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Native grass: it’s a jungle out there
With the proliferation of native grass areas on golf courses, steps need to be taken to maintain playability

Meadowbrook Golf ups the ante
Don Rhodes has come aboard to handle the acquisition of up to $350 million in golf course assets through the company’s new Honors Fund

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• Tools of the Trade at Hayes’ Boone Golf Club

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POINT
Architect Damian Pascuzzo and the NGCOA’s Jay Karen debate the need for municipal golf.

COUNTERPOINT

LandLogic puts GPS mapping in supers’ hands
By ANDREW OVERBECK
SCOTTSDALE, Ariz. — Technology entrepreneur Larry Robinson has rolled out an affordable and highly portable Global Positioning System (GPS)-based facilities management system to help superintendents become more efficient.

Wallace takes the lead in resort
By KRIS WALLACE
NEEDHAM, Mass. — Wallace Golf Group, a full-service golf management company, has been named the preferred golf management company for TPC Scottsdale, home of the Phoenix Open. The Preferred Partner program involves a local agreement between the TPC and the company.

Wetland issues delay Shelter Harbor project
By DEREK RICE
NEWPORT, R.I. — Nearly three years after the permit process commenced, Shelter Harbor Golf Club is set to break ground this month. Permitting in Rhode Island is usually difficult, said architect Michael Hurdzan, who designed the course.

IGM expands westward
By ANDREW OVERBECK
CHAMPIONSGATE, Fla. — International Golf Maintenance (IGM) is expanding westward with the opening of new business development offices in Dallas and Phoenix. It is also moving its West Coast headquarters from Los Angeles to Las Vegas.

Editorial Focus: Wetland Management
Course to break ground after long permitting process, many ‘significant’ routing changes

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Superintendent Kevin Hicks at Hillcrest CC in Boise, Idaho, said LandLogic lets him spend more time in the field.

An artist’s rendition of the wetlands-challenged Shelter Harbor Golf Club.

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“We’ve worked in 30 or 40 states and there was never a definitive wetland survey until someone finally said, ‘Stop, we have to have a map that we work with.’”

This was the most complicated and litigious permit process that we have been through. It was a large tract of land, it was in two towns and it had a lot of different issues,” he added. The NGCOA’s Karen Pascuzzo and the NGCOA’s Jay Karen debate the need for municipal golf.

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Another wetlands related issue

Continued on page 14

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By ANDREW OVERBECK

CHAMPIONSGATE, Fla. — International Golf Maintenance (IGM) is expanding westward with the opening of new business development offices in Dallas and Phoenix. It is also moving its West Coast headquarters from Los Angeles to Las Vegas.

The contract maintenance company currently has four courses in the region and plans to add more.

"Our parent company, Meadowbrook Golf, is looking to acquire courses out West, so we thought it would be a good fit to increase our presence in these year-round golf markets," said IGM vice president Scott Zakany. "We had a presence out here, but our people were focusing on operations and business development at the same time."
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Desert Challenge facing financial, legal hurdles

Development's woes outline risks builders face in today's construction market

By ANDREW OVERBECK

TOLEDO, Ohio — Financial resources have run dry for local developer Jack Sparagowski and his ambitious desert-themed golf course and housing development here in northwestern Ohio.

While a desert golf course in an area that gets more than 30 inches of rain a year may have been doomed to failure from the start, Sparagowski and architect Brian Hunnely insist the design and concept were sound.

The big problem for The Challenge at Desert Village was a lack of financial resources as major golf course lenders fled the golf course market, leaving Sparagowski high and dry. (See related story on page 1).

‘The error I made was not

digging into the background of the ownership,’ he said. ‘That’s an error I won’t make again. In bid meetings it is taboo to stand up and ask how the owners plan on financing the project. Not enough guys do that, but I do now. If the client is too scared to answer, you

might not want to be working there.”

According to MacCurRach, since the financing landscape changed, problems that were usually hurdles for projects are now project killers.

Continued on page 12

Children’s Golf Foundation enjoys inaugural success

By ANDREW OVERBECK

WEST PALM BEACH, Fla. — The Children’s Golf Foundation, which has had a successful first season at its Tarn O’Shanter Teaching and Learning Center that is dedicated to teaching golf to disabled kids. The facility, which sits on top of a former landfill, opened in March.

“We logged more than 450 kid hours this summer,” said Keith Stuhler, chief executive of the foundation. “We have made alliances with a number of disability groups and we are growing by leaps and bounds.”

Stuhler has been working on the golf learning center for handicapped children for the last 12 years. Prior to the construction of the facility, Stuhler and his staff would conduct classes on-site at schools. Now kids come to a 15-acre facility that was designed with them in mind.

The course features a 25,000-square-foot teeing area, an 8,000-square-foot putting green and a 3,000-square-foot clubhouse. The driving range provides four holes of varying length.

“We have progressed from teaching golf at schools to getting the kids out chipping and putting,” Stuhler said. “Then we get them to play the course. We can set up the course specific to their abilities. For instance, for a severely handi-

capped kid, we have holes that are 10 yards in length and we can have a hole that is 310 yards in length.”

Stuhler designed the course and

PGA awards Air Force-related grants

PALM BEACH GARDENS, Fla. — The PGA of America, through its Growth of the Game Grant Program, has awarded two grants to programs that focus on children of men and women who serve in the U.S. Air Force.

Both the Eisenhower Junior Golf Academy, which received $8,000, and the LPGA Urban Youth Golf Program of Delaware, which received $12,400, use golf as a way to teach life skills to children whose parents are often away on active duty for months at a time.

The player development program of the Eisenhower Junior Golf Academy has been so successful that a new player development program has been established to accommodate the parents who have been asking for instruction. The program is also being implemented at Air Force bases around the country, with a goal of helping military families spend more time together through golf.

The LPGA Urban Youth Golf Program of Delaware works with at-risk children. Now in its eighth year, the program recently established a partnership with the Dover Air Force Base. Through this relationship, the program now reaches up to 100 children of Air Force parents annually.

Since the 1999, the PGA of America’s grants for growth of the game and community outreach have totaled more than $22 million.

By ANDREW OVERBECK

NAPA, Calif. — The Northern California Golf Course Superintendent Association declared war on ball marks during its “Ball Mark Repair Week” in early October.

The message was simple: Golfers can contribute to the health of the golf course by repairing ball marks properly.

“There are a lot more ball marks out there than there are greenkeepers or hours in the day,” said Bob Lapic, superintendent at Orinda Country Club and vice president of the Nor Cal GCSA. “We want to educate golfers that ball marks left unfixed are dead in 72 hours and then take four weeks to repair. By using a repair tool properly, golfers can be active in the maintenance of their course.”

The 600 members of the association were on hand at their individual courses to demonstrate the proper method of repairing ball marks. While golfers on the PGA Tour often lift and push up the turf to create a smooth putting surface, Lapic and others will explain why that is the incorrect method.

“The professional golfer doesn’t care if that ball mark turns into a brown spot,” he said. “But by lifting it he is tearing the roots and spreading the problem beyond the crateric to the perimeter of the ball mark. We give people a card that shows the proper method of turning the tool and pushing the crater of the ball mark toward the center.”

The campaign culminated at the Senior PGA Tour’s Napa Championship at Silverado Resort & Country Club, where members of the association distributed free ball mark repair tools and demonstrated how to correctly use them. The association gave out 5,000 repair tools this year.

Nor Cal GCSA declares war on ball marks

By ANDREW OVERBECK

GOLF COURSE NEWS

NOVEMBER 2002
**COMMENTS**

Irrigation system improvements a choice between brown and green

By DAMIAN PASCUZZO, AGCSA

Brown is beautiful, but green pays. Those were the conflicting phrases facing golf course superintendents this summer as drought gripped much of the nation.

As water restrictions hit courses, difficult decisions ensued. Superintendents had to decide which parts of the course got water and which didn't, running the risk of alienating golfers who have come to expect walk-to-wall green. Of course, for many there was little choice in the matter. You either let your roughs and, in some cases, fairways go, or got slapped with fines.

Going into winter, much of the country has had some drought relief, but the effects of the dry spring and summer linger on as superintendents work to repair turf damage. However, in addition to focusing on turf recovery, industry experts say now is the perfect time to analyze irrigation systems to see how they could better perform against future drought conditions.

In this month's issue, on page 8, irrigation consultant David D. Davis outlines how superintendents can evaluate the effectiveness and efficiency of their irrigation systems. He discusses what steps can be taken to make the system perform better under drought and other stress conditions.

The steps that may need to be taken to improve the irrigation systems range from adjusting sprinkler spacing, to replacing nozzles, to turning-up pump stations. Davis' ideal drought-resistant system includes valve-in-head sprinklers, a weather station, a state-of-the-art control system and field controllers and properly-sized mainlines to improve pressure control.

Davis also suggests using GPS maps to improve calculation of surface areas to maximize the efficiency of each irrigation cycle. With the introduction of LandLogic, GPS mapping technology has become, he says, easier to use and more affordable. See that story on page 1.

According to the Golf Course News Poll (see page 8) many superintendents are already heeding the above advice and are updating their irrigation systems. Of those surveyed, 35.4 percent are planning an upgrade. However, many are asking, "What good is a new, efficient irrigation system if I'm not allowed to use it?"

This year, courses in some areas of country were nearly cut off from irrigation altogether. In Greensboro, N.C., the city water manager proposed cutting golf courses back to hand-watering only. After careful lobbying, local superintendents were able to convince the city water manager to institute a decidedly more measured approach. In the first stage of the restrictions, Greensboro April 2002).

Going forward, constant vigilance will be required to keep water use restrictions from hurting the industry. However, it should be easy for courses to justify whatever investment is needed to upgrade and improve their irrigation systems now. The more efficient your system is, the less brown your turf will be. This fall when the next drought inevitably hits, keeping golfers happy and your job secure.

As Davis said in his article, improved irrigation efficiency reduces operating costs, improves playability and "reduces the stress on superintendents."

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**POINT**

Municipal golf still plays an important role in game's growth

By DAMIAN PASCUZZO, AGCSA

A friend of mine, Les Claytor, wrote a terrific master's thesis titled "The Evolution of the American Municipal Golf Course: 1895-1940." It is fascinating reading, as Les chronicles the development of the country's first public golf course, Van Cortlandt Park in New York, in 1895. The initial success of this nine-hole Bronx-based course encouraged the city of Boston to follow a year later with the creation of Franklin Park Golf Course. Other cities around the country were not far behind in building their own nine- or 18-hole golf courses.

Claytor's research documents how, despite primitive conditions, "people who used them was best stated by a park official who in a 1927 New York Times article claimed, "I know of no enterprise of similar character that has afforded so much recreation and pleasure to so large a number of people."

It's been more than 100 years since the creation of Van Cortlandt Park and I have to wonder, how much has changed in a century? Certainly we have seen golf continue to grow through the decades to the point that we have around 22 to 25 million participants. But have we provided for everyone?

Recent research out of the Golf 2020 initiative indicates that there

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**COUNTERPOINT**

The time and need for municipal golf has come and gone

By JAY KAREN

A bout three years ago, an angry course owner and National Golf Course Owners Association member called asking for help fighting a proposed municipal golf course in his market. Being relatively green on the issue, I asked him why he was so upset about this issue.

On the surface, it seemed to me that an owner just didn't want new competition dipping into his market share. I quickly learned there was much more to it than sour grapes. He asked me, "If you owned a bowling alley and the city opened one a new bowling alley across the street, and they charged half what you charged and didn't have to pay taxes, how would that make you feel?" Good point. He went on, "Now, how would you feel if there are 10 other bowling alleys like yours in the same market (keeping in mind that the number of bowlers has remained about the same for the past five years) and the taxes you pay are subsidizing your competition?" Another good point.

There was a time in the golf industry when municipal golf courses were extremely valuable for the purpose of introducing the game to new players in an affordable fashion. While there may be small pockets in nooks and crannies around the country where municipal golf is the only incubator for new golfers, the time and need for government golf has generally come and gone.

The construction boom of daily-fee golf courses during the last quarter of the 20th century has essentially supplanted the need for municipal golf. When the free enterprise system provides ample supply of a particular desire or need, the government should take itself out of the equation. Instead, we find that cities, counties and states are building facilities as ways to fill the municipal coffers. Or worse yet,
NGP acquisition a good sign for golf business

Several months of speculation and rumor-mongering ended in September when Goldman Sachs agreed to acquire National Golf Properties (NGP) for $1.1 billion, most of which will go to satisfy the real estate investment trust's more than $800 million in debt.

Once Goldman is able to buy back enough shares to take NGP private, it will merge the company with management company American Golf Corp. (AGC), its largest tenant, eliminating a large part of NGP's original problem. Namely, AGC's inability to make lease payments.

While it's obvious the NGP that will emerge when all is said and done will be very different than the company of today, the Goldman acquisition is huge for the industry. It is a statement that Wall Street is willing to take a look at golf, which is a refreshing change.

Bottom-line-focused Goldman, which does not have a background in golf, simply will not tolerate under-performing assets. The firm will evaluate NGPs courses and try to cut loose those that aren't pulling their weight, retaining only those it feels can still turn a profit. Something tells me there will be a glut of courses on the market to be had for a fraction of what NGP paid to acquire them.

This deal may just be the kickstart the golf industry needs. Many of the larger lenders, such as Bank of America, have left the space and default rates on golf loans are rising. It is not the most ideal time to get involved with a golf course project from a financial standpoint, as competition is shrinking what were already slim margins.

According to Steve Mooney, CEO of Commercial Bancorp, who has been in banking for many years, this is the latest in a string of good news for the industry. Equity money is starting to flow back into golf. As Mooney says, wherever equity money goes, "the lenders will follow blindly - they always do."

On the subject of management companies, in the page 1 story "Muni face challenges from many fronts" in last month's issue, I neglected to mention that Black Gold Golf Course director of golf Eric Lohman works for KemperSports Management, which operates the in Yorba Linda, Calif.-based course.

Again the research of Golf 2020 bears this out: "alternative facilities open to the public share a complimentary relationship to regulation-length courses nearby. That is, golfers pay and play more at traditional facilities in communities with abundant alternative facilities."

While it is easy to focus on bringing new players into the game, we cannot forget about older players who for either physical or economic reasons, simply don't want to go the full 18 anymore. Alternative facilities are a great way for them to continue their participation in the game.

Municipal golf still fills important niche

Continued from previous page

are many people who want to play the game but don't. They make up the latent demand segment of the market. Conservative estimates place the number of people in the latent demand segment of approximately 10 million. Other estimates put that figure up to 20 million people. The reasons most often cited for not playing golf are time, expense and difficulty.

This is where municipalities still play an important role in golf. Municipalities, counties and other government entities are not under the same pressure to maximize profit as developers in the private sector.

It allows them to develop those simple, inexpensive golf courses that meet the needs of so many existing and potential golfers. In the same way that they provide ball fields, soccer fields, tennis courts, skate parks and BMX tracks for their citizens' use, they need to build golf facilities in a way that the private sector can't.

Over the years, metropolitan areas such as Los Angeles, Phoenix, Wash., and New York have built a terrific collection of municipal golf courses that are simple, affordable and fun. They service their citizens as they have for decades. But as new communities continue to sprout up across the country, it is important for them to understand the value and role a municipal golf course plays in their future.

I believe municipalities also have a responsibility to think beyond traditional, regulation-sized golf courses. In most instances they are better positioned than the private sector to develop and operate executive-length and par-3 courses. These "alternative golf courses" often act as the entryway to golf to many aspiring golfers. Not unlike baseball's minor league system, par-3 and executive courses allow players to improve their skills, learn the etiquette of the game and gain the confidence necessary to move up to regulation golf courses.

Cities can take a leadership position in environmental stewardship by converting degraded sites in municipal golf facilities. We've seen in recent decades the conversion of many landfills, and brownfield sites into player-filled golf courses.

Enjoyable, accessible and affordable are the keystones of municipal golf courses. They have played a historic role in the growth of American golf and will continue to be an important part of the game's future.

Damian Pascuzzo is a partner in Groves & Pascuzzo Ltd. in El Dorado Hills, Calif., and is past president of the American Society of Golf Course Architects.

Leave the business of golf to private owners

Continued from previous page

as a means for some politicians to leave their legacy behind in the form of 18 holes of upscale golf.

Tell anyone outside the golf industry about the supply and demand struggle in private golf and they just can't believe it. Golf is more popular on television than ever before, but the business of golf has seen better days. Mayors, city and county councils and state park divisions that are curbing the growth of golf courses seem to be insulated from the truth about the overabundant supply of golf courses that already exists.

Don't get me wrong - I am not anti-growth. But I am against illogical and unreasonable growth.

It's not just a supply-and-demand issue. It's also a matter of government waste. First, only eight percent of the public plays golf. Municipalities should not engage in building golf facilities in a way that the private sector can't.

Golf still plays in their future. Municipalities should not engage in this aspect of public golf if they are falling apart, teachers are underpaid, medical services are poor, taxes. Such relief should be reserved for projects and programs that affect the quality of life of a large percentage of the populace, such as

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Jay Karen is director of membership for the National Golf Course Owners Association and is based in Charleston, S.C.
MAINTENANCE

Going native: Proper management ensures playability

By KEVIN J. ROSS, CGCS

One area of golf course design and course aesthetics that clash with playability is the proliferation of native grass areas. The addition of native grass, which has been labeled the "Scottish look," has sparked a debate, as architects incorporate more and more of these grass areas into designs.

Most of these layouts are sites with limited trees and open land, which need mounding features for hole separation and definition. But the use of native grass can also be found as bunker surrounds and wildlife habitat areas. Some courses have also incorporated native areas to reduce mowing and labor costs in out-of-the-way areas.

True native grass can be defined as grasses indigenous to the area that are growing in nearby fields. These species survive with natural rainfall, no fertilizer and no mowing. Native grass cultivar selection often results in grasses that are not truly native to the area. There is no problem with this, however, many times mistakes are made in selection. The typical mistake is choosing a cultivar that performs more like a true turfgrass than a true native grass.

Another typical mistake is the seeding rates. Many times superintendents/architects use rates much too high and create a stand that is far too dense. For example, the normal seeding rate for native fescues should be 50 to 75 percent less than a turf stand. This will provide a much more playable situation with a thicker stand. The grass will develop a more clump-type growth habit with the ability to seed better and get that wispy, seedhead look.

Seeded zoysia shows promise in lower transition area

By ANDREW OVERBECK

Purdue University is working in conjunction with the University of Kentucky to study the viability of seeded zoysia grass in the lower transition zone. The results so far are promising, according to Purdue's turfgrass extension specialist Zachary Reicher.

"We are in our third full year of research here," said Reicher. "We think zoysia is the best overall choice for fairways and tees in the lower transition area because of its ease of maintenance. It also requires less inputs and it survives the winter better than Bermudagrass and the typical fescue.

Research has focused on the best approaches to seeding zoysia, specifically studying the best timing and rates and when herbicides can safely be applied. Work is also being done to determine the best method of converting cool-season turf to zoysia.

Seeded zoysia establishes faster than plugs

With seeded varieties, more courses could get the benefits of zoysia without the initial expense. Previously, zoysia has been only widely available as sod, sprigs or plugs. Seeded zoysia costs $1,500 to $2,000 an acre compared to $15,000 for sod and $5,000 for strip sod.

According to Tim Bowyer of Patten Seed Co., which is supplying the studies with its Zenith seeded zoysia grass, there is now a ready supply of seeded zoysia on hand.

"Before it was a inventory issue," said Bowyer. "Now we can produce the volume of seeded zoysia that the market needs. But there has been no work done on seeding it because it has traditionally been all plugging and sodding. It can

Haines puts PermO:Pore to work at San Pedro GC

By DAVID HUBBARD

BENSON, Ariz. — For more than 10 years, Lou Haines, head golf professional for the golf course superintendents of porous ceramic technology. Now, as a part owner of San Pedro Golf Course here, the veteran agronomist and golf course superintendent is utilizing his innovative soil conditioning system in his own project.

Slated to open in early December, San Pedro Golf Course promises a "pure golf" experience that preserves the spirit and tradition of golf.

Carved from high desert terrain in the San Pedro River Valley, 30 minutes southeast of Tucson, Arizona-based Arizona Golf Systems has constructed a much-needed top quality, affordable layout in this area of the state.

With the help of noted Denver-based course designer Mark Rathert they have masteredmind a 7,300-yard classic configuration free of real estate development or other distractions from the game.
Colleagues, Hayes dealt with tough conditions this summer. From drought to anthracnose to grubs, Hayes has been keeping busy at the Ellis Maples-designed layout.

"We have been battling late-summer stress," said Hayes. "With the heat, the native push-up greens and the high traffic, we have had to use a more aggressive fungicide program. Now grubs are showing their face."

In addition to his normal maintenance duties, Hayes oversaw construction on the course’s new practice range. The three-acre range is situated between the sixth and 18th holes and will have a maximum length of 200 yards.

"It will be a place to warm up and practice shots," he said. "Half our patrons ask us if we have a range, and this time next year we will be able to tell them we do."

A local contractor did all the work but we will try and direct play to temporary greens so we can stay open. The work won’t impact the whole playing season. While the redesign work hangs in the balance, Hayes is busy wrapping up this playing season.

"Last year we didn’t close until Dec. 22," he said. "But we usually close from Thanksgiving to the end of March."

Hayes’ primary concern during the winter is snow mold and desiccation, so he is preparing the course for those harsh conditions.

"The local joke is the only thing showing their face."
Improve irrigation system now to beat next drought

By DAVID D. DAVIS

While rainfall at the right time solves many irrigation problems, recent weather patterns have brought drought to large portions of the country. Under drought conditions, a system designed and maintained to handle an arid climate might not require too many tweaks to improve efficiency. A system designed to supplement rainfall, on the other hand, may require substantial tweaks and/or upgrades, just to survive a short drought. A prolonged or multiple-year drought could lead to severe turf damage and perhaps complete replacement of the irrigation system.

Even if your golf course and irrigation systems will not face droughts, you will face years of reduced rainfall, reduced humidity and increased temperatures, all of which increases irrigation requirements and stresses on your total system.

In either case, there are several steps you can take to improve your irrigation system. First, actually evaluate your system.

ITEMS TO TRACK AND EVALUATE INCLUDE:

• Power and water consumption – increases over a period of time indicate system wear and probably low efficiency. Check controller programs and schedules for scheduled, balanced flow and pressure relationship.

• Develop a short-term drought-management plan. Consider what you have to do to survive a drought. This should include nozzle replacement to match coverage requirements and a pump station tune-up, including motors, pumps, filters, etc. In addition, tune-up mainline and lateral isolation valves, make sure all valves are fully open, check controller programs and schedules to balance flow and pressure relationship.

• Develop a long-term drought-management plan. This should include a review of system components and identification of supplemental water sources. The plan should also include identification of turf and ornamental areas, which can survive on reduced or "deficit" irrigation. When short-term actions do not increase irrigation efficiency, review or outright replacement of the irrigation system should be planned.

RENovation and/or ReplaceMent Plans Should Include:

• Use of valve-in-head sprinklers having low scheduling coefficients and high distribution uniformity coefficients.

• A weather station to develop real-time site data to facilitate sprinkler programming and scheduling.

• A state-of-the-art central control and automation package.

• A central control and automation package which incorporates automatic and manual overriding of irrigation requirements or environmental exposure to facilitate various levels of reduced irrigation.

• Create GPS record plans to provide a more accurate map of efficient irrigation system.

• Develop a long-term drought-management plan which incorporates area separations by feature, specific weather location, plant material, irrigation requirement or environmental exposure to facilitate various levels of reduced irrigation.

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• Develop a long-term drought-management plan which incorporates area separations by feature, specific weather location, plant material, irrigation requirement or environmental exposure to facilitate various levels of reduced irrigation.

When short-term actions do not increase irrigation efficiency, review or outright replacement of the irrigation system should be planned.

By ANDREW OVERBECK

As use regulations continue to push the water quality envelope, pump station manufacturers are working to keep up with systems to handle so-called aggressive water. Flowtronex, Syncroflo and Watertronics all have devised systems that can withstand everything from brackish to seawater to tertiary effluent.

Flowtronex created its first brackish water system in 1991 with a stainless steel for the Old Collier Golf Club in Naples, Fla., two years ago. In order to get approval for the golf course, developers had to agree to use water from an adjacent semi-brackish river and a well that yields mostly brackish water.

"We never thought that anyone could grow grass with salt water," said Flowtronex's Tom Male. "Well, with passpalum you can, so we created a system that could handle the salt water. Since the Old Collier installation, the company has sold five more of the heavy-duty systems. Old Collier superintendent Tim Hiers uses the different water sources depending on what time of year it is.

"From June to October, the river has lower salinity because it is just water that we are using, so we pump largely from the river," said Hiers. "But from November to May, it can be pure ocean water so we rely on our deep well."

The deep well averages 5,200 tds and the river can range upward of 34,300 tds.

The resulting pump system features stainless steel columns and pipes, and the discharge manifold, pump head and internal fission are bonded with epoxy. The valves have stainless steel disks and the balls and impellers are made of cast iron. The system uses rubber bearings to prevent corrosion.

The system uses five times the amount of a normal-duty pump station, said Male.

Syncroflo and Watertronics take different material approaches.

"We use a lot of fuse-bonded epoxy, especially on the impellers," said Syncroflo's Jim Simonini. "It's less expensive than stainless steel."

On a recent project in Puerto Rico, Syncroflo developed a system that used PVC piping and ductile iron on the check valves. The pumps were all stainless steel.

Watertronics, on the other hand, is partial to using HDPE for its corrosive duty systems.

"We have used HDPE in our project in Kuwait. We are using reinforced fiberglass piping to combat extreme conditions.

EFluent applications

While standard pump stations can handle effluent, which usually ranges from 600 to 1,300 tds, the higher-grade parts could find their way into these systems.

"With the knowledge we have gained, we may use more bonded epoxies for reclaimed systems," said Male. "There is a lot more demand for these systems because it is getting harder and harder to get quality water."

Another option is treating irrigation water before it gets to the pump station.

"Using sulfur burners from a company like Aqua SO2 to clean up water, we can handle up to 400,000 tds and increase levels of pH and sodium may counter the need for epoxy or stainless steel," said Simonini.

With the use of injection systems, water systems rise, however, Reinders said HDPE is "it." "HDPE does not react with any of the fertilizers or acids that are being injected into the water," he said. "For those systems we use HDPE in the pump manifold."
Manage native grass for playability

Continued from page 6

Trying to balance design integrity and aesthetics with playability is the challenge that superintendents face when managing native areas. To achieve this balance, most agree that proper irrigation design is the key.

Native areas that are watered, or get partially hit by water, turn into the so-called jungle. For a new golf course, it is imperative to be able to control or turn off the watering once the course is established. The most difficult area to manage is the interface area where mowed rough meets the native area. The mowable rough needs water, but it is very difficult to water it 100 percent without some overspray hitting the native grass along the edge.

This is when you hear the golfer commenting, "I would rather hit my ball 10 feet in the native than a foot into the native." They are referring to the fact that the interface zone is jungle, but 10 feet in, it is dry and playable. In this case, you can either live with some rough on the dry side, or control that fine line of native by selective mowing.

How to manage native grasses around bunkers and bunker faces is another contentious issue. Golf purists agree that bunker faces ringed with native grasses have a look second to none. Adding surrounding native grass to a bunker can make the hazard two to three times larger, but any of these areas that receive water tend to become thick and practically unplayable.

Unfortunately, golfers often misunderstand design principles, strategy and hazards. Most golfers today expect every square foot of the golf course to be manicured and playable. While bunkers are hazards by the rules of golf, the native grass edging is not a hazard but plays as difficult or even more difficult. If you can even find the ball, faces or fringes of the bunker may be totally unplayable.

Where does all this leave the debate? It seems there is no complete answer from a playability standpoint. The decisions on managing native grass will lie with each individual club and their objectives for speed of play and playability. The design intent of the architect should be considered before changes are made in native areas. Careful irrigation management/design, species selection and seeding rates can also ensure a more manageable native grass situation.

Winter irrigation

Continued from page 6

pretty small because you can’t put water out when it is below freezing. We are in the 20s every morning so we can’t water anything until at least 10 a.m."

Dave Hare, superintendent at The Sanctuary in Castle Rock, also has a winter irrigation system that he uses to protect against desiccation. "Our main line is at a depth of four feet and we have frost-free hydrants around the tees and greens," said Hare. "We have not had to water fairways yet. Last year we watered three times before March."

To further protect bunker faces and minimize winter irrigation, Hare soaks them for eight hours to try to get as much water into them before the ground freezes. Then on the south-facing bunker slopes he applies a three-quarter-inch jute mat to keep the sun intensity off the turf.

Even to the north in Granby at 8,000 feet in elevation, superintendent Greg Chambers at Grand Elk Ranch & Club irrigates in the winter. However, the system he relies on – a pickup truck and a water tank – is a more low-tech option.

"We watered in December and again in the beginning of February to defeat desiccation," he said. "It still gets really cold, but because of the sun on slopes it takes the water. It is time consuming but it is worth it."

GOLF COURSE NEWS

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November 2002
Haines' ceramic material eases maintenance

Continued from page 6

no trick holes and there are no continuous cart paths.

"One of my pet peeves as a golfer is having to keep cars on paths set too far off to the side. When we say 'car path only,' we mean take it down the middle of the fairway," said Haines. "Our car paths are essentially invisible, because the PermO2Pore root zone helps us achieve a more traditional look and feel. Players are directed to the optimum areas of the fairway, with their view and play unimpeded by car paths."

Haines' proprietary PermO2Pore mix of sand and porous ceramic granules creates a specialized root zone sturdy enough to support car traffic leaving natural gravel paths fanning onto the fairways, and gathering again at the gravel paths near the greens. PermO2Pore is a product made by Agronomic Systems Design Group, which Haines helped them develop.

With little or no compaction to deal with, the maintenance crews only have to control the wear to the turfgrass by managing the traffic patterns. Small metal markers delineate the fortified areas. To golfers, there is no noticeable car path beyond the gravel areas.

The porous ceramic root zone is approximately 12 to 15 feet wide, and extends 30 to 40 yards into the fairway, large enough to be able to redirect cars each day to allow the worn areas of turf to grow and heal.

Haines has also applied porous ceramic technology to putting greens. A similar soil conditioning and drainage system he calls SoilAire alleviates the need for the gravel blanket normally prescribed by the USGA in "perched greens" construction.

"Over the years, the capillary nature of the soil in perched greens is increased by the steady build-up of organic matter," said Haines. "With their capability to retain so much more water, the greens simply do not get enough air and must be aerated more often." Haines added that SoilAire green construction is in place at more than 50 golf courses throughout the country.

A prescribed mixture of sand and porous ceramic placed directly over the base soil results in improved capillary movement as compared to the more traditional approach. As water moves through the SoilAire mixture, it slows at the soil interface, but does not stop. The capillary forces pull excess water through the root zone, while drawing in from the top as the system reaches equilibrium. The porous ceramic material drains more rapidly and holds equal amounts of air and water in the root zone.

Where USGA specifications require a cavity 16 inches deep to accommodate two separate layers of gravel and soil cavity, the depth of the cavity for the SoilAire mixture is only 10 inches.

"The porous ceramic mixture itself may cost a little more, but the overall green construction costs compare closely to that of a USGA approach," said Haines. "The SoilAire system has the potential to reduce long-term maintenance costs, which helps in our objective to provide affordable golf at San Pedro."

Zoysia research

Continued from page 6

give lower-end golf courses something that exclusive golf courses have used for years."

The data collected so far shows that the best time to seed zoysia is between May 15 and July 1. After 10 weeks, there is 100 percent coverage and the turf is playable. The best rate is between one to two pounds of seed per 1,000 square feet, and the first herbicide application, depending on the product used, can be made as early as two weeks after seeding.

For the conversion of ryegrass and bluegrass, Purdue has conducted field trials and also worked with four golf courses in Indiana and Kentucky.

"We found that overseeding existing fairways doesn't work well, even at high rates of seed," said Aaron Patton, a graduate student working with Reicher. "The best move is to treat the area with Roundup, prepare a seedbed and put down seed."

Patton and Reicher plan to spend another year doing more herbicide studies and Patton will continue on to study which varieties are most resistant to zoysia patch.

"At this point," Reicher said, "we have enough answers so superintendents can make an educated decision about whether to choose or convert to zoysia."
Coldwater developers bring affordable public golf to Iowa

By DEREK RICE

AMES, Iowa — At this time next year, golfers will be playing Coldwater Golf Links, which is nestled between the athletic fields at Iowa State University and the business district of Ames on 130 acres of former farmland and land leased from the university.

Routing and construction of the Tripp Davis-designed links course has been completed and seeding is underway. Despite a string of bad-weather days in mid-September, the developers said the course opening would be on time next year.

Niebur Golf Construction Services took on the building and shaping of the course, which required moving 450,000 cubic yards of dirt to give the flat farmland some definition.

For developers Marvin J. Walter and Scott Randall of the Randall Corp., the experience of building a golf course was a new one. The two owned adjoining tracts of land on the site and decided to pool their resources to form Legacy Golf Associates Inc. In order to build an 18-hole course, they leased 50 acres from Iowa State. That land sits adjacent to the football overflow parking area in the shadow of Jack Trice Stadium, where Iowa State plays its home games. Under the agreement with the university, should a larger stadium be built, which would require more parking, the university may park cars on the golf course. But Matt Randall, vice president of the Randall Corp. said he's not worried about that.

Niebur keeping busy despite building slowdown

By DOUG SAUNDERS

TRUCKEE, Calif. — While work continues on Coldwater Golf Links in Ames, Iowa (see story above), golf course builder Niebur Golf has several other ongoing projects proceeding coast to coast in spite of a slowdown in course construction.

The housing market has been keeping us alive," said president Joe Niebur. "All but eight of our 10 projects are in housing developments.

Current projects include:
• Trilogy at Redmond Ridge for Shea Homes in Redmond, Wash. Work on the Gary Parks-designed 18-hole course will be completed this year.
• An 18-hole course designed by Rick Phelps in Falcon, Colo. It is due to open in fall 2003.
• Highland Meadows GC in Windsor, Colo. Work just started on the 18-hole course designed by Art Schaupeter.
• Art Hills' White Clay Creek GC in Wilmington, Del. The course will be finished this fall.
• 18-hole addition by Robert

East West Partners breaks ground in Truckee

By DOUG SAUNDERS

TRUCKEE, Calif. — Site prepa-
ration began last month on a new Jack Nicklaus Signature golf course in this small railroad town in the Sierra Nevada Mountains.

Old Greenwood Golf Course marks the beginning of a new era for this hamlet that for years has been the gateway to nearby Lake Tahoe.

Old Greenwood is the first of two courses to be built as the linchpin to an ambitious resort undertaking by East West Partners, which will feature 3,000 home sites, the creation of a European-style ski village at nearby Northstar at Tahoe and complete recreational amenities for prospective club members.

The project will signal a transformation for the small mountain community and also mark an expansion of the resort concept that East West developed over two decades in Colorado. East West is internationally recognized for the development around the base of Beaver Creek, Colo. That complex combined a ski village core with a blend of single-family homesites, shared ownership homes and condominiums for visitors. The ski resort brought winter visitors, and a Robert Trent Jones Jr. course was constructed to lure summer residents and visitors.

We have begun to remove trees and will do as much rough work on the first five holes this fall as the weather permits. We should be able to complete final shaping and sod the course by next fall in order to open in 2004," said Todd Patrick, East West Partners director of sales.

The development group has teamed with Crescent Real Estate as a financial backer for the 13-year project. East West Partners is also already involved in a long-term lease arrangement with another Truckee course, Coyote Moon. With the construction of the two new courses, East West will be able to offer 54 holes of golf to prospective members of the planned Tahoe
for MacCurrach in the case. Sparagowski's attorneys appealed to the appellate court, which upheld the lower court's decision. They then appealed to the Supreme Court to reject the appeal.

As for Sparagowski, he said he and a partner are close to putting a deal together to fund the first phase of 31 housing lots on the property. "That deal would generate half a million dollars, and that is all we need to finish nine holes. With that money in place we would be 60 days from having nine holes open," said MacCurrach.

Another draw for Maloy was the opportunity to return home. Coldwater will look to Ames someday, so he was thrilled said he wanted to return home to Ames someday, so he was thrilled at the Coldwater opportunity.

"I met Matt (Randall) at a trade show and he said he was looking for a superintendent for a course he was building in Ames," Maloy said. "I thought, 'This is perfect,' so I jumped at the chance."

To complete the decision-making team, Coldwater would look to hire a business manager sometime in the near future. "We're probably looking at around the first of the year," Randall said. "We don't want to be making too many decisions until the team is in place."

Under Maloy's employment agreement, some of his salary is based on the course achieving certain performance levels. While this could mean lower than average pay at times, Maloy said he relished the opportunity to work under that structure. "I am all for this kind of agreement," Maloy said. "I think more superintendents ought to work like this."

Another main draw for Maloy was the opportunity to work closely with Iowa State again. Through the relationship with the university, Maloy will have access to a steady stream of employees through the university's turfgrass research department.

"We've got students working for us part-time, and it's really a win-win situation," Maloy said. "I can hire five or six turf students for less than it would cost to hire full-time staff, and they're getting the hands-on experience they're going to need in the future."

Partly because of this arrangement, the course owners were able to get John Deere to give them a discount on equipment.

"John Deere was smart about this," Maloy said. "They want these kids to be using their equipment so that when they're working on their own courses, they'll be familiar with the company." Walter agreed, adding, "John Deere really stepped up and we worked together to develop a unique program with them."

The course design includes an alternate fairway, where Iowa State students and professors will conduct turf research, Maloy said.

"It will serve as a lab of sorts where they can get a hands-on feel for turf management," Maloy said.

Construction continues on the clubhouse at Coldwater Golf Links.

Construction equipment sits idle at the site of the planned Desert Challenge.
Niederb stays busy

Continued from page 11

Trent Jones II at Chenal CC in Little Rock Ark. The course will open later this year.

• Three Crowns GC in Casper, Wyo. for British Petroleum. The 18-hole Robert Trent Jones II-designed course will be finished in fall 2003.

• A nine-hole addition to Boone CC in Boone, Iowa. Work was completed in September. In addition to this work, Niebur also is starting on jobs in Lansing, Mich., and Beckett Golf Club in New Jersey. The firm will also be opening a satellite office in Scottsdale, Ariz., this fall that will be staffed by Kent Neville.

“...to the action down there,” said Niederb. — Andrew Overbeck

Old Greenwood

Continued from page 11

Mountain Resort.

The 6,740-yard, par-72 Old Greenwood course is being built on a 600-acre parcel of land that features tall mature white pine and ponderosa pine that are spaced throughout a rolling site that offers a very natural routing. While no figures are available, East West has said that expenditures on the course, clubhouse and infrastructure costs will be substantial.

With construction underway, the Truckee area is heading toward recognition as a mountain golf destination community. Old Greenwood will bring the number of courses in this town up to six. The move to build courses in this town, which is just 14 miles from Lake Tahoe, is driven by the environmentally sensitive nature of the Tahoe Basin. The area continues to draw visitors and residents to the numerous ski areas and mountain scenery, but building such an ambitious project within the Tahoe Basin would be impossible.

East West Partners came to the California mountains three years ago to access the development of Northstar at Tahoe, a ski resort situated on the ridge that divides Lake Tahoe from the Martis Valley.

“After our experiences in Colorado with Beaver Creek and Copper Mountain, we understand how important golf is to creating a desirable four-season resort. We could see the potential of Northstar and the surrounding area. Tahoe Mountain Resort will expand on the concepts we created in Colorado,” said Roger Lessman of East West Partners.

The biggest difference the group has encountered in California is the strict environmental review process that is necessary to obtain approval for the golf course construction. This approval process brings local, state, and federal regulatory agencies into play. This process can take two years to clear, but this is an improvement from the late 80s, when the approval process could take up to eight years.

“We appreciate the interest to make these golf courses as environmentally sensitive as possible and are excited to finally begin the construction process,” Lessman said. — East West Partners

GC at Westwood seeks rebirth

HOUSTON — The Golf Club at Westwood has hired architect Keith Foster to redesign and Landscapes Unlimited to construct the course’s planned changes.

With construction expected to be completed in November 2003, the course hopes to undergo a rebirth of sorts. Head pro Scott Olsen promises a simple, clean and classic design surrounded by 160 acres of natural, heavily vegetated parkland just minutes from downtown Houston.

Foster will redesign all 18 greens and tees, as well as hand-crafted bunkers in what the club said is reminiscent of early 20th century designs. The renovation also includes a new irrigation system and turfgrasses.

Other preemergents talk a lot about crabgrass. With Pendulum, it never comes up.

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

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Shelter Harbor
Continued from page 1

that caused delays centered on the state's desire to put in place significant buffer zones around the wetlands, Hurdzan said.

"When we would find small wetlands, we would then propose that we would enter into a smaller number of smaller tributaries. Complementing the course is a 20-acre practice facility that includes a separate teaching tee, a sand and bunker shot area and two putting greens. A short-game area with fairway, rough and sand bunkers is scheduled to open next year.

Future plans for the course include a rustic clubhouse made of wood, stone and rough-hewn beams, which will house the grill, lounge, pro shop and locker rooms.

Because of permitting issues, architect Michael Hurdzan had to "substantially" change the routing at Shelter Harbor 25 or 30 times.

The five-year study started in 1998 after the completion of the Pete Dye-designed course, and so far the results have shown that the constructed wetlands have been extremely effective in filtering runoff. The wetlands serve as a buffer to Celery Bog which used to handle the runoff coming from the two residential highways, a motel parking lot, gas station and 200 residences that surround the course.

The study, which is being funded by the United States Golf Association, Pete Dye Inc., and Heritage Environmental, monitors water quality at six points throughout the golf course.

Runoff is tested as it enters the course to determine the initial level of pollutants and is then tested at four other points along the way before a final test as it leaves the property and enters Celery Bog. The water is monitored five times a year and during some storm events.

"We have been able to prove that the golf course does not add any pesticides and fertilizers to the system," said Purdue's turfgrass supervisor, Michael Reicher. "We have recorded reduced levels of chloride, nitrate-nitrogen, ammonia-nitrogen, chemical oxygen and dissolved and suspended solids. The wetlands have been inconsistent in the removal of organic nitrogen and phosphorous.

No unusually high levels of pesticides and metals or even oil and grease were detected from the runoff, although the common herbicide atrazine has been detected twice. In both cases the level of atrazine was reduced between the urban input and the entrance to Celery Bog.

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With hiring, new funding, Meadowbrook looks to double size

CHAMPIONSGATE, Fla. — With the addition of industry veteran Don Rhodes as its vice president of acquisitions and development, coupled with the formation, along with Apollo Real Estate, of Honors Fund LLC, Meadowbrook Golf appears poised to take the next step toward becoming a larger player in the course management sector.

Rhodes, who formerly held high-profile positions at Heritage Golf Bank of America and Textrom Financial, said the company, backed by Apollo, is looking to make significant acquisitions.

"Apollo has made the decision, and I think they're great for doing it, that instead of trying to sell everything and getting out even or with a small profit maybe, or a loss, they're going to try to tough double the size of the company," he said.

Because Apollo went through the boom of the 1990s and the downturn of the early 21st century, Rhodes said, the company is in a position to understand that golf is a stable business, just not one that was made for get-rich-quick schemes.

"They've been through this and they understand the reality of the market. They understand what golf as a business can really generate. It is a first-class asset," said Rhodes.

Continued on next page

NGCOA revamps annual conference

CHARLESTON, S.C. — In response to the challenges facing the golf course business, the National Golf Course Owners Association (NGCOA) is revamping its annual conference to present solutions to the pressing problems facing golf course owners and operators.

The NGCOA's Solutions Summit is scheduled for Feb. 22 through 26 in Palm Springs, Calif. The summit's educational seminars will focus on how to maximize profit centers and control expenses in all areas of golf course operation.

A pre-conference workshop will tackle the issue of marketing solutions, which has become key as owners and operators attempt to maximize profits in the face of flat rounds played data. Other educational topics will include the business value of business veterans form golf consulting firm

HOUSTON — Golf, real estate and hospitality industry veteran Elmer E. Stephens and financial consultant Glenn Fold have formed ES Partners Inc., a firm that will specialize in golf course and real estate project management and advisory services for developers and owners of golf courses and residential communities.

ES Partners is a preferred golf management provider for Jack Nicklaus Design, as well as a strategic partner of C.H. Johnson Consulting, a convention, sports and real estate consulting firm.

According to Stephens, the company's expertise and experience will be beneficial to developers, owners and managers.

Continued on next page

Cleveland Metroparks takes on pace of play issue

By MICHELLE R. SMITH

CLEVELAND — According to many golf experts, one of the toughest and most important challenges facing golf course operators today is pace-of-play management.

A course with substandard pace of play, or even a reputation for having slow play, stands to lose revenue and regard in the professional golf community if the problem is not purposefully addressed.

In recent surveys of golfers, pace of play was the number one concern. To address this, Cleveland Metroparks District's golf staff modified previous measures and instituted several new pace-of-play initiatives this season to maintain an above-satisfactory pace of play on all six Metroparks courses.

"The goal is to ensure that we keep our promise of fast play to loyal and new patrons alike," said Mike Baby, clubhouse manager for several of the district's golf courses, and leader of the pace-of-play initiative.

One measure the district has taken at all six of its golf courses is to hand out pace-of-play POP information cards with receipts at every clubhouse. This information emphasizes the benefits of playing "ready golf," which improves pace of play.

Sleepy Hollow and Little Met golf courses have established incentives programs, using completed POP cards, through which players are rewarded for finishing 18 holes in less than the standard four and a half hours. The incentives, which include free rounds of golf, are intended to encourage players who might not otherwise focus on pace of play.

Also at Sleepy Hollow, Casual Round Martin has been installed in the golf cars. These electronic pace-of-play management systems attach to the car's steering wheel and track time from the beginning of a player's round. The LCD display indicates where players should be on the course at any given time.

Continued on next page
measurement of properties for disposition and turnaround of under-performing assets. The company will also leverage its industry relationships to provide quality resources to meet clients' needs and solve their problems. The company signed two management deals within days of its formation, Wildcat Golf Club in and The Golf Club at Westchase, both in Houston.

Rhodes' departure, Heritage acquired Weston Hills (see story above). At Meadowbrook, Rhodes will be responsible for overseeing the company's new Honors Fund, which was established shortly before his arrival to capitalize on acquisition opportunities, participate in corporate structurings and optimize the performance of assets held in the fund. The fund will initially be capitalized by an equity investment of $25 million from Meadowbrook and Apollo, and will also target third-party investors for an additional $125 million contribution. By leveraging this fund, the company will be able to acquire businesses, partnerships and golf course assets.

Commercial Bancorp Continued from page 1

"Ninety percent of the time, they're not educated to the point where they know what they should be doing - they're just not there yet," said Cummings. "We have established a very distinct process we lead people through... The company is so confident its process works that it is looking into having it trademarked," Mooney said.

Commercial Bancorp looks at golf as a retail business, rather than a real estate venture, which Mooney said is something a lot of operators fail to think about. "Have you a storefront and a community to sell to?" he said. "You've got to bring the customers back repetitively to be successful. It's not just that you have a great location.

Tee times are perishable goods. Once that 10 o'clock tee time passes, it's never coming back," he added. Unfortunately, Mooney said, too many independent owners across the country are ill-prepared to either buy a course or, once they've bought or built it, to run one, although he said most management companies do a good job at recognizing potential pitfalls.

"There's a lot of good management companies out there, but you have 17,000 courses around the country, and a large amount of owners are just not capable of running that type of business," he said. More and more people who are getting into golf ownership and operation are "getttingit," said Mooney. "Golf is changing a lot. The guys who are coming on line now are much different from the old owners," Mooney said. "The new are astute and they're grasping this stuff."

While the golf business may constantly evolve, Mooney said he will be pleased to add Weston Hills to Heritage's portfolio. Weston Hills is the 10th course Heritage owns. "Weston Hills is an extraordinary acquisition for Heritage because of its unique quality and the reputation it enjoys in the surrounding areas of Jacksonville and Palm Beach," he said.

Three or four years from now, all I may have to do is say, 'Come in and we'll get you a loan.' But right now you can't do it that way." Steve Mooney

NGCOA summit Continued from previous page

"Environmentally responsible golf course owners and operators have the tools they need to thrive in the soft, economic climate." Rhinos said.

On Feb. 24 and 25, more than 100 exhibitors will take place in the summit's trade show. At previous NGCOA annual conferences, the trade show had been limited to one day.

The summit's IDEA Fair and Problem Busters events are intended to give owners and operators an opportunity to see ideas and find solutions to the challenges of day-to-day course operations with their peers.

Cleveland Metroparks pushes 'ready golf' Continued from previous page

"These units are used at over 40 golf courses nationally and have been proven to help players maintain a proper pace, or even shave many minutes off their rounds," said John Fandor, Sleepy Hollow's golf professional. Fandor said pace of play at Sleepy Hollow has improved significantly since the devices were installed, with the average nine-hole office as much as 40 minutes. The statistics were recorded through a tracking system implemented at Sleepy Hollow that compares 2002 turn times with 2001 turn times to assess the effectiveness of Personal Rangers. The Metroparks District's Manakiki Golf Course clubhouse staff uses "wave" tee times on weekends and holidays. According to head pro Tom Kochensparger, this system has been effective in maintaining the course's pace of play. The first wave begins around sunrise. Sixteen groups go off the first tee, and 13 go off the 10th. After all groups have gone off the green, the staff shuts down both tees so play can move from one nine to the other. After all the groups have made the turn, the staff begins a new wave. This second wave usually finishes around 2 p.m., and the course returns to a traditional first-tee start.

Kochensparger said the wave system allows staff to regulate how many groups are on the course and to better spread out play, which leads to better pace of play. It also allows the course to host more players during prime morning hours. Manakiki also posts selected turn and finish times in a public location on the course to make players aware of improvements in overall course pace of play. This encourages a "healthy competition" in players, spurring them to keep up with those who have an impressive pace of play. Metroparks' Mastick Woods Golf Course also posts turn and finish times in an attempt to make players aware of how their course efforts can improve pace of play. At Shawknee Mills and Big Met courses, clocks with pace of play will be in stalled at the first, third, sixth, ninth, 12th and 15th tees. The objective is to increase pace of play by giving players who prove successful in improving pace of play, these clocks may eventually be installed at all six Metroparks courses.

Also, regularly scheduled meetings for rangers and starters are held to improve staff training in customer relations and player management. Through increased and more intensive training, the part-time rangers and starters who will tend the golf courses on the greens become more effective in helping maintain good pace of play. Rang ers use the POP cards to remind players of ways to improve their pace. At Shawknee Hills and Big Met courses have begun experimenting with wave tee times.

With these initiatives in place, players on Cleveland Metroparks golf courses will see the Park District's commitment to pro moting responsible golf that is friendly to the environment. They will also see that their own efforts can do to improve play on their favorite local golf course.
Deere brings in Truttmann for One Source rollout

By ANDREW OVERBECK

CARY, N.C. — John Deere Landscapes is hitting the ground running with its One Source initiative on the East Coast. The company plans to gradually roll out the concept across nationwide as it adds more locations and products.

The initiative was born last year as John Deere purchased McGinnis Farms and Century Rain Aid. They have slowly rolled out the new division that aims to become a single-source supplier for the golf course industry.

So far, the company has retrofitted McGinnis Farms locations and built 12 additional facilities on the East Coast. Expansion across the rest of the country will occur as the company builds and acquires other locations.

Industry veteran David Truttmann has come on as national golf sales manager to oversee One Source sales of irrigation equipment, chemicals, fertilizers, seed, sod and nursery stock. On the irrigation side, John Deere Landscapes offers the full line of Hunter irrigation products.

"I will handle all the products that we sell to golf courses other than turf equipment and utility vehicles," said Truttmann, who was previously director of golf development for Landscapes Unlimited in Lincoln, Neb. "We are initially approaching all the golf courses that are already preferred customers of John Deere in an effort to offer them the full line of golf course supplies."

In order to put the One Source initiative into action, Truttmann is setting up a communication system to allow salespeople from each product segment to share information.

"One person will not sell all the products because there are technical specialties involved," said Truttmann. "Leads will be shared so that our appropriate specialist in irrigation, chemicals or fertilizers can follow up."

According to Truttmann, superintendents will be able to realize substantial cost savings by taking advantage of the One Source program.

"If you think about it as a co-op under the John Deere name, you have access to tremendous buying power." 

Continued on next page

Lesco moves on to phase two of restructuring plan

By ANDREW OVERBECK

CLEVELAND — Lesco Inc. has completed phase one of its move toward a "hub and spoke" logistical network with the retrofitting of its existing distribution centers. The company is now working on the second phase of its reorganization, which will include the opening of at least four new distribution facilities over the next 18 months.

"One of the keys for the Lesco model to create value is efficient, cost effective product distribution," said president and CEO Michael P. DiMino. "We designed phase one of our hub and spoke network to support our current service centers and customers. Phase two will support our future service center expansion and continued sales growth."

The company completed the retrofitting of its regional logistics hubs in New Jersey, Massachusetts, Ohio and Florida. This retrofitting included the re-engineering of operational processes, space planning and the reorganizing of distribution routes to service centers and customers for the optimization of delivery times and costs. Direct shipments to customers will be managed regionally to provide the highest serviceability to its customers.

Lesco will open regional hubs in Georgia, Texas, Illinois and California during the next 12 to 18 months. When phase two is completed, over 95 percent of Lesco's customer base will be within a one-day transit time from a regional hub.

Continued on next page

Golf course drainage improvements

WATERWICK SYSTEM IMPROVES DRAINAGE

WaterWicK Inc. has introduced a gravel injection system that improves golf course drainage without disturbing the soil surface. The WaterWicK system incorporates multiple vibratory blow blades that gently slice into the turf. As the turf is drawn apart, a gravel vein is injected into the opening to create a permanent underground aqueduct that carries away excess water. WaterWicK is appropriate for use on greens, tees and fairways. For more information, contact: 888-287-1644 or www.waterwick.com.

PFG Golf to provide financing for ProLink GPS systems

CINCINNATI, Ohio—President Financial Group's golf division has teamed with E-Z-GO and ProLink to provide customized financing solutions for Global Positioning Systems (GPS) manufactured by ProLink and marketed in conjunction with the E-Z-GO sales and marketing network.

According to PFG Golf, the GPS golf market is expected to grow into a $500 million market by 2009.

"We believe GPS represents a major product and profit opportunity for golf courses and we see tremendous market penetration with the increased product acceptance and consumer demand," said Chris L. Schaumann, vice president of PFG Golf.

Lease options include predetermined buyout options, optional return privileges or lease payments based on the number of rounds played.

"PFG Golf's corporate strength and their experience in managing customers similar to ProLink make for an exciting combination. We are confident our customers will enjoy a positive experience in dealing with our new capabilities and we are excited about our new relationship," said Doug Lecker, president and CEO of ProLink.

PFG Golf provides equipment financing for golf courses and country clubs nationwide and the division currently has an agreement with E-Z-GO to handle financing in 11 states in the Northeast.
Hunter releases G880

Hunter Industries has released the high-capacity G880, a gear-driven rotor that delivers up to 88 feet of full-circle coverage. It has a pop-up height of three and a half inches and is available in three models: electric-regulated, electric three-way, and hydraulic. All models include top service, snap-in components with no screws or bolts to fumble with. Made of composite material, Quantum valves are the only valves on the market designed with outside inlet threads for extra strength under pressure. A special add-on compact service valve is also available. For more information, contact: 800-491-4973 or www.huntergolf.com.
LandLogic gives GPS capabilities to superintendents
Continued from page 1

irrigation head you are mapping and what brand and type it is," Robinson added. "It is tailored to your course. If a head is added or moved any time down the road, the superintendent can adjust the map accordingly so the map stays current and doesn’t become obsolete.”

HELPs KEEP OPERATIONS ON TRACK
Superintendent Kevin Hicks at Hillcrest Country Club in Boise, Idaho, has been helping Robinson test the software package for the last year.

"I had never even used a pocket PC, but it was pretty self-explanatory. We mapped 7,500 points in 10 days," said Hicks. "We mapped the entire irrigation system, all trees, all buildings and all utilities. We had an irrigation system on our first nine that was more than 30 years old and that map was very sketchy. Now we know where everything is and when we tweak the system during the season we can easily update the map.

"It was very helpful for us because we host a Buy.com Tour event and I was able to go out and create a map of where I wanted gallery ropes and port-a-potties," he continued. "I created that, printed out the map and the tournament director knew exactly where things needed to be. That is a real time-saver." In addition to creating accurate maps and work orders for staff members, the system can eliminate paper record-keeping and improve communication.

The map allows superintendents to accurately quantify how much material to use on a given area, and keeps records of how much has been used to help keep inventory up-to-date.

"Since spot-applications are more common, we have enabled users to circle an area on the map and instantly get the square footage to calculate how much material they need," said Robinson.

Superintendent Travis Blamires at Troon North Golf Club in Scottsdale, Ariz., has been using the system since August and plans to map the amount of Poa annua he has on each green.

"We will be able to quantify how much Poa we have on each green and then be able to quantify how effectively chemicals are treating the problem," he said. "Before you had to guess, now I can quantify it, and draw up a map for the spray tech and send him off to do spot applications more accurately."

Superintendents can also record audio notes and create schedules on the pocket PC as they make their morning rounds. Once back in the office the maps and notes are all transferred to the desktop PC. When the irrigation technician or assistant superintendent comes in and docks to the PC, the notes and work schedules are instantly added to their pocket PCs so they know what tasks need to be completed. The pocket PCs have removable 128-megabyte memory cards that can hold up to three years of data.

All notes, records and changes to the maps are stored on the unit and can provide powerful information to the superintendent.

"He can keep track of labor usage and chemical inventory and he can calculate how much active ingredients he is putting down. All that information can be isolated down to specific areas on the golf course," said Robinson.

INFORMATION STAYS AT THE COURSE
Another reason Robinson developed the

LandLogic system was so owners and management companies could prevent all the agronomic knowledge from leaving the facility when a superintendent moves on to another job.

"I got the idea when I was a member at Desert Highlands GC and we lost our superintendent John Szklinski to Southern Hills CC," said Robinson. "We took a real hit in terms of agronomic standards because when he left, all the agronomic knowledge left with him. I wanted to create a better way for superintendents to record information to insulate owners and management companies from the investment that they make in superintendents and their expertise." Robinson is slowly introducing the product and hopes in three years’ time to have 10 percent of all superintendents using LandLogic. Both Troon Golf and IntraWest Golf are currently doing pilots at their premier facilities.

"Education and understanding are the biggest barriers, not price," Robinson said. "We de-emphasize the technology because superintendents don’t have a great relationship with many of the software products they use. They are generally perceived as complicated and unreliable so they assume we are no different. Instead, we provide them with a basic service and give them the tools to grow at a pace they are comfortable with. This is very much a crawl, walk, run approach.”

49th Rocky Mountain Regional Turfgrass Conference and Trade Show

December 4-6, 2002
Colorado Convention Center
Denver, Colorado

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Fax: 303 770-1812
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e mail: rmrtac@gwani.com

RMRTA
WARD, "he said. "We have chosen to grow where everyone else is, or you move forward instead of downsizing."

IGM expands
Continued from page 1

Now we will be more focused on new business."

Longtime golf industry consultant Dennis E. Shirley will head up efforts to expand IGM’s business in Texas and Craig Johnson, owner of Golf Course Services, will handle new opportunities in the Southwest.

"Both Shirley and Johnson have lots of contacts in the business," Zakany said. "Once they get us qualified leads, we will get involved. They have the contacts and see the people that we want to get in front of."

IGM has also relocated its western regional office to Las Vegas from Los Angeles. Brad Rook will head up the new office located at IGM’s Silver Stone Golf Club.

"We felt Los Angeles was too far west and that we were missing opportunities in high-profile golf markets like Las Vegas and Phoenix," Zakany explained."

According to Zakany, the changes will help IGM achieve its goal of growing 15 to 20 percent annually.

"This is a time when you either fall back where everyone else is, or you move forward," he said. "We have chosen to grow instead of downsizing."

Zakany said additional growth will come from placing new business development offices in the Northeast and Midwest in the coming months.

We want to hear from you!

Letters to the editor are an integral part of GCN, so let your voice be heard. Send all correspondence to:

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Yarmouth, ME 04096
Fax: 207-846-0657
aoverbeck@golfcoursenews.com
NATIONAL GOLF ROUNDS PLAYED*

<table>
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<tr>
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<th>AUGUST</th>
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* The percentages above represent the difference in number of rounds played in the month of August 2002 to the number of rounds played in August 2001.

Source: Golf Datatech

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

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<td>63 (-4)</td>
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<td>IN PLANNING</td>
<td>388 (-5)</td>
<td>67 (-1)</td>
<td>455 (-6)</td>
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<td>UNDER CONSTRUCTION</td>
<td>348 (-18)</td>
<td>176 (NC)</td>
<td>524 (-18)</td>
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<tr>
<td>COMPLETED</td>
<td>176 (+22)</td>
<td>91 (+9)</td>
<td>267 (+31)</td>
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Source: NGF

Golf Course News STOCK REPORT (10/4)

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<td>39.00 - 62.75</td>
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We salute course builder Louis Miller, long-time Penncross specifier.

"I love '50s rock classics, and Penncross is a rock-solid '50s classic."

In the early sixties, The Monarchs rock group reached number one nationally with Look Homeward Angel. The Monarchs are still playing gigs, and I still play bass for them as I did then. Penncross was 8 years old when we topped the charts, and I'm pleased to say Penncross still tops the charts as the best-selling creeping bentgrass of all time.

As a certified golf course builder for 9 years, I still specify Penncross for 95% of greens I build or rebuild. Penncross takes extremes of cold, heat, traffic, plus wear and tear of daily spiking and ballmarks. Plus, Penncross adapts to various superintendents' management styles.

Why do I still specify Penncross? It has been where other bents are trying to go.