Mower makers shelve new technology

By ANDREW OVERBECK

While mower manufacturers continue to develop GPS, electric motors and autonomous capabilities, they have not yet to incorporate these technologies into any new products. Instead of testing the waters with risky and expensive technology, manufacturers have concentrated their short-term efforts on improving and tweaking existing products.

"A lot of the excitement over new technology was fed by the Internet euphoria that you could do anything," said John Wright, director of marketing for Toro. "A lot of companies have spent money trying to do anything and it didn't pay off. Superintendents have told us that they don't want more technology. They want stuff that works and makes their jobs easier - not more complicated."

Toro and other manufacturers have not given up on the promise of new technology (see story page 11), but they are cognizant that any breakthrough product will have to offer

Continued on page 11

Rutgers gains rights to Purelntro technology

By ANDREW OVERBECK

NEW BRUNSWICK, N.J. — Rutgers University has reached an exclusive agreement with Japan Tobacco to develop and commercialize transgenic turfgrass varieties using a pioneering plant transformation technology.

Japan Tobacco’s Purelntro employs plasmids derived from Agrobacterium tumefaciens, a bacterium that has the unique ability to insert a portion of its DNA into the cells of plants. According to officials at Rutgers, Purelntro technology is more precise than the Scotts Co.’s “gene gun” and it will allow turfgrass producers more access to transgenic varieties.

“Agrobacterium has been used by researchers for years in transforming dicots but it has never been used in monocots,” said Jim Costagano, manager of technology and licensing at the Center for Turfgrass Science and the Biotechnology Center for Agriculture and the Environment at Rutgers.

Dr. Barbara Zilinskas, a plant scientist at Rutgers, received permission from Japan Tobacco in 1997 to begin work with Purelntro in turfgrass and was
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Rutgers survey to determine size of green industry in N.J.

By ANDREW OVERBECK

NEW BRUNSWICK, N.J. — The Rutgers Center for Turfgrass Science is conducting a survey to determine the economic impact of the green industry in New Jersey.

According to the center's director, Dr. Bruce Clarke, the survey will go to sod producers, service providers, homeowners, commercial institutions, golf courses, wholesalers and retailers, and turf product manufacturers. "This survey will provide a complete picture of the economic impact of the green industry," said Clarke. "The last survey, which was done in 1985, indicated that the green industry was worth $1.4 billion."

Clarke is hopeful that numbers showing the impact and growth of the green industry in New Jersey will both increase the amount of money that comes into Rutgers' turf program and give the industry more leverage when dealing with the state legislature on pesticide regulations and water restrictions.

Half of the survey's $120,000 price tag will be paid for by Rutgers' Cook College Ageconomics department, which is administering the project.

"We have been working with the industry and focus groups to develop the survey questions and now we are ready to go," said Clarke. The surveys were sent out in late March and Clarke expects to process the data this summer and have a full report ready by late fall.

Lesco makes changes

By DEREK RICE

CLEVELAND — In an effort to shore up its profit margins and stock price, Lesco Inc. has named Michael DiMino president and CEO. He replaces William Foley, who reportedly decided to resign and pursue other interests. J. Martin Erbaugh was also elected chairman of the company's board of directors.

This is the latest in a series of high-profile changes at Lesco. DiMino joined the company in December 2001 as president and chief operating officer and in March, Jeffrey Rutherford came on as chief financial officer. According to David Hanni, Lesco's director of marketing and communications, the board felt more changes were needed.

"It was felt we needed a new look, so it was an agreed-upon decision for him to resign," Hanni said.

When Foley came to Lesco in 1993, the company had sales of $166.2 million. Those sales rose to $504 million in 2001. The number of service centers and stores on wheels also increased substantially in that time. One area DiMino identified as ripe for future growth was the company's distribution operation.

To address those distribution issues, rather than hire a COO to replace DiMino, the company brought in Bruce Thorn to manage its logistics operations. Thorn most recently worked for Gap Inc., where he handled the company's logistics and global engineering functions. The company also signed its first independent marketer agreement in March (see story on page 26).

In its quest to become more customer-friendly, Lesco may combine its golf and service center units under one management team, DiMino said.

On April 5, the day of the announcement, Lesco shares rose 7.4 percent, from $8.75 to $9.40, with a high of $10.50.

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To learn more about how you can start down the road to perfection with Basamid, visit www.turffacts.com or call 1-800-545-9525.
Laubach receives Piper and Oakley Award

FAR HILLS, N.J. — The United States Golf Association's Green Section has honored Robert A. Laubach of Scottsdale, Ariz., with the its Piper and Oakley Award. The award was established in 1998 to recognize meritorious service to the USGA Green Section and the game of golf by a volunteer.

Laubach has been a member of the USGA Green Section committee since 1974 and has participated in several meetings of the USGA turfgrass and environmental research committee. He also served on the USGA sectional affairs committee (1981-1999) and Senior Amateur Championship committee (1994-99). In 1999 he received the Ike Grainger Award, given by the USGA in recognition of at least 25 years of volunteer service to the organization. In addition, he is a past president of the MacKenzie Society, former director of the Golf Association of Michigan, and a former vice-president of the Arizona Golf Association.

Dr. Charles V. Piper and Dr. Russell A. Oakley were among the earliest scientists to conduct studies in the fields of turfgrass science and golf course management, and served as the first chairman and co-chairman of the USGA Green Section when it was formed in 1920. The Piper and Oakley Award periodically recognizes others who have so generously contributed to the programs and activities of the USGA Green Section.

Troon adds 10 in Q1

SCOTTSDALE, Ariz. — Management company Troon Golf experienced a record first quarter as it grew its portfolio by 10 properties, which extended its presence into new markets worldwide.

The following are Troon’s first quarter additions, which bring Troon’s management operations total to 115 courses in 23 states and 10 countries:

• Estrella Mountain Ranch, Goodyear, Ariz.
• Flying Horse Ranch, Colorado Springs, Colo.
• Poplar Hills Golf Club, Farmville, Va.
• Georgia Tech Club, Alpharetta, Ga.
• Oblong Valley Country Club, Amenia, N.Y.
• Newport National Golf Club, Newport, R.I.
• CapCana, Dominican Republic
• Denaru Golf & Racquet Club, Denaru Island, Fiji
• Arabian Ranches, Dubai, United Arab Emirates
• Tres Vidas Acapulco Golf Club, Acapulco, Mexico

Delhi College students win scholarships

DELHI, N.Y. — Delhi College students Casey Grann of Jamestown and Benjamin Nash of Skaneateles have each been awarded a $1,500 scholarship by the Duke Polidor Foundation.

This is the fifth consecutive year that Delhi College students have won the award, which is administered by the New Jersey Turfgrass Association and the New Jersey Turfgrass Foundation. The scholarship is given in the name of former Fairview Country Club (N.J.) superintendent Duke Polidor. It is awarded yearly to students in both undergraduate and graduate programs in turf-related disciplines.
NGP, AGC moving forward with merger plan

Continued from page 1

and a number of lawsuits the company is involved in as both plaintiff and defendant (see story on page 21). According to documents filed with the Securities and Exchange Commission, American Golf made $13 million of its first-quarter rent payments, but still owes NGP another $13.4 million. According to the Los Angeles Times, at the end of 2001, American Golf's liabilities exceeded its current assets by $149.5 million. The company also reported a loss of $60.4 million for 2001, compared to a loss of $200,000 the year before. NGP didn't fare much better in 2001, reporting a loss of about $363,000, compared to a net income of nearly $20 million the year before.

Charles S. Paul, NGP's chairman and interim CEO, has dismissed these concerns, saying the report only underscores why maintaining the current status of the two companies is no longer an option.

The REIT team at Merrill Lynch and Co. has also called the merger into question, based on the many outstanding details surrounding the combined companies' current financial statements, terms of the proposed equity infusion needed to stabilize operations and the trend in property operations.

Boyle said while he doesn't want this deal to go through, there may be no preventing it.

"I think it's unfair, but they'll probably get away with it," he said. "They'll try to vote for it and other people will try to vote against it, but in the end they'll probably prevail because that's the way these things tend to work out."

One of those shareholders is Carl Tash, president of Los Angeles-based Cliffwood Partners LLC, which holds a nine-percent stake in NGP. In a letter sent to NGP's board of directors, Tash proposed an alternative plan for restructuring the companies. His proposal calls for the company to break up the operation of its courses into regional groups, sell under-performing assets and seek opportunistic purchases of high-quality courses. He also called for ending merger talks with financially troubled American Golf.

In statements after the April 1 merger announcement, Tash continued to advocate a different path for the company than merging with its struggling tenant.

Boyle said there may be interests out there that will provide the financing the combined company would need to continue.

"I've heard that there are a number of people who are still interested in this, in contributing an equity piece," he said. "My guess is that some of that money would go toward maintenance of courses and then paying down some debt."
Renovation work making its mark on industry

The slowdown in new golf course construction over the past year and a half has been well documented. For those of you keeping score at the 19th hole, development slid nearly 30 percent between 2000 and 2001.

Golf Course News has tracked this trend and the impact it is having on the golf course industry. While the business seeks a comfortable balance between supply and demand, renovation work has increased as golf courses try and stay on top in a fiercely competitive market. Some golf course builders and architects report that their renovation projects have surged more than 50 percent.

As a result, we are refocusing our coverage to reflect this trend. This month we are introducing a revamped section – Development & Renovation – where we will cover both new course development and the renovation projects, both large and small, that are proliferating across the country.

Kevin Downing, superintendent at Willoughby Golf Club in Stuart, Fla., and GCN advisory board member, kicks off the new section this month (see page 15) with the first installment of a four-part series outlining the extensive renovation project that his club is undertaking this summer. From the planning process, to selling the project to members, to the construction bidding, to the nature of the work itself, Kevin will provide complete coverage of the renovation issues that impact superintendents.

In addition, we will also cover individual projects that offer tips and insights and showcase new techniques and products. For example, on page 16, we checked in with Rick Holanda at Aronimink Golf Club in Newtown, Pa., to learn how he and his club worked together with architect Ron Prichard and builder McDonald & Sons to implement a new master plan in less than two years while still accommodating play.

As we delve into renovation issues, we welcome feedback from our readers – superintendents, builders, owners and architects alike. Tell us about the projects you are planning or implementing. Share your renovation hints, suggestions or experiences with the industry by dropping us a line, giving us a call or dashing us an email (see contact information at right).

This month also marks the return of our Point/Counterpoint forum as we present the debate over the feasibility of organic golf (see below). The movement has gained some steam as an appellate court in New York recently decided in favor of pro-organic golf activists (GCN April 2002). Take a look and fire off your responses to us here at GCN.

Due to the return of Point/Counterpoint, our letters to the editor section has been mailed back to page 28.

Is organic golf realistic?

By Matt Nelson

Much of our society believes golf course maintenance is inherently bad for the environment. They see golf courses as artificial surfaces that are only possible through rampant and negligent use of fertilizers, pesticides and water. The perceived end result is the degradation of water resources and wildlife habitat and exposure risks to humans and animals.

To be sure, golf turf maintenance represents the horticultural extreme. Yet, our industry has stepped forward to investigate our environmental practices through independent university research studies that the United States Golf Association has funded. We have learned to identify best management practices that significantly reduce risk to the environment, and we have also learned that the turfgrass community is an amazingly dynamic system with its own network of environmental safeguards.

There are currently several communities throughout the country lobbying for the elimination of all synthetic pesticide and fertilizer use on golf courses. Without question, these voices are being heard and the stones cast are sending ripples throughout the golf industry. I would hope that those representing our industry will listen to these concerns and address them in logical, open-minded, scientific and concerned fashion.

Our industry has learned an incredible amount regarding golf course management and the environment in recent years. Products with reduced toxicity, mobility and persistence are constantly being developed. Integrated pest management strategies and best management practices are being adopted by numerous golf operations. Improved equipment, mapping technology, record keeping and product storage and handling devices are available. Grasses have

The time for organic golf has arrived

By Neal Lewis

Golf has become a target for efforts to reduce toxins in our environment due to its substantial and highly visible use of pesticides. The public is becoming increasingly unwilling to accept the use of substances that are possible carcinogens over drinking water supplies, alongside streams and wildlife habitats, or near homes.

Environmentalists, for the most part, are adamantly anti-golf. However, as executive director of the Long Island Neighborhood Network, I am an environmentalist and a golfer who believes golf can be a great source of environmentally friendly recreation. We call our project Organic Golf, because our pesticides from golf courses.

By this I do not mean to eliminate golf courses but instead to eliminate the toxic chemicals. These microbes are the key to non-chemical methods of turf maintenance. Beneficial microbes feed on the microbes that cause disease, out-compete the disease-causing microbes, depriving them of food and water, and the roots and blades of plants blocking pathogens, and make nutrients more readily available.

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Organic golf?  
Continued from previous page

been developed that require reduced inputs and have better adaptation to certain conditions. Golf course superintendents’ skills and awareness has increased steadily in the last few decades. But, we’re a far cry from being able to go “organic.”

First, consistently reliable organic substitutes for pest management have yet to be developed and/or proven to replace products currently used to combat the myriad of diseases, insects and weeds found across our country’s extremely variable climatic conditions. Testimonials don’t cut it, we need scientific validation.

Second, golf is more than a game, it is big business. Our multi-billion-dollar industry supports many families and communities, most of which are inextricably linked to golf course management. Golfers aren’t likely to flock to golf courses with extended periods of widespread dead grass and playing conditions reminiscent of the early 1900s. If all-organic regulations are imposed, those are the conditions you can count on.

While you may hear of organic golf course management success stories from places like eastern Long Island or the Oregon coast, bear in mind that there are certain climates where turfgrasses experience significantly less pest pressure and environmental extremes than others. Without even judicious pesticide use, golf courses in St. Louis and Washington D.C. will croak every year from dollar spot, leaf spot and patch diseases and mole crickets and nematodes will chow through Florida’s turf like one gigantic buffet line.

Safeguarding environmental quality should be the primary goal of the golf course industry. Our future depends upon it. Golf courses have and will continue to play an important part of landscape conservation in urban areas. They also are valuable community assets that must recognize diverse interests. But organic golf course management is by no means a reality. Perhaps someday our level of understanding regarding plant science will enable us to get there, but until that time realistic golf course management will continue to utilize management strategies and technological innovations proven to offer agronomic value and the least risk to environmental quality.

Matt Nelson is an agronomist for the USGA Green Section’s Northwest region and is based in Twin Falls, Idaho.

Organic golf arrives  
Continued from previous page

Compost and compost tea are vital for promoting diverse soil ecology. Compost provides both a wide variety of microorganisms and a source of organic matter to feed them. Compost can be incorporated into the soil when building a new golf course, when reconstructing features on an existing course, or when applied as a topdressing material. This results in healthier, greener turf, a reduced need for irrigation, and increased disease and pest resistance.

Compost tea is easier and cheaper to apply than compost, and its microbial makeup can be tweaked when it is brewed to help fine-tune the soil microbiology. Golf courses using compost tea on Long Island are reporting dramatic reductions in the number and severity of outbreaks of diseases such as dollar spot. A comprehensive organic program will require other inputs that may be unfamiliar to some superintendents. Microbial inoculants, kelp extract, rock dust minerals, beneficial nematodes, earthworm castings, plant growth hormones and vitamins are all being incorporated into golf course maintenance programs.

Critics of organics insist that there is a lack of university-based research involving many of these products. However, there is decades-old research that demonstrates that compost has turf disease-suppressive qualities. Enhancing microbial activity is the presumed mechanism for compost’s effect, and is the design of many organic products. Unfortunately, when it comes to brand-name products, universities rely upon funding from large corporations to determine what they will study. Manufacturers of organic products may first need to achieve a significant level of financial success before they will be able to fund the research that will prove the effectiveness of their products.

New golf courses represent the best opportunity for establishing an organic program. Compost can be incorporated into the soil throughout the root zone. Grass cultivars that are resistant to disease can also be selected. For example, in the Northeast where dollar spot is a major problem, L-93 bentgrass is a good choice for greens. It is because new golf course construction presents an opportunity to do things right from the beginning that the courts have required that the organic alternative be considered. However, existing courses that are being converted to organic maintenance practices demonstrate that it is never too late to change.

Neal Lewis is an attorney currently serving on a committee overseeing construction of organic golf courses in Suffolk County (NY).
Milorganite helps new greens grow in quicker. Sadly, it has no effect on slow play.

Fortunately, not all decisions require hours of hemming and hawing. Take choosing a fertilizer for new greens, for example. Research shows that Milorganite achieves faster, more complete grow-in than other organic fertilizers. It builds up roots, improves water retention and infiltration rates, and reduces phosphorus deficiency. Now, if only it could help reduce the number of practice swings before each shot.

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Scientists also used autoradiography to photograph and measure the amount of herbicide in the roots two hours after application. Time after time, at least three times more herbicide showed up in the weeds sprayed with Roundup PRO. With the imitator, barely any herbicide has moved to the roots.

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In the first two hours, it delivers three times more power to the roots than Syngenta’s latest imitator product.
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This weed, sprayed with the imitator, has almost no droplets in the leaf.

In the first two hours, almost no imitator herbicide has moved to the roots.

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See for yourself the difference Roundup PRO with patented PROformance technology can make in your weed management. See your dealer or call 1-800-ROUNDP for more information.
**Free video shows science in action.**

See PROformance technology at work in a free, five-minute video. Scientists Dr. Tracey Reynolds and Dr. Jimmy Liu demonstrate the autoradiography and cryo-SEM techniques used to compare Roundup PRO with an imitator on two identical weeds.

Call **1-800-ROUNDUP** and ask for your free Roundup PRO video today!

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Always read and follow label directions. Test conducted with MON 77360, EPA Reg #524-475 with comparison to Syngenta product carrying EPA Reg. #10182-449. 1. Test methodology: In scanning-electron microscopy, Monsanto scientists identified penetrated formulations of both Roundup PRO and Touchdown Pro in the mesophyll cell layer. These micrographs support the evidence that formulations containing Monsanto's patented PROformance technology rapidly penetrate the leaf surface. 2. Test methodology: Radiolabeled formulations were applied at equal acid-equivalent rates. Radioactivity was visualized by autoradiography following a simulated rain event two hours after application. Monsanto laboratory tests, 2001. Roundup®, Roundup PRO® and PROformance™ are trademarks of Monsanto Technology LLC.
**Water conservation plans require constant evaluation**

By James T. Snow

Far Hills, N.J. — With drought conditions gripping the East Coast and parts of the western United States, water conservation issues have again been pushed to the forefront. While golf courses are often cited for misuse of water, the golf industry has recognized its responsibility to reduce water use and become less reliant on potable irrigation sources.

As research and technology progresses, superintendents should continue to evaluate, update and implement their water conservation programs. In recent years the turfgrass industry had developed varieties of turfgrass that use less water or can tolerate poor-quality water, introduced technologies that improve the efficiency of irrigation systems, and tapped alternative water sources that reduce or eliminate the use of potable water.

**Improved Grasses Require Less Water**

Since 1982 the United States Golf Association has distributed more than $18 million through a university-grants program to investigate environmental issues related to the game of golf, with a special emphasis on the development of new grasses that use less water and require less pesticides.

For example, turfgrass breeders at the University of Nebraska have developed several improved cultivars of buffalo grass, which is native to the American Great Plains. This grass can replace high water-use grasses on fairways and roughs in a large area of the Midwest, resulting in water savings of 50 percent or more.

At Oklahoma State University, turfgrass breeders also have developed improved cold-tolerant, seedling-type Bermudagrass cultivars, allowing for the establishment of this stress-tolerant, low water-use grass in the transition zone of the United States to replace high-water-use cool-season grasses. Water savings of 30 percent to 50 percent or more can be realized.

Ruby Hill Golf Course in Pleasanton, Calif., features Bermudagrass fairways and roughs instead of the cool-season grasses used at nearly all other courses in northern California. As a result, the course estimates that it has reduced water use by about 40 percent during the severe drought of 2001.

**Gypsum clears muddy water at The Club at Patriots Glen**

By Andrew Overbeck

Elkton, Md. — During the construction of The Club at Patriots Glen here, project superintendent Jim Kelley faced a potentially disastrous problem — his eight-million-gallon irrigation pond was full of suspended clay and silt particles from construction runoff.

"We get all of our water from that pond, so we had to fix that problem before we could irrigate our new sand greens," said Kelley. "We didn't spend all that money on greens just to plug them up with dirty, muddy irrigation water. As soon as we got the greens seeded, we needed clean water."

Kelley, whose company Evergreen Turf Management is managing the new course, consulted with Wadsworth Golf Construction's Travis Barbee and decided to treat the six-acre pond with gypsum.

"We did some experiments in the shop first," said Kelley. "Hydrated lime worked really well but it was three times more expensive than gypsum. We also tried a polymer that is used to keep hot tubs from getting cloudy, but we weren't sure what that would do to bentgrass."

Kelley bought 10 tons of gypsum and used a hydroseeder to mix it into shurry and spread it out on the pond. It took a four-man crew 11 days to complete the job.
Howell back in 'Bama at The Ledges CC

By ANDREW OVERBECK

HUNTSVILLE, Ala. — It was a homecoming of sorts for superintendent Jim Howell when he accepted the grow-in challenge here at The Ledges Country Club. Howell spent seven years in the top job at Hoover Country Club in Birmingham, before leaving to tackle construction work at Country Club of St. Alburn outside St. Louis.

"I went up there to finish the Tom Weiskopf/Jay Morrish course and then did the grow-in for the Michael Hurdzan/Dana Fry course," said Howell. "I got to know Michael and Dana really well. Because they knew I had spent time in Alabama and that my wife is from here, they introduced me to the opportunity at The Ledges."

Howell came on board in 1998 and The Ledges opened in April of 2000. The private layout, which is part of The Ledges of Huntsville Mountain real estate development, offers commanding views of downtown Huntsville and the surrounding countryside.

"The course sits at 1,582 feet, the highest point in town," Howell said. "Several holes outline the outside of the mountain. We were fortunate to be able to put the course on the outside of the mountain and put the houses on the inside."

While a number of holes play along cliffs, the layout itself is actually on gently rolling terrain. "The topography fools you," said Howell. "It is fairly flat once you get to the top."

At The Ledges, Howell is working with California greens and a SubAir system for the first time. Howell credits the construction methods for reducing disease pressure on his A1 bentgrass greens. "The California greens are extremely fast draining," he said. "We didn't trench in the sub-surface. We used flat tile in the greens and put in a half-inch of pea gravel. The rest is all sand. The SubAir system has also been awesome in helping to remove water and reduce compaction in soils. When summer showers dump, these greens drain very well.

"As a result we have less disease pressure," he added. "It helps to be up on top of a mountain, but we get as hot and humid as anyone else. We are only spending $9,000 a year in fertility and chemicals for the greens. The system allows us to spend that money elsewhere."

The Ledges is also unique according to Howell because they were the first course to sod Meyer Zoysiagrass in Huntsville and the surrounding countryside.

"I used it in St. Louis, but it grows much better here," he said. "It greens up quickly and the members love it because the ball sits right up. It takes longer to get established than Bermudagrass, and because we were in a drought in 1998 and 1999, it didn't really mend together until last year."

In order to combat the turf's tendency to thatch, Howell has instituted an aggressive verticutting program, and uses Primo plant growth regulator and low nitrogen rates to "keep the canopy nice and tight." He also topdresses the fairways each spring and fall at one-eighth of an inch.

"As a result we have less disease pressure," he added. "It helps to be up on top of a mountain, but we get as hot and humid as anyone else. We are only spending $9,000 a year in fertility and chemicals for the greens. The system allows us to spend that money elsewhere."

The Ledges is also reestablishing the slope areas on the course and will be working on getting Audubon certification this year.

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Equipment selection process critical to effective operation

By KEVIN ROSS

One of the most important decisions a superintendent has to make in managing a golf course operation is proper equipment selection. Justification for purchasing expensive equipment, like mowers, must be matched to needs and budget. How does one go about selecting the equipment needed? There are many different factors which go into this process. While superintendents will differ in their criteria of selection, some of the important factors include:

- **Price** - For many, price is the bottom line. Unfortunately, comparing equipment only by price can be very misleading. Two machines with different prices might look the same on the surface, but a closer look at the units will reveal differences, especially when it comes to components. For example, a less expensive machine might not have as good hydraulic motors as the more expensive machine.

- **Service/Support** - The ability of the company to back their equipment with service and support, whether it is parts, training, or updates is of extreme importance.

- **Warranty** - Most equipment warranties are very similar, however reading the fine print can reveal important differences. It is critical to investigate warranties because components such as hydraulic motors, drive engines and even tires can carry different warranties.

- **Reliability/Track Record** - There is no doubt that word of mouth in this industry can make or break a piece of equipment. A machine that has been rock-solid in the field has a major advantage because superintendents cannot afford down time.

- **Serviceability** - Having the equipment technician crawl all over a potential equipment can reveal many important issues that can make a difference. For example, by taking a closer look, mechanics can evaluate everything from how easy it is to get to the oil drain plug to how difficult it will be to change a fan or drive belt.

**THE DEMO GAME**

Another important factor in the decision-making process is the equipment demo. A one-week demo should be enough for a superintendent to see how it performs under their course conditions.

During the demo process, it is critical to get input from assistants, mechanics and seasonal staff. First have the technician do a total inspection and set-up. Make notes on advantages and disadvantages so when the next demo rolls in, comparison will be easier. Next, select the staff members that will be using this machine the most, and have the equipment technician perform the proper training. The unit should then be put to the test in all conditions (wet, dry, etc.) over different terrain (flat, hills, etc.).

When each demo is finished, have a brief meeting with the operators to discuss the machine’s performance and make notes for future reference. After all machines have been evaluated, have a final meeting for staff input, and review the notes for each. Using the demo information with the aforementioned selection process factors, a superintendent can then evaluate their equipment selection with confidence in making the proper decision.

Manufacturers tweak products

Continued from page 1

the same reliability, quality and value for price as models currently on the market.

"I don’t think you could say we are moving away from new technology," Wright said. "It is just a matter of reading when the industry is ready for a big jump. There are a lot of things that can be done, but you have to have an economic model in place to make new technology viable."

Larry Jones, product manager for lawn and rotary mowers for Textron Golf Turf and Specialty Products, agreed.

“We are challenged with creating the latest in technology but also focusing on the customers’ needs and wants,” said Jones. “But at the end of the day it has to present value to the customer.”

With that value proposition in mind, manufacturers are making incremental improvements to existing product lines.

“There is a significant risk from the manufacturing standpoint in moving too quickly with breakthrough technology,” said Gregg Brennigmeyer, director of sales and marketing for John Deere golf and turf. “So it is not surprising this year to see new products being different iterations of current technology.”

JACOBSEN’S NEW LF 1880

Textron’s new Jacobsen LF 1880 lightweight fairway mower features patented new floating lift arms that allow for more vertical movement while keeping cutting units in the same plane. According to Jones, the new mower can handle more undulating surfaces while delivering the same quality of cut.

“It keeps the cutting units from spreading farther apart and leaving uncut grass,” he said. “We will be adopting this technology to our rotary mower lines.”

The company also made minor improvements on its AR 2500, 9510 and 5111 rotary mowers.

TORO IMPROVES ROTARY MOWERS, ERGONOMICS

Toro also made improvements to its Groundsmaster 4500- and 4700-D rotary mowers by adding cutting decks from the Groundsmaster 3500 and the engine from the Reelmaster 6000 series.

“If you can use tools that you have already developed or introduce fine-tuned products into the market, then your customers are not starting over with a new machine,” said Wright. “That idea here is to have innovation with limited newness.”

The company also improved ergonomics and operator comfort on its Greensmaster 3150 greens mower.

JOHN DEERE EXPANDS B-SERIES LINE

John Deere’s new B-Series walk-behind greens mowers have also been improved for this year.

“We have made a good product better,” said Brennigmeyer. “We have made it easier to adjust the reels and to take them on and off. We also added a true 18-inch machine and a new 26-inch machine to the line. They are the lightest walk-behind greens mowers out there.”

Brennigmeyer also said that a major new product is in the works for release next year, but gave no other details other than it would be “riding mower.”

Focusing on Focus Groups

According to manufacturers, these product tweaks and developments are largely a result of feedback sessions and focus groups.

Jones said the LF 1800 was tested on golf courses for two years before its release this season. “Superintendents put the unit to the test and the final design is a result of their input,” he said. “This allows us to ensure the reliability and value of the machine when it goes onto the market.”

In a market where innovation can equate risk, this strategy will be key to the introduction of any new products or changes.

“Toro has the largest install base out there to pull from,” added Wright. “We will continue to tweak our products as we learn from our customers about the changes and modifications they would like to see. We will also gauge their response on new products and prototypes.”
Digital Cyclone to offer Doppler radar for cell phones

SAN FRANCISCO —
Motorola and Digital Cyclone have developed a weather radar application for Java technology-enabled Motorola mobile phones.

Digital Cyclone's Mobile My-Cast weather application uses a network of high-resolution weather models and personalized radar imagery to help weather-sensitive businesses make better decisions. Users can receive current conditions, a nine-hour or seven-day forecast, and notifications regarding severe weather for their specific locations on their Motorola mobile handsets.

“Mobile My-Cast is a planning tool that can help businesses make the correct weather-based decisions,” said Paul Douglas, chairman and founder of Digital Cyclone and chief meteorologist with WCCO-TV in Minneapolis.

“It is often difficult for weather-sensitive businesses to provide relevant weather information to employees off site. This application helps isolates the forecast within a few blocks and provides real-time radar for their precise locations, helping mobile workers remain productive.”

Users of the Motorola 990c, 185s, and 150sx handsets can download Mobile My-Cast wirelessly at www.nextel.com/idenupdate. There is a subscription charge of $14.95 per month to use the service.

Water conservation

Continued from page 9

percent compared with similar courses that use cool-season grasses.

Improved cultivars of seashore paspalum developed by turfgrass breeders at the University of Georgia are extremely salt-tolerant grass and can be irrigated with high-salt or brackish waters with little negative effect on turf quality. Cultivars are available for greens, tees, fairways and roughs, and some of these varieties can be irrigated with water directly from the ocean.

Research on other improved varieties is ongoing. Work is being undertaken on zoysiagrass (Texas A&M), saltgrass (Colorado State and Arizona State universities), annual bluegrasses (Minnesota and Penn State universities), alkali grass (Loft’s Seed), fairway crested wheatgrass (Utah State University), colonial bentgrass (University of Rhode Island) and on a number of grass species at Rutgers University. This research, along with breeding work being done at other commercial seed companies, will provide new turf varieties for golf courses that reduce water use and pesticide use for decades to come.

NEW IRRIGATION SYSTEM TECHNOLOGIES

New irrigation system technology also has improved water-use efficiency on golf courses. Superintendents can reduce over-irrigation by using onsite weather stations, weather reporting services and other resources to determine accurate daily water-replacement needs. There also is a considerable effort being made to adapt various types of sensors to evaluate turf soil moisture-replacement needs, including tensiometers, porous blocks, heat-dissipation blocks, neutron probes and infrared thermometry.

In the meantime, using state-of-the-art computerized control systems, portable hand-held controllers and variable frequency-drive pumping systems remains the most efficient way to reduce water and energy consumption. For example, the Southern California Golf Association Members Club...
Muddy water
Continued from page 9

hours to completely cover the area and the entire treatment cost around $3,000.

The finely ground gypsum (CaSO₄) clears muddy water by shrinking the layer of positively charged ions surrounding clay particles. As the number of these ions decrease, the attraction from one particle to another increases, causing the colloids to clump together and settle out due to their increased weight. According to gypsum supplier United States Gypsum, the product has no adverse effects on water quality, plant or aquatic life and does not increase water hardness.

Kelley said the pond cleared three days after application and has not needed a reapplication. "I don't think we will have to use it again," he said. "The surrounding homes have all been built and the course opened last October so we don't have the excessive runoff that we had during construction."

Water
Continued from previous page

in Murrieta recently installed a new irrigation system that has reduced water use by about 35 percent. And because the club is able to complete its irrigation schedule in a short time frame during nighttime hours, it has reduced its energy costs by about 50 percent.

ALTERNATIVE WATER SOURCES

It is not hard to understand why many communities are concerned about golf course use of potable water supplies, either from municipal sources or from onsite wells, during periods of drought and water-use restrictions. In response, many golf courses have developed alternative irrigation water supplies and methods that do not depend on potable sources.

These include using storage ponds to collect storm runoff water that might otherwise be lost and wasted and using effluent that has undergone a three-step (tertiary) treatment process. This recycled water provides moisture and nutrients to the golf course while helping the municipality avoid discharging the effluent water into nearby rivers. Turf does an excellent job of filtering the water of nutrients and breaking down various chemicals and biological contaminants in the water. Use of recycled water on golf courses is mandatory in some locales in the Southwest, and it is estimated that more than 1,000 courses nationwide use recycled water.

Brackish water or even ocean water can supplement other water sources. Bermudagrass is quite tolerant and seashore paspalum is very tolerant of high salt-content water, and these varieties allow golf courses to irrigate with brackish water that has few other uses. For example, the Old Collier Golf Club in Naples, Fla., is planting its greens, tees, fairways and roughs with two of the new seashore paspalum varieties emanating from the University of Georgia's turf-breeding program.

Reverse-osmosis (RO) desalination plants are another way to produce irrigation water from ocean water or brackish water where other supplies are not available or are very expensive. Three golf courses in Florida and one in the U.S. Virgin Islands have built RO plants in recent years, establishing good-quality, dependable and less costly supplies of irrigation water and allowing others in their communities to use the limited supply of potable water.

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James T. Snow is the national director of the USGA Green Section in Far Hills, N.J. Portions of this article were adapted from the International Turf Producer's Foundation publication, "Water Right—Conserving Our Water, Preserving Our Environment."
Oak death
Continued from page 9

trees. Trees of thousands of oaks along California’s coastal counties have been wiped out by SOD and recent research has found that it also affects over a dozen other plants including madrones, manzanita, broad leaf maple, rhododendron, and bay laurel. The pathogen can thrive within a healthy tree, which it won’t affect, and then spread on to trees that succumb to its attack.

NO KNOWN CURE

to date there is no known cure for SOD and there is evidence that it may be spreading. Infected trees have been identified as far south at Monterey and as far north as Southern Oregon.

The SOD mystery has been slowly unraveled through the efforts of two forest pathologists: Matteo Garbelotto from the University of California at Berkeley and Dave Rizzo of the University of California at Davis. They discovered that SOD is caused in part by *Phytopthra ramorum*, a microbe that related to the fungus that caused the Irish potato famine in the 19th century.

Research is still in its infancy and discoveries about the pathogen’s nature are slowly being made. The keys now are to determine how climate and ecology affect the pathogen and understand completely how it spreads from one plant to another.

“We have determined the cause of the disease but are still learning more about it. We can eradicate it but we need to learn how to control its spread,” explained Rizzo.

Last year California Sen. Barbara Boxer secured $3.5 million in federal funds and the state of California added $3.6 million to fund the needed research to find a way stop the advance of the disease. One forester fears the worst if the disease should move to the Sierra Nevada Range.

“If it spreads to the mountains what is to keep this disease from spreading across the country?” said U.S. Forest Service plant pathologist Susan Frankel.

NO IMMEDIATE SYMPTOMS

The fungus will infect a tree for a few years before symptoms are noticeable, such as brownish lesions on leaves and blackish ooze coming from the bark. The fungus destroys all the tissue the tree uses, cutting off the tree’s ability to move sugars into the root system. This causes the root system to die and the top of the tree quickly falls.

“Throughout the hillsides where in Marin, you can see ash gray tree tops within the forest that are the remnants of dead trees, and also spot browning leaves of trees that are dying. The signs of SOD are visible everywhere,” Sexton said.

The disease has also impacted certain tree nurseries. One such supplier, Valley Crest Tree Co. in Sunol, has felt the pinch as science and government regulations collide. Valley Crest supplies trees for the landscape industry and trees for new course construction and ornamental trees for clubhouse and course renovations.

“The pathogen was identified in one tree here in our county and the decision was made to place a county wide quarantine on plants being shipped from here. To me it is a classic case of regulation preceding science in the reaction to the discovery. I don’t have any infected trees in my nursery nor has there been any sign of it, yet every tree that I ship out of the county must be inspected by county inspectors before it is sent,” said Robert Crudup, president of Valley Crest.

“New course construction has slowed recently but still there is quite a bit of renovation work in the industry that requires trees so we are feeling the effect from the disease,” Crudup added.

Ongolf courses, superintendents are paying more attention to their trees. So far the disease seems to have a stronger effect in deep forest rather than attacking lone trees, such as ones surrounded by fairways. The use of best management practices to promote healthy trees continues to be the best preventive measure.

“Weaker trees are more susceptible to the pathogen. We have been in constant contact with an arborist and are willing to try whatever is suggested to try,” said Peacock Gap superintendent Richard Lavine. “Our course is right next to ground zero, the China Camp Park where the disease first showed up but we have seen no effect on our course.”

MAINTENANCE

Balanced Chain
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(continued from page 8)

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GOLF COURSE NEWS
Continuity leads to consistency during club’s reconstruction

By KEVIN DOWNING

STUART, Fla. — As Willoughby Golf Club embarks in a full-scale renovation project that will involve closing the course for the next six months, proper long-range planning has been a key organizational advantage. I have headed up the renovation planning process which began in 1998. Since I have been at the club from the beginning, I have been able to easily identify what steps need to be taken to improve the layout because I understand the course’s mission.

In the late 1980s the developers of Willoughby set out to create a golf course that focused on the needs of the average golfer. They wanted to create a stimulating round of golf, but realized that most of the buyers were high-handicap golfers.

The developers originally chose the Arthur Hills design firm because of their ability to work with environmentally sensitive property and because they understood the diverse needs of the eventual homeowners and club membership. I worked closely with their firm and the housing configuration to ensure that the course hit the targeted market. The result was a 6,000-yard course that still challenged all levels of golfers.

As courses mature, the design characteristics and landscape materials can alter the playing conditions of the best golfers.

Golf courses are dependent on the sanctity of par, he said. “Rather than the sanctity of par, why don’t we just create shots. Suddenly the land requirement is about a third. That was the basis of the Golf Trail concept.”

Golf Trail is the combination of a golf course and a practice facility. Golfers use standard equipment to hit operator-supplied balls to target greens and fairways. Players can add a competitive component to the round.

Continued on next page

UK alum returns for renovation

By DEREK RICE

LEXINGTON, Ky. — When architect Drew Rogers of Arthur Hills/Steve Forrest and Associates graduated from the University of Kentucky in 1991, he never imagined that he’d one day be back to help renovate the Big Blue course at the University Club of Kentucky.

“When you leave school, you never know where your career is going to take you,” Rogers said.

“Certainly, I didn’t have any idea that I’d ever have an opportunity to come back and be in Lexington doing the kind of work that I do, so that was pretty rewarding.”

The course, which is set to reopen May 18, has undergone what Rogers called a “typical facelift,” including rebuilding greens to USGA specifications and renovating tee boxes, bunkers, drainage and cart paths.

“A lot of vegetation that was on the site that was probably not selected to match the pastoral quality of the site, so we removed a lot of it,” Rogers said.

Course to open on donated land

By DEREK RICE

BATON ROUGE, La. — Thanks to a donation of 200 acres of land and a property tax levy that raised $3.2 million, the East Baton Rouge Parish Recreation and Parks Commission (BREC) will soon open a new flagship golf course, its seventh in the area.

Although there is no set date for the opening of Beaver Creek, Bill Palmer, BREC director, said conditions should dictate a summer opening.

“We don’t have a target date except for somewhere around July or August,” he said. “It’s growing in and doing very well. It’s been a kind winter and the grass really looks good.”

A group of landowners donated the land in 1995, keeping 322 acres for a residential community that is also under construction.

“The land is worth about 2.5 million. That’s a very significant donation,” Palmer said.

Because BREC and the developers have worked together from the start, the two projects will avoid many of the issues encountered by such close neighbors, Palmer said.

“We eliminated a lot of the potential problems by working together in the beginning,” he said.

Continued on page 17

Twin Creeks project progressing

By DEREK RICE

AUSTIN, Texas — Twin Creeks, a 700-acre residential, country club and golf course community located in the Cedar Park area of Austin, will be the first private country club and the first Fred Couples signature course in the area when it opens this fall.

The operation is a venture of Twin Creeks Holdings, a partnership between Crescent Resources LLC and SWD Communities. The development, undertaken by Weitz Golf International of Palm Beach, Fla., broke ground last October and is progressing on schedule, said Harry Turner, senior vice president of Twin Creeks Holdings.

“We’re currently in construction with a planned opening of late this year,” he said. “We hope to have everything planted by the end of August and I believe that we should meet that as long as we don’t get any big rains or anything that’s unforeseen.”

One reason the project is going well, Turner said, is the land itself, which he said is attractive to both golfers and homeowners. “We’ve got a perfect piece of land. We’ve got 15 holes that don’t have houses directly on the fairway so from a golfer’s perspective it gives you the feel of not being in a housing development,” he said. “From Continued on page 19
Holanda wraps up renovation work early

By ANDREW OVERBECK

NEWTOWN, Pa. — Superintendent Rick Holanda here at Aronimink Golf Club has taken advantage of a warm, dry winter to wrap up the final phase of a Donald Ross restoration and renovation project a month ahead of schedule. Architect Ron Prichard and golf course builder McDonald & Sons oversaw the work, which was done to prepare the layout for the 2003 Senior PGA Championship.

Over the past two years, the course’s greens, tees and fairways were reshaped and returfed with bentgrass and all of the bunkers have been restored to their original Donald Ross design.

Holanda, who came to Aronimink two years ago after stints at Chestnut Ridge Country Club in Lutherville, Md., and Merion Golf Club in Ardmore, Pa., has plenty of renovation experience.

"At Chestnut Ridge we rebuilt all the bunkers in-house over two years and at Merion I was involved with the conversion of the fairways," said Holanda. "That helped prepare me for the work at Aronimink."

While Prichard drew up a master plan for the club back in 1995, it didn’t go into full effect until Holanda came on board.

REACTIVATING THE MASTER PLAN

"We reactivated the plan and the first stage was to convert to bentgrass and reshape greens, tees and fairways. The greens had been rounded off over the years and we enlarged them by 25 percent to regain the corners that had been lost. We also squared off the tees and recontoured the fairways and made them much wider. We now have 31 acres of fairways compared to 26 acres before the work."

Holanda removed the Poa annua greens with methyl bromide and the Poa annua, ryegrass and bentgrass fairways and tees with Roundup. The greens have been replaced with A4 bentgrass and the fairways and tees are L-93 bentgrass. The areas between the tees and fairways are planted with ryegrass, which Holanda said provides striking contrast. All of this work was completed in 2000.

This fall and winter, Holanda tackled the bunker restoration. "We reshaped them and relocated them back to the Donald Ross design. We have made some of them deeper and added grass faces."

The pond in front of the 10th green that had been filled in back in the 1940s was also restored. "Apparently the green committee took the pond out during World War II because a lot of golf balls went in there and the members didn’t have money to waste on balls," Holanda said. "We have put it back in and it makes the hole much stronger."

All the work went off without a hitch, even with stronger than usual levels of winter play.

"Ron Prichard came out every week to work with us and give us new field drawings, and McDonald & Sons did a great job keeping a low profile," said Holanda. "We didn’t work on more than two holes at a time."

PREPARING FOR THE PGA CHAMPIONSHIP

With the restoration work wrapping up, Holanda is looking forward to getting the course into shape for the Senior PGA Championship next June.

"Our goal is to manipulate the golf course and get it into tournament condition. We need a winter with lots of snow so I can take it easy because we have been working a summer schedule in the wintertime for the last two years," he said. "But it has been worth it. I am ready to turn the course back to the members and let them enjoy it because they have been very supportive and a great team to work with."

Continuity aids reconstruction

Continued from previous page

Layouts. Therefore it is important to observe the course in order to create a fair and competitive golf challenge. Fortunately at Willoughby we have been able to have continuity in staff, which has created an opportunity for continued membership satisfaction.

As the developer finished off sales operations and the membership peaked, long-range planning started in an unofficial capacity. I documented all weaknesses, such as tee locations, severely contoured greens and obstacles that hindered the flow of play for future planning and compiled a list of all projects that had been completed over the years.

As membership turned over became an issue, we have created a renovation plan that we will implement this summer. Arthur Hills’ firm will be involved with the renovation process, allowing for a continuity in course design.

In next month’s issue, I will focus on the components of our planning process that include: identifying priorities, categorizing improvements or modifications, creating membership excitement, and establishing construction time tables.

The 13th green at Willoughby will be renovated because members’ balls keep rolling over the existing bulkhead and into the water.
Re-tooled Frenchman's Creek re-opens

NORTH PALM BEACH, Fla. — WeitzGolf International recently completed an 18-hole renovation at Frenchman’s Creek Country Club based in Palm Beach Gardens.

Architect Robert Cupp of Cupp Design directed the project, which broke ground on April 2, 2001, and was completed in time for winter play in 2002.

The renovation included striping and clearing the entire course and re-grading it to Cupp’s specifications. In addition, Weitz installed a new irrigation system.

The course now features larger greens grassed with TifEagle, fairways grassed with TifSport, new bunkers, new timber bridges and timber bulk-heading and custom-colored cart paths.

The renovated fairways are highlighted by new landscaping elements throughout the course.

This was the second renovation Weitz Golf has performed at Frenchman’s Creek, following a total restoration of the course’s clubhouse last summer.

UK alum

Continued from page 15

that to expose the more typical open Kentucky rolling horse farm-type of landscape,” Rogers said.

The construction aspect of the project, which was handled by Landscapes Unlimited, included some work with the existing lakes on the property, Rogers said.

“We replaced the lake overflow structures and connection structures from what was a concrete gutter-type system, which was not the look we were trying to achieve,” he said.

“We extruded those and used a lot of the limestone on site. We had a water feature specialist, Horizon Golf, build more stream-like spillways that connected the ponds, which aesthetically was an improvement.”

Because of the extensive drainage system renovation, Rogers said, the fairways are completely new.

“There was a lot of disturbance in the fairways necessitated by the drainage that we planned to install,” he said. “As you can imagine, trying to save anything in the line of fairway turf was not a number that made any sense. We were kind of starting from scratch there. We did not alter the original routing to speak of. A few were lengthened, a few shortened, but the original corridors were maintained as they had existed.”

Rogers said his affiliation with the University of Kentucky came in handy on this project, from both a personal and professional standpoint.

“Most people don’t get a chance to give something back,” he said. “I was already familiar with the property from years past and got to do some significantly exciting things. I played it a few times under its old name.”
Roslyn, Holiday Organization to develop golf community

JERICHO, N.Y. — Mt. Sinai Ventures LLC, an affiliate of Roslyn Bancorp Inc., has partnered with The Hamlet at Willow Creek Development Co. LLC, an affiliate of The Holiday Organization, to develop a 177-unit, $105 million residential golf community. The Mt. Sinai-based Roslyn Bancorp Inc. has partnered with The Hamlet at Willow Creek Development Co. LLC, an affiliate of The Holiday Organization, to develop a 177-unit, $105 million residential golf community.

The partners expect the project to be completed in 24 to 36 months. The terms of Roslyn's investment call for a preferred return of 1 percent over the bank's prime lending rate on a total investment of $25 million, plus a 50 percent share in the residual profits and losses. According to John R. Bransfield Jr., vice chairman of Roslyn Bancorp and president of Roslyn Savings Bank, the company expects its share of the profits to be in excess of $10 million.

The homes currently under construction range from $485,000 to $625,000 and range in size from 2,200 square feet to 3,900 square feet. They will be adjacent to the 18-hole golf course and practice range. Also included in the golf club are tennis courts, playgrounds, basketball courts and an in-ground swimming pool. Once completed, the club will accept only a limited number of memberships from non-homeowners.

Roslyn and The Holiday Organization previously teamed to construct a 570-unit residential community in Oyster Bay, which should be completed later this year. The Holiday Organization has constructed similar projects throughout New York, Pennsylvania, New England and Florida.

First National

First National’s board of directors recently approved a proposal to provide additional funds to finance golf projects on Native American soil. This move stems from the positive experience First National has had with Santa Clara Golf Services, which is constructing a course in Santa Fe, N.M. Working with Native American projects, Sager said, is a relatively new area of investment.

"That's a real breakthrough for us, and apparently for everyone else," he said.

Previously, lenders were skittish about lending for projects on Native American soil because of tribes’ sovereign governments. Because of this structure, lending for these projects is the equivalent of lending for a project in another country.

"You are not lending to a United States entity, you’re lending to a sovereign entity, so you are subject to whatever Indian law exists at that particular tribe," Sager said. "You’re effectively lending to a non-United States entity, so you don’t have simple fee title to the real estate. It’s a whole different set of rules."

Sager said a number of factors have led to an increase in the number of inquiries for these types of projects in recent years.

"There are a lot more now than there were five years ago and certainly 10 years ago," he said. "The growth with casino development and destination resort development onto Native American lands has sparked golf development and of course golf course lending. It’s a wonderful market and I think a wonderful opportunity for golf course developers to partner with Native Americans."

Based on its success with the Santa Clara project, Sager said, First National will continue to fund these types of projects in the future.

"It's been a very positive experience for us," he said. "The golf course is not open yet, although we have invested several million dollars. We said, 'Now that we've got our feet in the water, let's get wet all the way up to our neck and do some more of these.'"

18 MAY 2002
Puddicombe tackling ownership role

By DEREK RICE

EDMONTON, Alberta, Canada — Golf course design firm Sid Puddicombe Associates plans to take the next step and become a golf course owner and operator with the opening of RedTail Landing Golf Club, which is scheduled for spring 2003.

“This is their flagship course,” said Kimberly Schick-Puddicombe, director of sales and marketing for RedTail Landing. “The guys over there have always worked everywhere else but at home, done it for everybody else, and sometimes there are guidelines and restrictions that a particular owner wants, so they just wanted to go to town on their own thing.”

Construction has been completed on the 234-acre site located at the entrance to the Edmonton International Airport’s AirLinks Business Park.

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Twin Creeks

Continued from page 15

as expansive views of the golf holes themselves. They don’t just get a confined view of a golf hole like you might think of in Phoenix or Scottsdale or Palm Springs.”

Austin’s mild winter has also contributed to the success of the construction, Turner said. “We were pretty fortunate with the winter weather,” he said. Turner said he hopes to have a superintendent and general manager hired by the beginning of summer to oversee the final stages of the project.

In addition to the golf course and surrounding community, Twin Creeks will feature a recreation center, two tennis courts and a water park.

BREC course

Continued from page 15

ginning,” he said.

There were also wetlands issues at the site, Palmer said, which Craig Schreiner Golf Course Architects incorporated into the master plan.

“Craig Schreiner has worked very well with the site to minimize the impact on those wetland areas,” he said. “We mitigated 14 acres out there. The adjacent wetlands are some of the features that make the golf course so unique and make it such a beautiful course.”

Among those issues was the relocation of a six-foot alligator to a neighboring swamp. “It calls [the wetlands] home, so we’ll see if it comes back,” said Kristi Barnett, director of BREC’s public relations.

BREC is also undergoing a renovation at its Clark Park facility thanks to a grant from The First Tee. Both projects have been planned and overseen by Schreiner.

“We already have extensive junior golf program, we’re just looking to make it better through The First Tee,” Palmer said. “Clark Park is a beautiful nine-hole course. We’re going to change it a little bit, and add a driving range, make it more friendly for our purposes.”
Designer tackles ownership

Continued from previous page

and at press time, the firm was waiting for the snow to melt so seeding could begin, Schick-Puddicombe said.

"We have way too much snow at the moment, so we need to get rid of the snow and then we'll be doing the grow-in this summer," she said. "We're not sodding. Everything will be planted by seed. We'll just be growing it in and cleaning it up, putting cart paths in and some of the final details."

Depending on how the grow-in progresses, Schick-Puddicombe said, the course might open for limited play later this year. As far as staffing is concerned, the club has hired a superintendent, but could not divulge his name because he hadn't yet given notice at his prior job.

"We're excited to have him on board," Schick-Puddicombe said. "He'll bring a lot of knowledge and experience and energy into the project."

The plan is to hire a general manager sometime this summer, but that plan could be accelerated if there is to be play on the course this year.

"It really depends on what happens this year because if we do have a little bit of limited play this year, we'll obviously have to hire some people on just to get that going," Schick-Puddicombe said.

RedTail's clubhouse is scheduled to break ground this month.

Golf Trail

Continued from page 15

to the trail as well. The site is a circle with a square, but Pate said that design isn't absolute.

"Depending on the terrain, it could be linear or it could take on different shapes. It's easy to do on a flat site," he said. "It will fit into all kinds of equations, whether it's a business park or residential development or a freestanding one on unused public land."

While no facility has been built yet, Pate said he has some sites that are close.

"The one that seems like it might go first is located in SeaTac, which is the big airport area for Seattle," he said. "There's a half of a park that hasn't been developed that was granted to the city of SeaTac by the FAA. It's a neat place, about 6,000 hotel rooms within a mile. I like that site a lot, and we're working with the FAA and the port of Seattle."

Pate said Economic Research Associates did an economic study for his firm in Seattle and found that Golf Trail is much more efficient than a typical nine-hole course.

"They showed that the nine-hole course could make about $1 million (net operating income on an annual basis) running at about 80 percent capacity. Then they showed how the GolfTrail would make $1 million operating at 20 percent capacity," he said.

Pate also pointed to Sportometrics research that suggests that alternative facilities and traditional courses can peacefully coexist.

"These alternative facilities or whatever they are seem to thrive in and around other golf courses and they don't cannibalize each other, which would suggest that alternative facilities is a growth sector for the golf industry," he said. "It's becoming more and more apparent that the golf courses are overbuilt, particularly these high-end daily fees. There's going to be a lot of blood spilled in the next year or two."

Pate said he looks forward to identifying and building the first of his designs, whether that is in SeaTac or somewhere else. He's also cautious, knowing that previous plans, such as a course conversion in Honolulu, have encountered problems.

"I'm principally looking for locations now," he said. "The first one is going to be critical, so I need to identify that. I might get stymied at any site."

Landscape architecture by Toscanini.

Ornamentals by Monrovia.

Turf by Confront.
BLACKMOOR NAMES NEW PRO

MURRELLS INLET, S.C. — Jon Fritz has joined Blackmoor Golf Club as golf professional. In his new position, Fritz will be responsible for providing golf instruction and clinics, supervising assistant professionals, managing the golf shop, coordinating groups and working directly with guests. Fritz comes to Blackmoore from Arrowhead Country Club, where he was an assistant professional for more than four years.

STONIONIS JOINS FREEDOM GOLF SERVICES

HERSEY, Pa. — Former Gotham Golf Partners vice president Dan Stonionis has been named executive vice president of Freedom Golf Services (FGS), where he joins former co-worker and current FGS president Allen Dupuy. Stonionis will establish a satellite office based in Rochester, Minn., to service clients and future acquisitions in the upper Midwest. Prior to joining FGS, Stonionis spent five years with Gotham Golf Partners and KSL Fairways, and three years at Doral Resort and Country Club.

COUNTRY CLUB OF MENDON APPOINTS NEW CLUBHOUSE MANAGER

ROCHESTER, N.Y. — Country Club of Mendon has appointed Joel Cummings as clubhouse manager. Cummings was formerly the general manager and chief operating officer of Lancaster Country Club in Lancaster, N.Y. He has also held management positions at Locust Hill Country Club and Oak Hill Country Club. Cummings is a board member in the Club Managers Association of America. Cummings will be responsible for re-positioning the club to offer members more events and social opportunities, such as weddings, corporate outings and golf tournaments.

Heritage Golf takes on long-coveted Valencia CC

By DEREK RICE

SAN DIEGO — Golf course operator Heritage Golf Group has acquired Valencia Country Club, located in a suburb of Los Angeles, from Uniden Valencia Inc.

Bob Husband, president and CEO of Heritage Golf, said he has had his eye this particular course for a number of years.

“I’ve always liked the course because it was one of the best of the area,” he said. “We think it’s going to be a great acquisition for our every four years. It fits right in with what we’re doing, which is trying to stay in the high-end stuff.”

Husband said there are some cosmetic changes Heritage will make, but it will be nothing too drastic.

“If we do anything to the golf course at all it will be to restore it to what Robert Trent Jones had in mind 35 years ago,” he said. “I remember playing it 20 years ago, when it had deep bunkers. We’ll take a look at them and see if we need to restore them. There were some drainage issues, but nothing really major there. Most of the work we’re going to do will be in the clubhouse—renovating the entry and just aesthetically giving it a better feel.”

As for Heritage’s acquisition strategy, Husband said this should be one of many courses the company will buy this year.

“We’ve been patient because we were waiting for some things to change a little,” he said. “I think we’re going to do a lot this year. Certainly, it’ll be in the last half of the year because it takes that long to get anything going anyway.”

Because of current business conditions, Heritage doesn’t expect too much competition for the types of courses it hopes to acquire this year, Husband said.

“We’re starting to see some things with American Golf and National Golf Properties and all the things that are going on there—they’re sort of out of the market,” he said. “You hear other groups talking about gearing up, but there are not a lot of transactions going on. We’re ready to buy a lot of stuff if we can find the right prices.”

However, Husband said, any growth the company experiences will continue to be in the high-end market, which Heritage has staked out as its strategy.

Continued on next page

AGC sues Eagle Brook member

Counter claim ‘may break’ management company

By DEREK RICE

GENEVA, Ohio — Since becoming a member of Eagle Brook Country Club in 1998, Tom Doyle has seen many things about the operation that have made him unhappy, such as non-members playing on the private course and sliding maintenance issues. Two years ago, he decided he’d seen enough and wanted out of his membership.

Understanding that club policy dictated that until membership reached full capacity, one member would be allowed to leave the club for every four new members who joined, he put his name on the resigning members list and continued to pay his dues. At the time, he was told he was No. 23. The last time he checked, he was told he was moved up to No. 17, although, as he said, there is no way to know for sure, since the list is kept confidential.

Last July, Doyle decided enough was enough. He told general manager Jeffrey Kreafle to keep his $24,000 membership fee and that he was no longer a member. When monthly dues statements continued to arrive, Doyle ignored them. When the club posted his name, as well as his wife’s name, in the clubhouse as a dead member, it raised issues.

“It’s like asking how much you could make in a season,” Doyle said.

Heritage Golf (CEO) Bob Husband said Valencia Country Club is one of the best clubs in Los Angeles.

Continued on page 24

Keyonix looks to eliminate unauthorized rounds

By DEREK RICE

GREENVILLE, S.C. — With the introduction of its Smart Key golf cart ignition system, Keyonix LLC hopes to allow course owners to regulate golf cart usage and establish accountability for every round of golf played with a car.

“We’re not trying to eliminate free rounds of golf, just the unauthorized ones” said Bobby LoVine, national sales manager for Keyonix. “Extra play is an expense — to increase and a 215 percent ROI.”

Currently, there is no system for knowing how many rounds a course is losing, LoVine said.

“No one knows that. It’s like asking how many times a bank didn’t get robbed,” he said. “Once we’ve completed our first full year, we’ll be able to tell them about how many rounds they’re losing based on trends from previous years.”

Many courses don’t lock their cars in a barn, so anyone with a key to the clubhouse can get access to the cars and joyride around the course, LoVine said.

“You’ve always got those cases where someone drives a car into a pond or across a green or rolls one over,” LoVine said. “Between the damage to the car itself, the damage to the golf course and potential injury, you expose yourself to a lawsuit because you didn’t secure your golf cars the way you should have.”

At the moment, Keyonix is testing its system at Carolina Springs Golf Club in Greenville. Once the system has been installed and tested, it will be available on a widespread basis.

“Golf courses can program each Smart Key, which use iButton technology, in 15-minute increments at the point of sale. Once that time limit has been reached, the golf car will stop running.”

Continued on page 23

Case studies demonstrate return in GPS investment

By DEREK RICE

AUGUSTA, Ga. — According to case studies released by golf car manufacturer E-Z-Go Textron and global positioning system (GPS) provider ProLink, golf courses can see financial benefits from GPS. Courses in the case studies, conducted in summer 2001 by Fletcher Martin Ewing, showed a return on investment (ROI) of up to 240 percent and a reduction in the length of rounds by an average of 15 to 20 minutes.

The following are examples of the benefits courses across the country have seen since installing the ProLink system.

PA A KO RIDGE

As a new course in a competitive market, Paa-ko Ridge Golf Club in Sandia Park, N.M., was concerned about slow play, so it needed a way to move golfers around the course faster, while sticking with its “cart path only” rule. Warren Lehr, Paa-ko’s director of golf, brought in the ProLink system.

The Keyonix Smart Key is about the size of a keychain bottle opener.

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Continued on next page
FireRock goes private ahead of schedule

By DEREK RICE

FOUNTAIN HILLS, Ariz. — Based on the progression of its membership drive and home sales, FireRock Country Club, which is a partnership between TerraBrook and MCO Properties, has converted to a completely private club a year ahead of schedule. The club closed to public play April 1.

"The partnership came together in January and saw that our development, our lot sales and our luxury-attached properties had progressed at such a rate that we could convert to the private country club option earlier," said Greg Bielli, project manager at FireRock. "We saw that the acceleration of the program was going to be a benefit both in the community and also externally for future sales."

One of the reasons behind allowing public play in the early stages of the project, Bielli said, was to be able to provide a high level of service from the outset by pumping the funds from that into the club.

"Many projects will delay a clubhouse construction, for example, which is a major investment, until they’re further along in their memberships, but we wanted to bring on all of the facilities at the beginning of the project," he said. "We built our 29,000-square-foot clubhouse in the beginning. That gave everyone the use of the clubhouse and in the short term, public play exposed more people to the club."

"Quite frankly, that outside play also supplied financing to keep the operation levels at the service levels that we wanted to," he added.

Bielli stressed that the FireRock members were informed that there would be public play for a limited time from day one.

"That was something we let all our members know up front," he said. "Before they bought here, they understood that that was how we were going to provide a high level of service to them until the membership got to a level where we could go ahead and eliminate public usage. We kept it very open."

The club has also capped the number of golf memberships it will sell at 395 to ensure its members accessibility to the course.

"The issue in our business is accessibility," he said. "In the Phoenix market, we found that when you go over 400 golf memberships, there are some limits that are imposed on golf accessibility during the peak season."

An additional source of early funding was the sale of non-real-estate invitational memberships, which the company will recall at the end of the year, Bielli said. As with those who bought in to the community, anyone who bought an invitational membership was told up front that it would one day be recalled.

Valencia CC

Continued from previous page

"If we were to do anything else, say mid-level clubs, we would probably do it under a different name because we want to keep that brand," he said.

Valencia recently hosted the Senior PGA Tour SBC Senior Classic, and Husband said he hopes to continue that tradition.

"We're negotiating right now, but it looks as if we will continue to host the tournament," he said. "We'd love to do it because we'd like to have a chance to show it off next year after we've had a year to work on it. It will be fun."
GTA updates projections

CHARLESTON, S.C. — Based on updated analysis by its financial advisors, golf course management company Golf Trust of America Inc. (GTA) estimates that its common shareholders will ultimately receive between $6.01 and $9.43 per share in liquidating distributions.

Financially troubled GTA currently expects its first liquidating distribution to be paid shortly after the company liquidates its final asset, which it expects to be in the next 12 to 24 months.

Based on its current projections, GTA doesn’t expect to qualify as a real estate investment trust (REIT) for its taxable year ending December 31, 2002, particularly in light of the net operating loss it carried forward from 2001. The company said it does not expect the loss of REIT status to affect its liquidating distribution.

At press time, GTA owned an interest in 21 golf courses, which it is liquidating pursuant to a plan approved last year by its stockholders.

Smart Key

Continued from page 21

whether to go or to stop based on you turning the key on or off,” LoVine said. “What we’re doing is telling the golf car, ‘Work for 360 minutes and stop.’”

BRIDGING THE GAP

Keyonix is working with point of sale companies and golf car manufacturers to bridge the gap between them, LoVine said.

“They can work together to give the owner a more powerful management tool, and that’s what we’re trying to do with our system,” he said. “Eventually, we’d like to have the installation take place at the point of manufacture.”

The most expensive version of the system, which costs $71 per year per cart, or less than 20 cents a day.

“Some courses spend more money giving out bags of tees than it would cost them to ensure that that round got paid for,” he said.

Moving forward, LoVine sees additional applications of this technology for golf courses, such as gift certificates and limiting access to restricted areas.

GPS studies

Continued from page 21

hours away. The club’s biggest challenge was slow play, driven by the fact that 40 percent of its rounds come via conferences or outings. Because more than 60 percent of the course is designated “cart path only,” the club installed the ProLink system.

According to Chuck Ingalsbee, Rocky Gap has maintained pace of play around four and a half hours, while seeing a 7.9 percent revenue increase and a 167 percent ROI.

TIFFANY GREENS

In the upscale resort/private golf sector of the Kansas City, Mo., market, Tiffany Greens faces stiff competition. As a result, the club needed a point of differentiation, according to Tom Aikmus, head golf pro. An additional hurdle is the club’s green fees, which are among the highest in the area.

Aikmus said the ProLink system has been a major benefit to Tiffany Greens. Not only has it helped speed play, but it has helped create a memorable experience, which he said has resulted in repeat business and a host of tournaments. The revenue increase Tiffany Greens saw was 6.3 percent, and its return on investment was 244 percent.

EMERALD DUNES

Because West Palm Beach, Fla., is one of the top golf destinations in the country, Emerald Dunes faces a lot of competition. Because of its high-end green fees, the club needed to offer additional value to its customers. Pace of play has also been a deterrent.

Emerald Dunes was among the first of ProLink’s installations in 1995. Since installing the system, the club has been able to eliminate rangers.

In its first year using ProLink, Emerald Dunes experienced a 16 percent increase in revenue, its highest to date. The club also saw a 10.2 percent increase in rounds played that year.

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MANAGEMENT

KemperSports adds The Bull

NORTHBROOK, Ill. — KemperSports Management has assumed management of The Bull at Pinehurst, located in Sheboygan Falls, Wis. Designed by Jack Nicklaus, The Bull is currently under construction and is scheduled to open this summer.

During construction, KemperSports is acting as a development consultant and will operate the course on behalf of Pinehurst Farms Golf Development LLC.

"Our company has had great success in developing unique destination golf properties, and The Bull promises to be one of the best," said KemperSports CEO Steve Lesnik.

Upon completion of the property, KemperSports will market the property as a Midwest golf destination. Golf Digest recently ranked Sheboygan County, which lies in KemperSports' backyard, as the No. 3 golf destination in the United States.

The Bull is named for the property's 150-year history as a working Holstein farm.

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AGC lawsuit

Continued from page 21

beat, he decided to fight back by taking his case to the Internet.

"The first week in February, I got a certified letter demanding $7,200. I bought a book on programming, I reserved the name and put that site up in four hours," Doyle said.

On his site, which he describes as “salty,” Doyle tracks news about Eagle Brook, as well as its parent company, American Golf Corp. Because of some of the allegations Doyle has made on the site, he has been sued by both American Golf and Eagle Brook, as well as by Kraefle, head pro Bryan Haas, for defamation. Doyle removed most of the offending text from his site shortly after the suits were filed, but he said he plans to fight them with suits of his own.

"We're in the process now of filing multiple suits against American Golf, against Eagle Brook Country Club and against individuals," Doyle said. "Two of those suits will be for defamation of myself and my wife. I can't tell you the other suits because they're in process, but my attorney told me this may break American Golf."

Kraefle declined to address the issues of the Web site or the pending lawsuits.

"Unfortunately, we can't comment, simply because it is pending litigation," he said. Representatives from American Golf also declined to comment.

Doyle is not alone in his fight against financially troubled American Golf, which is in the process of merging with National Golf Properties (see story on page 1). Eight years into a 40-year lease with the management company, Sugar Creek Country Club in Houston, which has seen a number of the same types of maintenance and management issues, has hired an attorney to break its lease. Among the issues Sugar Creek is addressing is airborne mold that has closed the dining area of the clubhouse, leading to $40,000 a month in lost revenues. In order to take back the club from American Golf, however, Sugar Creek would have to pay the $7 million that has accrued on the tenant financial obligation, as well as a debt service of $2 million.

At press time, Doyle, who said he has received at least one death threat because of his Web site, had not yet filed his counter claims, but he hinted they might have something to do with violation of consumer protection laws.

Where this will all end up, as well as whether American Golf's merger will have any impact, is anyone's guess. Despite living along the course at Eagle Brook, Doyle has joined another club in the area. He said he would continue to update his site, which had been viewed nearly 10,000 times by early April, with information relevant to his lawsuits, as well as American Golf's merger.

"I would never think I would do something like this," he said.

"I decided to take my chances on the Internet, and I have been pleasantly surprised by how popular the site has been."
WATERFONTS EXPANDS WATERVISION FUNCTIONALITY

By ANDREW OVERBECK

HARTLAND, Wis. — Watertronics has rolled out an improved version of its Watervision software system that features a Windows CE-powered touch screen operator interface right at the pump station.

"Watervision now runs at the pump station, which allows for Internet service and gives users access to all of the pumps stations in a network," said Jim Claas, software engineer. "If you have five stations you can connect to all of them at one location. This allows all of the pumps to be monitored and controlled through the network in real time."

Putting all of the pump stations on a network solves the old problem of having one "master" pump. "Before, if that pump went down, then the other pumps could not communicate with each other," Claas said. "Now if one pump goes down, the others can still communicate and you don't lose the data flow." The system is ideal for multi-course properties that have many pump stations on different layouts, added Claas.

The six-inch touch screen unit has infinite programming ability, a one-gigabyte hard drive, and users to instantly access data logs and alarm information.

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Spanish Systems aims to improve communication

By ANDREW OVERBECK

NORTHELM, Ill. — Arturo Castro's Spanish Systems is making a strong push with its software programs aimed to help superintendents better work and communicate with the growing Hispanic workforce in the golf industry.

Castro, who started his business by creating a Spanish for hospitality management program for Marriott Hotels in the late 1980s, identified a need in the golf industry for his services in the mid-'90s. "The golf course management industry is extremely standardized and well organized. It allowed me to create a very practical solution," said Castro.

Castro, who has been working with the Golf Course Superintendents Association of America on seminars for the past seven years, developed Search and Say Spanish for Golf Course Management two years ago and has seen strong responses.

CONTINUED ON PAGE 27

SIMPLOT PARTNERS READIES SOLUBLE FERTILIZER LINE

SAN DIEGO, Calif. — Simplot Partners has rolled out a new line of soluble fertilizers called SoluPack.

A number of the products will incorporate Mequon, Wis.-based Agrotain International's UMAXX stabilized nitrogen technology. UMAXX's chemistry maximizes urea nitrogen efficiency by reducing the risk of nitrogen loss to the environment and provides plants with ammonical nitrogen for 12 to 16 weeks.

"These water-soluble fertilizers are an excellent value for customers since water is added at the time of application, resulting in substantial cost savings," said Nick Spardy, vice president and general manager of Simplot Partners.

The new product line is composed of the following nine formulations:

- Bermudagrass Special 20-5-30 is manufactured with chelated micronutrients and promotes sustained nutrient plant response to greens and fairways in both warm- and cool-season climates.
- High Potash Formula 13-0-44 relieves stress problems normally associated with cooler temperatures on greens and fairways.
- Potassium Special 10-20-30 provides plant stress conditioning when applied as a water-based solution to both leaves and roots.
- SP All Purpose 20-20-20 advances...
Lesco signs first independent marketer

CLEVELAND — In a move to expand into previously untapped geographic markets in United States, Lesco has signed its first independent marketer agreement.

Lesco, which announced the new marketing program late last fall (GCN December 2001), has teamed up with Wilco Farmers as part of the deal. Wilco, an agricultural cooperative in Oregon's Willamette Valley, supplies its customers with a range of goods including crop protection products and crop nutrients, and lawn and garden products.

Under the program, Lesco will sign contractual agreements with nurseries, garden centers and other independent marketers positioned to distribute the company's proprietary product line. With the program, Lesco aims to reach marketers who are eager to increase profits and strengthen their presence within the professional turf care industry. Lesco estimates that the independent marketer program will enable the company to reach over $250 million in untapped market potential.

Rutgers to use PureIntro technology

Continued from page 1

eventually successful in converting creeping bentgrass and fescue.

“We filed a patent for the transformation of turfgrass using PureIntro, but we didn’t have freedom to operate under the general patent,” said Costagano. “This agreement gives us a general license from them in turfgrass in exchange for a royalty.”

According to Zilinskas, PureIntro is very precise. “It has some advantages over particle bombardment because it introduces single copies of the gene as opposed to multiple copies. Multiple copies often lead to the suppression of the gene you are trying to introduce.”

“And since Scott’s holds the exclusive license for the gene gun, this provides an alternative for other turf companies to expand their biotech work,” she added.

COOL SEASON FOCUS

Work at Rutgers will focus on inserting disease-, insect- and herbicide-resistant genes into cool season turfgrasses.

“If we could come up with a gene that could control pythium in cool season grasses or a way to have toxins in grass roots to kill grubs, that would be a big deal,” said Dr. William Meyer, head of the turfgrass breeding program at Rutgers. “We need this technology to solve problems that we have not been able to solve using conventional breeding.”

Once the genes are identified, Zilinskas will insert them into the elite cultivars and possibly have them ready for commercialization in two to three years. According to Meyer, Rutgers is drawing up agreements with several seed companies to start developing new transgenic varieties. Seed companies will have to pay royalties to Rutgers and Japan Tobacco on any new varieties that come out of the program.

BIOTECH DEBATE COULD SLOW DEVELOPMENT

With the technology in place and gene identification underway, the only other significant roadblock is the growing anti-biotech movement in the United States. Within the seed business some growers are loathe to plant transgenic varieties because of contamination concerns.

However, Meyer remains confident that transgenic turfgrass will reach the market. “I think the isolation problems can be handled spatially,” he said. “I think sometimes the debate is more about market share and politics than it is about science. We are cautious in our work, but in the end, the Environmental Protection Agency, the United States Department of Agriculture and the Animal and Plant Health Inspection Service will control all decisions regarding transgenic varieties.”

According to Costagano the technology is too valuable to pass up.

“There are environmental concerns, but in the end, this is too powerful a tool in the hands of cultivator developers not to use it,” he said. “Once these questions get answered, we will be on the cutting edge.”

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GOLF COURSE NEWS
Watertronics
Continued from page 25

While Watervision and its irrigation communication component PumpLink have been out on the market for two years now, Claas is always looking for ways to tweak the software program. Last year the company introduced Maintenance Manager software that is a record keeping database for system maintenance and repair work.

"Maintenance Manager keeps track of the date you fix certain items or replace parts," Claas said. "By keeping a repair history you can keep an eye on chronic problems. You can also set it up to schedule maintenance activities based on total pump hours."

Looking ahead, Claas is working on adding fertigation functions to new versions of the software. "That is in the works right now so that fertigation can be controlled at the central processor," he said. "We want to not only be able to control the percentage of fertilizer in the system but also monitor the quantity in the tanks so that it can tell you when to reorder. Right now we can put up to four fertilizer pumps on one flow sensor."

Claas also wants to adapt the software so that irrigation control systems can tell the pump station when to fertigate.

"We are trying to tie all these items together," he said. "We have the irrigation system together with the pump station through PumpLink and now we want to add fertigation capabilities. The more we can tie things together, the more we can improve the efficiency and reliability of the entire system."

Spanish Systems
Continued from page 25

growth and interest in the program over the past year.

"Computer habits among superintendents are increasing," he said. "And there is a natural paradigm shift that occurs with the employment of Latinos in any industry when it becomes clear that without adequate solutions to the communication barrier, it is going to hurt productivity."

The Search and Say program is not designed to be used as translation software. Instead, it allows superintendents to search for specific phrases relating to a golf course task. The database then pulls up a list of phrases relating to the task that the superintendent can use to instruct workers and solve problems.

"You can identify the tasks that must be done and put them on a note pad that you can hand out to the employee for the day or for the week," said Castro. "You can also tell guys to be more careful, or offer positive reinforcement. It helps in team building."

Mark Hoban, superintendent at the Atlanta Athletic Club in Duluth, Ga., recently started using Search and Say and has noticed results. Seventy-five percent of his hourly employees are Hispanic.

"My assistants and I are all learning Spanish," Hoban said. "Our Hispanic guys appreciate our efforts to learn their language. I have tried tape memorization, but that only goes so far.

"This helps us learn specific things about work," he added. "It allows me to print out cards to show to my guys. It is a big motivational tool."

Castro, who also offers a self-instruction kit, is now in the process of developing new software.

"I am in the process of developing a number of support mechanisms to encourage and develop communication and job skills development for Hispanic employees," he said."

Soluble fertilizer
Continued from page 25

uniform growth and development when applied as a water-based solution to both leaves and roots.

- SP Bentgrass Formula 28-8-18 can be applied through conventional spray equipment or through fertigation.
- SP Rapid Green 20-0-20, a balanced ammonical and nitrate feed, provides a quick plant response even during cool dry conditions.
- SP Root Enhancer 12-31-14 contains ammonium phosphate to promote root and shoot development.
- Super Cal Formula 15-0-15 contains calcium to improve plant metabolism and cell wall strength.

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What about solutions?

To the Editor,

I have some concerns about the Colorado Moss Symposium article by Kevin Ross (GCN April 2002). Specifically, I don’t think it truly reflects the pertinent information that came out at the seminar — especially in terms of completed research.

The article also mentions Dawn for moss control as providing the most consistent results. This does not mention that Dawn is only a temporary fix and that moss nearly always comes back after Dawn applications. Dawn also discolors turf. Superintendents from eight states conducted a study that indicated these conclusions.

As far as research, Frank Rossi at Cornell has completed a study on the effectiveness of TerraCyte on bentgrass greens and Mark Mahady of Mahady and Associates in Carmel Valley, Calif., studied TerraCyte on Poa. Both studies came to the conclusion that TerraCyte in conjunction with cultural practices and following a program from BioSafe Systems does kill moss. These results were discussed at the seminar.

This article seems to only state the fact that moss is a problem and why courses get moss. It doesn’t really offer any solutions.

Sincerely,
Neil Goldberg, marketing director
BioSafe Systems
Glastonberry, Conn.

SISIS lays claim to award

To the Editor,

I read Kevin Ross’ report on new products from the GCSAA Show (GCN, March 2002) with great interest and enjoyment.

However, I would like to register our claim to one of Ross’ awards, “Imitation is the best form of flat-tery,” that he gave to the Graden de-thatcher/verticutter. That product is a worthy recipient of many accolades I am sure, but not this one.

SISIS introduced their first verticutter/de-thatcher in 1950, patented the principle of contrarotation in 1964, and developed deep linear aeration in the 1970s with the Auto-Rotorake Mark 1. The Rotorake 600 is the latest in the SISIS Rotorake family.

Sincerely,
Ian Camp, general manager
SISIS Inc.
Sandy Springs, S.C.
Mower technology

Continued from page 11

 operator on course all day. According to Larry Jones, product manager for fairway and rotary mowers for Textron Golf Turf and Specialty Products, the electric market is unexploited and the company plans to add more on the electric end. He declined to specify what models are being considered for electric conversion.

AUTONOMOUS MOWERS

John Deere is also considering adapting its autonomous technology from its agricultural division to the golf and turf division.

“Autonomous mowing is interesting with the labor issues and rising costs for golf courses,” Bremingmeyer said. “We are investing in it and see the need, but we have to decide if it is feasible. We are using it in the agricultural business right now, but golf courses have more obstacles like trees and golfers.”

Wright said Toro is evaluating autonomous mowers and hybrid and alternative fuel options, but that any new products are at least five to 10 years off.

“It will take time for the price of technology to come down,” he said. “It is not like computers where more technology is cheaper. In our business, more technology means higher costs, and I am not sure superintendents are willing to pay for it yet.”

— Andrew Overbeck

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The City of Fairfield is seeking proposals to manage and operate two premier 18-hole municipal golf courses located in the City of Fairfield, California, Paradise Valley and Ranch Solano. Fairfield is a growing city with a population of 100,500, located along Interstate 80, approximately 40 miles from San Francisco and Sacramento. Proposals are due Friday, June 28, 2002 by 5:00pm. A Pre-Proposal Conference will be held Friday May 28th at 11:00 am. For further information or to request a bid package, contact Ron Collins, (707) 428-7676.

WANTED: OLD MOWERS
The Reel Lawn Mower History & Preservation Project is always looking for those old reel mowers, metal grass boxes, old handles, parts and pieces hiding under the work bench or in the rafters of the back shed. Also, don’t light the fire in the stove with your old turfgrass equipment literature. Please stick a stamp on it and send it to The Reel Lawn Mower History & Preservation Project. Call or e-mail Jim Ricci at 413-268-7863; jricci@reellawnmower.com.
In late February, the National Golf Foundation changed its methodology for tracking course construction activity. As a result, numbers from 2002 cannot be compared directly to those from 2001. Future issues of Golf Course News will track month-to-month changes.

NATIONAL GOLF ROUNDS PLAYED*

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* The percentages above represent the difference in number of rounds played in the month of February 2002 to the number of rounds played in February 2001.

Golf Course News Stock Report (4/4)

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In late February, the National Golf Foundation changed its methodology for tracking course construction activity. As a result, numbers from 2002 cannot be compared directly to those from 2001. Future issues of Golf Course News will track month-to-month changes.

When requesting information, please mention Golf Course News 5/02.
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W. Patrick Donelan
Golf Course Superintendent
Love and Norman Courses
Barefoot Resort and Golf

"Nothing's better than this."

David E. (D.Z.) Zeidler
Golf Course Superintendent
Fazio and Dye Courses
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Penn A-1 is a top performer in the USGA/GCSAA/NTEP 1997 On-Site Bentgrass Trials!

Mean Turfgrass Quality Ratings of Bentgrass Cultivars in the 1997 USGA/GCSAA/NTEP On-site Bentgrass Test at 13 Locations in the U.S. 2000 Data. Turfgrass Quality Ratings 1-9; 9=ideal Turf

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