Alternative treatments
Sod producers explore nontraditional treatment options to promote pest-free crops

Show preview
GCN covers it all from the 52nd annual GCSAA championship to a rundown of all the major shows

Golfer Profiling
- 40-64 years of age
- Incomes over $75,000
- Live in large metropolitan areas
- No longer have small children living at home
- Majority are concentrated in three areas of the country:
  - East North Central
  - West North Central
  - South Atlantic
- Pacific

IRS to allow depreciation
By A. OVERBECK
WASHINGTON — After two years of negotiations, the National Golf Course Owners Association and consultant KPMG have emerged victorious in their depreciation battle with the Internal Revenue Service. The IRS, which had been considering the matter under its Industry Issue Resolution pilot program, issued revenue ruling 2001-80 in late November that will allow golf courses to depreciate the costs of modern green construction.

According to KPMG’s Bill Ellis, the ruling is an “economic stimulus tax package” that could save individual golf courses hundreds of thousands of dollars.

Continued on page 24

Turf researchers debate biotech buffer zones
By JOEL JOYNER
RIVERDALE, Md. — It seems that anything genetically modified these days has the potential to become a controversy. When it comes to golf, the big question is whether or not there is such a thing as a safe buffer zone for open pollinated testing of genetically modified turfgrasses.

After the Supreme Court ruled in 1980 that genetically modified organisms (GMO) could be patented, commercial endeavors took off. By 1992, the U.S. government approved the first GMO product — a FlavorSavr tomato with a delayed ripening gene.

Today, two seed companies both researching transgenic creeping bentgrass, the Scotts Co. and Turf Seed, have a difference of opinion on what is needed to protect the public. For Landscapes Unlimited, 2001 was a record year for new construction and renovation work, according to Brad Schmidt, vice president of Landscapes Unlimited headquartered here. “We’ve been gearing up for quite some time for renovation business in 2002, ’03 and ’04,” he said. “For several years now, 30 percent of our business has been renovation work. That percentage could increase as much as 20 percent this year and make it 50/50 with new construction.”

Schmidt has not seen an increase in competition on bidding for renovation projects to date, but he certainly expects it. “One of the ways an older course can remain competitive is by upgrading,” said Schmidt. “If they don’t, they just might die on the vine.”

The renovation market has been strong in the past two to three years during the golf course building boom, according to Andrew Crouch, director of business development for ASL Golf Course Construction in Waitsfield, Vt.

Continued on page 18

Renovation work to surge in 2002
By JOEL JOYNER
LINCOLN, Neb. — The National Golf Foundation has tracked the downward slide in new golf course construction projects this past year, and the industry is bracing for the impact. For many golf course builders and architects, course renovations in 2002 will prove to be a more valuable source of income in keeping businesses afloat and the golf economy in motion.

As new course construction seeks a comfortable balance between supply and demand, restoration and modernization of existing courses will carry a lot more weight, according to builders and architects.

BUILDERS SEE INCREASE
For Landscapes Unlimited, 2001 was a record year for new construction and renovation work, according to Brad Schmidt, vice president of Landscapes Unlimited headquartered here. “We’ve been gearing up for quite some time for

Continued on page 27

American Golf working to regain profitability
By PETER BLAIS
SANTA MONICA, Calif. — Despite recent reports that American Golf Corp. (AGC) may not be able to make scheduled rent payments to one of its major landlords, National Golf Properties (NGP), AGC management is confident it has taken steps to cover future expenses and return to profitability in 2002, according to co-CEO David Pillsbury.

The past six months have not been kind to the company that is the largest golf course operator in the country. In November, shares of National Golf

Continued on page 27

Ford’s THINK neighbor enters production
By ANDREW OVERBECK
DETROIT, Mich. — Ford Motor Co. has launched the THINK neighbor, the first of its line of low-speed electric vehicles. While the neighbor is primarily aimed at private users in resort and gated communities, it does have a “golf” setting that will allow it to be used on courses.

“We probably won’t market it much on the golf course fleet business at this time,” said Chris Klein, national accounts manager with THINK Mobility. “Because this is designed for private use, what we are looking to do is go after private golf car owners right now.”

Klein, who used to work for E-Z-GO as a territory manager, said the vehicle will be introduced in California first where a percentage of Ford vehicles sold must

Continued on page 27
Penn A-4 is something to look forward to at Wooden Sticks

"Penn A-4 is picture perfect for our Wooden Sticks greens."

"The Wooden Sticks experience has golfers of all skill levels arm pumping, cursing, and coming back for more. Eight holes on this unique course draw inspiration from well-known tracks worldwide, and our greens range in size from the 3,000 square foot 'Postage Stamp' at Troon to a 25,000 square foot likeness of the finishing hole at St Andrews, complete with upfront swale.

Number 2 hole is a truly unique design with bunkers surrounding the green. From the elevated tee, it's possible to land on the target with a well-placed shot, but to miss short or right could mean a day at the beach.

"Penn A-4 is just right for our greens at Wooden Sticks. With the variety of putting surface sizes, shapes, and contours we have, Penn A-4 is asked to do a lot of things including: grow in deep shade, adapt to our severe climate changes, repair scuff and ball marks resulting from public play, and to be the reward at the end of some challenging approaches.

"The new Penn A-4 creeping bentgrass does it beautifully."

Brian Haus, Superintendent

GCSAA BOOTH # 1515
Golf 20/20 highlights research, results and plans for action

By ANDREW OVERBECK

ST. AUGUSTINE, Fla. — In the wake of another year of flat participation growth, Golf 20/20 convened here again Nov. 11-13 to discuss and implement plans to grow the game of golf.

The short term and long term goals are aggressive: increase the number of new golfers to 3.5 million from 3 million a year, while slowing the exodus of golfers to 2.5 million from 3 million a year. By 2020, the organization hopes to have 55 million participants playing 1 billion rounds a year.

Since the first meeting, Golf 20/20 has amassed a staggering amount of data to help it both crystallize its goals and identify a plan of attack.

MARKET SEGMENTATION

In addition to quantifying the number of golfers in the United States, Golf 20/20 has also identified a "best" customer profile.

The 36 million golfers in the country, research identified 10.1 million that fit this "best" customer profile. These customers make up 40 percent of all golfers, account for 85 percent of spending and 85 percent of rounds played.

ALTERNATIVE GOLF FACILITIES IN THE UNITED STATES

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Courses</td>
<td>16%</td>
</tr>
<tr>
<td>Par Threes</td>
<td>30%</td>
</tr>
<tr>
<td>Pitch &amp; Putt</td>
<td>3%</td>
</tr>
<tr>
<td>Others</td>
<td>1%</td>
</tr>
<tr>
<td>Driving Ranges</td>
<td>50%</td>
</tr>
</tbody>
</table>

The percentage breakdown by type of the 5,542 alternative facilities in the United States.

The site, www.juniorlinks.com, is currently focusing on registering junior programs through an online registration process. It will feature content on a wide range of subjects including rules, swing tips and college scholarship information.

The site will play a role in the regional summits that the USGA Foundation has held around the country. The summits bring junior golf communities together to discuss best practices, build awareness, and stimulate growth and participation in junior programs.

"This will be a comprehensive database of junior programs in the United States," said Jessica Turnwald, USGA fellow. "The site will encourage parents and kids to get into golf and will facilitate local and regional summit meetings."

The First Tee expands overseas, tops 2001 goals

By ANDREW OVERBECK

GUANLAN TOWN, Shenzhen, China — The First Tee has expanded beyond the United States with the establishment of The First Tee of South China at Mission Hills Golf Club.

Joe Barrow, national director of The First Tee, joined Mission Hills Group chairman Dr. David Chu and Powergolfasia CEO Peter Hsu to make the announcement during a clinic with Tiger Woods that was held to benefit The First Tee experience in Asia.

"This is the initial First Tee located outside of North America," said Barrow. "Many thanks to Dr. David Chu and Mission Hills Golf Club for donating the land and constructing the six hole golf course."

The course, which is set to open in March, marks the first step towards achieving one of its Phase II goals and expanding The First Tee, added Barrow.

"To extend The First Tee to China is cooperation with NFO WorldGroup. The First Tee has joined forces with NFO WorldGroup to bring the program to China."

Researchers also found that among the golfing prospects, ball striking was three to five times more important than scoring, course conditions, competition, and exercise. The information will help structure teaching initiatives such as Link Up 2 Golf (see accompanying article) and other skill improvement programs.

The program worked well at some places, but not as well at others," said Mann. "Ranges did well, they still provided the free rounds of golf and sold an average of one to two sets of clubs for every class. Semi-private and public courses were less successful due to the lack of time and competing instructional programs. The private country club was a huge success, they had 65 participants and had to turn away 30 to 40 more."

After participating in the program, 78 percent said they were more comfortable and 41 percent said they planned to play 11 to 20 rounds in the next year.

We are delighted to take this first step into South China and look forward to the prospects of extending into other cities in China over the coming years.

SUCCESS ON THE HOME FRONT

Back on the home front, the organization has surpassed its first year expectations for Phase II by more than doubling the number of participants expected to experience The First Tee, over 2001 goals. Over 1,600,000 juniors are expected to participate in the 2002 season. The First Tee has added 64,000 new junior golfers to the game last year and now has 585 facilities in total.

In the next five years, the organization aims to introduce the game to 500,000 youngsters, have 250 dedicated facilities that establish 500 affiliate relationships with existing golf courses.

The site, www.juniorlinks.com, is currently focusing on registering junior programs through an online registration process. It will feature content on a wide range of subjects including rules, swing tips and college scholarship information.

The site will play a role in the regional summits that the USGA Foundation has held around the country. The summits bring junior golf communities together to discuss best practices, build awareness, and stimulate growth and participation in junior programs.

"This will be a comprehensive database of junior programs in the United States," said Jessica Turnwald, USGA fellow. "The site will encourage parents and kids to get into golf and will facilitate local and regional summit meetings."

Newsline shows a success

MYRTLE BEACH, S.C. — Regional trade shows may be a hot ticket this year given the downturn in air travel and a slumping economy, according to officials of the Carolinas Golf Course Superintendents Association. The Carolinas GCSA's 35th annual Conference and Trade Show here generated record revenues for the 1,600-member association.

"No one really knew how we would fare given the cloud over the economy," said association president Steve Wright. "The fact that we had a record year in terms of both income and attendance is great news for us and could be a good indicator for other regional trade shows."

Wright suggested that the uncertainty over air travel meant people were looking for product
Research
Continued from previous page

president of research Jim O'Hara. “We need to quickly convert these potential customers into best customers.”

ALTERNATIVE FACILITIES

Research also identified that 62 percent of golfers leave the game because of time constraints. Since alternative facilities (par-3 courses, driving ranges, executive courses, and pitch and putt courses) take less time to play, another significant research effort examined the role of alternative facilities in bringing in new golfers and re-
taining existing ones.

Research conducted by Sportometrics found that there are 5,542 alternative facilities in the United States and identified the best practices that make the facilities successful. The firm also found that alternative facilities complement traditional facilities: golfers pay and play more at alternative facilities when they are in communities with a larger number of traditional facilities; and golfers pay and play more at traditional facilities when they are in communities with a large number of alternative facilities.

The 6.6 million golfers that play exclusively at driving ranges and alternative facilities represent an immediate pool of potential golfers for traditional facilities. According to O’Hara, most of those users play exclusively at alternative facilities because they are less expensive and less time consuming.

Golf 20/20 is developing industry initiatives to support alternative facilities and operators to integrate their efforts with traditional courses.

Carolinas
Continued from previous page

and professional information closer to home.

Close to 190 companies from nearly 30 states exhibited at the trade show, down marginally from 2000. Attendance figures were up, however, boosting overall revenues by more than two percent. According to communications director Trent Bouts, more than 2,000 attendees attended the show and educational sessions at the 100,000-square-foot Myrtle Beach Convention Center.

“We received good feedback from exhibitors,” said Bouts. “The show gives them a chance to do what they needed to do and they reported that the traffic and interest was strong.”

Also at the show, the Carolinas GCSA recognized Palmer Maples Jr., CGCS, with its 2001 Distinguished Service Award. The award is the latest in a long line for Maples, who is credited as one of the first to introduce bentgrass greens in the South at Charlotte Country Club (N.C.), more than 40 years ago. In recent years he has also been recognized by the Golf Course Superintendents Association of America, the United States Golf Association’s Green Section and the Georgia Golf Hall of Fame. He is a former president of the GCSAA and the Carolinas GCSA and was a director of the Georgia Golf Course Superintendent Association.

— Andrew Overbeck

THERE’S ONLY ONE THING TO SAY ABOUT HERBICIDES THAT STAIN. AND
Radisson Cable Beach Resort faces renovation challenges

By JOEL JOYNER
NASSAU, Bahamas — After a $15 million renovation, the Radisson Cable Beach resort is sporting a fresh, modern new look. The project includes a new 25,000-square-foot pool with bar, plantings on the grounds, six renovated and re-themed restaurants, a new hotel lobby and guest rooms, and a complete redesign of Nassau’s first and oldest course.

The original 18-hole layout was designed and built by Emmet Devereaux in 1928. The layout is being redesigned by architect and course operator Fred Settle, Jr., president of International Golf Design in Clermont, Fla.

“The owners wanted a good resort course that could be enjoyed by all who play the game,” said Settle. “The newly designed course will feature spacious fairways guarded by a beautiful network of lakes. The greens will be protected by a series of multiple mounds to create containment. This will actually assist a golfer who occasionally strikes a stray shot.

“The course will have a minimum of sand bunkers but will have a number of grass depressions to create undulation and to properly drain the course from the occasional tropical showers,” he continued. Renovation work on the front nine was complete until Hurricane Michelle struck The Bahamas in early November. Play on the course was scheduled to switch to the front nine on Christmas Day, and planned on starting the work on the second nine in January, said Settle. “After the storm, it’s probably going to be February or March before the new nine opens. We should have the entire course renovated and open by September or October of this year.”

One of the major costs for the project included eight-foot concrete cart paths around the tees and greens, according to Bill Endebrock, president of Endebrock-White Co. in West Palm Beach, Fla. “Concrete is expensive in The Bahamas, $117 per cubic yard,” he said. “In Florida, it’s $48 per cubic yard. It’s one of the biggest items on the golf course project.”

The par-72 golf course will measure approximately 6,500 yards from the back tees and 5,600 yards from the resort tees. The greens will be large and receptive with a minimum of undulation. The turfgrass will be Salam Paspalum which can withstand the salty sea breezes and tropical climate year round.

Let’s talk about something a lot more positive. Dimension specialty herbicide never stains and always delivers long-lasting prevention of crabgrass, Poa annua and several broadleaf weeds, including spurge and oxalis. Want even more proof of its unbeatable performance? Dimension even provides early post-emergent crabgrass control. Who else has the new technology to do all that?

Initiation fee insurance unveiled

ST. LOUIS, Mo. — Owners & Members National Insurance Services has unveiled new insurance coverage that enables club members to recover a portion of the initiation fee paid for their membership if they resign and move out of the area. The coverage, called initiation fee insurance, is underwritten by the Chubb Group of Insurance Companies.

“This insurance is designed to overcome a commonly-heard objection to buying club memberships — that a member may have to resign and lose the initiation fee due to a job transfer,” said Fonda Hereford of Owners & Members. “Under this program, if the member has to resign because of a need to relocate their principal residence more than 150 miles, the insurance allows the member to recover all or a portion of the initiation fee.”

The company said the program is aimed at helping clubs that have a significant amount of corporately mobile members increase sales and value by overcoming the objection to initiation fees.

Owners, developers or management companies of private clubs purchase the insurance. The policy may be issued for a period of up to nine years, including a one-year deductible period for new members and a two-year deductible period for existing members. Reimbursement will vary by policy and the club owner offers the refund to its departing members.

Let’s talk about something a lot more positive. Dimension specialty herbicide never stains and always delivers long-lasting prevention of erabgrass, Poa annua and several broadleaf weeds, including spurge and oxalis. Want even more proof of its unbeatable performance? Dimension even provides early post-emergent crabgrass control. Who else has the new technology to do all that?
20/20 conference was staggering. No matter the question, there seemed to be a number or figure to answer it. Want to know how many people there are in New Mexico? Consider it done. Need the number of potential "best" customers that are interested in golf? No problem.

All of this is in the interest of growing the game of golf. As we covered on our news pages this month, the goal is to have 55 million participants playing 1 billion rounds by 2020.

How does all of this quantifying and segmenting add up to more golfers and more rounds some 18 years into the future? That question is tougher to answer.

The idea is that the research will help the industry direct its marketing efforts by enabling golf courses and player development programs to better target both the potential and existing golfing population. The demographic figures will help the National Golf Course Owners Association and the PGA of America decide where to start Link Up 2 Golf program sites. The segmenting of the golf population into the "best" potential golfers will assist courses and companies in marketing their services. Ongoing research on "alternative" facilities is expected to drive traffic to "traditional" facilities. The initiatives being driven by this research, however, are long-term projects.

What can be done right now to increase traffic on golf courses?

IMPLEMENT NEW IDEAS FOR FASTER RESULTS

By far the most interesting (and entertaining) session at the conference was moderated by David Brannon, the retired chairman of Dunlop Slazenger Corp. Entitled "New Ideas," Brannon peppered the audience with ideas that could help add players to the game immediately.

The primary barrier to the game, said Brannon, is cost and time. He outlined several audacious ideas that could offer instant results. Brannon pointed out that there are 409 million airline tickets and 86 million professional sports tickets sold each year. Additionally, there are 47 million Americans that belong to associations like the PGA and the Red Cross. Offering discounts on golf to these ticket stub holders and frequency discounts to members of associations could drive traffic to golf courses.

According to Brannon, courses could solve the time factor by being more flexible in tee times and pricing. Courses could offer a "quick 6" for a third of the price, or allow golfers to pay just for the holes they play.

INCREASE THE COMFORT ZONE

Other barriers to the game include the comfort levels of beginning golfers and the stigma of golf as a high society game. To solve these problems, Brannon suggested giving free lessons, allowing players to "sample" a brand new course for free, and having special tee times for beginners. Even more creative was his idea to have two holes on every green, one big one for beginners in the middle of each green and one regulation-sized cup elsewhere. Other ideas included improving community involvement and visibility by having "town days" at a course or hosting 4th of July fireworks.

Sure, many of these ideas are not new. But discussing ideas, thoughts and initiatives will encourage the industry to think outside the box. Go ahead and try something new this year. Heck, step way outside the box and place personal ads. And when you find something that works, share it with the industry because everyone benefits from new ideas.

As Brannon said, "Don't wait until 2020, strike while the iron is hot!"

Surviving tough economic times requires creativity

In challenging economic times, golf course builders, architects and superintendents must take an active role in meeting business challenges. There is a domino effect in the golfing industry just like in the U.S. economy. If the restaurant at a golf course experiences a bad year in 2001, a course maintenance budget in 2002 might face cutbacks.

If a developer's finances start drying up, the new golf course down the street may not get off the ground this year, or the next.

As the soft market works to sort out supply and demand issues, the U.S. economy remains slightly unstable. Businesses are tightening their belts, and many of those with money to invest in the U.S. economy remain slightly unstable. Businesses are tightening their belts, and many of those with money to invest in the U.S. economy remain slightly unstable.

The market, however, is not oversaturated with new construction based on the economy and on the fact that a number of new courses built throughout the 1990s came to a head," said Mark Hoban, superintendent at The Standard Club in Duluth, Ga. At Hoban's club, used electric golf cars are converted into utility vehicles, saving the facility thousands of dollars and allowing for a more efficient operation.

At the Palo Duro Creek Golf Course in Nogales, Ariz., superintendent Sam Orozco took matters into his own hands when financing went dry during the renovation of his maintenance facility. Not only did Orozco save his money-strapped club thousands of dollars by completing construction work in-house, but he was able to build the morale of his employees.

"The way I see it is, if there's a need, I try to meet that need," said Orozco.
COMMENTARY

PIERSOL'S PERSPECTIVES: Internships key to producing industry-ready turf professionals

By John R. Piersol

Most successful turf programs have mandatory internships as an integral part of the curriculum. Producing an industry-ready turf professional requires the student to have practical experience along with the science and technical education. Providing practical experience at golf courses under a seasoned superintendent is good for everyone involved: the student, the golf course superintendent, the participating school, and the golf industry.

The student benefits from learning the tools, techniques, and management practices needed to successfully maintain a golf course. The superintendent benefits from having part-time workers who are seriously interested in the job, and who have an added incentive to perform since most interns receive a grade for their work experience and use internships as job references. The participating schools benefit from these off campus "labs" and from the expertise of practicing superintendents who are like adjunct faculty members. The real world training of the internship helps to feed the golf industry with competent technicians, assistant superintendents, and eventually superintendents.

ATTRACTING INTERNS

Many golf course superintendents look forward to hiring interns from turf programs. The competition for students can be stiff, as there are usually more sites than students. This is a great situation for the students, but superintendents cannot always be assured of interns. So what can a superintendent do to attract interns? The following are a few suggestions:

• Provide a meaningful work experience. Talk with each student to find out his/her strengths and weaknesses and provide appropriate experiences.
• Watch and counsel the students. Positive feedback and helpful critiques are important. Weekly meetings can help.
• Take interns to local superintendent meetings and have them observe at greens committee meetings. These can be eye-opening experiences.
• Providing housing or a housing allowance.
• Provide a competitive wage, as it's customary for golf course interns to be paid.

FINDING INTERNS

Aside from contacting community colleges and universities that have turf related programs, superintendents should also consider working with high schools and vocational-technical centers. It is true that the high school students will be younger, less experienced and less educated than the college student. But there are many jobs that a novice high school student can do, and it is a great way for the superintendent to recruit a student into turf management. Most high school students are unaware of careers in the golf industry, especially in regard to turf equipment and irrigation. This is the main reason there is such an extreme shortage of these specialized technicians. Getting a high school student "hooked" on a golf related career through part-time work can be an excellent recruiting tool.

John R. Piersol, M.S., is the chair of the Division of Golf/Landscape/Forestry at Lake City Community College, in Lake City, Fla.

WE CAN'T MAKE YOUR GOLFERS PLAY BETTER, BUT WE CAN MAKE THEIR DIVOTS GREENER.

We've been playing the green grass game for a long time. And now we've got it down to a system that makes your grass even greener. Introducing Flowtronex Integrated Water Management: The IWM System handles all your golf course water quality and distribution needs by linking fertigation, pH control and filtration components to the highest quality, pre-assembled pump station in the industry. To find out more about how to make your grass greener and your life easier, call 1-800-786-7480 or visit www.flowtronex.com.

FLOWTRONEX™

No One Makes Your Life Easier. No One.

GCSAA BOOTH # 3135

In the article titled "Public golf boom continues despite construction slow down" (GCN, December 2001) the city that invested $8.1 million to renovate the 18-hole Monarch Bay golf facility was incorrectly identified. The work was funded by City of San Leandro, not the City of Alameda.

GOLF COURSE NEWS
Unfortunately, iron-rich Milorganite only improves the look of turfgrass.

Golfers haven’t always been known for their fashion sense. But when it comes to golf courses, they have impeccable taste. Milorganite is rich in iron that is released naturally, giving your turfgrass a steady diet of usable iron nutrients over time. The result is a look that never goes out of style: a rich, plush green that golfers of all tastes prefer. For complete details, visit us at milorganite.com or call us at 1-800-287-9645.
**Superintendents innovate to save time and money on course**

**By JOEL JOYNER**

DULUTH, Ga. — Faced with smaller budgets and staffs and managing increased workloads with fewer resources, golf course superintendents are turning to innovative ideas to survive economic fallout. Superintendents Mark Hoban and Sam Orozco know that saving time and money in a golf course maintenance program helps to create a more efficient operation and could potentially save jobs.

**HOBAN MODIFIES GOLF CARS**

At the Standard Club in Duluth, Ga., Hoban has modified used electric golf cars into utility vehicles.

“We have electric golf cars that we’ve converted to utility vehicles,” he said. “We build a deck on the back of them so that all our greens supervisors are easily loaded on and off. We can get a fleet of six used electric cars and convert them for the price of one new utility vehicle.”

The club trades in golf cars every three years, then Hoban buys the used cars back for $1,500 to $1,700 and converts them versus buying a new gas powered utility vehicle for $8,000 to $12,000. Hoban keeps the converted golf cars for three years before he trades them in for another set of used cars.

“I’ve found that golf cars will last for six to seven years before any major maintenance repairs are required,” explained Hoban. “After that time you begin running into problems like worn out bearings. So we trade them out before any real maintenance problems develop.”

**EFFICIENT OPERATION**

The electric cars are able to handle the load and help to make a more efficient operation. “The cars are already loaded with the mowers each morning and the crew is on the course within minutes. It’s easier than finding a utility vehicle, getting a trailer to hook up to, and arguing about who has what,” said Hoban.

“The cars are only stopping at four or five greens at a time so there isn’t any wear and tear before they are headed back to the shop and recharged for the next day, according to Hoban. “It’s a big savings with small benefits included,” he said. “There’s a windshield so that the operator doesn’t get a cold wind in the face during the winter and a place for coffee. We really load the cars up.”

“There’s a place for a whipping pole and backpack blower,” he continued. “There’s a map for which greens an operator is supposed to do. Each car is assigned so that the same mower goes to the same holes everyday. So there’s a problem with the equipment, we know which operator was on-hand running it on a given day.”

Hoban has reduced his fleet to 17 vehicles, including the six electric cars with mowers on them, as well as decreased maintenance required to keep the gas powered vehicles operating. “The constant stops and starts with the gas powered vehicles left us with several repair problems in the long run,” he explained.

Hoban learned of the idea when one of his assistants saw it done at the Athens (Ga.) Country Club. “We discussed it for a few years, then I sent my mechanic, Herb Zehm, to the club to check it out,” said Hoban. “We ended up using a modified version to meet our own needs.”

Orozco finishes facility

Superintendent Sam Orozco, at the Palo Duro Creek Golf Club in Nogales, Ariz., took on the role of general contractor after finances started drying up during construction. “There’s a place for a whipping pole and backpack blower, where the turf was amended with silica.”

**New construction and management techniques needed for approach areas**

**By KEVIN ROSS**

While greens, tees and bunkers receive the bulk of construction and maintenance dollars, green approach areas are beginning to become an equally important playing surface.

There is no debate that the most important area on a golf course is the green surface. During a round of golf, anywhere from $5 to 30 per person in strokes are played per golfer on the green surface.

When it comes to construction, greens are the most complex of areas to build behind tees and bunkers. In maintenance costs, tees are second only to greens in per unit area of expense. But should tees areas be considered that important?

While 18 shots during a round are played from tees, none of these shots land or react off those surfaces. You never hear golfers complaining, “I can’t get my tee shot over there.”

Tees are the only area of the golf course not receiving golfers off the back of the tee. “Apprentices and independent irrigation may become the standard.”

**APPROACHES AND PLAYABILITY**

Many architects, builders and superintendents are beginning to rank approach areas above tees. Why? Because the approach area is highly visible. "We preformed a bird inventory, considering native vegetation, exploring pest-free alternatives to promote vigorous, pest-free forms..."
AYRSHIRE, Scotland — “I like to keep it lean and mean rather than soft and green,” said golf course and estate manager George Brown of his maintenance practices here at the Westin Turnberry Resort.

While he admits that there are differences between what the golfing public has come to expect from the conditioning on a true links-style course and a modern layout, Brown insists that his cultural practices make for healthier turf.

“I don’t care if it goes a little brown here and there, it is especially nice to see it on a links course,” he said. “I like to see the greens firm up and get a wee bit firmer. And I think traditionalists like Tom Watson and Lee Trevino would go along with that.

“Now if superintendents elsewhere let their greens dry out or get a little bit undernourished, they would probably wind up losing their jobs. Everyone wants the ball to stop dead when it hits the green whether they are hitting a wedge or a one-iron,” Brown continued. “But you don’t get your true native grasses when you start putting on too many nutrients and too much water.”

Brown, who is on the Royal and Ancient advisory panel and has been at Turnberry for 16 years, points out that even in Britain native grasses are disappearing from the greens.

“On some greens you have more than 80 percent poa because of close mowing and over fertilizing and over watering,” he explained. “Water is becoming a premium and new projects are putting in USGA-spec greens that need lots of water. That’s crazy. When you over water and over fertilize that encourages the wrong grasses, encourages disease and leads to the use of more chemicals. All of this costs a fortune, pollutes soils and is very labor intensive. And you finish up with not a very good quality green.”

At Turnberry, Brown oversees the management of the famous Ailsa course that has hosted three British Opens, the newly opened Kintyre Course that was designed by Donald Steel, the new nine-hole Arran Academy Course, the golf academy and pitch and putt areas, and the resort’s gardens.

The courses all feature a mixture of brown-top bentgrass, fescues and other native turfgrasses. Brown does have about 15 percent poa in his greens, which he attributes to wet summers and dark, damp winters.

Brown has a double row irrigation system that is used “just to keep the turf alive”, and uses a fertilizer derived from chicken manure on the greens. The fairways only get fertilized once every two or three years. He also gets an occasional attack of fusarium on his greens which he has to treat with a fungicide. At the peak of the year-round playing season, his staff mows the greens once a day and the fairways twice a week.

Brown, who at 65 is starting to “wind down his career,” is assisted at Turnberry by three head greenskeepers: Martin Lothian, Jimmy Johnson and Tom Cuthill.

---

**Where can I find environmentally safe fertilizers?**

* I need a new mower.

**What are you looking for?**

* How do I control grubs?

* Who offers management services?

* I’m ready to overseed. Who sells ryegrass?

---

**Here’s where to find it.**

www.golfcourseresales.com

Online Buyer’s Guide

- Searchable
- Comprehensive
- Always up-to-date

*The only online reference in the industry!*
Biotech turf
Continued from page 1

a safe buffer zone.

APHIS REGULATIONS

The Animal and Plant Health Inspection Services (APHIS), a division of the U.S. Department of Agriculture, regulates and issues permitting required for researching transgenic turfgrasses. These field experiments, as well as the new varieties they will help to bring to the market, are at the core of the controversy.

APHIS has established Minimum Land, Isolation, Field and Seed Standards for distances in feet from any contaminating source during open pollinated testing. Categories for Foundation, Registered and Certified seed distances are listed for control zones. In cross-pollinated grasses, minimum isolation distances range from 900 feet (with exceptions) for Foundation, 300 feet for Registered, and 165 feet for Certified seed.

"There has been some discussion on whether or not those distances should be increased," said John Turner, biotechnologist here at APHIS. "The field tests only need our required distances if they are trying to produce seed or studying seed yield. Most of the time, as they are testing for agronomic performance, they'll be mowing the grasses so the plants won't be flowering.

"There's no zero risk with any distance when you have an axiomatic curve that approaches zero," continued Turner, "but it will give you a very low level of gene flow into other crops."

THE SCOTTS CO.

Transgenic turfgrass research at the Scotts Co., headquartered in Marysville, Ohio, is currently focused on developing a Roundup Ready creeping bentgrass with an introduced CP4 gene. There are three things that must be proved to show that a GMO product is safe and market ready, according to the company's chief scientist Dr. Bob Harriman.

"The application process has a high degree of oversight," he said. "First, we need to identify the species of plant. Does it have weedi- ness issues or is it a species that we understand the biology of and has served the environment and humankind very well for a long time?

"Second, is the gene introduced safe? Is it a toxin or allergen?" asked Harriman. "Will it create something that will have people or animals get sick? Finally, what does the combination look like? The gene and plant may be safe individually, but the combination may not be."

The Scotts Co. initiated their program back in 1995, and have been field testing the Roundup Ready turfgrass since 1998. Last year alone, the company had over 50 test sites in place for the CP4 gene in more than two dozen states.

"We've chosen to use separa-

BUSINESS CHALLENGES

With environmental safety measures in place, transgenic turfgrasses continue to gain acceptance in the industry, according to Wayne Hormon, director of sales and marketing at the Scotts Co. "It's a sensitive issue," he said. "I think the controversy is not so much the science behind it but the business behind it.

"The people that are yelling and screaming the loudest are the ones that don't have the technology," said Hormon, "but have the market share now of bentgrass. As far as a business plan, there's not one cast in stone right now. But our philosophy is that we'll probably broadly license this technology out."

Golf course superintendents often ask how Roundup Ready bentgrass will be eliminated, said Hormon. "One of the key questions asked, pertaining to controlling bentgrass, is 'Will I be able to remove this new variety?'" he said. "It's just one gene and one trait that's different."

"There are other products that can eliminate the plant. Finale would eliminate it, Vantage and Fusilade would eliminate it. I think that's the largest misconception in the marketplace today," said Hormon.

No release will occur until the product has been thoroughly

Continued on page 27
Super ideas
Continued from page 9

the renovation of his maintenance facility.

The Palo Duro Creek Golf Company signed a 100-year contract with the city of Nogales, located south of Tucson and just minutes from the Mexican border, to operate the facility. Three million dollars was invested by the company back in 1996 to add nine holes to create a full 18-hole layout, install a new irrigation system with pump house, and renovate the club-house and maintenance building.

During the renovation of the maintenance facility, the money ran out. "They had the basic maintenance structure put up with the office semi-finished and the chemical room finished, but the plans called for a lunchroom/conference center and restroom," said Orozco. "We finished the project in-house.

The entire facility is relatively small, less than 4,000 square feet, according to Orozco. "I put in my own time in the afternoons and on weekends with some of my crew and we finished the building in about two months," he said. "The company estimated about $7,000 to finish the building, we spent only about $1,900 total in materials." 'A REAL MORALE BOOSTER'

Orozco admits that the added workload wasn't so much for the company, but for the employees. "There are no real benefits, not even insurance, for my employees," he said. "The company basically only provides uniforms. As a superintendent, I had to find a way to help motivate my employees.

They now have a nice lunchroom. In the summer, it was almost unbearable trying to eat lunch outside with flies hovering around," said Orozco. "The employees had to eat on top of the machines or under a tree."

With the new restroom, the employees don't have to go out to the desert or under a tree somewhere, said Orozco. "There's only one restroom at the pro shop, and that's usually closed early in the morning when the employees arrive. Besides, they shouldn't have to go over to the pro shop or restaurant all the time. The whole project has been a real morale booster for the employees."

The lunchroom also is utilized as a conference room to help train employees. "We're currently in the process of trying to buy a television and VCR in order to show instructional videos," Orozco said. "We've been selling the pallets we have left from our ryegrass orders every year and placing the money into a bank account. We sell about 30 pallets each time, and we almost have enough to buy the television and VCR."

Orozco has a background in electrical and plumbing work, and the building has been inspected and passed all code requirements. The superintendent doesn't have an assistant, so his mechanic Al Quintero helped out acting as foreman for the project. They even tackled the job of finishing the renovation work on the pro shop and clubhouse.

"We have to make do with what we have," said Orozco. "It's a slow process, and our company doesn't provide a large budget. We have our hands full on the golf course already with just eight employees and my mechanic. But we're planning to build more.

"We've got more equipment than storage space at the moment," he explained. "I'm looking to build a storage area for our fertilizers next, as well as an area to wash our equipment. We want to eventually put in a filtration system and collect runoff water in order to recycle it." •

Maple Leaf GC
Continued from page 9

Maple Leaf GC was built in two phases. The first nine was constructed in 1976 and the second in 1980. Designed by Lane Marshall and Ward Northrup, the course is a par 62 that plays to 3,915 yards.

As many as seven IGM-main- tain courses have already received certification, and the more than 90 courses contracted with the maintenance outsourcing company are all enrolled in the ACSP.

MAINTENANCE

DIMENSION® AND BARRICADE® WITH PENDELMULUM,

Pendulum herbicide consistently controls crabgrass better than other preemergent herbicides. Why more can we say? How about Pendulum controls a broader spectrum of weeds than any other preemergent—more than 40 grassy and broadleaf weeds, such as oxalis and spurge, in all. It also controls costs, to offer you greater value. Plus, Pendulum comes in granular and liquid formulations, and BASF pendimethalin is available on fertilizer from Scotts and Helena, for maximum application flexibility. With Pendulum, there's just so much more to talk about than crabgrass.
TPI alternatives
Continued from page 9

successes in the field.

BENEFITS OF MINERAL SILICA
For years, rice and sugar-cane farmers have used water-soluble silica, a byproduct of phosphate fertilizer mining, to fight fungal disease and promote growth. Now its effects are also being studied on turfgrass, with funding from the International Turf Producers Foundation (ITPF).

Paul Grose, general manager of King Ranch Inc. in Belle Glade, Fla., has participated in the University of Florida's ITPF-supported silica/turfgrass trial studies for the past year and a half. While it's still too early to report definitive results, Grose said he has seen improvement in root system density.

"We used silica on our sugarcane for many years and had dramatic results," said Grose. "So when the University of Florida approached us about trying it with our turfgrass, we were interested."

According to Lawrence Datnoff, Ph.D., the University of Florida plant pathology professor who oversees the study, most soils contain considerable quantities of silica. However, over-planting can reduce the levels that are naturally available to plants. Datnoff has found that spraying turfgrass with soluble silica reduces incidents of Pyricularia grisea, or gray leaf spot. Other research has found it to be effective against pythium blight, dollar spot, brown patch disease and powdery mildew.

MINERAL, HERBAL AND LIVE BIOLOGICAL TREATMENTS
In addition to the silica studies, researchers are testing the effectiveness of sulfur, manganese, iron and other mineral products against pests and disease. Scientists also are studying the health benefits to turfgrass of herbal remedies such as salicylic acid and the bacteria Xanthomonas.

Live biological remedies like the bacteria pseudomonas have been used to suppress a variety of turfgrass diseases. And beneficial nematodes (microscopic worms of the phylum Nematoda) are being used to parasitically control insect pests, such as grubs, mole crickets and caterpillars.

TIMING IS CRUCIAL
For the past three years, Myron Kuenzi of Kuenzi Turf & Nursery of Salem, Ore., has used a yeast starter containing the beneficial fungus Trichoderma to combat the fungal disease helminthosporium. Kuenzi says he has experienced "modest" success by spraying it on turf in the early stages of growth.

"The timing of the application is exceedingly important," he said. "You need to be aware of the life cycle that you're working with. If it's too early or too late, there's no benefit."

Most researchers and producers familiar with alternative treatments agree that timing is crucial, and that these products work best if applied preventively. And as is the case with traditional pesticides, these alternative remedies should never take the place of good maintenance practices.

"I always tell my customers, that's the most important part of disease management," Grose said. "Sod producers are doing all they can to deliver the healthiest product possible, but after the grass is installed, the customer can avoid most fungal problems by maintaining turf properly."

Douglas H. Fender is executive director of Turfgrass Producers International, a not-for-profit association of turfgrass sod and seed producers, equipment manufacturers and suppliers, and various individuals involved in education and research.

To learn more about why everyone’s talking about Pendulum, call 1-800-545-9525 or visit www.turffacts.com.

Always read and follow label directions.

We Don't Make The Turf. We Make It Better.

GCSAA BOOTH # 1611

BASF
Pinehills GC opens Rees Jones course, Nicklaus design to follow

By JOEL JOYNER

PLYMOUTH, Mass. — New England's latest golf course facility, Pinehills Golf Club here in historic Plymouth, opened its 18-hole Rees Jones layout last Memorial Day weekend and has exceeded its projected golf rounds for the year. The upscale, daily-fee club is hoping to follow up on that success this year with a new Nicklaus Design course, drawn up by Jack Nicklaus II, scheduled to open this May.

In its first five weeks of operation, the Jones course averaged 200 players a day. "The course has been well received," said head pro, John Tuffen. "We're looking forward to opening the Nicklaus course next year. Construction is complete, and they finished seeding Aug. 1. It was playable last fall, but we're waiting until this year to open it up to the public."

THE JONES COURSE

The entire development, with the surrounding community developed by The Green Companies, consist of approximately 3,000 acres with 350 acres set aside for golf. Jones had a large piece of property that provided several options. "The soil is really sandy, high-and-dry, and we were able to utilize a lot of the ridges," Jones said. "The biggest challenge for me was to maximize the terrain."

All the tees on the Jones course are rectilinear. The eighth hole is pictured above.

The bunkers resemble the old-style A.W. Tillinghast or Alister MacKenzie bunkering. "They're real sculptured, fairly dramatic, and they're one of the major characteristics of the golf course. Several of the fairway bunkers are located as protective bunkers," said the architect.

There are bunkers located on every hole, and many of the fairways are routed along the ridges. "Most of the bunkers are below the fairways or below the targets and actually help keep the ball in play on missed shots," Jones explained. "They're not just sticking out of the ground. They're more recessed and cut into the lower terrain."

Four sets of tees allow play from 5,388 yards to 7,175 yards. "Basically, we design all our courses over 7,000 yards and add multiple tees," said Jones. "A course of 7,000 yards is no longer a long course anymore with the shafts now available, the metal head drivers, the Pro V1 and Nike golf balls. The course is long, but there's opportunity for all caliber players to find a comfortable challenge."

Grass hollows and pockets, cuts that hold a shot in, sculptured bunkers and rumps into greens give the design character. "It's not a spartan golf course," said Jones. "It's also a course you really need to think yourself around and determine what kind of shot you want to hit or are capable of hitting. It makes the game more enjoyable when a player needs to develop and apply strategy."

Continued on page 16

Matthai unveils second in Md. at Patriot's Glen

By JOHN TORSIELLO

ELKTON, Md. — Jeff Matthai and Morris and Ritchie Associates, Inc. have addressed the need here for a mid-level public golf course with the opening of The Club at Patriot's Glen.

"What we wanted to do with Patriot's Glen was fill a niche," said Matthai, who is a project manager for Morris and Ritchie Associates, Inc. of Abington, Md. The company’s golf division has served as project engineers for several acclaimed courses, including Bulle Rock Golf Course in Havre de Grace, Md., and Beach Tree Golf Course in Aberdeen, Md.

"There have been a lot of upscale, daily-fee courses built in the area [between Baltimore and Philadelphia] with greens in the $85 to $140 range. There are a number of existing municipal courses in the $20 to $30 range. Patriot's Glen is in the $45 to $55 range. We feel that the course is a bargain for a truly fine public layout," said Matthai.

This is Matthai’s second solo design. His first course, Mountain Ranch Golf Course in Joppa, opened last year. Trent Wright, general manager/director of golf at Patriot’s Glen, said the reception for the new course has

Continued on page 16

Silver Creek membership puts renovation on fast track

By DOUG SAUNDERS

SAN JOSE, Calif. — Architect Mike Strantz has started work on the renovation of Silver Creek Country Club despite the sagging economy that has crippled the nearby Silicon Valley region. The commencement of work on the nine-year-old layout is the culmination of a fast-paced approval process where a committed membership took control to make things happen.

Silver Creek Country Club is a Ted Robinson-designed course built on a hilly site in South San Jose as an anchor to a housing development created by Shea Homes. Club membership was limited to property owners in the gated community and the course proved popular, drawing more than 300 members. As is the case with many real estate driven properties, the best real estate went for the housing first and Robinson had to work with some awkward topography for the course.

Over the years the membership lodged many opinions of how the course could be better. With the final phase of development completed, Shea Homes offered the club membership the opportunity to take over club operations last
Faldo Design storming the globe

By ANDREW OVERBECK

PHOENIX, Ariz. — Another course in professional golfer Nick Faldo's growing international portfolio will open here this month at Marriott's Desert Ridge Resort and Spa. The Faldo Course at Wildfire Golf Club will join an existing Arnold Palmer layout bringing the facility's hole total to 36.

Faldo Design's first course in the United States, Shadow Ridge Golf Club in Palm Desert, Calif., opened in February 2001. Faldo, however, has been involved with numerous golf course developments across Europe and Asia in the last several years.

"In the last five years or so, as his golf career winds down, he has determined that design will be his next career," said Nick Edmund, Faldo Design's director of development. "Our intention is not to build a lot of courses, but to build a worldwide portfolio."

WILDFIRE GOLF CLUB

At Desert Ridge, Faldo worked with architect Brian Curley to design a course that would complement the desert-style Palmer layout.

"The Palmer course is a true desert golf course," said director of golf Kevin Stockford. "The Faldo course has a more manicured look in the transitions. The bunkers are more distinctive with high flashing lips of turf and sand. They look pretty ferocious."

The course will open this month, but a grand opening for the facility that will include a 1,000-room hotel and convention center will not be held until November.

ELSEWHERE IN NORTH AMERICA...

In addition to work in California, Faldo Design is involved with another multi-course project in Connecticut. The project, Phelps Brook Golf Club, is being developed by National Fairways and will include a Tom Fazio layout. While the Fazio course will begin construction in spring, Edmund said the Faldo track that was designed along with Philadelphia-based architect Gil Hanse has been put on hold.

The firm is also working with Brian Curley in Mexico at Cabo San Quintin, 200 miles south of San Diego on the west coast of Baja. The course will open this month at the operator's fingertips. For a better look at the 2500, call your local John Deere distributor or 1-800-537-8233.

The 16th hole at Wildfire Golf Club from the 2008 Olympic Village along the fourth ring road in Beijing. Rough shaping is currently underway and is being supervised by lead architect Brit Stenson. The course should be open for play in 2003.

While this may seem like a lot of projects, Edmund contends that the firm wants to focus on quality not quantity. "In three to four years we will have courses in six or seven countries and we want them to be the best if not one of the very best in each of those countries."

GOLF COURSE NEWS

No machine maintains greens better than the John Deere 2500 Tri-Plex Greens Mower. After years of extensive testing feedback from literally thousands of superintendents worldwide, the 2500 has been engineered to give an exceptional quality of cut, the utmost in operator comfort, and the highest level of serviceability. Cut is king on the 2500. The cutting unit suspension carries the weight of the lift arms and grass catchers on the traction unit instead of the cutting unit. The 2500 also has the lowest psi of any tri-plex greens mower. And all controls are conveniently located at the operator's fingertips. For a better look at the 2500, call your local John Deere distributor or 1-800-537-8233.
Patriot’s Glen
Continued from page 14
been beyond expectations.
"We had around 3,500 plays in the first month," he said. "Of course, the weather has been cooperative this fall, but we have had almost three times the rounds we thought we would from the start.”
Matthai said Patriot’s Glen, so named because of the area’s rich Revolutionary War history, was carved out of mature woodlands, giving it the feel of an established course.
The par-72 layout was built by Chicago-based Wadsworth Golf Construction Co., and plays around 6,700 yards from the tips. "The course rolls through stands of hardwood trees, which makes for a traditional feel. There will ultimately be 400 single family housing units on the site, but the property line setbacks are such that the course stands by itself," said Matthai.
While the term "playable" has become cliche, it does apply to Patriot’s Glen. Matthai said he likes giving players of various skill levels multiple choices off the tee box.
"For me, the thing that makes a good hole is having 10 people play it 10 different ways," he said. For example, the third hole at Patriot’s Glen is loaded with choices. The dogleg left par 4 plays only 315 yards and big hitters can consider reaching the green by chewing off the left side, which is lined with bunkers. A conservative play calls for an iron off the tee that will leave the player a wedge into an angled green guarded by a bunker on the right side.
The par 5s are on the modest side and reachable in two for long hitters. The 18th is a classic, shortish hole (515 yards) that has water running up almost the entire right side. A good tee shot will allow the player to go for the green in two, but it’s almost a full carry across water.
Matthai said the actual course construction posed few challenges with very little excavation and shaping needed. It was built in two years.
"The biggest challenge was the soil. It’s a clay base and we had to put in some soil amendments," he said.
The course has a single row irrigation system running down the middle of its fairways, which are a new three-way blend of Kentucky bluegrass. The greens are bentgrass.
"The new bluegrass doesn’t seem to have the problems associated with ryegrass. You don't need to water it as much and you get a good lie off it," said Matthai.

Pinehills
Continued from page 14
TWO DIFFERENT GOLF COURSES
The goal at Pinehills was to have two different golf course layouts. "On the Jones course, the fairways are perched having a push-up type of look," said Larry Boudreau, project manager for the Greenwich, Conn.-based developer and owner Centennial Golf Properties.
"The greens on the Jones course averaged around 6,500 square feet," he continued. "They have slope, but it's generally mild ranging from one to maybe two-and-a-half percent. They don't have a lot of heavy undulation to them, but there are subtle features. The Nicklaus greens are smaller but have a lot of contour.”
The different approaches to bunkering also was noticeable. "We used 135,000 square feet of bunkers on the Jones course and about 95,000 square feet on the Nicklaus course," said Boudreau. "There are more bunkers on the Nicklaus layout, but they're smaller.”
Another distinction between the two courses involves the tees. "The tees on the Jones course are more traditional rectilinear. On the Nicklaus layout they are free form," Boudreau said. "So as soon as you get to the tee box you already know that you're on a different golf course.”
Silver Creek
Continued from page 14
winter and the membership leapt at the chance.

"We conducted several surveys during last summer to determine what the membership wanted to do about ownership and what things they would like to see happen to the golf course. By having a good sense of what members wanted we were able to move very quickly when the opportunity came," explained general manager Bob Lee.

STRANTZ ON THE SCENE
The members made it clear from the start that they wanted to see their golf course brought up to a higher level in order to be more competitive with other private clubs in the region. Several prominent course designers, including the original architect Robinson, were contacted. However, the club went with Strantz who in recent years has earned a strong reputation on the East Coast for his artistic designs such as Tobacco Road in North Carolina and Stone House Country Club and Royal New Kent in Virginia.

"I have wanted to branch out to the West Coast and the timing of the renovation at Silver Creek fit our schedule. Also, as funding for new projects is becoming tighter and good properties are harder to find, I think that renovation of existing clubs and golf courses is a facet of the design market that is going to grow," Strantz said.

As the renovation field grows, Strantz feels that it is important to be sensitive to other designers as he looks at more redesign work.

"For myself, I would not want to do any rework on a course where the original designer hasn't been contacted first. I think that is only fair," Strantz said.

The $2.5 million renovation will include improvements to the irrigation system, making significant improvements to the strategic placement of bunkers and improved bunker construction, and the redesign of four holes.

"The clubhouse sits up on a hill and the first and tenth holes play right off it. We are going to lengthen these two holes by adding new tees and repositioning the bunkers. Most of the bunkers around green sites really don't come into play, so we are setting up the bunkers to add more challenge and appeal to the course," Strantz explained.

One golf hole, the par-5 16th, plays on the edge of a slope where Strantz proposes to move 30,000 yards of dirt to create a more playable hole. All of the bunkers will also be rebuilt in order to give more consistency to the entire course.

RENOVATION FAST TRACK
Working with a motivated membership and seeking outside knowledge was key to putting the renovation process on the fast track, said Lee.

"The membership was very supportive of bringing the course up to a higher level. Having a very motivated membership also helped to make this project come together so quickly," he said.

In addition, Lee and golf course superintendent Nick Checklenis attended a Remodeling University seminar presented by the American Society of Golf Course Architects that helped in the planning of their upcoming project. Strantz also made several presentations to the club members in May in order to get feedback and settle any concerns. This attention to pre-planning was crucial in order to secure member approval.

"We had our master plan together in the late summer and our membership voted for approval just after the Sept. 11 tragedy. Even through that cloud, 73 percent of the members voted to proceed. The members voted to pay capital dues beginning in 2003 to finance the project," Lee explained.

Plans are to keep the course open for play during the renovation process with all work scheduled to be completed by next summer.

"Having a very motivated membership helped this project come together quickly."

— Bob Lee

MAKE IT BETTER.

Basamid® Image® Drive® Pendulum®

When choosing a professional partner, you should demand a commitment to success equal to your own—the kind of commitment you get from BASF. While other companies were bailing out on the turf industry to chase profits in pharmaceuticals, BASF was actually divesting its pharmaceutical holdings to free up resources to serve you better. That means billions in R&D to add innovative new products to our already top-performing portfolio. It means unsurpassed customer service and a long-term commitment to the future of the turf industry. Most of all, it means working side by side with you to make it better.

We don't make the turf. We make it better.

BASF

GCSAA BOOTH # 1611
BY JOEL JOYNER

KANSAS CITY, Kan. — Golf course architect Craig Schreiner built the reputation of his design firm on renovation projects. Although his company tackled three new golf course construction projects last year, Schreiner’s renovation work remains in demand.

New golf course construction is considered by many architects to be more lucrative and, in some cases, more rewarding than renovation work, according to Schreiner. However, renovation projects can prove to be more challenging.

“Solving problems via drainage or course inadequacies, getting a course to take down trees or rebuilding greens to withstand more traffic can be intensely challenging,” Schreiner said.

“Upgrading a golf course is not a no easy feat. There can be a fine line between success and failure.”

“Management and communication skills need to be heightened because you’re dealing with a course superintendent who needs to maintain the course, members who want to continue playing, permitting requirements, course builders, and a number of different people that have to be pleased and often place your work under a microscope,” said Schreiner.

Schreiner’s firm, headquartered here, has met these challenges at its three latest renovation projects.

NORTHLAND COUNTRY CLUB

Schreiner’s renovation of the Donald Ross-designed Northland CC in Duluth, Minn., is nearing completion with improvements made over the last three years expected to return the course to its original grandeur.

“A diverse membership profile and the evolution of golf equipment technology required that we update the course to accommodate today’s member,” said Joe O’Connor, Northland’s director of golf operations.

Schreiner’s master plan on the project outlined a number of changes to update the 6,825-yard, par-71 layout such as integrating multiple trees to balance par for all players. Fairway bunkers were repositioned to define landing areas, greenside bunkers were restored to proper depth and drainage was added throughout the course. The Bruce Company of Wisconsin is completing the third phase of the renovation work.

“Probably one of the few areas of the course that was left untouched is the greens,” said Todd Clark, Schreiner’s senior design associate. “Ross designed exceptional green complexes here, and we worked hard to respect the nuances.”

The work at Northland is fairly typical of how the firm approaches renovation projects, said Schreiner. “It allows members to continue playing the course and that’s a big issue with both private and public courses. They still need to generate revenue, especially in the North where there’s such a short playing season.”

PITTSBURGH FIELD CLUB

Originally designed by Scotsman Alex Findley, renovation at the Pittsburgh Field Club also is nearing completion. With roots dating back to 1871, the club is one of the most esteemed private clubs in the Pittsburgh area.

Schreiner worked closely with Frontier Construction of Jones Mills, Pa., to renovate nearly 100 bunkers, reconstruct the 16th and 18th holes and the green on the fifth hole, contour the fairways, re-grass primary roughs and install a new irrigation system. “The bunkers had lost their shape over time and they were extremely contaminated,” said Mike Zedrick, superintendent.

Course improvements, originally outlined in 1998, also included a new practice range, tree planting and removal and multiple teeing grounds.

“Master plans are an important aspect to renovation work,” said Schreiner. “There are just too many opportunities that are missed if an architect doesn’t really conceive all changes in relation to the entire golf course.”

“A golf course is a dynamic, living, growing, changing biomass. It changes everyday,” he continued. “Like bunkering, strategic bunker placement has been overlooked much too often.”

Duinink Brothers, Inc., of Prinsburg, Minn., completed the work in two phases with minimal disruption to play, said Schreiner.

OAK RIDGE COUNTRY CLUB

The architect also has completed a bunker renovation project at the Oak Ridge CC in Hopkins, Minn. Fifty-seven sand bunkers have been renovated, fairways recontoured and several drainage problems resolved at the club located west of Minneapolis.

“Master plans are an important aspect to renovation work,” said Schreiner. “There are just too many opportunities that are missed if an architect doesn’t really conceive all changes in relation to the entire golf course.”

“As a builder, I see it continuing,” he said. “Most of our projects this year will involve renovation work because of the permitting process required and limited finances available for new 18-hole construction.”

The company primarily focuses on private owners with upscale public facilities. Crouch has noticed an increase in competition on renovation bids. “I’d say there’s an average of five to 10 builders bidding for most projects right now,” he said.

PRIVATE LAYOUTS

Golf course architect Rees Jones, in Montclair, N.J., has noticed a trend by courses to upgrade their layouts. “Many courses also are looking for master plan work to be done,” he said.

“With most courses, Especially private clubs, successfully restoring and upgrading their courses that developers want to keep up with the competition. Renovation work certainly has become more popular,” Jones points to the fact that there also is more money available from the game of golf now than in times past. “Courses are beginning to look at building bunkers and greens properly, adding length for the improved implements of the game and increasing strategy for players,” he said. “Some of the older courses may not have had the finances available when their courses were first constructed.”

Many older courses may be interested in restoring their layouts to their original look as well, said Jones. “Like we did at the Brookline Golf Club,” he said. “We pushed the bunkers out for the pros, but at the same token we restored the greens back to the old style.”

Renovation projects will make up the majority of the work for Clyde Johnston, a golf course architect based in Hilton Head Island, S.C., this year.

“Overall, we’re probably looking at doing more renovation work than we are new construction projects given what’s out there and available, at least at my level of the business,” said Johnston.

The renovation work will likely include both minor and major renovation work, according to Johnston. “We have 43 golf courses in my immediate area,” he said. “So it’s fairly easy for me to do small work around here.”

Johnston completed a major renovation project, $2.6 million, at the Sea Pines Country Club on the Sea Pines Plantation at Hilton Head Island last year and started a $2.5 million renovation project at the Pine Lakes Golf Club on Jekyll Island that carried over to this year. “Renovation work will be the largest part of my workload this year,” said Johnston, “and probably next year as well.”
St. Augustine golf courses gear up for GCSAA championship

BY JOEL JOYNER
ST. AUGUSTINE, Fla. — The Golf Course Superintendents Association of America will hold its 52nd championship event here as 720 superintendents from around the world compete at six area golf courses. Sponsored by the Toro Co., for the eighth consecutive year, the championship will lead off the GCSAA annual conference and trade show in Orlando, Feb. 3-10.

Following practice rounds, the individual championship and four-ball championship will take place Feb. 4-5. The six courses scheduled to host the event are: The Slammer & The Squire at World Golf Village; The King and The Bear at World Golf Village; Matanzas Woods Golf Club at Palm Coast Resort; Cypress Knoll Golf Club at Palm Coast Resort; Grand Haven Golf Club; and The Golf Club at South Hampton.

Mitch Clodfelter, superintendent at Cowans Ford Country Club in Stanley, N.C., won his first GCSAA championship last year in San Antonio, squeezing out a one-stroke victory over Sam Williamson, superintendent at Ojai Valley Inn & Spa.

The Slammer & The Squire

Named after golf legends and course design consultants Sam Snead and Gene Sarazen, The Slammer & The Squire's 6,939-yard, par 72 layout was designed by Bobby Weed. Superintendent Steve LaFrance intends to have the course "at its best when the guys come to town." The short game will be the key to playing the course. "The course has very generous fairways. The short game will be the issue here as far as scoring well," said LaFrance. "The greens and chipping areas both have a lot of undulation." "As far as maintenance on the greens, it will depend on the weather," he continued. "If we get any hard freezes, that alone will speed up the greens. You never really know what kind of weather to expect here in early February. It could be freezing or it could be 70 degrees. We'll attempt to have the greens running at 10 feet plus on the Stimpmeter." There will be plenty of birdie opportunities if the ball is kept in play, according to LaFrance. "The last four holes on the layout are the most challenging, but again the short game needs to be the focus," he said. "We have some strong finishing holes here."

The King and The Bear

Designed by Arnold Palmer and Jack Nicklaus, The King and The Bear stretches to 7,279 yards from the championship tees. The 18-hole course offers two distinct nine holes. The front nine provides a links-style layout while the back nine offers a more strategy needed to play the layout. "There are water features all over the course that the guys come to town."

GCSAA sets up in Orlando

ORLANDO, Fla. — The Golf Course Superintendents Association of America’s 73rd International Golf Course Conference and Show visits Orlando next month, Feb. 3-10, to wrap up a yearlong celebration of the GCSAA’s 75th anniversary. With attendance surpassing 20,000 each of the past five years, the event is the world’s largest golf course management conference and trade show. Some of the highlights scheduled for the event include:

• The 2002 GCSAA Golf Championship, sponsored by the Toro Co., Feb. 4-5, will be held at six St. Augustine area golf courses;

• Former Dallas Cowboys coach Jimmy Johnson presents the keynote address during the Opening Session Feb. 6 at 6:30 p.m. The event is sponsored by United Horticulture Supply.

• A Golf General Session, 9:00 a.m., Feb. 7, features a presentation by former middle linebacker for the Chicago Bears, Mike Singletary. The association also will present the President’s Award for Environmental Stewardship and the GCSAA/Golf Digest’s 2001 Environmental Leaders in Golf Awards. A Career Development General Session: Thriving in Today’s Employment Environment will be held at 2:00 p.m. and moderated by talk show host and golf historian Peter Kessler.

• The President’s Reception and Dinner Show, 6:00 p.m. Feb. 8, will be highlighted by the honoring of the GCSAA’s highest honor, the Old Tom Morris Award, to former St. Andrews Links superintendent Walter Woods, Esq. A concert by the Jacksonville, Fla.-based band .38 Special also will be held. The event is held in partnership with the Bayer Corp.

• GCSAA members will vote for three officers and two directors from a selection of eight candidates at the annual meeting, Feb. 8.

• More than 120 conference and educational seminars will be conducted and more than 70 hours of workshop sessions and forums will take place during the event. The seminar program is sponsored by Textron Golf, Turf & Specialty Products.

• The trade show, involving more than 750 exhibitors, will take place Feb. 7-9.

CMAA convenes for 75th World Conference and Expo in San Antonio

SAN ANTONIO — The Club Managers Association of America (CMAA) will hold its 75th Annual World Conference on Club Management and 25th Annual Exposition here at the San Antonio Marriott Rivercenter and the Henry B. Gonzalez Convention Center, Feb. 3-7.

The international conference brings together club industry professionals for five days of education sessions, social events, and the large trade show in the club industry. Some highlights for the event include:

• Two pre-conference golf tournaments will be hosted here at the Quarry Golf Club and Canyon Springs Golf Club Feb. 2.

• More than 100 educational sessions, including eight pre-conference workshops, covering everything from culinary instruction to environmental issues and leadership.

• The 25th Annual Exposition at the Henry B. Gonzalez Convention Center, Feb. 3-4, is expected to be the largest in the association’s history with more than 580 booths.

• A Club Tour event, Feb. 4, will take members and guests via motorcoach to visit three San Antonio clubs. The tour features the Dominion Country Club, Oak Hills Country Club and the San Antonio Country Club.

• Former First Lady Barbara Bush will be the keynote speaker at the Opening Business Session, Feb. 4.

• World-class blind adventurer Erik Weihenmayer will speak at the Closing Business Session, Feb. 7. He was the first blind man in history to reach the summit of the world’s highest mountain - Mount Everest.

• The closing event will be a return to the "Roaring 20s." A visit to 1927, reliving CMAA’s first formal dinner dance, in the middle of Prohibition in America will be recreated at the CMAA speakeasy held at The Blue Rabbit Club. Bath Tub Gin Tootsy will offer champagne, beads, flapper feathered bands and boas to the ladies and petticoats to the men while Al Sturchio’s Orchestra presents the music of Benny Goodman, Duke Ellington and "Jelly Roll" Morton.

continued on next page
General Electric VFD Line Side Contactor
Smart Drive™ Technology Lightning Protection

Two Strokes Ahead of the Competition
SyncroFlo®
PUMP STATIONS

“Two hazards we avoid at the Atlanta Athletic Club are motor pump failure and lightning damage”
Todd Daniel - GCSA, Atlanta Athletic Club - Highlands Course
Host Site of the 2001 PGA Championship

Moulton said. “It’s like the wind circles here making it tough to place shots sometimes. When the ball is hit above the tree line, it could get tricky. The last four holes play into the wind off the ocean.”

The eighth hole, a 156-yard, par 3 with an island green, may become a new home for some superintendent’s balls. “It’s a tough shot to make, you never know which way the wind is going on that hole,” said Moulton. “The green is about 6,000 square feet with a small landing area and a bunker on the left surrounded by stone. There also is an elevated tee, so superintendents will be hitting down at the green with about a 40-foot drop.”

THE GOLF CLUB AT SOUTH HAMPTON
A 6,915-yard layout designed by Mark McCumber, The Golf Club at South Hampton is surrounded by tall pines and oaks. Sixteen lakes and more than 60 bunkers will provide opportunity for a risk-reward style of game. Superintendent Jason Green will be looking to beef up the already challenging layout.

“We’ll definitely step up our program by triple cutting the greens and rolling them,” said Green. “I don’t play golf, but I’m looking forward to having the superintendents out here on the course.”

The long, par 5 sixth hole is fairly challenging for those who play the layout, according to Green. Named “Lightning Strikes,” the 545-yard signature hole offers a tee shot framed by two large oak trees.

The course, which was designed by Gary Player, is extremely narrow, said Jenkins. “One of the hardest holes, I find, is the third hole. It’s a straight shot par 4, with no real bunkers, that plays at about 450 yards,” said Jenkins.

Moulton. “It’s like the wind circles here making it tough to place shots sometimes. When the ball is hit above the tree line, it could get tricky. The last four holes play into the wind off the ocean.”

The eighth hole, a 156-yard, par 3 with an island green, may become a new home for some superintendent’s balls. “It’s a tough shot to make, you never know which way the wind is going on that hole,” said Moulton. “The green is about 6,000 square feet with a small landing area and a bunker on the left surrounded by stone. There also is an elevated tee, so superintendents will be hitting down at the green with about a 40-foot drop.”

THE GOLF CLUB AT SOUTH HAMPTON
A 6,915-yard layout designed by Mark McCumber, The Golf Club at South Hampton is surrounded by tall pines and oaks. Sixteen lakes and more than 60 bunkers will provide opportunity for a risk-reward style of game. Superintendent Jason Green will be looking to beef up the already challenging layout.

“We’ll definitely step up our program by triple cutting the greens and rolling them,” said Green. “I don’t play golf, but I’m looking forward to having the superintendents out here on the course.”

The long, par 5 sixth hole is fairly challenging for those who play the layout, according to Green. Named “Lightning Strikes,” the 545-yard signature hole offers a tee shot framed by two large oak trees.

There are small fairway bunkers hidden from the teeing area and water covers the left side of the green,” Green said.

NGCOA show heads to Arizona

PHOENIX, Ariz. The National Golf Course Owners Association will be holding their 20th Annual Conference and Trade Show here at the Hyatt Regency Phoenix in the golf mecca of Phoenix, Ariz., Jan. 19-23. The event is one of the largest gatherings of golf course owners and operators in the world.

Educational opportunities, networking, entertainment and golf will highlight this years event. They include: educational sessions that cover everything from wage and hour issues and food and beverage to course marketing and pace of play; a preconference on management, succession and other issues in family businesses; an UpLink golf outing at Troon Golf-managed Talking Stick Golf Course; and updates on the Internal Revenue Services’ ruling to allow depreciation of tees, greens and sand bunkers.
AGC to double learning center commitment

BY PETER BLAIS

SANTA MONICA, Calif. — With rounds, revenues and the economy flagging, a program that expects to create 30,000 new golfers this year is the type of good news the golf industry sorely needs.

“If half the public courses in America achieved half those results, we would easily achieve the goals put forth in the Golf 2020 initiative that we've been working on for the last four years,” said American Golf Corporation co-CEO David Pilsbury of the management company's Nike Golf Learning Centers. “That would benefit all of us — operators, manufacturers, and others.”

AGC is so convinced of the importance of creating new golfers that it is pressing forward with its $30-million Nike Golf Learning Center program in the face of some difficult financial times of its own (see story on page 1).

“In a company that wasn't thinking strategically about its business, I could see a program like the Nike Golf Learning Centers being cut,” Pilsbury said. “But we're actually doubling our investment. We're spending more in one year [2002] than we did in the previous four.”

Nike Golf Learning Centers are operating at 50 American Golf-operated facilities, with another 50 planned to open in the next 12 months.

“They are located where we have our largest concentration of golf courses, major metropolitan areas primarily in the Sun Belt,” Pilsbury said. “The new ones will be similarly located. We started out West and the expansion will be primarily into the East and Midwest. The more mature centers are doing very well — a couple in Southern California, a couple in Northern California and one in Chicago. Those are typically larger facilities with a strong population within a 10-mile radius. They are usually connected to a golf course.”

Tee It Up! 1

The Learning Centers combine traditional golf fundamentals

Continued on page 23

GMI expands golf operations division

BY ANDREW OVERBECK

JACKSONVILLE, Fla. — Golf course design and construction management specialist, Golf Management Inc., has expanded its list of services to include golf course operations.

GMI was founded in 1999 by president Chris Wilkerson who spent 10 years as a vice president and director of construction for the PGA Tour. Wilkerson has steadily added to his team that consists of golf course architect Tim Freeland, ASGCA, and operations manager Rich Hohman. The firm cleared $47 million in revenue last year and now has 26 employees.

“We hired Hohman last year to go after third party management contracts,” said Wilkerson. “We see an opportunity to pick up after some management companies that are dropping projects. If we can get them for a reasonable sum, step up the operations and maintenance, then we can bring good projects back to profitability.”

MANY POTS IN THE FIRE

Wilkerson hopes that its design and construction management divisions will also turn into management deals. The company currently has several construction projects underway including: Pete Dye’s Wintunbury Hills Golf Club in Bloomfield, Conn.; Tim Freeland’s Old Hickory Golf Club in Prince William County, Va.; and Lighthouse Links in Freeport, Grand Bahama Island. The company also recently opened Joe Lee’s Musk Ridge Golf Club in Myerstown, Md.

Hohman said the pooling of resources

Continued on page 24

KSL acquires La Costa Resort

SANDIEGO — KSL Recreation Corp. has added another marquee resort to its portfolio with the acquisition of La Costa Resort and Spa in Carlsbad.

The group bought the famed resort from an affiliate of Japan’s Sports Shinko for an undisclosed amount. Sports Shinko bought the property in 1987 for approximately $250 million.

The expansive 479-room resort is set on 400 acres in the coastal foothills north of San Diego. It features two 18-hole Dick Wilson and Joe Lee-designed golf courses, a spa and a tennis center. Addition-

ally, the resort offers meeting, convention and banquet facilities.

“We are proud to include La Costa Resort and Spa in our family of signature resorts,” said Scott Daleco, president of KSL’s Golf Management division.

Daleco added that KSL plans to embark on an ambitious improve-

ment from his current role as vice president and general manager of KSL’s Claremont Resort & Spa in Northern California.

Editorial Focus: Golf Cars

Car makers optimistic despite slowdown

BY ANDREW OVERBECK

The economic slowdown, the events of Sept. 11, stagnant levels of participation and a sharp downturn in new golf course construction have combined to create tremendous uncertainty in the marketplace. However, while most golf car makers report that buyers have deferred or delayed purchases in the last few months, some are cautiously optimistic about 2002.

“The economic environment has made it more challenging for customers to budget for new vehicles, but golfers have found ways around the financial constraints,” said Dewey Holland, Club Car’s vice president and business manager for golf. “New construction starts are down, but we look at the fact that people understand the value of new cars and the quality they bring to the image of the course. We are cautious optimistic about 2002.”

Lower interest rates and other leasing incentives are also driving car maker’s confidence.

“The irony of the whole thing [customers delaying purchases] is that financing costs are at an all-time low,” said Todd Saney, president of Columbia Par Car. “They can lock in at rates that will not go any lower.”

To help consumers justify the purchase of a new fleet of vehicles, car makers are working to introduce new products, add new features and roll out new concepts.

Club Car

Club Car formally launched its new IQ System in July and 2001 sales quickly exceeded the company’s expectations, said Holland. This year its cars will all come with the...
HMS Golf bulks up portfolio

By ANDREW OVERBECK

ATLANTA — HMS Golf has aggressively entered the golf course management arena, adding six courses to its portfolio in the last 18 months. The company, which began in 1983 as a development and construction concern, continued its strong push in November adding two more properties and is looking to sign another five to six facilities in the next two months.

Early in the month, the firm added to its growing stable of Atlanta area courses with the signing of Gold Creek Golf Club in Dawsonville, and it picked up another property in South Carolina at Island West Golf Club in Hilton Head to close out the month.

“We are telling our clients not to build courses right now,” said HMS Golf’s director of business development James Haslam. “The market is not favorable.”

The company’s only construction project this year is the Cider Ridge Golf Club in Oxford, Ala. The semi-private layout, designed by Bill Bergen, will open in March. “It was a tough, hilly piece of property,” said Haslam. “The course is well positioned 45 minutes north of Birmingham and is close to the Robert Trent Jones golf trail.”

Haslam sees a lot of opportunity in expanding into course management. “The worse the golf market is, the better we seem to do,” he said. “We are a cost and profit oriented company. It is easier for us to make money than it is for an individual owner.”

HMS Golf offers cooperative advertising and marketing and runs a reciprocal program for its Atlanta-area courses that Haslam said has been a huge selling point for memberships.

TURN AROUND AT GOLD CREEK

While Haslam reports that existing courses in the portfolio are doing well this year, the firm’s new additions will take some turn around work.

“At Gold Creek we changed out the general manager and superintendent,” he said. “In a turn around deal you often have employees that lack leadership. We put in new management and will retrain the workers.”

The new superintendent, Eric Daughtry, will be charged with improving course conditions and Joe Rullan will take over the general manager reigns.

For now, HMS will continue with its strategy of hiring strong on-site managers, but Haslam admitted that they will need to add staff as they expand.

“We have been small enough that we have not had to put in regional managers,” he said. “But we will as we get larger.”

Underground golf car facility saves money, increases efficiency

By JOE JOYNER

PLYMOUTH, Mass. — Here at the ProLink alliance with Centennial Golf Properties saved money and established a more efficient operation by installing an underground golf car facility. The facility is in the basement of the clubhouse and has enough car storage to handle two 18-hole courses.

“Right now we have 85 cars which we used last year for our new 18-hole Rees Jones Course, but there will be 160 cars available in the storage area by the time our second course [an 18-hole Nicklaus design layout] opens this May,” said head pro John Tuffen. “It allows the cars to be easily accessed and keeps them in great condition.”

The 13,000-square-foot clubhouse was designed by Joe Childs Bertram Tseckares architectural firm of Boston, and Club Car was involved in the basement design for the car facility.

“It’s in the basement of the clubhouse with ramp access leading out one side of the building,” said Larry Boudreau, project manager for Centennial Golf. “We built retaining walls around it, and those retaining walls are the foundation for the clubhouse.”

The original plan was to have two buildings with the car barn as a separate structure, according to David Leibowits, vice president for Centennial Golf. “Our initial concerns were about the grades. Once we managed to get the grades to coincide with the building of the clubhouse, we decided it was the most efficient way to operate.”

Ceiling-mounted electric boxes allow for quick recharging of multiple cars. “There’s a steel-framed grid hanging from the basement ceiling that has wires, and the pipe running to all of the outlets,” Leibowits said.

When golfers approach the Pinehills entranceway, they’re directed toward the bag drop area with a pavilion structure where they can store their clubs. “The bags are dropped off and players park and make their way to the pro shop,” he said.

“Once they check-in, they head toward the driving range on the other side of the building where their cars and bags are waiting for them,” he said. “It’s very functional.”

Car manufacturers

Continued from previous page

IQ option that lets courses run diagnostics on and customize the performance of their fleets.

“The through-the-hand controller, you can analyze any system failures and change settings for speed and acceleration and braking sensitivity,” said Holland. More than a third of its customers have ordered the system on new vehicles.

The company is also following up on leads created by its partnership with GPS provider, UpLink. The system is currently on 42 courses and the alliance fits in with the company’s overall solutions-based selling strategy, said Holland.

“We are looking at improving a course’s profitability,” he said. “Our 1-PASS is a handicapped vehicle that expands the market, the CART Expo is a beverage car offers more revenue capacity, and the GPS system offers the ability to add new revenue streams.”

YAMAHA

In addition to implementing its five year warranty program this year, Yamaha Golf Cars is working on new models that are slated to roll out of its new factory in Newman, Ga., later this summer.

At this year’s trade shows, president Bill Szarowicz said the company will showcase some “exciting concepts for the future” along the lines of its new “tougher than golf” marketing strategy.

The Battle Ready Vehicle (BRV) that OGIO introduced earlier this year was based on a Yamaha car and fits well into our plan,” he said. “We will have some similar looking things in our display,” he said.

We are supplying OGIO with 200 to 300 of our cars for the BRV concept,” he said.

While Szarowicz declined to comment on how many of these concepts will make it to production, he said new products will be unveiled in July.

E-Z-GO

E-Z-GO is pinning its 2002 efforts on increasing the market’s awareness of its GPS system that is provided through an alliance with ProLink.

“When you consider that a lot of courses are struggling right now with revenue generation and differentiation, we have shown that ProLink can be a helpful tool to a golf course,” said Ron Skenes, marketing communications coordinator for E-Z-GO.

The system is currently used by more than 200 courses. Skenes said the company expects the increasing popularity of GPS to drive sales.

“Golf car fleets are still revenue generators, even in tough economic times,” he said. “We need to educate the market on the value that GPS adds.”

The company is still working on its Eagle adaptive golf car that is expected to be ready for the market this year.

COLUMBIA PAR CAR

Columbia’s newest car with the ACE EPS uses powered front-wheel drive technology went into production in June and is currently in use on six golf courses across the country. According to president Todd Sauey, the reaction from the marketplace has been positive. He expects the product to sell well during its first full season of availability.

Sauery said the new car is lighter and more efficient than previous cars while offering the same amount of torque as a gasoline model.

This publication gives you good reading, good writing and good arithmetic.

We present the information in our articles clearly, accurately and objectively. That’s good writing. Which means good reading. We present the information in our circulation statement clearly, accurately and objectively. That’s good arithmetic.

BPA International helps us provide precise and reliable information to both advertisers and readers.

An independent, not-for-profit organization, BPA International audits our circulation list once a year to make sure it’s correct and up to date. The audit makes sure you are who we say you are.

This information enables our advertisers to determine if they are reaching the right people in the right marketplace with the right message.

The audit also benefits you. Because the more a publication and its advertisers know about you, the better they can provide the information you need.


270 Madison Avenue, New York, NY 10016. 212-779-3200.
Learning centers

Continued from page 21

with instruction in such practical areas as golf jargon and terminology, proper etiquette, pace of play, how to operate a golf cart, how to reserve a tee time, and, most importantly, how to transition from the practice range environment to actually playing the course. The program offers an introduction-to-golf package, Tee It Up 1, for $149 that includes six hours of instruction, five rounds of golf and other benefits.

New golfers completing Tee It Up 1 are invited to special weekly new-golfer "play-days." For a discounted rate, they can play nine holes with other new golfers and, at the same time, receive follow-up coaching from the pro. "Play days" are a key to retaining players, according to Trish Hinze, a PGA professional and director of instruction at AGC-operated Tilden Park in San Francisco, where she has taught for the past 20 years.

"The emphasis is getting the students onto the golf course," she said. "That's the most intimidating part of learning the game. Students want to know how to feel more comfortable on the course and keep up with the group in front of them. They want to fit in and not feel lost. Very few programs actually do anything with students on the golf course."

Additionally, the Learning Centers create incentives for their teaching professionals, paying instructors $10 for each time a Tee It Up 1 student returns to the course to play a round. "Instructors are compensated appropriately for the time they are out on the course with students," Hinze said. "When I taught in a more traditional setting, it was hard to justify spending the time on the course with students. The choice was to spend time on the practice tee, where you could make money, or go out on the course and help students along. But you couldn't charge students for that on-course time, so many pros didn't do it. With this program, the pros are compensated for their on-course time because the operator wants people out on the course playing golf. That's going to help the facility in the long run."

The actual cost to develop the Learning Centers has been worth the expense, Pillsbury said. "The out-of-pocket expense is less than $5,000 per center for signage and sales materials. All the golf professionals are put on the AGC payroll instead of being independent contractors. They have medical benefits and a career path. The lesson fees charged pay the golf professional's expenses. The construction piece yields a very small profit — maybe $5,000 to

$10,000. That doesn't include the income generated from the additional rounds these new golfers play. That's the ultimate motivation. So the Learning Center basically pays for itself."

The centers are an attempt to overcome many obstacles, including oversaturated markets, the golf industry has encountered in the past year. "The softness in the golf economy is a function of the number of courses expanding faster than demand," Pillsbury said. "We can't control the number of new courses that are built. But we can influence the number of new golfers coming into the game. The research data suggests there are 12 million best-profile customers standing on the sidelines interested in entering the game and looking for a safe entry point. We need to create that entry point and bring new players into the game."
feed the design work to Tim and the construction management to Chris," he said. "We are always feeding each other leads.

Hohman spent 2001 "working on 200 different deals" and putting together several consulting agreements.

As far as third party management is concerned, Hohman said that the company is involved with a group that is buying Kiskiack Golf Club in Virginia from the National Golf Properties portfolio and is currently managing Maryland National in Fredrick, Md. He said the company is close to a couple other deals in Florida.

"We have seven or eight deals that we will close in the next couple months," he said. "We are also doing consulting jobs for new developments to help them develop due diligence and operational analysis. We are hoping those will develop into ongoing third party management contracts."

At the Art Hills-designed Maryland National that will open this summer, Hohman has been able to put together a management team from scratch.

McGillicuddy, a former American Golf employee and the former manager of the TPC at Heron Bay, will be the general manager, and Brian Zigaloff will be the superintendent.

"We are creating a staff from the ground up," Hohman said. "Being able to establish all the systems, policies and procedures from day one makes a big difference."

According to Hohman, there are many turnaround opportunities out there, even in overbuilt markets. "There is no shortage of opportunities," he said. "Every course has a niche in its market."

IRS, depreciation
Continued from page 1

"The ruling allows course owners to deduct any cumulative 'undepreciated' amount as of Dec. 31, 2000, over four years beginning in 2001. This may be a boon for course owners that are hurting right now," he said.

However, Ellis also pointed out that this change is factual in nature and that a majority of owners were already claiming the depreciation.

"The ruling brings the IRS into agreement with course owners over depreciation, and it protects those who have been depreciating greens from being audited," he said.

The IRS's previous ruling regarding greens was issued in 1955 when "push-up" greens were the norm. While push-up greens will remain nondepreciable, the new ruling recognizes the complexity of modern greens construction.

The new ruling states: "Unlike push-up or natural soil greens, the modern green is a sophisticated improvement to the land carefully designed to facilitate drainage. Essential components of the modern green are underground drainage tiles or interconnected pipes. Because these tiles or pipes deteriorate over time, they have a determinable useful life and, therefore, are depreciable."

The items will be depreciable under current law and regulations as 15-year land improvements. However, Ellis cautioned that costs of general earthmoving, grading and initial shaping of the area surrounding and underneath the modern green will remain nondepreciable.

BUNKERS AND TEES TO BE ADDED

While the ruling only specifically addressed modern greens construction, Ellis said the IRS will soon issue internal guidance on bunkers and tees.

"We were aware they were only going to address greens in this ruling because the 1955 ruling only addressed greens," he said. "But the basis of their conclusions is the factual existence of integrated drainage systems in modern greens. It is our understanding that they will apply the principles of this ruling to other golf course items such as bunkers and tees, but only if similar integrated drainage facts exist."

COST SAVINGS

The ruling provides automatic approval for a change in accounting method. Modern greens and other qualifying improvements not depreciated, or under-depreciated in prior years, could be eligible for a cumulative depreciation adjustment.

For example, an owner with $1 million in depreciable costs placed in service in January 1991 should have been cumulatively allowed $675,000 in depreciation through 2000. With the change, 25 percent ($163,750) will be deductible per year for five years beginning in 2001, 2002, 2003 and 2004. In addition, the balance of the greens cost ($325,000) would be available for the normal depreciation of approximately $60,000 per year for five years beginning in 2001. This results in approximately $224,000 in additional depreciation expense for 2001 and each of the next three years.

Ellis stressed that documentation will be critical to determining the amount eligible for depreciation and that owners that over-depreciated improvements could be subject to recapture in the year of audit.
Harrell’s merges with Wilbro to become Southeastern powerhouse

By ANDREW OVERBECK

SYLACOUGA, Ala. — Harrell’s Fertilizer, based here, has become a regional force overnight following the completion of its merger with Norwex, S.C.-based Wilbro Jan. 1. With the deal, Harrell’s has added coverage in the Carolinas, Virginia, and eastern Tennessee to its existing service area of Florida, Alabama, Mississippi, Louisiana, and western Tennessee.

Harrell’s will be taking over existing Wilbro accounts and will also gain a blending plant and distribution facility in Norwex. Jack Harrell, Jr. will be the president and CEO of the new company and former Wilbro president Harvey Williamson will serve as general manager of the Norwex operations.

“We have been talking for two years about getting together,” said Steve Wilson, director of marketing and communications for Harrell’s. “The two companies are very similar, we both manufacture custom fertilizers and are distributors for PTI’s POLYON product.”

“The business philosophies are also similar,” Wilson continued. “The customers will not see any difference in operations or service. We will bring our small company philosophies to a larger company. We don’t want to forget what has made us successful.”

PROSPECTING FOR CUSTOMERS

With that in mind, Harrell’s will not be cutting many jobs, keeping all Wilbro sales staff and only trimming extraneous accounting and office staff in Norwex.

While Wilson said the current economic situation did not drive the decision, he did say the combined company will enjoy economies of scale in regards to purchasing.

“In this business you either shrink or grow,” said Wilson. “We are in a growth mode.”

Deere’s financial woes to extend into 2002

MOLINE, Ill. — Deere & Co. reported worldwide net losses of $320.1 million for the fourth quarter and $64 million for the year ended Oct. 31. The company posted a net income of $71.1 million last year. Deere expects losses to extend into the first quarter of 2002 and beyond.

Affecting results for both periods were after-tax charges of $216.6 million caused by early retirement programs, continued softness in the economy and weaker foreign currencies.

For the quarter, net sales of all segments were lower than last year due to production cutbacks, continued softness in the economy and weaker foreign currencies.

“Fourth-quarter results were adversely affected by production cutbacks aimed at driving more efficient asset levels and by continued weakness in our major markets,” said Robert W. Lane, chairman and CEO.

Leasco’s 3Q sales up, net income down

CLEVELAND — Leasco has announced record sales of $144.1 million for the quarter ended Sept. 30. In the third quarter of 2000, the company had sales of $139.6 million. Net income for the quarter, however, was $200,000 down from $4.2 million a year ago.

The company cited the rising cost of raw materials, a competitive price environment and the attacks of Sept. 11 as reasons for the earnings downturn. Sales for the golf division in the quarter were flat, but down 17 percent in September. As a result of weak operating results, the company is negotiating temporary relief from its lenders and is pursuing the refinancing of debt on a longer-term basis.

President and CEO Bill Foley is looking for better returns in the fourth quarter. “In response to increased market competition and pressures on margins, we have continued to reduce costs,” said Foley. “We have reduced our headcount by 60 people and discontinued 1,500 slow moving products in 2001. We also expect to benefit from increased sales and the lower urea costs that we have seen in the fourth quarter.”

Toro closes two factories

BLOOMINGTON, Minn. — In a continual effort to reduce production costs and improve asset utilization, Toro Co. has announced the closure of two factories in the last several weeks.

In early December, the company said that it will sell its Riverside, Calif., headquarters and plant and move all manufacturing operations, including golf-related irrigation products, to its facility in El Paso, Texas. Toro will leave its office operations in Riverside.

As a result of the plant closure and restructuring, 440 jobs will be eliminated. The move is expected to cost between $6.4 and $6.9 million in fiscal 2002 and provide an annual savings beginning in 2003 of between $7 and $7.5 million.

In addition, the company will close its Evansville, Ind., plant and shift manufacturing to its Tomah, Wis., and Windom, Minn. plants. The factory produced Toro and Exmark branded grounds maintenance and sports turf spraying equipment.

“Toro’s said the closure will affect 494 employees and result in a cost savings of about $2 to $2.3 million beginning in 2003. Manufacturing will be phased out by June 15 and inventory and equipment transfers will be completed by the end of the year.”

Aquatrols unveils five new products, severs Simplot ties

By ANDREW OVERBECK

CHERRY HILLS, N.J. — Like most companies in the golf business, Aquatrols has put 2001 behind them and is looking towards 2002 with more optimism. The company has reason to be optimistic since it is introducing five new products that will hit the market in February.

“We are much more excited about 2002,” said vice president for sales and marketing Ron Gagne. “We have three new formulations for existing products and two brand new products that utilize new chemistry.”

The company’s Primer surfactant has a new Select formulation that will allow superintendents to fine tune rates based on course conditions. It is also available as a spreadable, water dispersal granular (SWG). Its Aqueduct product is also available as a SWG.

“This allows for lighter rates and the new granular formulation dissolves the minute water hits it,” said Gagne.

NEW CHEMISTRY

Aquatrols has improved its wetting agent technology with the introduction of Dispactch, which is seven times faster than its existing Infillex product.

“Dispatch completely overcomes Infillex,” noted Gagne. “It allows water to be sprayed to the root zone and to be instantly available to the plant.”

Continued on page 27
SCOTTSDALE, Ariz. — The Whitepath Golf Club team from Ellijay, Ga., placed first in the 15th annual John Deere International Team Championship Golf Tournament posting a two-day total of 102. The event was held Nov. 15-18 on the Talon and Raptor golf courses at Grayhawk Golf Club.

A total of 35 teams from across the United States, Canada, Germany and Australia competed in the final event. This was the first year that teams from outside North America participated in the tournament.

As part of the tournament, John Deere contributed $30 for each of the teams competing at the local tournaments to either the Golf Course Superintendents Association of America’s “Investing in the beauty of golf” campaign, the Canadian Golf Superintendents Association scholarship fund, or the German and Australian superintendents associations. The company gave more than $28,000 this year.

The winning team from Georgia’s Whitepath Golf Club were: Tony Smith, club manager; Tim Land, club president; Mike Brumby, superintendent; Lonnie Reece, golf professional; and Dane Hanger, representative of John Deere distributor, Georgia Turf & Tractor of Alpharetta, Ga.

Members of the winning team from Whitepath Golf Club were: Tony Smith, club manager; Tim Land, club president; Mike Brumby, superintendent; Lonnie Reece, golf professional; and Dane Hanger, representative of John Deere distributor, Georgia Turf & Tractor of Alpharetta, Ga.

**Toro closures**

Continued from previous page

will be completed 60 to 90 days later.

The two plant closures will result in a restructuring and other expense charge in the first quarter of between $7.4 and $7.9 million.

In other news, the Toro Co. has finalized the integration of Goossen debris products into its equipment line with the first of two new blowers being shipped last month from its manufacturing facility in Beatrice, Neb.

The two new products, the Toro Debris Blower 400 and 600, are capable of clearing areas of leaves, twigs, pine needles, clip-pings and other debris.

The 400 unit is a compact unit that is tuned to clear small areas and is ideally suited to clearing dew from work or play areas in the early morning. The 600 unit has a 36-inch fan that produces 9,324 cubic feet per minute airflow and an air velocity of 153 mph. It features a bi-directional discharge allowing the user to change airflow direction instantly.

**Harrell’s buy**

Continued from previous page

you grow,” he said. “We feel fortunate that we can expand our service area in a time when many companies are scaling back.”

Wilson said 2001 was another year of growth for Harrell’s and expects 2002 to be even stronger. Harrell’s will look to add more sales volume in the new Wilbro territories by adding seed and chemicals to the existing mix of fertilizer products.

“We also intend to prospect and add to our customer base across the Southeast. We will look at each territory and see where more sales staff could be added,” he said.
Ford rolls out THINK neighbor

use alternative fuels. The neighborhood in at 1,300 pounds, is eight inches wider than an average golf car, and can go up to 25 mph. The vehicle uses a 72-volt power system with six 12-volt batteries and has a range of 30 miles. It is also available with a sport package that includes: a golf speed setting of 15 mph; ball, tee and scorecard holders; club washer, sand and seed bottles; and a bag rack. The street-legal golf car will sell for approximately $6,495.

Klein also said that the division will be introducing a utility vehicle model this summer.

MARKET REACTION

The entry of a Big Three automaker to the golf car market has so far been greeted with indifference from existing manufacturers.

“It is not positioned for general applications on golf courses in terms of weight, turf compaction and turning radius,” said Club Car’s vice president and business manager Dewey Holland, who used to work for Ford as a marketing manager for its pickup truck line.

Lack of a competitive distribution network will also pose a competitive disadvantage, according to Ron Skenes, marketing communications coordinator for E-Z-GO. “They have name recognition, but distribution is the challenge,” he said. “Dealers with showrooms are not how courses purchase golf car fleets.”

Ford’s entry into the market, however, may lead golf car manufacturers to get into the neighborhood electric vehicle market. Reedsburg, Wis.-based Columbus Par Car will introduce a product into that niche this year and other car makers hinted that they might follow.

“We expand people’s ability to get around, and the electric vehicle is a new way to do it,” said Yamaha’s president Bill Szarowicz. “I am glad Ford is doing it because it shows that golf cars are not just for golf anymore.”

Biotech controversy

tested by APHIS, according to Horman. A tentative timeline for release is in the fall 2003.

TURF SEED, INC.

Bill Rose, president of Turf Seed, Inc. in Hubbard, Ore., would argue that there is no such thing, to date, as a safe control zone for golf courses purchase golf car fleets.”

Continued from page 25

Aquatrols sends up new products, ends supply agreement with Turf Partners

penetrate almost immediately reducing runoff and evaporation, thereby reducing water and electricity consumption.

While the product only lasts a couple of weeks, Gagne said it costs $4.25 an acre.

The company’s other brand new product is an algaeicide that is currently nameless because the Environmental Protection Agency did not approve the original name.

“I have been doing this for 30 years,” Gagne said, “and I have never had the EPA reject a name.”

Aquatrols uses a form of copper that carries a double positive charge allowing it to distribute itself evenly throughout a pond and last longer than conventional copper algaeicides that only have a single positive charge.

The advantage is that it lasts longer and can be distributed evenly from one location,” said Gagne. “Other products require multiple points of entry.”

Aquatrols purchased the turf market rights for the product from Arkansas-based Earth Sciences Laboratories.

In other news, Aquatrols has terminated the supply agreement that it had originally signed with Eco Soil Systems to manufacture a line of private label products for acquiring rights.

When Simplot purchased Eco Soil’s distribution company Turf Partners and formed Simplot Partners, Aquatrols continued to honor the manufacturing agreement for the new company. That will all change for 2002.

“Going forward we didn’t feel that it was an outlet that we wanted to keep going,” said Gagne.

“It had nothing to do with Simplot Partners, but more to do with the fact that we felt it was interfering with our branded products.”

The products in question include Brilliance, Rely II, Rely Granular, ReWet, ReWet Granular, and Syringe. Simplot Partners said that it will continue to market and sell the products but declined to disclose whether the company will manufacture the products itself or sign another outsourcing agreement.

American Golf

Continued from page 1

Properties (NYSE: TEE) fell 23 percent after the course owner, which leases 157 courses to AGC, said AGC might be unable to make its full rent payments in 2001. NCP, which is AGC’s largest single landlord, said it might have to renegotiate its leases with the management company.

Three months ago, National Golf said that American Golf had a technical default on its debt. A technical default occurs when a borrower violates a covenant governing the terms of its debt.

NGC cited a weak economy, bad weather and the terrorist attacks of Sept. 11 as having hurt golf-industry revenues. Also, a record growth in the number of courses, with little increase in the number of golfers, has led to more competition. NGC’s properties in Las Vegas and Phoenix have been particularly affected by the recent decline in tourism.

“A couple things are important to realize,” said Pillsbury, whose company manages roughly 300 courses. “First, our gross revenue is off four to five percent from the previous year. Second, a lot of that is far from a disaster.

A lot of businesses in America – given the recession and the events of Sept. 11 – would like to change places with those numbers. Second, we have been planning for the past four months for 2002. We have made structural changes with regard to personnel, expense structures, etc., to adapt to the economic slowdown, shaky consumer confidence and a golf environment that is overbuilt.”

2002 PLAN

Pillsbury said AGC has produced a financial plan for 2002 that calls for full payment of all its rents, a substantial capital investment back into the business and a significant profit. “We have a responsible, conservative business plan and a management staff to implement that plan,” he said. “We are confident in our ability to significantly improve our operating results in 2002.”

AGC began taking steps to reduce costs six months ago when it anticipated a decline in revenues, Pillsbury said. The company reduced overhead expenses by 25 percent, cut staff by a savings of more than $10 million; made efficiency improvements and cut costs; divested itself of a dozen non-strategic, non-profitable courses; and developed responsible budgets and forecasts for 2002.

Pillsbury said some of the cost-cutting moves involved layoffs. “There is nothing more difficult or painful for someone in management to have to do,” Pillsbury said. “And it’s hard for the people who remain.”

Pillsbury said some of the cost-cutting moves were aimed at making the company more profitable and more than $10 million; made efficiency improvements and cut costs; divested itself of a dozen non-strategic, non-profitable courses; and developed responsible budgets and forecasts for 2002.

Pillsbury said some of the cost-cutting moves involved layoffs. “There is nothing more difficult or painful for someone in management to have to do,” Pillsbury said. “And it’s hard for the people who remain.”

Pillsbury said it had noth-

American Golf said that American Golf had a technical de-

fault on its debt. A technical default occurs when a borrower violates a covenant governing the terms of its debt.

the products itself or sign another outsourcing agreement.
Ross approaches

Continued from page 9

involved in the playability of the hole, so how the ball reacts off this surface is critical. As the USGA green became the standard method of construction, along came firmer green surfaces. With firmer green surfaces, golfers have been forced to play the ball into the approach area and bounce/roll the ball onto the green surface.

In recent years, many golf course superintendents have adopted green-style management programs on approaches, such as: walk mowing, aerifying and topdressing.

This shift of green style programs to approaches has produced excellent turfgrass conditions. However, this maintenance cannot guarantee excellent playability. The biggest factors contributing to this are the growing medium, drainage, and irrigation. Generally, approach areas are constructed with typical topsoil medium, minimal if any drainage, and irrigation coverage from some other area (like fairways).

NEW CONSTRUCTION METHODS

The solution to this problem would be to consider approaches as the next modified area. Construction using USGA rootzone, independent irrigation set-up, and herringbone type drainage could offer extensive benefits. The foremost benefit of this construction would be the ability to control the moisture. This would solve the main complaint over a present softer/wetter area where ball reaction is minimal and unpredictable. From a playability standpoint, approaches that have a high sand mix can offer the benefit of a firmer surface, unlike soil based approaches. Firm approach surfaces can offer the golfer the option of a bump-and-run shot with more predictability. Sand mix can also be graded much easier, thereby producing a very even and smooth contour. This smooth surface would then be able to offer a superior, tight cut.

While there are many different ways to achieve this, one construction method could be to construct an approach cavity six inches lower than final grade. Within the cavity, drainage could be installed dictated by the final grade contours using four-inch drainpipe and enveloped with peastone. A six-inch depth of rootzone and independent irrigation would complete the approach construction. Not only would this offer great playability, but would also offer the potential for growing very fine turfgrass. Since approaches make up an average of two acres on an 18-hole course, this method would not significantly add to construction costs.
Golf Course Marketplace

To reserve space in this section, call Jean Andrews 207-925-1099

January

8-9
6th Annual Heart of America's Golf and Turf Conference in Kansas City, Mo. Contact: 816-561-5323.

8-9

9
33rd Annual Professional Turf & Landscape Conference & Trade Show in White Plains, N.Y. Contact: 914-946-3005.

17
Mid-America Horticulture Trade Show in Chicago. Ill. Contact: 847-556-2010.

19-23

28-30
68th Iowa Turfgrass Conference & Trade Show at Polk County Convention Center in Des Moines, Iowa. Contact: 1-800-605-0420.

29-1

February

3-10
GCSAA's 73rd International Golf Course Conference and Show in Orlando, Fla. Contact: 1-800-472-7878.

3-7

Periodicals postage paid at Yarmouth, Maine, and additional mailing office, Golf Course News (ISSN 1054-0644) is published monthly by United Publications, Inc., 106 Lafayette St., P.O. Box 997, Yarmouth, ME 04096. Phone number is 207-846-0600.

The publisher assumes no responsibility for unsolicited material or prices quoted in the newspaper. Contributors are responsible for proper release of proprietary classified information. Copyright 2002 by United Publications Inc. All rights reserved. Reproduction, in whole and in part, without the written permission from the publisher is expressly prohibited.

Reprints may be obtained from Reprint Management Services at 717-399-1900. Back issues, when available, cost $7 each within the past 12 months, $12 each prior to the past 12 months. Back issue orders must be paid in advance either by check or charged to American Express, Visa or MasterCard.

Golf Course News is distributed in the U.S. without charge to qualified personnel of golf course facilities and to golf course builders, developers and architects. Non-qualified subscriptions to the U.S. and Canada cost $65. All foreign subscriptions cost $150 annually to cover air delivery. All payments must be made in U.S. funds drawn on a U.S. bank.

For subscriber services, please call 215-788-7112. Send address changes to Golf Course News, P.O. Box 3047, Langhorne, Pa. 19047-3047.
SEEKING BACKHOE OPERATOR

Seeking qualified backhoe operator with bunker renovation experience and finish shaping experience. Applicants must be willing to travel and have reliable transportation. Fax resume to (909) 736-1058.

Golf Course Classifieds
online at
www.golfcoursenews.com

Career Opportunity
Duininck Bros Golf

Duininck Bros Golf will be conducting interviews at the 2002 GCSAA Annual Convention in Orlando, FL February 7-9.

Duininck Bros Golf has career opportunities available for those who are experienced in the golf course construction industry, or those wanting to start a career in the golf course construction industry.

Duininck Bros Golf offers a competitive benefits package. Compensation is based on experience. All employees will be required to travel extensively.

If you are interested in making a career in the golf course construction industry, send resumes to the following address: Duininck Bros Golf, Attn: Shirley, PO Box 208, Prinsburg, MN 56281. Or an application can be filled out through the Duininck Bros Golf website at www.dbigolf.com

Please note on your application if you will be attending the GCSAA Trade Show in Orlando on February 7-9.

EMPLOYMENT

NEED EMPLOYEES?

 SERVICES

SECKING BACKHOE OPERATOR

SEEKING BACKHOE OPERATOR

Seeking qualified backhoe operator with bunker renovation experience and finish shaping experience. Applicants must be willing to travel and have reliable transportation. Fax resume to (909) 736-1058.

Golf Course Classifieds
online at
www.golfcoursenews.com

Career Opportunity
Duininck Bros Golf

Duininck Bros Golf will be conducting interviews at the 2002 GCSAA Annual Convention in Orlando, FL February 7-9.

Duininck Bros Golf has career opportunities available for those who are experienced in the golf course construction industry, or those wanting to start a career in the golf course construction industry.

Duininck Bros Golf offers a competitive benefits package. Compensation is based on experience. All employees will be required to travel extensively.

If you are interested in making a career in the golf course construction industry, send resumes to the following address: Duininck Bros Golf, Attn: Shirley, PO Box 208, Prinsburg, MN 56281. Or an application can be filled out through the Duininck Bros Golf website at www.dbigolf.com

Please note on your application if you will be attending the GCSAA Trade Show in Orlando on February 7-9.

EMPLOYMENT

NEED EMPLOYEES?

 SERVICES

SECKING BACKHOE OPERATOR

SEEKING BACKHOE OPERATOR

Seeking qualified backhoe operator with bunker renovation experience and finish shaping experience. Applicants must be willing to travel and have reliable transportation. Fax resume to (909) 736-1058.

Golf Course Classifieds
online at
www.golfcoursenews.com

Career Opportunity
Duininck Bros Golf

Duininck Bros Golf will be conducting interviews at the 2002 GCSAA Annual Convention in Orlando, FL February 7-9.

Duininck Bros Golf has career opportunities available for those who are experienced in the golf course construction industry, or those wanting to start a career in the golf course construction industry.

Duininck Bros Golf offers a competitive benefits package. Compensation is based on experience. All employees will be required to travel extensively.

If you are interested in making a career in the golf course construction industry, send resumes to the following address: Duininck Bros Golf, Attn: Shirley, PO Box 208, Prinsburg, MN 56281. Or an application can be filled out through the Duininck Bros Golf website at www.dbigolf.com

Please note on your application if you will be attending the GCSAA Trade Show in Orlando on February 7-9.

EMPLOYMENT

NEED EMPLOYEES?

 SERVICES

SECKING BACKHOE OPERATOR

SEEKING BACKHOE OPERATOR

Seeking qualified backhoe operator with bunker renovation experience and finish shaping experience. Applicants must be willing to travel and have reliable transportation. Fax resume to (909) 736-1058.

Golf Course Classifieds
online at
www.golfcoursenews.com

Career Opportunity
Duininck Bros Golf

Duininck Bros Golf will be conducting interviews at the 2002 GCSAA Annual Convention in Orlando, FL February 7-9.

Duininck Bros Golf has career opportunities available for those who are experienced in the golf course construction industry, or those wanting to start a career in the golf course construction industry.

Duininck Bros Golf offers a competitive benefits package. Compensation is based on experience. All employees will be required to travel extensively.

If you are interested in making a career in the golf course construction industry, send resumes to the following address: Duininck Bros Golf, Attn: Shirley, PO Box 208, Prinsburg, MN 56281. Or an application can be filled out through the Duininck Bros Golf website at www.dbigolf.com

Please note on your application if you will be attending the GCSAA Trade Show in Orlando on February 7-9.

EMPLOYMENT

NEED EMPLOYEES?

 SERVICES

SECKING BACKHOE OPERATOR

SEEKING BACKHOE OPERATOR

Seeking qualified backhoe operator with bunker renovation experience and finish shaping experience. Applicants must be willing to travel and have reliable transportation. Fax resume to (909) 736-1058.

Golf Course Classifieds
online at
www.golfcoursenews.com

Career Opportunity
Duininck Bros Golf

Duininck Bros Golf will be conducting interviews at the 2002 GCSAA Annual Convention in Orlando, FL February 7-9.

Duininck Bros Golf has career opportunities available for those who are experienced in the golf course construction industry, or those wanting to start a career in the golf course construction industry.

Duininck Bros Golf offers a competitive benefits package. Compensation is based on experience. All employees will be required to travel extensively.

If you are interested in making a career in the golf course construction industry, send resumes to the following address: Duininck Bros Golf, Attn: Shirley, PO Box 208, Prinsburg, MN 56281. Or an application can be filled out through the Duininck Bros Golf website at www.dbigolf.com

Please note on your application if you will be attending the GCSAA Trade Show in Orlando on February 7-9.
### Information Center

**RECEIVE INFORMATION DIRECTLY FROM ADVERTISERS IN THIS ISSUE!**

- **By Phone**
- **By Fax**
- **By Email**

#### BRIDGES

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
<th>Phone</th>
<th>Fax</th>
<th>Email/Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continental Bridge</td>
<td>28</td>
<td>800-328-2047</td>
<td>320-852-7067</td>
<td><a href="http://www.continentalbridge.com">www.continentalbridge.com</a> / <a href="mailto:conbridg@continentalbridge.com">conbridg@continentalbridge.com</a></td>
</tr>
<tr>
<td>Enwood Structures</td>
<td>29</td>
<td>800-777-8648</td>
<td>919-469-2536</td>
<td><a href="http://www.enwood.com">www.enwood.com</a> / <a href="mailto:mikee@enwood.com">mikee@enwood.com</a></td>
</tr>
<tr>
<td>Excel Bridge Mfg.</td>
<td>28</td>
<td>562-944-0701</td>
<td>562-944-4025</td>
<td><a href="http://www.excelbridge.com">www.excelbridge.com</a> / <a href="mailto:excelbridg@gte.net">excelbridg@gte.net</a></td>
</tr>
</tbody>
</table>

#### COURSE ACCESSORIES

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
<th>Phone</th>
<th>Fax</th>
<th>Email/Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Tee to Green</td>
<td>28</td>
<td>800-972-5223</td>
<td>513-759-0721</td>
<td><a href="mailto:twcewj@fuse.net">twcewj@fuse.net</a></td>
</tr>
<tr>
<td>Markers, Inc.</td>
<td>28</td>
<td>800-969-5920</td>
<td>440-933-7839</td>
<td><a href="http://www.markersinc.com">www.markersinc.com</a></td>
</tr>
<tr>
<td>Markers, Inc.</td>
<td>29</td>
<td>800-969-5920</td>
<td>440-933-7839</td>
<td><a href="http://www.markersinc.com">www.markersinc.com</a></td>
</tr>
<tr>
<td>Reliable Golf Course Supplies</td>
<td>29</td>
<td>800-274-6815</td>
<td>518-793-2812</td>
<td><a href="http://www.reliablegolf.com">www.reliablegolf.com</a></td>
</tr>
</tbody>
</table>

#### CHEMICALS, FERTILIZERS AND AMENDMENTS

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
<th>Phone</th>
<th>Fax</th>
<th>Email/Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASF</td>
<td>16-17</td>
<td>800-545-9525</td>
<td>919-547-2410</td>
<td><a href="http://www.turffacts.com">www.turffacts.com</a></td>
</tr>
<tr>
<td>BASF</td>
<td>11-13</td>
<td>800-345-9525</td>
<td>919-547-2410</td>
<td><a href="http://www.turffacts.com">www.turffacts.com</a></td>
</tr>
<tr>
<td>Dow AgroSciences</td>
<td>4-5</td>
<td>800-255-3726</td>
<td>800-905-7326</td>
<td><a href="http://www.dowagro.com/turf">www.dowagro.com/turf</a></td>
</tr>
<tr>
<td>Mlorganite</td>
<td>8</td>
<td>800-304-6204</td>
<td>414-221-6818</td>
<td><a href="http://www.mlorganite.com">www.mlorganite.com</a></td>
</tr>
<tr>
<td>Roots, Inc.</td>
<td>23</td>
<td>800-342-6173</td>
<td>203-786-5295</td>
<td><a href="http://www.rootsinc.com">www.rootsinc.com</a></td>
</tr>
</tbody>
</table>

#### IRRIGATION AND PUMP STATIONS

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
<th>Phone</th>
<th>Fax</th>
<th>Email/Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqua SO2</td>
<td>29</td>
<td>530-271-0915</td>
<td>530-271-0591</td>
<td><a href="http://www.aquaso2.com">www.aquaso2.com</a> / <a href="mailto:jwebb@aquaso2.com">jwebb@aquaso2.com</a></td>
</tr>
<tr>
<td>Eagle Golf &amp; Landscape Products</td>
<td>28</td>
<td>800-31-EAGLE</td>
<td>714-524-6199</td>
<td><a href="http://www.eaglegolfandlandscape.com">www.eaglegolfandlandscape.com</a> / <a href="mailto:eagleglp@exxi.com">eagleglp@exxi.com</a></td>
</tr>
<tr>
<td>Flowtronex PSI</td>
<td>7</td>
<td>214-357-1200</td>
<td>214-357-5861</td>
<td><a href="http://www.flowtronex.com">www.flowtronex.com</a></td>
</tr>
<tr>
<td>Harrington/Harco Corporation</td>
<td>28</td>
<td>434-845-7094</td>
<td>434-845-7441</td>
<td><a href="http://www.harcofittings.com">www.harcofittings.com</a> / <a href="mailto:sales@harcofittings.com">sales@harcofittings.com</a></td>
</tr>
<tr>
<td>Soltis Golf</td>
<td>29</td>
<td>909-949-6210</td>
<td>909-949-0281</td>
<td><a href="http://www.soltisgolf.com">www.soltisgolf.com</a> / <a href="mailto:chris@soltisgolf.com">chris@soltisgolf.com</a></td>
</tr>
<tr>
<td>SyncoFlo</td>
<td>20</td>
<td>770-447-4443</td>
<td>770-409-3292</td>
<td><a href="http://www.syncoflo.com">www.syncoflo.com</a></td>
</tr>
</tbody>
</table>

#### MOWERS, TURF GROOMING EQUIPMENT AND ACCESSORIES

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
<th>Phone</th>
<th>Fax</th>
<th>Email/Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Deere</td>
<td>15</td>
<td>919-850-0123</td>
<td>919-954-6343</td>
<td><a href="http://www.deere.com">www.deere.com</a></td>
</tr>
<tr>
<td>Precision Small Engine</td>
<td>28</td>
<td>800-345-9600</td>
<td>954-973-8032</td>
<td><a href="http://www.precisionusa.com">www.precisionusa.com</a> / <a href="mailto:andym@precisionusa.com">andym@precisionusa.com</a></td>
</tr>
<tr>
<td>Textron TCASP</td>
<td>32</td>
<td>888-922-TURF</td>
<td>414-635-1175</td>
<td><a href="http://www.ttcsp.textron.com">www.ttcsp.textron.com</a></td>
</tr>
<tr>
<td>Trion Lifts</td>
<td>18</td>
<td>800-436-3634</td>
<td>970-339-5369</td>
<td><a href="http://www.trionlifts.com">www.trionlifts.com</a> / <a href="mailto:mail@trionlifts.com">mail@trionlifts.com</a></td>
</tr>
<tr>
<td>Turbo Technologies</td>
<td>29</td>
<td>800-822-3437</td>
<td>724-846-3470</td>
<td><a href="http://www.turboturf.com">www.turboturf.com</a> / <a href="mailto:sales@turboturf.com">sales@turboturf.com</a></td>
</tr>
</tbody>
</table>

#### SEED AND SOD

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
<th>Phone</th>
<th>Fax</th>
<th>Email/Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seaside 1 *</td>
<td>10</td>
<td>888-584-6598</td>
<td>706-227-7159</td>
<td><a href="http://www.seasidel.com">www.seasidel.com</a> / <a href="mailto:gsseedjs@bellsouth.net">gsseedjs@bellsouth.net</a></td>
</tr>
<tr>
<td>Tee-2-Green</td>
<td>2</td>
<td>503-651-2310</td>
<td>503-651-2351</td>
<td>tee-2-green.com</td>
</tr>
<tr>
<td>TifTurf</td>
<td>10</td>
<td>888-584-6598</td>
<td>706-227-7159</td>
<td><a href="http://www.tifturf.com">www.tifturf.com</a> / <a href="mailto:gsseedjs@bellsouth.net">gsseedjs@bellsouth.net</a></td>
</tr>
<tr>
<td>TifSport</td>
<td>22</td>
<td>888-584-6598</td>
<td>706-227-7159</td>
<td><a href="http://www.tifsport.com">www.tifsport.com</a> / <a href="mailto:gsseedjs@bellsouth.net">gsseedjs@bellsouth.net</a></td>
</tr>
</tbody>
</table>

#### MISCELLANEOUS

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Page</th>
<th>Phone</th>
<th>Fax</th>
<th>Email/Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chestnut Identity Apparel</td>
<td>18</td>
<td>831-336-8977</td>
<td>831-336-8977</td>
<td></td>
</tr>
<tr>
<td>Formost Construction Co.</td>
<td>29</td>
<td>909-698-7270</td>
<td>909-698-6170</td>
<td><a href="mailto:formost@inland.net">formost@inland.net</a></td>
</tr>
<tr>
<td>New England Turfgrass Conference &amp; Show</td>
<td>26</td>
<td>401-848-0004</td>
<td>401-846-5600</td>
<td><a href="http://www.NERTG.org">www.NERTG.org</a></td>
</tr>
</tbody>
</table>

*Appears in regional editions.

When requesting information, please reference GCN 1/02.
What's better than a Jake cut? A Jake cut that combines state-of-the-art technology with ease of operation. They won't settle for anything less at Arnold Palmer's Bay Hill Club & Lodge — home of the Bay Hill Invitational. The new LF-3400/3800 fairway mowers feature the industry's most advanced engineering, including a simplified hydraulic system, electrical components with self-diagnostic capabilities and improved overall ergonomics. With the input of experienced mechanics and operators, these models are the easiest ever to maintain, own and operate. Now, add in the Jake precision cut, and you've got a formula for productivity and performance no one can beat. After all, when you've got an image to maintain, there's no room for errors. For a dealer near you, call 1-888-922-TURF or visit www.texronturf.com.