discover something that would help strengthen his turfgrass. “The place was going downhill,” White recalled (see story page 9). White decided to see what biostimulants could do to improve turf quality. He set up 45 different 1,000-square-foot test plots in a fairway to test various products. While the tests are still ongoing, he now uses an enzyme-based product called Vital Reactions on all of his greens and has experienced better turf conditions while also using fewer chemicals.

Former superintendent David Mihailides has taken his devotion to his invention one step further. Mihailides, who invented his underground hose vented his underground hose further, Mihailides, who invented his underground hose reel in 1999 while a superintendent at Boulder Hills Golf and Country Club in Rhode Island, now works for Reelcraft Industries.

Audubon program is losing its appeal

By KEVIN J. ROSS, CGCS

No one can debate that Audubon International’s establishment of the Audubon Cooperative Sanctuary Program (ACSP) for golf courses in 1991 was a great idea. However, the program hasn’t exploded like some thought it would. Over the past few years, the program has started to lose the appeal it once enjoyed.

With approximately 17,000 golf courses in the United States, a mere 13 percent (about 2,000) have joined the program to some degree. These are certainly not very big numbers for a 12-year period. As far as ACSP certified golf courses, slightly less than two percent (about 300) of the total golf courses in the United States have reached that status. Yet Audubon International has a goal of another 6,500 courses over the next five years?

Why is the ACSP for golf courses losing its appeal? In today’s depressed economy the $150 annual membership fee is a lot of money for some clubs — especially if they have no intention of working toward ACSP certification. Maybe if the membership fee drops to two percent (about 300) of the total golf courses in the United States.

Job security was one of the things superintendent Paul White’s mind when he took over the superintendent’s position at Olds Mill Golf Club in Portage, Michigan.

After looking at the fungicide budget and noticing no improvement in the quality of the greens, he decided that he needed to discover something that would help strengthen his turfgrass. “The place was going downhill,” White recalled (see story page 9). White decided to see what biostimulants could do to improve turf quality. He set up 45 different 1,000-square-foot test plots in a fairway to test various products. While the tests are still ongoing, he now uses an enzyme-based product called Vital Reactions on all of his greens and has experienced better turf conditions while also using fewer chemicals.

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Audubon program makes good business sense

By KEVIN A. FLETCHER

The golf industry is going through an environmental adolescence of sorts. Like many industries, golf has accomplished much when it comes to protecting the environment, but many opportunities for improvement remain.

While a growing number of superintendents are embracing their role as environmental stewards, the percentage of those making this commitment remains small. More than 2,000 golf courses have committed to environmental leadership through either the Audubon Cooperative Sanctuary Program (ACSP) or the Signature Program. Yet, this represents only 13 percent of all the courses in the United States.

Part of the problem may stem from a misperception that the ACSP takes too much money, time or labor. This is simply not true. In fact, it can save you all three.

The ACSP has a $130 per year membership fee — which, as one superintendent stated, is easily covered by recycling bottles and cans on your course. Likewise, while some members elect to invest money in ACSP projects, the return on this initial investment can be significant.

For instance, Village Links of Glen Ellyn in Illinois watched an initial investment of $5,000 toward ACSP projects yield $30,000 in savings. For most members, however, it takes very little money to accomplish the goals of the program and earn certification, yet the return on investment remains. Finally, the program is designed to dovetail seamlessly with many of the day-to-day activities of golf course superintendents.
Ross on Audubon
Continued from previous page

A superintendent once commented to me that his club's response to achieving certification was, "If it's a lot of work for just another plaque on the wall, forget it. People play golf here for the condition of the golf course and not how many birds are on the property. Concentrate your efforts on golf course conditioning." Perhaps this is a little harsh, but it is certainly to the point.

There are a few areas of the program that have affected the golfing environment. One of the first practices the ACSP advised was the "reduced maintenance" approach. The main idea was to eliminate aeroze on a golf course by taking out-of-play areas and naturalizing them. The initial thought of reducing maintenance and cutting labor costs seemed to catch on quickly. Many superintendents embraced this idea and proceeded to naturalize. Now many golf courses have reverted back to maintaining these areas. There are many different reasons for this reversion, but the primary reason was speed of play. When natural areas begin to constrict the playing area, players spend more time looking for lost golf balls instead of playing golf.

What about promoting wildlife on the golf course? This has been an area of dispute for many courses. The problem stems from promoting wildlife species that cause destruction of property. Some of these destructive species include beavers, muskrats, elk, deer, voles, martens, prairie dogs and geese. For example, the prairie dog (aka ground squirrel) is a tremendous pest throughout the Western United States. Their burrowing creates numerous problems throughout the golf course from bunkers to rough areas. Many golf courses have to eradicate this species each year to minimize damage. The word "eradication" doesn't sit very well with the ACSP.

Another dubious promise is that the ACSP will save courses money. If that was true, everyone would jump on the bandwagon. According to Audubon, you can save money by reducing chemical, water and energy use. No professor in turf school, or anyone I've worked for the last 30 years, told me I had to join the ACSP to make those decisions. Many superintendents have practiced Integrated Pest Management programs through the ACSP, courses can see dramatic chemical use reductions. Less chemical use means money saved on product purchased, as well as on time and labor for preparation, application and clean-up, among other things.

According to our annual "Managed Lands Survey of Golf Courses," at least 75 percent of ACSP members have recorded a reduction in pesticides costs. Less pesticide use also reduces potential for spills and contamination, and avoids associated cleanup costs, regulatory fines and increased insurance premiums.

What about water use? The ACSP helps you save money by eliminating non-targeted watering (i.e., sidewalks, pathways and ponds), ensuring well-maintained irrigation systems, incorporating evapotranspiration and weather data into irrigation schedules, etc. Our "Managed Lands Survey" indicates that 89 percent of ACSP golf courses have improved their irrigation systems or the ways water is applied and as a result, a majority of those courses report a direct reduction in water costs. Reduced irrigation use also leads to reduced electricity costs.

What about maintenance costs? Our "Managed Lands Survey" reveals that ACSP member courses increased the non-mown areas of their course by an average of 22 acres per course without sacrificing play — resulting in reduced mowing time, gas and equipment maintenance.

There are other intangible business benefits the entire industry should consider. For instance, policy-makers and regulators like to see successful voluntary environmental action in an industry. However, if the 13 percent ACSP membership rate is a reflection the golf industry's level of environmental commitment, it's easy to see why many agencies, environmental activists and communities still speak of golf courses negatively. Having 50 percent of all courses take action and see positive environmental results through efforts like the ACSP can help to reduce the potential for increased regulation, and less regulatory-related permitting compliance costs.

The golf industry has the opportunity to become an environmental leader among industries, driving good environmental stewardship and recognizing the financial savings that come as a result. Audubon International's education, certification, and stewardship programs can serve as a model for other industries. It's time for golf course owners, managers, superintendents, and others in the industry to throw away the outdated argument of "environment versus economy" and learn what other industries have learned — good environmental stewardship is just good business.

Kevin J. Ross, is director of golf course management at the Country Club of the Rockies in Edwards, Colo.

Kevin A. Fletcher is director of programs and administration for Selkirk, N.Y.-based Audubon International.

\[ \text{Fletcher makes case} \]
Continued from previous page

Course management. As a result, it does not add a great deal of labor or time.

It's time for the golf industry to replicate other industry successes and seize the opportunities to reduce water and resource use, reduce maintenance costs, eliminate waste, and lower energy bills — all in the name of good environmental stewardship. With 75 percent of superintendents expecting either no increase or reduced operating budgets in the coming year (according to a Dec. 2002 Golf Course News Pol), reducing costs is more relevant than ever. The ACSP can help courses realize these savings. Let's explore some of these environmental savings opportunities. By focusing on cultural practices and Integrated Pest Management programs through the ACSP, courses can see dramatic chemical use reductions.
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**MAINTENANCE**

Dobie uses underground ‘eyes’ to solve drainage issues

**BRIEFS**

*IGM PROMOTES GANO, WELLS*

CHAMPIONS GATE, Fla. — International Golf Maintenance (IGM) has promoted both Steve Gano and Jim Wells, CGCS, from regional managers to vice presidents of operation. Wells began working as a sales representative with Meadowbrook Golf's supply subsidiary, Golf Ventures, in 1990. He joined IGM in 1995 as a regional manager. Gano joined IGM in 1990. He was promoted to vice president of operations, superintendent at an IGM-golf's supply subsidiary, in 1995. He was promoted to the Southeast U.S. regional manager for IGM.

**BLUE HERON PINES GC TO HOST USGA PUBLIC LINKS TOURNEY**

ATLANTIC CITY, N.J. — Blue Heron Pines Golf Club and the United States Golf Association will host the 2003 U.S. Amateur Public Links Championship July 14 to 19, 2003. It has been 20 years since this event has taken place in the Tri-state area, and net proceeds will be donated to the South Jersey Junior Golf Foundation, a non-profit organization based at Blue Heron Pines Golf Club. Steven Sanchez is the course's superintendent.

**GRIGG BROTHERS MAKES SEVERAL PERSONNEL MOVES**

ALBION, Idaho — In response to strong sales growth in 2002, organic amino acid and fertilizer manufacturer Grigg Brothers has reorganized its staff. Gary Grigg, CGCS, MG, who recently retired after 34 years as a superintendent, is the firm's new vice president and corporate agronomist. Grigg, who is a past president of the Golf Course Superintendents Association of America, will be responsible for product education and training. The company also added Vince Van Meter as national sales manager, Roman Grigg as Northwest regional manager, and Todd Scott as Midwest regional manager.

**RETURNING SUPER BATTLE TOUGH JOB, MARKET, CHANGES**

By ANDREW OVERBECK

As the golf course construction boom in Asia has waned over the last couple of years, American superintendents have returned home to a very competitive job market. Out of the employment loop after time overseas, some have spent nearly a year looking for a superintendant position.

"My wife and I miss the cultural experience, but as for a career move I could not have timed it better," said James Sprinkle, superintendent at Ibiza Golf and Country Club in West Palm Beach, Fla., who spent eight years in Asia, mainly in the Philippines. "Projects [in Asia] are still now starting and most clubs are going with local superintendents now. "Being out of the U.S. market for eight years made it difficult to obtain a good job. I searched for about a year," he added. "Luckily, I had strong ties with tree roots from drain lines."

Dobie estimated the cost of equipment has paid for itself, and then some. "This is one of the most valuable tools we have ever had, and in my estimation every course should own one," he said. "The money saved in time and labor is worth the cost of the equipment alone."

"In terms of headaches, it is probably worth 10 times that," Dobie continued. "If you lost a poorly-drained green during the playing season, you lose rounds.

Continued on page 12

**WHITE PUTS ENZYMES TO THE TEST AT OLDE MILL**

By ANDREW OVERBECK

PORTAGE, Mich. — After years of using a chemical-first approach to golf course maintenance, superintendent Paul White decided to take matters into his own hands and test alternative products and practices.

"I got to the point spraying fungicides when I realized that they were great at killing disease but the grass was not getting any healthier," said White, who is superintendent at Olde Mill Golf Club here.

White discovered an alternative to a chemical-only approach by accident. While working at Sauganash National in Three Rivers, he came across two drums of products from Consulting Agronomists, a natural product formulator based in Chicago.

"I called up their agronomist Doug Arenberg and he explained to me what it was and we decided to give it a try," said White.

The product, Vital Reactions, is a proprietary formulation of enzymes combined with organic liquid fertilizer and micronutrients.

White saw success during his time at Sauganash so he decided to adopt the program full time at Olde Mill. But first, he set up a test program.

Continued on page 12

**AUDUBON INT'I TO HOLD FIRST INDUSTRY SUMMIT**

HARTWELL, Ga. — Kicking off a "Fifty in Five" initiative to enroll 50 percent of U.S. golf courses in its environmental programs within the next five years, Audubon International is planning its first-ever industry summit on Feb. 12 at Cartechee Golf Club here.

"At the end of the day," Fletcher said, "we want people to walk away with something that they feel they are a part of — an advisory council. We also expect to produce a document which captures the results of the discussion.

Richardson will present an overview of the Audubon Signature Program. Then Audubon president Ron Dodson and director of programs and administration Kevin Fletcher will emcee an agenda geared toward the "Fifty in Five" initiative.

"The club purchased a Rigid See Snake that came with a 200-foot snake, pushrod, monitor and radio transmitter for $8,000. It takes two workers to run the equipment with one watching the monitor and the other manipulating the snake. Once a problem spot is located, the radio transmitter records the depth and location of the end of the snake, allowing workers to pinpoint the blocked area.

"This way we aren't guessing and digging in the wrong spot," said Dobie. "It is right on the money, within three inches. It has helped us fix crushed drain tiles and clear blocked area.

A worker feeds the See Snake into a drain to scan for any blockages or crushed tiles.

Continued on page 11
Workman manages course, spray field at Cateechee GC

By ANDREW OVERBECK

HARTWELL, Ga. — As water resources in Georgia are placed under increasing stress, Buck Workman is one superintendent who will never have to worry about drought restrictions or water shortages. Cateechee Golf Club sits on part of Hartwell’s effluent spray field and is an example of how public and private interests can be mutually beneficial.

When the city announced plans to create an effluent spray field application site in the mid-1990s, local businessman Lee Barton came up with the idea to build a golf course on the property. In exchange for free land and water and tax abatements, Barton agreed to build the course and handle the effluent application process at the 370-acre site. Barton pays a yearly lease to the city, but that cost is largely offset because the city shares in the maintenance of the spray field and irrigation equipment.

"The golf course encompasses 90 acres of the 370 acre site," said Workman. "We irrigate 273 of those acres and we have to use one million gallons of water a day."

With the extra acreage, the golf course is watered only when it needs to be. However, Workman was skeptical at first.

"I thought, ‘One million gallons a day, every day. 365 days a year, there’s no way we can do that,’" he said. With a water balance formulation in hand from the Georgia Department of Environmental Protection, however, the practice has proved to be a snap. The course has not had any problems with runoff or saturation. It has had some minor problems, however, with the smell.

"The first time we had any odor problems was this last summer when it got really hot and the retention pond had algae building up," Workman said. "But we increased the aeration and that solved the problem."

The use of effluent does require constant agronomic vigilance, said Workman, especially when it comes to the L-93 bentgrass greens.

"We have high sodium levels, that is our biggest problem," he said. "We have to do a lot of aeration and use a lot of calcium products to help adjust sodium levels in the soil. We also have to keep an eye on high pH because it causes take-all patch. We changed our fertilizer to ammonium sulfate and that has helped lower the pH."

Another thing that gets caught up by having to manage the effluent spray field is time. Since Workman devotes two hours a day to the effluent application process, he has two assistants to help manage the golf course.

"Workman, however, said he wouldn’t have it any other way. "I enjoy it," he said. "You never think about where sewage water goes. We use it in a very beneficial way that is much better than dumping it in streams and lakes. The course is an excellent filter."

For these reasons, Cateechee was a natural fit for Audubon International’s Certified Sanctuary Program. It gained Bronze Signature status in 1998.

"We worked with Audubon from the clearing stages so we would understand how to take care of a piece of property," said Workman. "Wildlife thrives here and it probably attracts people to the course that may not normally come."

There are now several more reasons to come to Cateechee. This fall, architect Mike Young, came back to the course to add new tees and reposition several bunkers. The course now plays to 7,000 yards from the tips. Additionally, the club just opened an $8 million clubhouse, restaurant and 250-seat conference center.

With these changes, the club hopes to attract a major tournament.
Superintendents return from Asia

Continued from page 9

Nicklaus Design, which helped me here at Ibis, which was designed by Nicklaus.”

John Farley also worked in the Philippines for six years and returned to the U.S. early last year after he tired of conditions at Fairways and Bluewater Resort and Golf Club on the island of Boracay.

“I flew back last February for an interview and I didn’t wind up getting the job,” said Farley, who is now superintendent at the ClubCorp-managed Teal Bend Golf Club in Sacramento, Calif.

“I spent seven months getting back in the loop. It is a tough road because the turf schools are cranking students out and there are a lot of good up-and-coming young assistants out there. But you can’t keep a good super down for too long.”

Steve Agin, superintendent at Ruby Hill Golf Club in Pleasanton, Calif., spent nine years in Asia and said getting used to how the golf industry has changed was the toughest part.

“My culture shock was seeing how much the industry has grown into a business,” he said. “With the advent of management companies it is a different ball game. Add to that a flood of newly-minted superintendents and the fact that it was the beginning of a recession, and it wasn’t a great time to come back and look for a job.”

Once employed, these three had to adjust their management approaches.

“It took a few months to transition back into U.S. work mode,” said Sprankle. “Hiring and keeping an adequate staff was and still is my biggest obstacle. In Asia, having an adequate workforce was not a problem. Training was more intense, but reliability was not an issue. And in Asia you could have a staff of 50 per course; here we have 16 per course.”

Farley said the skills gained by working overseas have helped make him a better manager.

“It was beneficial to work with different cultures,” he said. “It taught me the basic tenants that you have to treat workers with respect and treat them fairly. If they respond, they are on board.”

While all three said most equipment was available in Asia, access to chemicals and irrigation technology is much better in the U.S.

“The chemicals are more reliable,” said Agin. “Over there you wouldn’t know what you were getting. Here it is more cut and dry. I can call a supplier and get product tomorrow. Over there it could be months.”

Farley, who was facing a severe water shortage at Fairways and Bluewater in Boracay, is thrilled with the high-tech irrigation system he has at Teal Bend.

“I have a weather system that programs the evapotranspiration and precipitation rates into the irrigation system,” he said. “It is not fool-proof, but for the most part it does a good job. The technology is fantastic.”

While returning to the States took a lot of effort and adjustment, none regret the time they spent in Asia and all think it made them better superintendents.

“I would not trade my overseas experiences for anything,” said Sprankle.

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See Snake helps solve drainage issues

Continued from page 9

members are dissatisfied and it puts added stress on your crew. You can’t put a price on that.”

On the greens he has fixed he has also had less anthracnose pressure and what fungicides he still has to use, work much more effectively.

In his four years using the See Snake, Dobie has focused on eight problem greens.

"I was here when we did construction in 1964 and 1965, and we discovered that most of the drain tiles were crushed during construction," he said. "When they put down the gravel, trucks drove over it and crushed them."

While the construction damage was surprising, the real eye opener for Dobie was realizing that his problem greens were suffering because of settling.

"When you have green sites that are built on fill material, that dirt settles over time no matter how much you compact it," said Dobie. "We have eight greens that incline from right to left on a 15-degree slope. So the left side settles more than the right. The herringbone had settled eight inches and instead of draining out the front of the green, it was getting trapped."

This caused all sorts of problems during wet, humid summers when the clay would saturate with water and turn anaerobic, forming carbon dioxide and methane gas, which would force out oxygen and damage the root zone and eventually the plant.

"There are so many courses built today where there is a lot of fill used," said Dobie. "This is as much a problem in old construction as it is in new construction."

Dobie’s crew takes the snake out whenever it gets a chance to investigate and isolate trouble spots, but they wait until the season slows down in October to do any repairs.

White’s enzyme test

Continued from page 9

"I put a test area across fairways and did 45 1,000-square-foot plots. We tested it against all kinds of organic biostimulants at label rates to see what worked," he said. "What we found was the enzymes in the Vital Reactions work to help the fertilizer kick it up a notch. They allow more nutrients to get to the plants and we have seen more horizontal growth. It heals faster and makes the turf thicker and denser."

In his second full season of use, White has been able to reduce his fungicide budget and he has seen evidence of bentgrass actually crowding out Poa annua.

"I have cut my fungicide use by 75 percent," White said. "And the bentgrass is encroaching in on the Poa annua and not letting it reproduce. When I first came here you could pull the bentgrass right out of the ground. Now I have bentgrass plugs with roots going down into and through the clay layer."

According to Arenberg, Vital Reactions contains enzymes that are natural in prairie soils.

"The ones we have discovered perform certain processes in wild grasses that make them more tolerant of adversity," he said. "The enzymes occur naturally in soil, but they don’t grow in the soil. By applying them to turf you can add them back. They are not present in man-managed soils."

Because of the product’s cost, White has only been using it on his greens and approaches. Vital Reactions costs $37 a gallon and the recommended rates are half a gallon per 1,000 square feet every two weeks. White said he has been using one-third rates and getting results. He hopes to go to a reduced-rate application program for fairways next year.

While White has had success at Olde Mill, he recommends that superintendents test the product and any others before implementing a course-wide application program.

"Test it on your course," he said. "Don’t go out and buy the whole program. Buy four gallons, mix it up and go test it out."

MAINTENANCE

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Sunday River to begin long-awaited course in 2003

By DEREK RICE

NEWRY, Maine — While the rest of the state weathered a barrage of snowstorms in late December, Sunday River Ski Resort was looking ahead to finally starting construction on its planned golf course in the spring.

After nearly five years of planning, the Robert Trent Jones Jr.-designed golf course at Sunday River will begin taking shape soon.

The American Skiing Co. resort began clearing land in the Jordan Bowl area of the property in 1998 in preparation for the 18-hole course, but various factors have delayed the project.

"It's something we've been wanting to do for a while and we actually started the plans in '98, now it's finally becoming a reality," said Susan DuPlessis, corporate communications manager for Sunday River.

DuPlessis said the development is on track for a spring or summer construction start.

"It looks like everything's on track. We're going to have the purchase, and sales agreement, that will be the next step," she said.

"The last I heard, we..."
Coastal Commission
Continued from page 4

Another golf course development that the commission successfully quashed was a planned Ben Crenshaw–designed course to be built in Santa Barbara. The commission voted 10-0 to deny the Dos Pueblos Golf Links proposal based on the discovery of the threatened red-legged frog on the property. That discovery, along with other biological discoveries over the years, caused the commission to reverse the approval it had given in 1994.

Earlier in December, the Hearst Corp. dropped plans to build a 27-hole golf course and golf resort in San Simeon after a lengthy battle with the commission and other environmental groups. Instead, Hearst retained the right to build 27 luxury homes and an inn on the 83,000-acre Hearst Ranch.

Real estate mogul Donald Trump has also clashed with the commission since purchasing Ocean Trails Golf Course near Los Angeles. Trump aims to turn the course, best known for having three holes collapse into the ocean in 1998, into an upscale private course that he said would rival Pebble Beach. However, under a commission ruling, deed restrictions require the course to remain public and any change must be approved by the commission.

In early January, Gov. Gray Davis said he was leaning toward calling a special legislative session to restore the commission as a constitutional agency. At press time, the commission was seeking clarification of the court’s ruling before deciding whether to file an appeal.

A spokesman for the commission said it may be possible to avoid an appeal if the legislature can make councilors’ terms a fixed length, rather than the current “at will” status.

Hills’ fast start
Continued from previous page

stormwater management constraints. All non-native plant species were removed, and a new irrigation system was installed to lessen the impact on an already-stressed fresh-water aquifer. TDI International handled renovation of the course.

Hills’ fast start, one of the distinctions that propelled the Florida course to the top of the rankings, is that the course was so carefully routed around existing wetlands, ponds, and forests, that “there was more preservation than clearing at Shadow Wood Preserve.”

Golf Course News also undertook the construction of Shadow Wood, which Hills called “moderate in length, fun to play.”

Sunday River
Continued from previous page

were still on target.”

DuPlessis said once construction begins, the development will be fast-tracked with a 2004 opening planned.

“Once we get through all the procedural things we need to do with the real estate, it’s definitely going to be an aggressive construction schedule,” she said.

Having a golf course on its property will allow Sunday River, which is enjoying a successful ski season in the wake of a dismal season last winter, to draw people to its resort year-round. At present, if a guest of the resort wants to play golf, he or she must make the trek to the nearby Bethel Inn and Country Club.

Under the development agreement, the course will be owned and operated by Harris Golf, which owns and operates two other clubs on the coast of Maine, one in Bath and the other in Boothbay Harbor.

The proposed 350-acre site is located near the 286-unit Jordan Grand Resort Hotel and Conference Center. As presently designed, the course will feature panoramic views on more than half of its holes. Development plans also call for a golf school, driving range and clubhouse designed to complement the mountain landscape.

The development is subject to approval by the secured lenders of American Skiing. Golf Course News will track the construction of the course on a monthly or bi-monthly basis. Watch for installments in future issues.

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Palmer Course Design has strong 2002, sees growth in 2003

Continued from page 1

Erik Larson

Charger Series or Palmer improvements,” Larson said. “It doesn’t become a Palmer course, but they get the marketing collateral, which is basically a new trademark. It labels these improvements as Palmer improvements only. That’s a market we hope to build and it’s been of some revenue benefit.”

This will allow course owners who can’t currently do so to draw on the marquee Palmer name to market their course and draw in new business, Larson said. For those who already have a Palmer course, Palmer Design is offering the opportunity to upgrade that layout, either in whole or in part.

“We’ll do a free master plan of a remodel, then they do the improvements as they want,” Larson said. “They can upgrade to Palmer Signature status or upgrade their Palmer Signature course status.”

The first Palmer course to undergo this renovation is Keswick Club in Keswick, Va. The course began its renovation in late 2002 under the supervision of superintendent Peter McDonough.

“Keswick Club is going to be the first upgrade,” Larson said. “That was a Palmer Signature course, so the company has the Signature collateral, which they’re going to be able to upgrade because of the improvements that they’re doing.”

Larson said another reason behind Palmer Design’s growth in 2002 was the booming housing market.

“Our main business is in golf course communities,” he said. “Our golf courses sell houses. As long as the housing market is good, we’re good.”

Moving forward, Larson said he sees a lot of opportunity for the remodeling side of the business to take off.

“With all the new equipment both in golf course construction and for playing the game, you have to upgrade. It’s timely,” he said.

Larson stressed that while Palmer Design is based on a marquee name, the company works as a team to meet the needs of its clients.

“This group is on the leading edge of trends in the country. We understand that golf is part of an overall land-planning effort,” he continued.

With a team that features five members of the American Society of Golf Course Architects, Larson said, Palmer Design can pool its resources to produce a number of different course designs and draw from the best of each of them.

“We throw the stuff on the table here and start throwing darts at it in critique sessions. It’s really healthy,” he said. “If you’ve got thin skin here, you’re going to bleed to death.”

TEE TO GREEN, AND IN BETWEEN

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Spencer's sale
Continued from page 13

Spencer's sale
Continued from page 13

Continued from page 13

it, what they were offering me was
a three-year contract with an offer
of a salary so good I couldn't refuse,
plus a lot of other perks. It's going to
allow me to work for another six or
seven years."

Spencer said the situation
works out well for Zande as well,
as the company has wanted to get
into golf course design for a while.
"Zande is a 450-man civil en-
ingineering company, and they have a
very large landscape architecture
department, as well as several other
arms off that, such as surveying
and environmental and traffic
studies and land planning, really
everything that you would want
to employ if you were a developer
putting in a big housing develop-
ment with a golf course," Spencer
said. "They've always wanted to be
in the golf course design business
but they didn't want to go through
the four- or five-year learning
curve. I've always needed the tech-
nical backup and always had to
farm that out. It's been a win-win
for both of us. I get the security
and the backup that I've needed
and they get into a whole new area
of the business."

As for Spencer's own golf
course, which he started last year
(GCN, April 2002), that has been
put on hold, but not because of
his new work arrangement.
"It's still alive. It's on the shelf
because financing has been virtu-
ally impossible," he said.
The first project that Spencer and
Zande will undertake is the remod-
eling of Oberlin Country Club in
Oberlin, Ohio. Spencer did a mas-
ter plan for the course, originally
built in 1898, late last year.

"The members have just re-
cently voted to do the entire plan," Spencer said. "It's the first active
project that our new merger is
going to undertake. We're work-
ing on specs and plans right now."

Another project that is in
the works, which Spencer said would
allow him to "die a happy man,"
is a course he hopes to lay out on
a small island in Toronto harbor called
the Portlands.

"There's about 175 or 180 acres
of unbelievably mistreated indus-
trial land on the southern and east-
ern tip of that island," he said. "The
city of Toronto, the province of
Ontario and the Canadian govern-
ment have put together a pool to
completely renovate the Toronto
waterfront, and included in that
renovation is the Portlands. We've
had a golf course laid out on this
thing for years, and it has evolved
because of various requirements."

Spencer said his plan is backed
by a high-profile developer who
has contributed "a substantial
amount of money" to the project.

"I believe very strongly in the
old-fashioned way of building golf
courses, which means that the ar-chitect has to be on site very often
and very regularly, which precludes
me from having 20 different
projects going on at the same time,"
he said. "With the situation with
Zande, I don't have to do 20 projects
a year to make a decent living, and
they are totally on board with my
way of thinking."

"But we figure it pays
for itself in four or five years."

Bo Alexander, superintendent
at Wade Hampton, said he doesn't
regret spending the extra money
on Billy Bunkers.

"These bunkers get the water
into the tile so fast, the sand doesn't
spread himself thin.

"And Cupp Design, with whom
Course Crafters works often, are
among the architects who push
old-fashioned way of building golf
courses, which means that the ar-chitect has to be on site very often
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Billy Bunkers
Continued from page 13

overlaid with Enkamat, a fiberglass
mesh material that keeps the gravel
from leaching into the sand layer.

Course Crafters president Bob
Pinson said the method is more
costly than other methods, but also
more reliable.

"It is quite a bit more expensive
than other bunkering methods," Pinson said. "But we figure it pays
for itself in four or five years."

Bo Alexander, superintendent
at Wade Hampton, said he doesn't
regret spending the extra money
on Billy Bunkers.

"These bunkers get the water
into the tile so fast, the sand doesn't
have time to wash," he said.

Pinson said both Fazio Design
and Cupp Design, with whom
Course Crafters works often, are
among the architects who push
for Billy Bunkers in their designs.
St Andrews Links Trust bought three pedestrian Graden Scarifiers in 2001 for use on their six public golf courses. Gordon Moir, Links Super-intendent has been delighted with the purchases. "We have found them to be very efficient and quick machines to use for scarifying playing surfaces prior to overseeding and sanding operations. We have had so much success with the pedestrian Graden that we purchased a tractor mounted Graden in 2002 to enable us to scarify larger areas such as fairways. All in all the Graden is a first rate machine."

Rick Elyea, Director of Golf and Marketing for tee-2-green has witnessed the benefits of the Graden while working with their Penn varieties of Creeping Bent Grasses.

"I was introduced to the Graden unit four years ago at a Tee-2-Green roundtable discussion. I was impressed with the performance of the machine and what it can do to revitalise the turf grass plants. I have found that the machine allows the golf course superintendent the ability to vary the depth of blade penetration, width by blade size or removal of blades. It has been very helpful in removing the grow-in layer on greens, excessive biomass, almost twice as much as aeration and provides an excellent seedbed.

I have seen more golf courses use the graden to renovate their greens. They are able to adjust the penetration depth to a maximum depth of 1 3/4" (45mm) with most greenkeepers targeting the area from 1/4" to 1/8" or 0.6mm to 12 mm.

They then follow the machine by dropping seed into the grooves, dragging the greens mix or sand back over the seed and wait for the new seedlings to emerge.

I have seen courses do this once a month through the growing season with very good success and little disruption of play to the golfers.

I highly recommend the Graden to anyone who wants a better putting surface and healthier turf."
Using the Graden on cricket squares is now increasing in popularity in the UK. Keith Kensett of Turfmasters and also an experienced contractor, always felt strongly that cricket clubs would benefit greatly from the machine, and demonstrated it to the English Cricket Board. The blades cut easily through the harder clay surfaces, removing thatch and fibre, without the need to pre-soak, and being from Australia, has already proved itself on Australian cricket squares.

Following the success Worcestershire County Cricket Club had with the Graden, many other cricket clubs at county, league and village standard have now followed suit. These include County Cricket Grounds such as Northampton, Sussex, Hampshire, Warwickshire, and Somerset County Cricket Clubs plus many others. This widespread use of the Graden has lead one leading cricket groundsman to say "I can’t imagine a cricket ground anywhere in the world that could not benefit from this machine”

David Bates, Head Groundsman at Northamptonshire CC and Chairman of the First Class Headquarter Groundsman Committee stated: “I believe the Graden has revolutionised the process by which cricket groundsman remove unwanted fibre and debris. The power, and when needed, the severity, enables the control and reduction of thatch layers for all standards of playing surfaces.

Roger Ward, an ECB advisor saw a Graden demo at Cheam Cricket Club along with Chris Woods, and their combined comments that this machine would completely change the way cricket groundsman treat their squares has become true. Cricket groundsman are amazed that they can scarify their squares so effectively without first watering.
At Michigan State University we are conducting research to evaluate two cultivation methods on turfgrass surfaces. We are using a standard hollow-tine core cultivator using \( \frac{3}{8} \)" (0.95 cm) tines on a 2" x 2" (5.1 x 5.1 cm) grid spacing and a Graden G504 using 2 mm blades on 1 inch (2.5 cm) spacing.

Details of procedures and Results from this study will be published in the 2003 Michigan Turfgrass Conference Proceedings, but there are some initial observations. Although the Graden can be more labour intensive in cleaning debris (due to debris being scattered versus "nice" clean plugs), twice as much surface area is cultivated with the Graden as compared to standard core cultivation. Aggressive cultivation needs to be done on very high sand content root zones because with the accumulation of organic matter, the average soil pore-size is decreased. This creates a zone at the near-surface that holds much more water and decreases aeration in the soil. Also, a smooth surface is easier to produce with the use of a Graden as compared to a core cultivation unit.

We have seen dramatic improvements to golf and athletic fields with the use of the Graden and expect to see the same results with our experiments.

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AERATION THROUGH DEEP SCARIFICATION

BY STEVE ISAAC, STRI AREA MANAGER FOR SCOTLAND & IRELAND

Everyone accepts the importance of a good aeration programme to develop quality turf playing surfaces but the vital area 12-30 mm beneath the turf base, where thatch formation can severely impact on surface water drainage, is often neglected by conventional aeration techniques. This is where deep scarification can play a major role in getting air into the grass roots and the main zone within the soil profile where the plant respires and where moisture and nutrient are taken up by the grass. Experience has clearly shown success in developing firmer surfaces and encouraging new white root growth to scarification lines where the technique has been applied in appropriate conditions. Information from the USGA highlights the greater impact on surface area using the Graden compared to traditional hollow coring, with up to 14.1% area impacted using the 3 mm blades compared to only 4.91% with 12 mm coring tines set to produce a 50 mm by 50 mm hole pattern.

The benefits to aeration are enhanced if quality sand-based top dressing can be worked into scarification lines, though this does necessitate that the operation be undertaken in dry surface conditions, with the 3 mm blades proving most effective in achieving incorporation of the dressing material.

Steve Isaac works from Blairgowrie (01250 875805 or e-mail steve.isaac@stri.co.uk) and his colleague Richard Windows is based in Glasgow (0141 334 4262 or e-mail richard.windows@stri.co.uk).
NEW FOR 2003
‘DIESEL’
GRADEN ZERO-TURN MOWER

2003 will see the launch of the exceptional ‘Diesel’ Graden Zero Turn mower, this fast and highly maneuverable ride on mower is powered by a 26hp Yanmar Diesel engine and is ideal for cutting cleanly and quickly through tight, restricted areas. The Zero-Turn mower has a forward top speed of over 15kph and with having the rear wheels independently controlled this gives a turning radius of ZERO and gives the operator full control for maneuvering in any situation. There are 2 cutting widths available, 62” and 72” with an option of side or rear discharge.
ATLANTA — The GCSSA will present its annual Old Tom Morris Award to golf course architect Pete Dye at this year's conference in Atlanta. The presentation will be Saturday, Feb. 15, at the GCSSA's dinner.

Dye, 76, is a former president of the American Society of Golf Course Architects. He has been recovering from surgery for colon cancer performed in December. According to reports, during a routine exam on Dec. 12, doctors found a malignant tumor and later removed it.

A GCSSA spokesman said it was unclear whether Dye would be on hand in Atlanta to receive his award in person.

During his career, which spans six decades, Dye has designed more than 100 courses in the United States. Last year, he completed a redesign of the Ocean Course at Kiawah Island Resort in Kiawah, S.C., which made the course more walkable (GCN, Oct. 2002). Dye was a driving force behind the renovation of the course, which he designed in 1991 to host the Ryder Cup. "Without a doubt, the only way to experience the natural beauty and grandeur of the Ocean Course is to walk it," Dye said.

Among Dye's most notable designs are the Tournament Players Club at Sawgrass in Ponte Vedra Beach, Fla.; Crooked Stick Golf Club in Carmel, Ind.; The Honors Golf Club in Chattanooga, Tenn.; Brickyard Crossing in Indianapolis, Ind.; and Old Marsh in North Palm Beach, Fla. Dye is best known for his use of island greens, pot bunkers and his use of railway ties in bulkhead construction.

The Old Tom Morris Award is given annually to an individual who "through a continuing lifetime commitment to the game of golf has helped mold the welfare of the game in a manner and style exemplified by Old Tom Morris." Past winners include Arnold Palmer, Robert Trent Jones, Tom Fazio, Byron Nelson and Ben Crenshaw.

Dye is best known for the once super slick and club-like. The festive restaurant features seasonally influenced modern American cuisine with a hint of traditional Southern cooking.

City Grill
50 Hurt Plaza SE
404-524-2489

New American, Southern, soul

The home of this restaurant, the Hurt Building, was the home of the Federal Reserve Bank in 1912. Now lavishly refurbished, the City Grill is reminiscent of old, established clubs and hotels of New York and Europe featuring a rotunda, an ascending marble staircase, and furniture that is bathed in "lush fabrics, soft leathers and warm woods."

Atmosphere aside, the City Grill features New American cuisine: "everything from hickory grilled brown sugar brined pork," "bone, blue crab, avocado, and ruby red grapefruit." Superb white tablecloths, fresh flowers, sophisticated decor and good service. Here, you'll find the typical Thai fanfare, as well as more innovative dishes. Those with sensitive taste to pay attention to the "hotness" guide on the menu, however, because some of these dishes are super hot.

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449 Auburn Ave. NE
404-526-8900

This site pays homage to King, who was born here. Visitors can see both King's birth home and his final resting place. They can also visit the non-profit King Center, which educates people about King's life, his work and his nonviolent philosophy toward conflict reconciliation and social change.

Centennial Olympic Park
265 Luckie St. NW
404-223-4412

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GOLF COURSE NEWS


**GCSAA CONFERENCE AND SHOW**

Schedule of events for GCSAA Conference and Show

**MONDAY, FEB. 10**
6:30 a.m. - 6 p.m. Registration, Bookstore, Internet Cafe
7:30 a.m. - 4:30 p.m. Certified Golf Irrigation Auditor (CGIA) Program
8 a.m. - 5 p.m. One-Day and Half-Day Seminars

**TUESDAY, FEB. 11**
7 a.m. - 6 p.m. Registration, Bookstore, Internet Cafe
8 a.m. - Noon Certified Golf Irrigation Auditor (CGIA) Program
8 a.m. - 5 p.m. One-Day and Half-Day Seminars
1 - 3:30 p.m. Certified Golf Irrigation Auditor (CGIA) Examination
1 - 5 p.m. Computer Boot Camp - Getting Connected in the 21st Century
Two-Day Seminars - Tues. & Wed., 8 a.m. - 5 p.m.

**WEDNESDAY FEB. 12**
7 a.m. - 6 p.m. Registration, Bookstore, Internet Cafe
8 a.m. - 6 p.m. Voting Check-In
8 a.m. - Noon Computer Boot Camp - Getting Connected in the 21st Century
8 a.m. - 2:30 p.m. Certification Examination
8 a.m. - 5 p.m. One-Day and Half-Day Seminars
1 - 2:30 p.m. Understanding the Weather - Learn From the Experts: Presented by The Weather Channel
1:30 - 3:30 p.m. First Tee Liaison Symposium and Facility Tour
2:30 - 4:30 p.m. Current Issues in Golf: Taking Control of Green Speed

**THURSDAY, FEB. 13**
6:30 - 9 p.m. Opening Session/Reception
6 - 7 a.m. Innovative Superintendent Breakfast
6:30 - 7:30 a.m. Chapter Delegates Breakfast
7 - 8:45 a.m. Innovative Superintendent Session I
7 - 11 a.m. Half-Day Seminars
7 a.m. - Noon GCSAA Dinner Show Voucher Exchange - Open to Early Bird Voucher Holders
7:15 - 8:45 a.m. GCSAA/Golf Digest Environmental Leaders in Golf Awards Recognition Breakfast (by invitation)
8 - 11 a.m. Distributor Preview
8 a.m. - 5 p.m. Media Center; One-Day Seminars
8 a.m. - 6 p.m. Merchandise Show, Bookstore
9 - 10 a.m. Golf General Session
10:30 a.m. - 2:30 p.m. Chapter Managers Session and Networking Lunch
11 a.m. - 6 p.m. Trade Show, Silent Auction (online), Employment Center
Noon - 6 p.m. GCSAA Dinner Show Voucher Exchange - Open to All Voucher Holders
1 - 2 p.m. Communications Education Module - Media Relations and Hosting a Professional Golf Event
2 - 3 p.m. Communications Education Module - Media Interviewing Strategies
2:30 - 4:30 p.m. Current Issues in Golf: The Americans With Disabilities Act and Golf Courses: What You Need to Know
3 - 4 p.m. Communications Education Module - Crisis Communications Strategies
3 - 4:30 p.m. A Women-Led Forum About Success: Carpe Diem - Seize the Day!
3 - 5 p.m. Student Chapter Forum

**FRIDAY, FEB. 14**
6 - 7 a.m. Innovative Superintendent Breakfast
7 - 8:45 a.m. Innovative Superintendent Session II
7 a.m. - 6 p.m. Registration, Internet Cafe, GCSAA Dinner Show Voucher Exchange - Open to All Voucher Holders
8 - 10 a.m. Annual Meeting and Election
Recovering from the Unexpected: Presented by the American Society of Golf Course Architects
The Challenging Role of the Club General Manager: Presented by the Club Managers Association of America
8 a.m. - 5 p.m. Media Center
8:30 - 11:30 a.m. 9th Annual Collegiate Turf Bowl Competition
9 - 5 p.m. Merchandise Store, Bookstore, Trade Show - All Registrants, Employment Center
10 a.m. - Noon United States Golf Association Green Section Education Program: Fifty Years of Lessons Learned
Noon - 1:30 p.m. Certification Luncheon and Business Meeting (by invitation)
1 - 5 p.m. Exploring a Career as General Manager: Presented by the Club Managers Association of America
Remodeling University: Presented by the American Society of Golf Course Architects; Student Seminar: Student Internships - Getting on the Course
1:30 - 3:30 p.m. Career Development General Session - The Art and Science of Customer Service: How You Can Make an Impact at Your Golf Course
2 - 3 p.m. Facing the 21st Century Challenges of Golf and the Environment: Presented by Audubon International; Golf Industry Key Indicators: Presented by the National Golf Foundation
5 - 6 p.m. Student Reception

**SATURDAY, FEB. 15**
6:30 - 7 a.m. Research Breakfast
6:30 - 7 a.m. Research Session - Science for the Golf Course: Making Your Job Easier
8 - 9 a.m. Communications Education Module - Newsletter/Article Writing Strategies, Prayer Breakfast
8 a.m. - 2 p.m. Media Center, Registration, Internet Cafe
8 a.m. - 2:30 p.m. Certification Re-examination
9 a.m. - 10 a.m. Communications Education Module - Public Speaking Strategies, Current Issues in Golf: Preparation for Major Golf Events
9 a.m. - 2 p.m. Merchandise Store, Bookstore, Trade Show (complimentary registration - today only), Employment Center, Silent Auction (online)
10 a.m. - Noon Education Session - Golf Course Management I
12:30 - 2:30 p.m. Education Session - Golf Course Management II
1 - 5 p.m. Half-Day Seminar
6 - 11 p.m. GCSAA Dinner Show

**What to do in Atlanta**
Continued from previous page

Atlanta Cyclorama
800 Cherokee Ave.
404-624-1071

There are only three surviving cycloramas, and this one, built in 1921, is said to be the best of them. The Atlanta Cyclorama depicts a painting of the Civil War's Battle of Atlanta, which cost 12,000 American lives. The Cyclorama also hosts a small museum of Civil War memorabilia.

Historic Oakland Cemetery
248 Oakland Ave. SE
404-688-2107

The Historic Oakland Cemetery, established in 1853, is Atlanta's oldest cemetery. The cemetery includes the graves of well-known names, such as Margaret Mitchell and Robert Tyre (Bobby) Jones, and a collection of artwork, from Victorian and Greek Revival to Neo-classical, Gothic and Egyptian. Since the cemetery was established when society was segregated, it's divided into several sections: African-American section, Confederate section and Jewish section.
## 2003 GCSAA ELECTION CANDIDATES AT A GLANCE

### President

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<tr>
<td>GCSSA POSTS HELD:</td>
<td>On the board of directors since 1998, currently serves as chairman of the chapter relations committee, chairman of the conference and show resource group, vice chairman of the industrial advisory council, member of The GCSSA Foundation focus group, and is board liaison of the election and nominating committees.</td>
<td>OTHER ASSOCIATIONS: Past president and vice president of the Michigan Turfgrass Foundation, board member of the Michigan Golf Foundation and member of the Northern Michigan Turf Managers Association, the Greater Detroit GCSSA, and the Golf Association of Michigan.</td>
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### Vice President

<table>
<thead>
<tr>
<th>NAME: Mark J. Woodward</th>
<th>COURSE: Dobson Ranch GC and Riverivew GC, Mesa, Ariz.</th>
<th>FORMER SUPERINTENDENT AT:</th>
<th>YEARS GCSAA MEMBER: 25</th>
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<tr>
<td>MEMBER: 24</td>
<td>GCSSA POSTS HELD: On the board of directors, currently serves as chairman of the chapter relations and tournament committees, and is a member of the GCSSA Foundation focus group.</td>
<td>OTHER ASSOCIATIONS: Member and past president of the Cactus and Pine GCSSA of Arizona, past regent and chairman at the National Golf Foundation's National Institute of Golf Management.</td>
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### Board Member

<table>
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<tr>
<th>NAME: Mark D. Kahne</th>
<th>COURSE: Baltusrol GC, Springfield, N.J.</th>
<th>FORMER SUPERINTENDENT AT: Oakmont (Pa.) CC; Laurel Valley GC, Ligonier, Pa.; Ligonier (Pa.) CC</th>
<th>YEARS GCSAA MEMBER: 22</th>
</tr>
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<tr>
<td>GCSSA POSTS HELD:</td>
<td>Currently serves on the certification committee and previously served on the chapter relations and nominating committees.</td>
<td>OTHER ASSOCIATIONS: Director of the O.J. Noer Turfgrass Research Foundation, past director of the Pennsylvania Turfgrass Council, past president and member of the Mountain &amp; Valley GCSSA, member of the Greater Pittsburgh GCSSA, the GCSSA of New Jersey, the New Jersey Turfgrass Association, the Ohio Turfgrass Association, the Tri-State Turfgrass Research Foundation, and the Penn State Agronomy Advisory Council.</td>
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### Board Member

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<tr>
<th>NAME: Gary K. Carls</th>
<th>COURSE: Sunnyvale GC and Sunken Gardens GC, San Jose, Calif.</th>
<th>FORMER SUPERINTENDENT AT: San Jose Municipal GC and Santa Teresa GC, San Jose, Calif.</th>
<th>YEARS GCSAA MEMBER: 21</th>
</tr>
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<tbody>
<tr>
<td>GCSSA POSTS HELD:</td>
<td>Currently serves on the environmental stewardship committee, and has previously served on the education and scholarship committees.</td>
<td>OTHER ASSOCIATIONS: President and member of the California GCSSA, past president and member of the GCSSA of Northern California, member of the Northern California Turf and Landscape Council, the Northern California Sports Turf Managers Association, the Northern California Golf Association, and the USGA.</td>
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## Center for Resource Management nets award

The Golf and the Environment initiative brings together representatives of the golf industry, the environmental community and government organizations. It is designed to enhance golf course environmental responsibility and performance through cooperation in environmental stewardship and public education. As part of the initiative, CRM has produced educational materials, events and policy documents such as "Environmental Principles for Golf Courses in the United States," educational videos and an "Environmental Staging Guide for Golf Course Development."
**NEW PRODUCTS**

**John Deere improves 2500A Tri-Plex**

John Deere has improved its 2500A Tri-Plex Greens Mower model by providing enhanced features that increase cutting performance, ease of maintenance and operator comfort.

The 2500A features a new radiator with stronger cross-flow tubes to increase cooling system performance. The design also features a new backlap valve to help improve debris handling. In addition, operators will notice improved response when lifting and lowering reels, thanks to an improved lower assembly.

Other benefits include an improved grounding methodology for proper operation of the electrical system, improved durability through a new engine shut-off module, increased operator comfort through an enhanced seat, increased clearance to the muffler via a new three-wheel assist yoke assembly and improved body durability and styling. For more information, contact: 800-537-8233.

**Rack keeps seed and soil bottles organized**

Standard Golf Co.'s new Seed and Soil Bottle Rack is designed to help course superintendents solve the problem of keeping seed and soil bottles ready for use. The bottle rack holds up to 30 bottles, and can be easily transported for use between the ninth and tenth greens to encourage golfers to exchange empty bottles. The portable rack holds two removable crates, each of which has a capacity of up to 15 40-ounce (1.4 L) bottles.

For more information, contact: 866-743-9733 or www.standardgolf.com.

**Mule gets new flip-up windshield**

Kawasaki has introduced a flip-up windshield for its Mule 3000 Series utility vehicle. The seamless one-piece design allows full opening of storage space and features gas assist shocks with a locking ventilation position. The windshield can be used along with a hard plastic top or a fabric top. Maximum open trailer towing speed is 65 mph. For more information contact a Kawasaki dealer or www.buykawasaki.com.

**Goossen unveils PTO-powered verticutter**

Goossen is ready with its new PTO-powered pull unit for verticutting, dethatching, renovating and preparation for overseeding. The unit features 540 rpm power take-off, a heavy-duty right-angle gearbox, #60 chain drive with shear bolt and a 60-inch-wide swath. It has 40 blades, spaced at one-and-a-half-inches, that are made of 12 inch diameter steel. The blades are adjustable for precision depth control and feature hydraulic lift for transport. For more information, contact 800-835-1042.

**MoKart makes unloading and loading greens mowers a snap.**

MoKart makes unloading and loading greens mowers a snap. The cart's tilting frame allows for effortless loading and unloading. The frame remains tilted until the mower is reloaded and self-latched back in the transport mode. The unit is adjustable to carry 18-inch, 22-inch and 26-inch mowers. The weight of the mower is carried by the drum to eliminate the possibility of bent axles. The unit will carry John Deere and Toro mowers with or without groomers.

For more information, contact: 800-698-8580.
Sierra Nevada owner discovers life after AGC

By DOUG SAUNDERS
GENOA, Nev. — Sierra Nevada Golf Ranch, a John Harbottle-Johnny Miller collaboration that opened for play in 1997, its pattern of numerous golf course promotions of the mid-1990s. This past-72 course, which flows over the high desert landscape along the Carson River Valley, was built on a retired cattle ranch at a time when the surrounding Reno-Carson region was starved for golf venues. But the surge of golf course development during this period nationwide didn't miss the High Sierra and this course soon became one of 24 faced with finding ways to be competitive in an overbuilt market. Sierra Nevada Golf Ranch was created under the guidance of its owner, Ronald Simek, who moved to Nevada in the mid-1980s. Simek, a Wisconsin native who grew up on a dairy farm and worked in the timber industry, learned the importance of resilience in the 60s when lumber prices dropped to the point that he had to find a new source of income. With his brother, he suddenly found himself in the restaurant and tavern business. Simek sold his self-started business, Tombstone Pizza to Kraft foods and began to search the West for a new challenge.

"I bought this 3,000-acre ranch at first to keep it as a working ranch but when another golf course was built next to my land I felt really bad about this, but there's going to be a lot of turnover over the next five to 10 years," he said. "There's saturation in most areas, as well as a combination of the economic environment in North Carolina and the rest of the nation. Plus, golf rounds are down. The revenue is just not there to support the debt load for a lot of golf courses." Part of the problem is that people continue to build golf courses based on unsound practices, putting pleasure and sales and marketing Jim Morris is now the company's director of business development.  

Thunderbirds course sold at auction

PHOENIX, Ariz. — The Phoenix Thunderbirds Golf Course, which has seen its share of trouble in the last year, has changed hands in a foreclosure auction. Phoenix businessmen Arturo Moreno and Ernie Garcia paid $4.8 million for the course, which Bank One put up for sale after The Phoenix Thunderbirds civic organization and co-owner Luther Alkahakeh defaulted on a loan in September. The course had been struggling to attract rounds since mid-summer when 13-year-old Nils Beeman died and more than 80 people reported getting sick after playing at the course in July. Suspicions for the boy's death, which was later ruled to have been caused by the Norwalk virus, centered on the drinking water at the course. As a result, courses in the area, as well as nationwide, changed the way they handle drinking water. Beeman's parents are said to be considering a lawsuit against the course. It was not immediately clear how a change in ownership would affect any potential lawsuit.

Cincy hires Billy Casper Golf

CINCINNATI, Ohio — The city of Cincinnati has hired Vienna, Va.-based Billy Casper Golf (BCG) to manage its seven municipal golf courses. The multi-year agreement calls for BCG to provide the Cincinnati Recreation Commission (CRC) with a number of services, including agronomy, marketing and public relations for its Avon Field, California, Dunham, Glenview, Neumann, Reeves and Woodland courses.
Fort Knox course to close in March
FORT KNOX, Ky. — Apparently a victim of military budget cuts, Anderson Golf Course at Fort Knox is scheduled to close March 31.

The course is one of two at the Army base's 36-hole complex. According to published reports, the two courses were expected to lose more than $240,000 this fiscal year. Membership at the two clubs has also fallen by a third, from 600 to 400.

Because of those two factors, the base could not afford to keep both courses open. It is unclear whether the course will reopen in the future.

The base's other course, the Lindsey course, will remain open.

Gotham Golf
Continued from page 1
which operates under the aegis of Gotham Partners, was considering filing for Chapter 11 bankruptcy protection.

This isn't to say that the merger, which has been challenged by investors in court (GCN Jan. 2003), won't go through. In early January, the two firms appealed a judge's December ruling that blocked the merger.

Hoping to appease shareholders, First Union issued a statement last month to reaffirm its desire to merge with Gotham. In that statement, the company highlighted that the merger had been approved by its common shareholders at a meeting in November 2002.

Whatever the outcome of this up-and-down deal, it will limp along until at least next month, when oral arguments are scheduled to begin in the appeal. Should the appeal be unsuccessful, First Union said it plans to continue its operations as a real estate investment trust and has no intention of liquidating the company.

Gotham Golf owns or operates 26 golf courses across the United States.

Interstate Cos.
Continued from previous page
prestige ahead of good business sense.

"I know in Greensboro we've had some people build golf courses on the premise of 'Every time I go to play golf, I can't get a tee time,'" he said. "They wouldn't do that with any other type of business.

"In North Carolina we have several towns considering building golf courses even though there are too many in that area and there's really no justification or need to," he added. "I don't understand it."

When a golf course goes out of business, Reece said, it's different from any other business going out of business.

"From a golf course owner's and operator's perspective, it's a little bit different. If a McDonald's closes on the corner, then a McDonald's is closed," he said. "If a golf course developer can't make it, then he's going to sell to someone, and the new purchaser is going to go in there with less debt, so they can lower the fees, but the golf course is going to stay the same, which doesn't help the saturation problem."

Reece said he hopes to see the industry turn around in 2003, but that it may take some time yet for that to happen.

"I think it's probably going to come up a little bit this year. If not, I think we're all going to get the .45s loaded and get the barrels hot," he said. "I wish I could provide a pep talk, but I'm not sure that I can. Like they say in court, the truth's the truth."

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Reece is treasurer for the Carolinas chapter of the National Golf Course Owners Association. He will continue as managing partner of Montgomery Country Club in Troy and in his management consulting role with Stoney Creek Golf Club in Stoney Creek.

Thunderbirds
Continued from previous page
that program.

Mama and Garcia have allayed concerns from neighbors of the course by indicating that they will continue to operate the property as a golf course, rather than turning it into a housing development, as was originally thought.

Thunderbirds
Continued from page 1
Life after AGC
Continued from page 21

I was approached about expanding the golf concept here. In 1992 I began to look toward changing the ranch to a golf and real estate development. The construction of the golf course fell into place easily, but as I got ready to open the golf course I started to look for a management firm to handle the daily operations," Simek said.

Simek's situation has been repeated around the country. A well-financed owner steps into the golf development business with money, land, and a dream but little knowledge of the golf business and searches for a management team. Simek's decision was to find what he thought would be best. His choice was to sign a five-year lease agreement with American Golf Corp. in 1997.

"At the time I went into an agreement with American Golf, I considered the fact that they were the largest such management group as proof that they would be the best. They promised to take our course and make it one of the top 10 properties in their portfolio. I felt that I was making a wise choice when I signed the agreement," Simek said.

When the course opened for operations in the spring of 1998, Simek was able to be around the property for a third of the time. Although he is not a golfer and was certainly not familiar to the golf business, he did understand how he had managed to make his own business successful.

"The food industry and the golf business are similar in many ways. You are providing a product to a customer that must be presented properly in order to create repeat business. I was always very detail and result oriented in my food business. I felt these traits should be carried over into the golf operation. I admit that I kept an eye for small details at Sierra Nevada Golf Ranch," Simek explained.

During the first year of operation, what caught Simek's attention was a lack of maintenance at both the clubhouse and on the golf course. Seeing a lack of care set off the first warning signs and Simek began to question his management choice.

"The more I watched how things were going, the more disappointed I became. As I saw the golf course condition slip, we had various discussions about water supply, pumping costs and other issues. I felt that all the presentations that promised to make our course one of the top American Golf courses were just sales pitches to tell me what I wanted to hear. In April 2002 I sued to get out of my lease on the grounds that many verbal agreements were not being met to our satisfaction," Simek said.

In retrospect, the lack of upkeep was probably a symptom of the financial pressures being felt by AGC at that time but it was performance issues that allowed Simek to escape from his lease agreement. It also put him into the difficult search to figure out how to manage his course for the future. Once again, there are many golf course owners around the nation that are reassessing their approach as they go into the new year. The experiences of Simek might hold some lessons for them to follow.

"My first lesson learned is that you must thoroughly research whoever you are going to bring into your organization. I have looked at doing our operations in-house and have interviewed some potential general managers. Doing complete background checks of potential help is critical. Secondly, if you want to manage the operations in-house, it is important to have a set criteria of how to run things that will put all facets of the operation on the same page," Simek explained.

"I know how important it is to get help in matters that you are not fully versed in. This is true in any business. But I feel confident that I have made a decision that will meet my expectations for the future," Simek said. 

Get The Look of a Champion

NEW! Tournament-Ready granular and high performance liquid soil surfactant keep greens and tees looking and performing their best in the toughest conditions. For effective control and prevention of localized dry spot, get the look of a champ with university-tested Tournament-Ready soil surfactant.

Get a free Pro-Ap Hose-End Applicator with a qualifying purchase of Tournament Ready liquid. Visit our website for details.
S U P P L I E R  B U S I N E S S

BRIFBS

JACOBSEN APPOINTS MAY

CHARLOTTE, N.C. — Textron's Jacobsen Turf, Commercial & Specialty Equipment group has appointed Howard May senior vice president of operations. May comes to the division with more than 20 years of manufacturing and operations management experience at various Textron locations. Prior to this appointment, May was senior vice president of operations at Kautex, a Textron company, and was responsible for the facilities in Windsor, Ontario, Canada and Avilla, Ind. May joined Textron in 1995 in the company's Automotive Trim division.

NECE JOINS BIOSAFE SYSTEMS

GLASTONBURY, Conn. — Daniel Nece has joined the turf division of Biosafe Systems as a territory sales representative for the Mid-Atlantic region. Nece will be responsible for business development in New Jersey, Pennsylvania, Maryland and Delaware. Nece has been in the golf course industry since 1985 when he started as an assistant at Riverton Country Club.

FINN CORP ADDS BOWERS

CINCINNATI, Ohio — Finn Corp. has added Marc Bowers to its executive team. As vice president of marketing, Bowers will oversee all strategic planning, distribution, growth and marketing for Finn and Express Blower. He will be specifically involved with erosion control related product lines.

FMC REORDERS STAFF

PHILADELPHIA — FMC Corp.'s Specialty Products business has recently reshuffled its staff. Dr. John Long is the new product development manager for turf and ornamental products. Amy Gabrielian has been promoted to marketing and software solutions business manager. Jim Walker has moved up to marketing and business development manager and will lead efforts to define, develop and implement new marketing programs. Felicia Boone has also joined the staff as assistant product manager.

E-Z-GO revamps utility vehicle line

By ANDREW OVERBECK

AUGUSTA, Ga. — E-Z-GO has replaced its five-year-old Workhorse line with a new family of utility vehicles that will carry the Multi-Purpose Truck, or MPT, nameplate. The more "truck-like" MPT line will be unveiled at the Golf Course Superintendents Association of America Show in Atlanta this month.

E-Z-GO will offer the MPT in four different configurations in both gasoline and electric versions that have payload capacities ranging from 800 to 1,200 pounds.

"We realized that we needed to keep the product evolving and improving," said E-Z-GO's Ron Skenes. "It is a competitive market, but these changes are based on feedback we have gotten from customers."

The biggest change will come on the MPT 1200 and 1000 models that feature a roto-molded, polyethylene cross-link load bed with inserts for tie-downs and racks. The bed also has a gas-assist shock for easier dumping and wall slots for 2 x 4's to divide the bed into sections.

"A polyethylene bed is a better match for the environment that superintendents work in. It will be a lot more durable than metal, steel or aluminum," Skenes said.

Initially, the MPT 800 series will only be available with a steel cargo bed.

E-Z-GO has also upgraded the electric power source on the MPT 1000 to a 48V system. Previous Workhorse models relied on a 36V system.

"With eight six-volt batteries, the 1000 now has more power," said Skenes. "Gas has historically been the biggest seller in this segment, but it will be interesting to see how the 48V system takes off. Superintendents we have talked to are excited about this innovation."

The MPT 800E will still come with the 36V power system. The MPT 1200 has an 11-hp, 320cc, 4-cycle engine and the MPT 800G has a 9-hp, 29cc, 4-cycle engine.

In addition to the new polyethylene bed and the larger electric power plant, the guts of the vehicles have also been redesigned. The cargo bed frame has been reinforced for more support and the front axle has been widened to improve the vehicle's ride and handling.

Other improvements to the MPT vehicles include improved engine performance and enhanced clutch design for better hill climbing and better cold starts.

Rain Bird to unveil Eagle wireless rotor

AZUSA, Calif. — Rain Bird Corp.'s Golf Division is set to introduce its Wireless Eagle Rotor to the golf market this year. With wireless technology now reaching the golf market, superintendents will be able to eliminate excessive amounts of underground wires and electrical connections associated with conventional irrigation systems.

The new Rain Bird rotor uses the same technology as its Eagle line, but the rotor is controlled without the use of remote satellite or decoder technology.

"As implied by the name, the Wireless Eagle Rotor eliminates the need for all types of wire," said golf structural and development manager Steve Sakurai. "It needs no power wire, no communication wire and no station wire.

"The elimination of these lines can help courses in high-lighting areas from experiencing down time," he added. "It also allows for maximum flexibility in the location and placement of rotors."

The rotor is powered by an internal battery, which is recharged by a solar panel integrated into its case. Installation is the same as a conventional rotor, minus the electrical wiring. The rotor is installed on a swing joint and then programmed with its own internal computer.

The new MPT features a polyethylene cargo bed.

Kubota files trademark infringement suit against Kioto

TORRANCE, Calif. — Kubota Corp., of Osaka, Japan, and its affiliated United States distributor Kubota Tractor Corp. have served a legal complaint upon Kioto Tractors manufacturer Daedong Industrial Co. Ltd. and its U.S. distributor Daedong — USA Inc.

Kubota filed charges of trademark and trade dress infringement and unfair competition in United States District Court in Fresno, Calif., on Aug. 19, 2002. Kubota’s efforts to resolve the lawsuit prior to formal service on Dec. 4, however, were unsuccessful.

The lawsuit alleges that Kioto has engaged in trade dress infringement by using Kubota’s distinctive orange color, and in some cases Kubota’s distinctive hood design as well, on its competing models of tractors. The lawsuit further alleges that Kioto has been responsible for statements indicating a current relationship between Kubota and Kioto with respect to tractors when, in fact, no such current relationship exists.

In the lawsuit, Kubota seeks, among other things, injunctive relief against Kioto’s use of the Kubota color and hood design and against false or misleading statements by Kioto. Kubota also seeks monetary damages, including treble damages and punitive damages based on Kioto’s allegedly willful and/or intentional misconduct.

Continued on page 26

Market still developing for underground reel

By ANDREW OVERBECK

COLUMBUS, Ind. — Former superintendent David Mihailides and Reelcraft Industries are pushing forward with their underground hose reel product for golf course and sports turf applications.

Mihailides invented the hand-watering device in 1999 while superintendent at Boulder Hills Golf and Country Club (now called Foxwoods G&CC) in Rhode Island. He then incorporated DGM Syringing Systems to distribute the product that has since sold more than 400 units.

Mihailides signed a deal with Reelcraft in April 2001 to market and manufacture the product and left his superintendent’s position in hopes of making his invention pay off. He is now working to build brand and market awareness for the product.

"It is my hope that this becomes a specified product with both new irrigation systems and renovation

Continued on page 26
Deere testing hydrogen-powered Pro-Gator
Continued from page 1

hydrogen fuel cell development. General Motors owns 24 percent of the publicly traded company.

"Hydrogenics is becoming a major supplier of small portable fuel cells under 100 kilowatts. We are putting a 20-kilowatt system in the Pro-Gator," said Wood.

DEERE SORTING OUT ADVANTAGES, DISADVANTAGES

Deere anticipates that using a hydrogen fuel cell will allow for a more simplified and technologically advanced vehicle.

"Where you had mechanical linkages with chains and sprockets, now you run power cords to motors," said Wood. "This gives the operator the ability to control things more carefully. With electrical controls you can start and stop things almost immediately. You can't do that with mechanical controls."

The technology would also replace hydraulic systems, eliminating the concern of fluid spills and the resulting turf damage on golf courses. The system has the added benefit of being entirely quiet and producing no pollution.

Wood said the use of hydrogen gas as fuel is completely safe and less dangerous than gasoline. Maintenance facilities could easily store the fuel on site.

The technology still has some drawbacks, however.

The largest disadvantage at this point is cost. Deere & Co. said the price of fuel cells is coming down rapidly and that by the time production could begin, the cost could be comparable to a current Pro-Gator, especially once tax incentives are factored in.

Another potential pitfall is range.

"One of the problems that you have with hydrogen is that to have enough fuel to have all-day range requires a lot of space," said Wood. "If we put it on a mower that you expect to run all day, you may have to refuel halfway through."

According to Wood, fuel cell technology will eventually move to solid hydrogen which will give vehicles extended range because it allows more fuel to be stored on board.

PRODUCTION COULD START IN FIVE YEARS

While the demonstration vehicle will be ready this spring, Wood said production of a hydrogen fuel cell-powered vehicle is five to eight years away.

Before committing to production, however, Wood will be working extensively on the demonstration vehicle.

"We need to figure out how you put the system in without altering the vehicle design," he said. "Then we will demonstrate it and see what kind of reactions we get and see what works and what doesn't."

In addition to hydrogen fuel cells, the ePower group is also testing hybrid power systems and what Wood called "high-performance batteries."

How a hydrogen fuel cell works

Most people know that hydrogen is a cleaner source of energy, with the only byproduct being heat and water. However, Golf Course News turned to John Deere's Bruce Wood to explain exactly how the hydrogen fuel cell produces electricity.

"The fuel cell is a powered battery," said Wood. "It uses a proton exchange membrane that has a platinum catalyst. When the hydrogen molecule is forced through the membrane, an electron is stripped off. That is what creates the electricity. On the other side of the membrane, the hydrogen ion combines with oxygen to form water."
 Textron takes Jacobsen name, introduces new products

Continued from page 1

The marketplace as a result of ongoing consolidation, Jacobsen's Joe Zvanut said. The rebranding move is part of an ongoing consolidation strategy within the company. In 2001 it began a process that consolidated product engineering and design, sales, marketing and customer service and support into three locations. The turf care division operates out of Charlotte, the utility vehicle division is based in Augusta, Ga., and commercial grounds care is based in Johnson Creek, Wis. As part of this strategy, the firm also streamlined product lines and reduced costs in manufacturing, distribution, procurement and warehousing.

While Zvanut said the consolidation process is still ongoing, he added that the company will count on several new products to drive its growth in the golf market. Jacobsen will be introducing three new products to drive growth in the golf market.

One of the products is the E-Walk electric greens mower, which Jacobsen is introducing in Atlanta. The E-Walk has two 48V electric motors that independently drive the ground speed and clip modulation of the green, the E-Walk will be able to mow 18 greens with two to three battery pack changes.

According to Sakurai, the wireless rotor will offer many advantages when it comes to eliminating scalping on severely undulating greens. The unit will be available with a 4-hp Honda engine or with the new 48V electric power system. In addition to the walk-behind mowers, Zvanut said the company will unveil a new fairway mower, a PTI-driven verticutter, and a new line of utility vehicles in Atlanta.

Mihailides realizes that he has a challenge ahead. "We have a brand-new product and no competition," he said.

One way he hopes to build awareness is to produce private-label products. "That way," said Mihailides, "superintendents won't say 'Why should I buy this' but 'Who should I buy it from?'" In a move to expand the product line beyond underground reels, Reelcraft has also introduced a trailer-mounted reel to allow golf courses to more easily transport hose around the golf course. The unit hooks into the back of a utility vehicle.

Fertilization costs $400 and the hose can be used all over the course," said Mihailides. "So there is a price difference. But we are also saving courses labor, time and wear and tear on equipment. "This keeps the hose right at hand and saves water because you only have to water as much as is needed," he continued. "Instead of sending four or five guys out to hand-water all day long, one guy can do it." Product benefits aside,
Bayer ES unified
continued from page 3

"Golf is a critical market for us and we needed to have a dedicated sales force," Farno added. "Before, guys would get up in the morning not sure whether they were calling on lawn care, golf or pest control. They are now thinking green only percent of the time."

The Chipco Professional Products division has split the country into three territories. Neil Cleveland, who formerly handled the North for Bayer, will cover the area for Chipco; Mike Daly, who used to be the brand manager for Bayer, is the new West region manager; and Jim Davis, who was Aventis' manager for the North, will now be responsible for the South. The managers will oversee a sales force of 30 and will utilize a group of approximately 50 distributors.

PRIMED FOR GROWTH
With the integration process more than 90 percent complete, Farno said the new product pipeline is primed to start churning out new chemistry.

The company hopes to unveil a new herbicide, Revolver, at the GCSAA Show in Atlanta this month. At press time, Farno said approval from the Environmental Protection Agency for the post-emergent herbicide was "imminent." Three more fungicides are slated for introduction in 2003, among them are Triton, a broad-spectrum product, and Lynx, a sterile inhibitor.

According to Farno, introducing new products in the golf market will be the key to the firm's growth. "Becoming number one in golf will take new products. Our performance last year as a combined entity was very good, it was more than inflationary growth, but it was not double-digit growth," he said. "Golf may take 18 months to recover back to pre-9/11 levels, but golf is a critical market to us and we feel really well-positioned now with a dedicated sales force and a strong product line."

We want to hear from you!

Letters to the editor are an integral part of GCN, so let your voice be heard. Send all correspondence to:
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Yarmouth, ME 04096
Fax: 207-846-0637
aoverbeck@golfcoursenews.com
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**NATIONAL GOLF ROUNDS PLAYED**

<table>
<thead>
<tr>
<th>REGION</th>
<th>NOVEMBER</th>
<th>Y.T.D.</th>
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<tbody>
<tr>
<td>NEW ENGLAND</td>
<td>-32.6%</td>
<td>-1.7%</td>
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<tr>
<td>MIDDLE ATLANTIC</td>
<td>-41.4%</td>
<td>-4.1%</td>
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<td>EAST NORTH CENTRAL</td>
<td>-57.7%</td>
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<td>-20.3%</td>
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<tr>
<td>WEST SOUTH CENTRAL</td>
<td>-14.4%</td>
<td>-1.8%</td>
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<td>MOUNTAIN</td>
<td>1.1%</td>
<td>-1.3%</td>
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<tr>
<td>PACIFIC</td>
<td>4.3%</td>
<td>1.7%</td>
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* The percentages above represent the difference in number of rounds played in the month of November 2002 from the number of rounds played in November 2001.

**YEAR-TO-DATE GOLF PROJECT ACTIVITY (MONTHLY CHANGE)**

<table>
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<tr>
<th></th>
<th>NEW</th>
<th>ADDITIONS</th>
<th>TOTAL</th>
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<tr>
<td>PROPOSED</td>
<td>378 (-1)</td>
<td>69 (-1)</td>
<td>447 (-1)</td>
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<tr>
<td>IN PLANNING</td>
<td>370 (NC)</td>
<td>66 (NC)</td>
<td>436 (NC)</td>
</tr>
<tr>
<td>UNDER CONSTRUCTION</td>
<td>349 (-1)</td>
<td>168 (-1)</td>
<td>517 (NC)</td>
</tr>
<tr>
<td>COMPLETED</td>
<td>191 (NC)</td>
<td>101 (-1)</td>
<td>292 (-1)</td>
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**Golf Course News STOCK REPORT (1/13)**

<table>
<thead>
<tr>
<th>Company(Symbol)</th>
<th>Price 12/16/02</th>
<th>Change(%) 12/16/02</th>
<th>52-wk range</th>
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<td>Aventis (AVE)</td>
<td>56.39</td>
<td>5.0</td>
<td>48.00 - 74.21</td>
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<td>BASF (BF)</td>
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<td>31.84 - 46.85</td>
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<td>22.05</td>
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<td>16.77 - 36.00</td>
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<td>11.0</td>
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<td>1.1</td>
<td>6.66 - 14.50</td>
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<td>Monsanto Co. (MON)</td>
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<td>4.30 - 12.43</td>
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<td>Syngenta AG (SYT)</td>
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<td>9.6</td>
<td>9.80 - 13.20</td>
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<td>Textron Inc. (TXT)</td>
<td>44.25</td>
<td>5.8</td>
<td>32.20 - 44.80</td>
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<td>Toll Brothers (TOL)</td>
<td>21.43</td>
<td>3.5</td>
<td>17.76 - 31.80</td>
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<tr>
<td>Toro Co. (TTC)</td>
<td>65.25</td>
<td>-0.1</td>
<td>45.71 - 68.30</td>
</tr>
</tbody>
</table>

**Renovation numbers**

The National Golf Foundation's monthly Golf Project Report numbers do not include courses classified as reconstructions or renovations. At present, 45 renovated/reconstructed courses are under construction and 35 courses have opened.

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