

GOLF COURSE NEWS

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Textron makes play for Ransomes PLC

By MICHAEL LEVANS

LONDON — What has been a four-company race to control the global golf course "iron" market is about to become a three-company race.

On November 10, Providence, R.I.-based Textron Inc., the parent company of Jacobsen and E-Z-GO, offered 60 pence for every Ransomes ordinary share, valuing the British group at 83.2 million pounds (\$144 million). At that time, Ransomes' directors agreed to sell their shares.

While not yet set in stone, Ransomes is about to fall under the Textron umbrella after 212 years of independent operation.

"Our share prices started to drift back in late spring, early summer, partly as a result of the general movement in the stock market," said Peter Wilson, president and chief executive officer of Ransomes.

Ransomes issued a release in March stating that the company's results would be below the previous year. This was due, Wilson said, to the fact that European markets, namely the municipality markets in Germany and France, dropped off as those governments attempted to align their economies for the convergence into a common European currency.

"That meant there was far less spending in the municipality market," said Wilson. "The result of all that was that our share price dropped down a bit."

It was at that point, said Wilson, that Ransomes had "an opportunistic approach." This first approach, however, was not Textron.

"The rule on the stock exchange here is that if a share price moves more than 10 percent of its price in a day the exchange asks various questions; one of which is 'Are you talking to anybody.' We had to say 'Yes.'"

Ransomes was forced to issue an announcement in the British press that it was, in fact, up for sale. Textron picked up the scent and a few days later a friendly phone call was placed to Wilson's office.

"They [Textron] asked if we could have a bit of a chat and we came to the situation we're in today," said Wilson.

"As a board we had to decide if Ransomes was going to be better off independent or were we going to be better off as part of a combined grouping within Textron. When you consider the financial strength of Textron, when you con-

sider that they have someone similar to ourselves in Jacobsen with the diversity of the E-Z-GO range of products, I think it's a good opportunity to move forward," he said.

Similar product lines aside, Ransomes offers Textron expansion opportunities through a well-plowed path into the European market. According to James Hardyman, chairman and chief executive of Textron, those global in roads will not be missed.

"This acquisition is consistent with Textron's strategy to expand core busi-

nesses on a global basis," said Hardyman. "The combined group will contribute to Textron's growth objectives by leveraging our product technologies, manufacturing capacity, marketing and distribution networks and commercial financing capabilities."

Word of the deal quickly reverberated around the industry. However, according to Don St. Dennis, director of corporate public relations at The Toro Co., it's still too early in the game to say how the market dynamics might shift.

"This wasn't a big surprise," said St.

Dennis. "Ransomes was struggling somewhat to stay in the four company race and it was becoming apparent that they needed to do some kind of consolidation. In this case, it was number two buying number four."

"If Jacobsen was going to survive against Toro and Deere then it better buy Ransomes," said Clarke Staples, president of Greentalk International, a consulting and sales organization, and ex-Ransomes employee. "Otherwise the two of them are going to dilute the waters enough that they'll both go belly up."

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GCN NOVEMBER

By J. BARRY MOTHES

SARASOTA, Fla. — A group of 27 Sarasota golf courses continues to battle the Sarasota County government over stormwater runoff assessment bills that have cost some courses as much as \$46,000 per year and in some cases seriously threatened their survival.

The courses, organized as the Suncoast Golf Course Association, say the rates are far too high and unfair when compared to lower rates assessed to other agricultural-related operations in the county like farms, nurseries and pastures. The group has filed two lawsuits over the stormwater assessment issue which are still pending. One challenges the level of the assessment rate. The other seeks a rebate for what the golf courses contend is excess money they have paid in assessment rates for the past two years.

Stormwater runoff assessments became an issue for the Sarasota-area courses starting in 1995 when turf areas became subject to assessments. Prior to that, the courses paid assessments that related only to parking lots and other non-turf areas. The rates, approved by the county's Board of Commissioners, were created in part to help pay the costs of the county's new stormwater system. But many courses received annual stormwater bills that increased anywhere from seven to 20 times. Foxfire Golf Club, a privately-owned 27-hole daily-fee facility, paid \$5,466 in assessments in 1993 but saw its bill jump to \$37,840 in 1995. Municipal golf courses are exempt from the assessments.

The Suncoast Golf Courses Association recently won a concession from the county in the struggle. The county agreed to reduce the annual assessment rate for 1997-98 from .148 to .037, a 75-percent reduction. That reduction could mean a combined \$250,000 reduction in the amount paid by the courses. But Linda Talbot, vice-president and manager of the Foxfire Golf Club and president of the Suncoast Golf Courses Association, said the .037 rate is still too high. The association would like to see the rate go down to at least .0257, a difference that represents thousands of dollars.

"It's still a slap in the face as far as I'm concerned," said Talbot. "It's outrageous. The figures they are getting are so out of whack compared with what agriculture is paying. They're paying 10 percent less than we are. We still have to continue the fight. We're sod farmers in the purest sense of the word... We're being penalized because we allow people to play on the surface

we cultivate."

Talbot said the county's assessment rate, even the recently reduced one, is "not based on scientific facts ... it was a politically expedient thing for them to do to send off the litigation..." She also criticized some of the standards used by the county to develop the rate level for golf courses. She

said cart paths are factored in, for example, as if they were large-scale parking lots. In developing its original rate, the county also stated that it assumed golf courses irrigated at least 3.5 inches a week and that agricultural concerns did not irrigate, both of which proved to be untrue.

Golf courses and government

bodies in several other counties in Florida have been watching the Sarasota stormwater assessment controversy with great interest. Stormwater runoff assessments, like fire and rescue, are what are known as non-ad valorem and are assessed against individual property owners according to the benefits to that particular property.

In Florida, except for certain charter counties, non-ad valorem assessments like the stormwater runoff one may be made by the county without a public vote, which is what happened in Sarasota. The concern of golf courses across the state is that Sarasota County's treatment of privately-owned golf courses could become a pattern in other counties.

Florida courses battle stormwater assessments

IT WHISPERS WHILE



Photographed at Blackwolf Run, Kohler, Wis.

Course openings top 400 mark, again

By HAL PHILLIPS

File this one under "Business cycle be damned."

The golf course industry witnessed the arrival of another 434 facilities during 1996, fending off the downswing predicted by optimists and skeptics alike. Openings have climbed a steady parabola since 1990. Despite a

slight decline from the record 1995 figure of 468 openings, observers view last year's formidable production with a combination of glee and disbelief.

"I continue to be amazed by the boom in new course construction," said Lansing, Mich.-based architect Jerry Matthews. "I suppose I say that because

I've been in this business for 30 years. It goes in cycles, as other businesses do. History tells us there is going to be a downswing; it's just a question of when."

Not any time soon, it would appear. According to the National Golf Foundation (NGF), more than 800 projects are in the construction phase, meaning any

downswing almost certainly will not take place before the new millennium. While some 657 courses are scheduled to come on line this year, a more realistic figure is 450, according to NGF Vice President Richard Norton.

"Historically, about two-thirds of those projects under construction open during the calendar year," said Norton. "Last year, we increased the total golf course stock by 2 per-

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cent, which is steady. Many people see the golfer population remaining flat and ask, 'Why should the facility population grow?'

"Well, the trends overlap. In the 1980s, there was huge growth in demand. In the '90s, we see growth in supply. They're beginning to match up now, and we expect another surge beyond the year 2000 as Baby Boomers get older. We've also seen a surge in spending from the golfing public — investment in equipment and golf fees. This bodes well for growth on the demand side."

Norton noted that scads of course openings, for their own sake, are not necessarily positive market indicators. More encouraging, he said, was the positive distribution of the 434 new courses (262 start-ups and 162 expansions of existing facilities). Where playing rates are highest (the Midwest), development was strongest. Further, approximately 88 percent of the new courses opened were public-access, meaning all manner of player can patronize them.

Matthews' home state of Michigan — with the nation's highest participation rate — led the pack with 34 course openings, 28 of them daily-fee, resort or municipal. Another high-participation state, Florida, placed second with 31 openings, 22 of them public-access. North Carolina also opened 31 new facilities.

"If you take the Midwest and Southeast together, they account for nearly half the total course openings," Norton explained. "When it comes to participation, that's where golfers live. In the Midwest, we continue to see farmers converting their land into golf courses. In that region we also see many more options in terms of capital investment, from do-it-yourself projects that charge small green fees to multi-million-dollar projects that charge higher, resort fees."

"In the Southeast, there is less range. Projects are a little more high-end. They're driven by real estate and tourism, or more so than in the Midwest."

"It appears that projects are more economically driven — meaning they're located in places where they're needed, to fill a need in the marketplace. Financing continues to be more favorable than it was several years ago. But it's hard to generalize. In fact, it's stupid to generalize. Golf is a very regional business."

Developers seem to have learned some valuable lessons.

"Absolutely," said Joe Niebur, president of Niebur Golf, a Colorado Springs-based construction firm. "I've learned. The architects have learned. We demand a lot more information from owners."

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GCN JULY

By BOB SPIWAK

GRAND FORKS, N.D. — The Red River has receded into its banks after cataclysmic flooding this spring, but golf courses in the Red River Valley are still struggling to get back to normal.

In the Grand Forks area alone, damage estimates are around \$8 billion, and not one golf course is fully operating 18 holes again. Courses are still tallying up the damage with Federal Emergency Management Administration (FEMA) — not only for facilities but lost revenues in an area where an estimated 80 percent of the population plays golf.

At Lincoln Park, a municipal facility run by the Grand Forks Park District, superintendent Steve Mullally said 60 acres of the 18-hole course will have to be reseeded, and nine of the holes may be lost to either a diversion ditch or a new dike. The U.S. Army Corps of Engineers is deciding the path to take, but in either case, the course will be reduced to nine holes and a new 18 built elsewhere. By a stroke of good fortune, the land for 18 holes had already been purchased.

"The people need diversion from their troubles and we're working as hard as we can to get them a place to play golf," Mullally said. Reseeding will cost about \$60,000. Revenue loss is estimated at \$200,000 and it will cost at least \$500,000 to replace the destroyed clubhouse.

The north-flowing Red River is the dividing line of North Dakota and Minnesota, and is joined at Grand Forks by Red Lake River. The land is flat, comprised of rich, black soil. At normal flow, the Red runs at around 5,000 cubic feet per second (cfs.) At the peak of the flood, it was gauged at 150,000 cfs and ran 31 feet higher than normal. Millions of tons of water brought with it uncountable tons of fine silt, which choked the land when the river returned to its banks — silt so fine that when it dried, it hardened like concrete.

Mark Lindberg, superintendent at Edgewood Golf Course in Fargo, is having a hard time dealing with the dried silt. In an effort to reseed through an inch of the hardpan, his aeration equipment is suffering.

"We're doing a lot of welding and repair on equipment," he said. The turf is gone from the course which was under water for 40 days. He is attempting to aerify it and then re-seed with a slit seeder. The hardened silt does not wash away under high-pressure hoses. Breaking through, or removing the silt, is the only way to deal with the

problem.

The flooding was not the only problem. When it was certain the water would rise, Lindberg and his crew hastened to erect the driving range net while there was still vehicular access to the poles. Once the net was up, a blizzard hit and was followed by a sleet storm which destroyed

the entire netting system.

Grand Forks Country Club was under water for 20 days. Superintendent Mark Bergstrom figures at least \$250,000 damage was done there. The course lost five fairways, and has been reconfigured to a nine-hole venue. The day before the flood reached its peak, Bergstrom and crew

boated to the maintenance shop and emptied the chemical building, putting the materials on a tarp and moving it and the equipment to a green on higher ground. He had everything moveable on the floor put on shelving 18 inches off the floor. The waters rose to 17 inches.

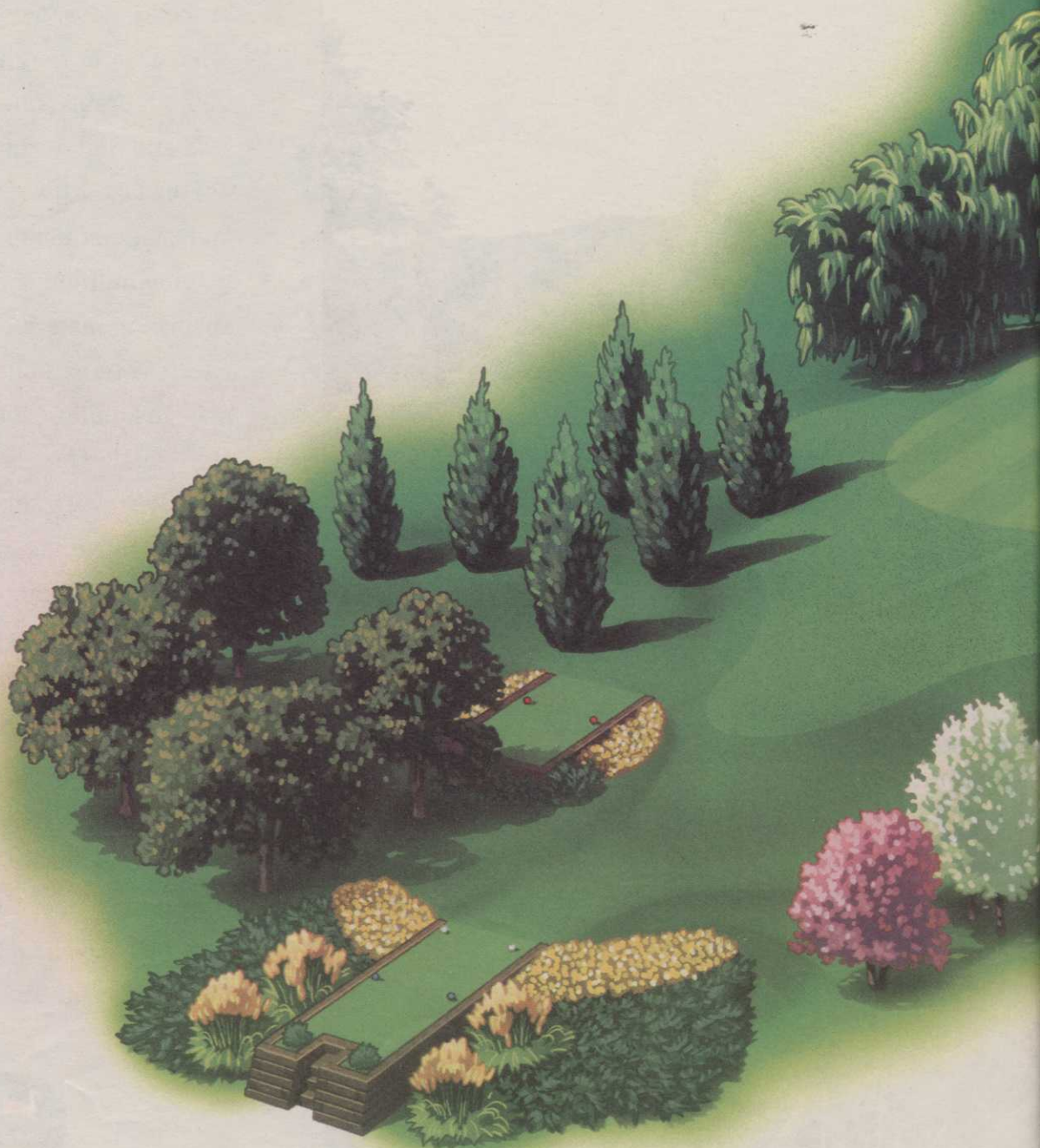
At Edgewood, Lindberg had

the fertilizer shed sandbagged, which saved the contents.

Despite billions of dollars in damages, the cost to the human psyche has been phenomenal, and probably longer-lasting. Bob Leach, owner of the Golf Center driving range in Grand Forks, said his business is better than ever. He attributed this to people coming to combat stress and take their minds off their troubles.

HERE.THERE. EVERYWHERE.

HOW'S THAT FOR APPLICATION GUIDELINES?



California hit hard by heavy rains, snow

By DOUG SAUNDERS

In the aftermath of unprecedented flooding that began on New Year's Day, California has been ringing out the old year and "wringing" in the new. More than 40 inches of rain fell here in the High Sierras during a six-day period, soaking a snowpack that was 10 feet deep.

By week's end more than 100,000 people had been evacuated from their homes as levee breaks and raging rivers turned 37 of the state's 58 counties into disaster areas. Many of the region's golf facilities were affected.

"The Carson River was 150 yards wide as it flowed through my golf course," said Jed Ander-

son of Genoa Lakes in Genoa, Nev. "I had five holes totally engulfed by the river when it spilled over the banks. I was left with quite a bit of debris on the course but no major damage."

Craig Pearson at Whitehawk Ranch, a newly opened course in the Feather River watershed, was not as fortunate.

"The Sulphur Creek, which borders our back nine, is a stream that usually dries up in late fall," Pearson explained. "We picked up 15 inches in the three days around New Year's and the creek was 100 yards wide and out of control. The heavy flow washed away three holes on the back."

At the Resort at Squaw Creek in Squaw Valley, mud slides off the adjacent mountain sides did heavy

GCN FEBRUARY

damage on the second, fourth and 13th holes and also destroyed a stretch of floating bridges.

"My course was also impacted by mud slides from a mountain side a half-mile away that dumped debris and silt on the course," said Superintendent Mike Carlson.

The same was true for other mountain courses that have streams running through their layouts. Luckily, most are routinely closed until May anyway, giving superintendents time to make repairs.

However, these mountain torrents headed downhill and quickly filled reservoirs, placing pressure directly on flood control dams. Oroville Dam on the Feather River, Shasta Dam, and Folsom Dam on the American River filled to near capacity in a few days. The continuing runoff forced the hand of water officials — resulting in water releases at record rates.

The first evacuations came in Yuba City below Oroville Dam. The town is bordered by levees that control the Feather River. At Peachtree Golf Club, superintendent Tim Thilo was ready for water on his course because it is built in an old river bed. But he couldn't believe how quickly the water rose.

"We had a bad flood in 1986 and my course was under 4 feet of water," said Thilo. "I spent Dec. 31 moving my equipment to a cart barn that stayed dry in '86. On New Year's Day I checked the course around 2 p.m. and decided to do some sandbagging around the clubhouse. The police came by and told us the water would be coming up soon. In a few hours there was over 8 feet of water on the golf course and over 4 feet in the clubhouse."

A 1,000-foot-long levee break on the Feather River south of Olivehurst flooded a 20-square-mile area. A mile from the break was Plumas Lakes Golf Course. The course was under 20 feet of water, submerging its two-story clubhouse, equipment sheds — everything.

On the American River, outflows at Folsom Dam were up to 115,000 CFS when the river spread out over Ancil Hoffman Golf course in Sacramento.

"The river grew to almost a mile wide as it poured up over my course," said superintendent Rich Sizelove.

Sizelove's major problem stemmed from debris carried by the river's force. It took three days for the water to subside before he could get out on the course to clean up. Sizelove estimated it would take two weeks to collect and haul away the debris.

The downstream flow also hit hard at Dry Creek Golf Course in Galt, near Modesto. The normally tame Dry Creek became a raging river, as deep as 15 feet, and soon covered the golf course.



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Despite base closings, military golf on rise

By J. BARRY MOTHES

Even though many military bases are being shutdown across the country, a significant number of new nine-hole additions and new 18-hole courses are springing up on those that remain active.

About 30 former military golf courses have become private or municipal golf courses over the past five years as a result of the Department of Defense's Base Realignment and Closure Commission, including such well-known facilities as Fort Ord and The Presidio.

But new 18-hole layouts or additions are currently under construction at Andrews Air Force Base in Maryland, Luke Air Force Base outside Phoenix, Ariz., Jacksonville Naval Air Station in Florida, and Camp Lejeune in North Carolina, among others. This new flurry of additions and courses at active bases, which are funded from the military's "non-appropriated funds" from sales and services within the military operation, have vastly improved the quality of military golf and eased crowding on many of the courses, according to Al Stetz, the editor of *The Order of Play*, a newsletter of the Military Golf Association. Stetz created the Military Golf Association to advocate for military golf courses and the rights of retired military personnel to play them.

A rundown of the new golf course construction activity at active military bases across the country includes:

— A new 18-hole golf course under construction at Andrews Air Force Base in Suitland, Md., which already boasts two of the more highly regarded 18-hole layouts on the military circuit. With the opening of the new 18 designed by Ault, Clark & Associates scheduled for 1998, Andrews will be the only 54-hole military golf complex in the country. The course is being built over a closed landfill.

— A new nine-hole addition opened for play earlier this summer at The Pines Golf Course at Fort Eustis in Virginia, making it a 27-hole complex.

— A nine-hole addition is under construction at the Marine Corps Air to Ground Combat Center in Twentynine Palms, Calif., in the California desert, to make an 18-hole facility that will be open in November of this year.

— A new 18-hole golf course is under construction at Luke Air Force Base outside Phoenix. The course, designed by Gary Panks and Associates, is scheduled to open next year and will be the first at Luke AFB.

"We anticipate doing 60,000 rounds a year," said John Beckett, business operations flight chief at Luke AFB, which is home to about 5,000 active duty personnel with families and another 1,000 employees, "and that's on the conservative side." Beckett said there are also an estimated 65,000 retired military personnel in Arizona, with the

vast majority in the Phoenix area. The new golf course at Luke AFB is a joint venture between Maricopa County and the Air Force. The golf course has turned out to be part of a site that serves as a flood retention center.

According to Stetz, the National Security's Morale, Welfare and Recreation (MWR) Panel

'In spite of all the base closures, there is still a bright future for golf on military installations.'

— Al Stetz, Military Golf Association

approved \$24 million dollars in fiscal year 1996 to fund a range of golf course construction projects at active bases. That same panel has appropriated \$9.5 million for fiscal year 1997 which covers new golf course construction projects at NCBC Gulfport

in Mississippi, Jacksonville Naval Air Station in Florida, Camp Lejeune in North Carolina, and other facilities.

"In spite of all the base closures," said Stetz, "there is still a bright future for golf on military installations."

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Virginia Polytechnic Institute & State University 1996

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GCN JANUARY

WAUSAU, Wis. — A golf course has been found at fault in a legal case involving a golfer who had 13 drinks before tripping on his golf spikes, falling face first onto a brick path outside the clubhouse, breaking his jaw and shattering his teeth.

The golfer, Dale L. Larson, needed nine root canals, 23 crowns and had his jaw wired shut for months. He was awarded

Trip-and-fall case goes against Wis. course despite 13 drinks

\$41,540 in damages even though his own lawyer had said it was rare for a drunk person to win a negligence case.

The appeals court upheld a trial judge's ruling that Indianhead Golf and Recreation, Inc. of Mosinee was 51 percent negligent because of its terralock brick ramp that led from the clubhouse bar. The judge

said the gaps in the bricks could have caused even a sober person to fall. The appeals court agreed the gaps were an initiating factor, especially since the ramp was built in 1976 to save \$1,440 over a recommended 4-inch thick concrete slab.

Larson, wearing golf spikes, fell on the ramp as he left the bar the night of May 16, 1990. He

argued the gaps were unsafe because a spike caught in one, causing him to lose his balance. An asphalt surface was installed a year later.

A doctor testified Larson was in a stupor, with a blood-alcohol level of .28 percent 90 minutes after the accident. But Larson said he was not significantly impaired by the eight beers and five mixed drinks he had over a period of six hours before the accident.

GCN JULY

Mouse-on-a-bun no laughing matter to golfer

WALKERSVILLE, Md. — A seasonal course maintenance worker at Glade Valley Country Club has been named in a \$500,000 lawsuit over a distasteful practical joke — he is accused of planting a dead mouse in a friend's sandwich.

Golfer Terry Lee, who bit into the sandwich, has filed the suit in Frederick County Circuit Court against the Glade Valley Country Club, the public club's manager James L. Reck, and maintenance employee Charles F. Shawver, who Lee contends handed him a mustard-covered rodent in a hot dog bun during a golf outing in December 1996. Lee and Shawver are, or were, friends and reportedly have played golf together off and on for the past 12 years.

According to the suit, Shawver, 57, handed Lee what he thought was a hot dog wrapped in foil before his round of golf. Lee bit down and discovered that the bun contained a dead mouse covered with mustard. According to the suit, the incident sent passers-by into fits of laughter.

Shawver, who is retired and works at the course during the summer, told the *Baltimore Sun* he is surprised that Lee filed a suit.

"It makes me irate to have something like this happen over a joke and then to think I have to go through litigation," he said. "This thing started out among friends, but the whole thing just went sour. I'm sorry it really did happen."

Meanwhile, Lee alleges in his lawsuit that the incident caused him to suffer "highly offensive contact" with the "hot dog" and "emotional pain" caused by his fear that dead rodents can carry potentially fatal diseases.

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Random notes on 1997 & 1998: A snapshot of the future

Read the 48 pages you have before you and you'll get a pretty good snapshot of what took place in the golf course industry in 1997.

Now, after this information settles in — after you figure out how you're going to rig a bunker vacuum or plan that much needed tee-box renovation on a skintight budget — answer the following question: Where do you want your course to be in a year?

Make a quick list, since this is the time of year for lists. Don't focus on small material items, think about where you want to be positioned in your particular market. Do you need to pump up your marketing efforts? How do you reach out more to your region's youth, women? What steps can you take to become a staple in your region's activity list? Is there one easy step you can take to increase a member's enjoyment of the course?

Indeed, if you attended *Golf Course News'* Public Golf Forum, you'd have your 1998 wish-list displayed on a blackboard in your office.

When you have that list complete, take the most important step: Figure out why you have to do these things. This whole idea of "thinking outside the box" is something the golf industry hasn't done very well over the years. Do yourself a favor, take one risk this year, reach out to your customers and members.

This is a challenge to step outside conventional thinking on one project and see how it pans out for you. Get back to me at the end of '98 with the result.

...

Favorite scene of the year: I took a jog through Fairmont Park in the heart of Philadelphia back in September. When I emerged from the pristine wooded path I found myself in the middle of a high-school football field circled by a cinder track.

I decided to take a quick turn around the quarter mile before I headed back through the woods. Then they caught my eye.

From under the bleachers came two young boys clad in the indigenous garb of the inner city — baggy jeans, untied high-top Air Jordans and oversized hockey jerseys. But they weren't coming to the field to toss the pigskin. Each boy had a driver and a bag of golf balls. I decided to take another turn around.

They teed up in the end-zone and proceeded to knock their drives down the field toward the other end-zone. The one closest to the base of the goal post won the hole.

In 1998, prepare for the change.



Michael Levans,
editor

Look back before you leap

A-h-h, it was a very good year, all in all. And, I believe, as we reach one milestone we should look back at what we've gone through as well as forward to where we're going. As George Santayana said: "Those who cannot remember the past are condemned to repeat it."

"Don't brood on what's past, but never forget it, either," admonished Thomas H. Raddall.

What can we learn from our personal — and the golf industry's collective — experience in 1997 that we can take with us to improve the year 1998?

From the positive side, many points, including:

- Women and juniors are dying to get involved in golf; those who accommodate them will prosper.

- Explore new avenues for financing. A lot more money is available in capital markets: real-estate investment trusts; public-private joint partnerships; stock issues; suddenly willing banks; and flexibility in supporting such alternative courses as Ratcliffe Golf Service's "poor man's country club," the Paradise Valley Par-3 that is linked to an apartment complex in Charlotte, N.C.

- Fewer golfers are objecting to rules mandating spikeless shoes.

- The ski industry is realizing that affiliated golf courses can provide four-season revenue as well as year-round jobs to their best employees.

- Great grasses — that is, disease-, pest-, drought-, heat- and cold-resistant cultivars — are entering the marketplace; but superintendents should be informed about the cost and extent of their cultural maintenance before buying them.

- Golf is sometimes the only option to develop previously "undevelopable" properties like the Superfund site at Anaconda, Mont., landfills, quarries, and land adjacent to airports.

- Scientific studies continue to pour in from universities illustrating golf's minimal, and oftentimes beneficial, impact on wildlife and the environment.

From the negative side:

- Building a golf course where 18 more holes saturates a market is not a good idea.

- Expecting that golfers will attend your new golf course just because it's there — without any marketing and advertising — is foolish.

- The "easy deals" are gone, according to management companies who, not long ago, were buying poorly operated facilities and turning them around quickly.

- Beware new government policies, such as updated versions of wetland regulations and OSHA's attempt at ergonomics control.

There is a story of a person who expressed amazement at Johann Sebastian Bach's ability on the organ. Bach replied: "You simply have to hit the right key at the right time. The organ does all the rest."

Bach was a humble man, and humility is good. But those in the golf industry can not expect that hitting the right key at the right time will always render a successful song. They can, however, expect that looking back at successes and failures will better equip them for prosperity in 1998 and beyond.

This is a time to reflect. Happy holidays!



Mark Leslie,
managing editor

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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GOLF COURSE NEWS

Believe it or not, horizons are expanding

In 1994, the Golf Course Superintendents Association of America (GCSSAA) launched new initiatives in the areas of professional image, golf and the environment, and chapter relations. A year later, it added career development to the mix.

To upgrade the superintendents' professional image and enhance career possibilities, the association began encouraging members to look beyond the position of golf course superintendent as an ultimate goal. GCSSAA organizers reasoned, quite correctly, that the skills developed in becoming a superintendent were transferable to other jobs and even ownership positions within the golf industry.

"All the experiences I had along the way were important in getting me to this position," said Kyle Evans (GCN June 1997), who was assistant superintendent at one course and head superintendent at two others before becoming managing partner

of Belgrade Lakes (Maine) Golf Club, a new facility he and his partners plan to open next summer.

Evans' comments appeared in a regular feature we launched earlier this year titled "Movin' on up" in which we highlight the accomplishments of former superintendents who have climbed the golf industry career ladder into positions many superintendents may have formerly believed unattainable.

Evans made the ultimate jump to course owner. So, too, did Dick Schulz (GCN May 1997), operator of the Oaks Course near Atlanta. Making that leap required the most important asset any entrepreneur can possess — the willingness to take a chance.

"I'm a risk-taker," Schulz said. Added Evans: "You can't hit unless you step to the plate."

The growth of management companies has made a new position more common in recent years. The title is usually something like Director of Agronomy

or Director of Course Operations. This person oversees maintenance operations and personnel at all the courses a management company runs. If the company is large enough, that person may have regional directors of agronomy reporting to him. That is the case with Mike Heacock (GCN January 1997), vice president of agronomy with management colossus American Golf Corp., the Santa Monica, Calif.-based operator of 250-plus courses worldwide.

"To be an effective manager, you have to be able to stand back and deal with the individual superintendent whose one course is his professional world," said the AGC executive and former course superintendent, who also noted that being able to get things done through other people is a key for any successful multiple-course operator.

"People" skills are also important for Carefree Resorts Director of Golf Operations Ed Miller (GCN February 1997), who oversees The Boulders in Carefree, Ariz.; The

Lodge at Ventana Canyon in Tucson, Ariz.; and Carmel (Calif.) Valley Ranch.

"I look for the best talent when recruiting superintendents and then give them the authority to do their jobs," said Miller, a long-time superintendent himself. "One of the greatest challenges in this industry is recruiting the right person for that position."

General manager is another title superintendents are assuming with increasing frequency. David Van Auker (GCN November 1996) was hired as Timberstone's head superintendent in April 1995. Last September he was named general manager of the new 18-hole course on Michigan's Upper Peninsula.

"I was always pro-active," he said. "I always offered my input and made myself available to my employer, and it's paid off."

So, Mr./Ms. Superintendent, are you willing to take a risk? Can you get things done through other people? Then maybe 1998 is a good time to explore new possibilities.

—Peter Blais, associate editor

Friends we've lost in 1997

VERN PUTNEY 1919-1996

Vern Putney, the original associate editor of *Golf Course News* and the founder of the Maine Golf and Baseball halls of fame, died Dec. 2. He was 77.

Putney twice was named Maine Sportswriter of the Year while a reporter for the Portland Press Herald and Evening Express. The Lynn, Mass., native was once a club professional and started a golf caddying school as well as organized scores of tournaments in Maine. He covered golf, baseball, boxing, wrestling and running, and championed women's sports, especially golfers and runners.

Shortly after GCN launched in 1989, he suffered heart failure. He recovered and worked part-time for the newspaper until his death.



Vern Putney

ALBERT ZIKORUS 1921-1997

Albert Zikorus, a fellow of the American Society of Golf Course Architects, died June 11. He was 76.

A course architect for more than 35 years, his career in golf started as a caddy when he was 10. He graduated from Massachusetts State College in 1941, and joined the Air Force during World War II. During his service, he earned the rank of sergeant, and was shot down over Germany and held as a POW for 14 months. He was honored with a Purple Heart.

After he returned from the war, he worked as a superintendent at Ould Newbury Golf Course and Wellesley Country Club in Massachusetts, and Woodbridge Country Club in Connecticut. In the early 1950s, he worked for course designer William F. Mitchell for a short time and then with course architect Orrin Smith. He was elected a member of the American Society of Golf Course Architects in 1969.

Most of his work was in the Northeast. Among the courses he designed are Tunxis Plantation Country Club (CC) in Farmington, Conn.; Twin Hills CC in Longmeadow, Mass.; and Heritage Village Golf Course (GC) in Southbury, Conn.

STANLEY ZONTEK

Stanley Zontek, a famed golf course superintendent whose son, Stanley J., is a regional director with the U.S. Golf Association Green Section, died at his home in Cape May, N.J., on Feb. 17 after a lingering illness. He was in his early 80s.

A Polish immigrant who moved to America with his parents at the age of 7, he retired from Wildwood Golf and Country Club in New Jersey after a long career as a golf professional, superintendent and pro/superintendent. After beginning his career as a pro, he took a position as pro/superintendent at Oak Hill Golf Club in West Virginia.

He later moved to Manor Country Club in Rockville, Md., and to Rolling Green in Philadelphia and White Manor in Melvern, Pa., before taking his post at Wildwood.

He was the first superintendent in the country to plant Penncross bentgrass. Most of the country later followed his lead. He is survived by his wife, Laura, two brothers, one sister, three daughters and son, Stanley J.

MARK FISCHESSE 1956-1997

Mark Fischesser, 41, died at home on July 12 following a year-long battle with cancer. He is survived by his wife, Lauren, sons, Brian and Daniel, and his father, Bernard, retired general manager of The Village Golf Club in Royal Palm Beach, Fla., and a brother, Christopher.

A graduate of the turfgrass agronomy program at Michigan State University, he was director of golf construction and agronomy for North American Golf and Meadowbrook Golf Group, Inc. since 1994. He played a major role in the design and construction of several golf courses in the United States and Europe as a field design supervisor and project manager for Robert Trent Jones Sr.

His first construction project was Jupiter Hills Country Club in south Florida. His accomplishments in Europe included completion of Golf d'Esery, Esery, France; Golf de Chamonix, Chamonix, France; Golf de Chant-Val, Luxembourg; Golf Riviera, Mandelieu, France; Golf St. Donat, Grasse, France; Golf La Bauge, Angers, France; Golf de la Grande Motte, la Grande Motte, France; Golf Esterel, St. Raphael, France; and Joyenval Country Club, Paris, France.

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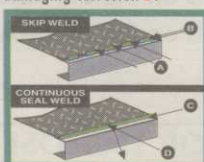


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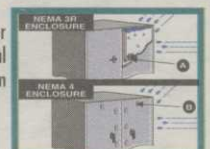
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THE WORLD OF MAINTENANCE IN '97

If necessity is the Mother of Invention, then greenskeeping is the Father of Invention. This is proven again and again, from the shop to the fairway. Experimenting to ease the chemical and financial pressures on maintenance, superintendents have dipped deeply at the well of invention. Among their findings: barley straw fights algae, a molasses and cane sugar mix gives turf a quick flush, and shag carpet is a superior replacement for sod on sod-wall bunkers.

Meanwhile, superintendents and their crews are better educated. There are more college-educated first and second assistants and irrigation specialists. At the same time, burgeoning mechanics programs are starting around the country.

Parallel to all this progress, university scientists — many funded by the U.S. Golf Association — are discovering the impacts, or lack thereof, of golf course maintenance on water supplies, wildlife and the environment.

The maintenance business is fairly bursting with news and discoveries. The following pages give a glance.

— Mark Leslie

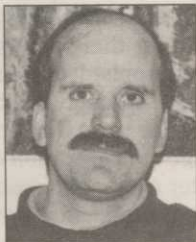
Notable quotables



Judy Bell

● "If we want perfect we can just stay at home and putt on a rug."

— Judy Bell, president, USGA



Kevin Ross

● "You can spend a long time in a filing cabinet, or you can get a computer."

— Kevin Ross, CC of the Rockies

● "You've got to use common sense out there. It's like working in a fish bowl. People see what you're doing. Three or four kids edging a bunker is not acceptable."

— Bob Feindt, superintendent retiring from CC of Rochester

● "We tried in the '40s, saying spikes were terrible on the turf, and that did nothing. No, the impetus for going 'spikeless' is the golfers. It has nothing to do with research, or the USGA ... or anything else."



Jim Snow

— Jim Snow, USGA Green Section director

OSHA targets ergonomics controls on industry

By MARK LESLIE

WASHINGTON, D.C. — Arguing that ergonomics is the solution, not the problem, the Occupational Safety and Health Administration (OSHA) ergonomics coordinator defended the agency's work to define guidelines for the workplace.

"Our Congressional mandate is to prevent injury and illness in the workplace," said Nancy Adams. "The way the debate gets framed, ergonomics is the problem. But it's not. It's an intervention strategy to prevent the injury from happening, by good engineering, good process design, fitting the job to the worker and not the worker to the job. You can't do that as one-size-fits-all."

OSHA's push into the realm of ergonomics is not new. The first ergonomist joined the agency in 1979, and talks with labor, trade associations and professional organiza-



tions began in the early 1980s. But the business and industry communities got concerned when, in 1992, an "Advance Notice of Proposed Rulemaking" targeted such items as:

- Lifting or carrying anything weighing 25 pounds without assistance more than once during a workshift.
- Using vibrating tools, which would include weed-eaters, for more than two hours.
- Working in awkward positions (such as kneeling, stooping or squatting) for more than two hours.
- Performing the same motions every few seconds.

"That's called labor," quipped one superintendent regarding the 25-pound limit. "The standard weight [for bags for various products] is 50 and 80 pounds."

Various other chores on a golf course maintenance crew

Continued on page 20

Fathers of Invention

GCN JANUARY

Carpet-wall bunkers expected trend-setter

By MARK LESLIE

SCITUATE, Mass. — Some inventions seem to be just laying around under a bush waiting to be discovered by an innovative mind. Such was the case of the "sodwall bunker kit in waiting" — Dr. Michael Hurdzan's answer to standard, old-time stackwall bunker.

Fresh from a trip to Scotland, the home of sod-wall bunkers, Hurdzan was walking the property of what would become

Continued on page 17

GCN AUGUST

Barley straw a fatal attraction for pond algae

By MARK LESLIE

TORONTO — News flash: Folk remedy strikes at the heart of the pond algae problem.

While science and technology are striving to remove algae from ponds, some superintendents are accomplishing the task with a simple bale of barley straw.

Continued on page 19

GCN JANUARY

Mounted hose reels equal easy watering

By KEVIN J. ROSS

VAIL, Colo. — In all my years in golf course management, I have yet to see the perfect irrigation system. I do not believe this is due to a lack of irrigation design or equipment, but rather of agronomic science. Let's face it. No irrigation system can replace the agronomic benefits of a good hand-watering program. If you're not hand-watering on a consistent basis (when needed), perhaps you should evaluate your watering practices.

Hand-watering is a pain, but it can make

Continued on page 19



No, this is not sod, which needs repair every couple of years. It's shag rug.



A bale of barley straw floats atop a one-acre pond at Toronto's Board of Trade Country Club.



Three types of hose reels used at Country Club of the Rockies: mounted to an E-Z-GO (left); mounted to a Kawasaki Mule (center, in use); and mounted to a fabricated trailer.



GCN MAY

Ground, surface water: Minimal impact

By MARK LESLIE

WHEATON, Md. — Preliminary findings of studies monitoring ground- and surface-water quality at nearly 40 golf courses re-enforce golf industry claims that courses are not a danger, particularly when compared to other sources of chemicals, according to Stuart Cohen, president of Environmental & Turf Services, Inc. here.

"Overall, these results show that golf courses are not having a significant impact on human health or aquatic organisms relative to other sources of chemicals in the environment," Cohen said of the study he conducted for the Golf Course

Continued on page 15

GCN NOVEMBER

Dicamba, 2,4-D no problem on greens

By MARK LESLIE

BELLE GLADE, Fla. — A two-year study of a U.S. Golf Association-specified golf green by University of Florida Profs. George Snyder and John Cisar has found that concentrations of the herbicides 2,4-D and dicamba were low in the thatch and soil and far below federal maximum contaminant levels (MCLs) in percolate water.

"Dicamba and 2,4-D, particularly dicamba, are pretty mobile in sand soils, and most people don't want any in their drinking water," said Snyder, adding, "As far as I know,

Continued on page 14



A blower helps a crew keep smoke to a minimum, after clearing brush on a golf course.

Torched! Tree burning made clean and easy

By TERRY BUCHEN

DUBLIN, Ohio — There are blowers, and then there are blowers. Just ask superintendent Ted Hunker, who, thanks to Ranger Construction Co., has seen the future when it comes to burning brush.

The scene: Tartan Fields Golf Club, a mile from Muirfield Village Golf Club.

The cast: Hunker, Ranger Construction and Arnold Palmer's design team of Harrison Minchew and Joe Veal.

The star: a huge blower, powered by a

GCN JANUARY

V-8 diesel engine, that flames a fire so hot that wood burns quickly and virtually smoke-free.

"After the clearing process on our wooded holes," said Hunker, "we obtained burn permits from our township fire department and burned all of our trees in very large pits that were dug in far out-of-play areas and near high-tension power lines."

To speed up the burning and eliminate smoke, Ranger brought in the out-of-this-world blower.

"The fire department extended our burn permit indefinitely because of the great quality burning that is being done and we are being a good neighbor in the process without one single complaint," said Hunker. "It has made a big difference of what the neighbors will let us do."

Contractors have used between 12 and 15 pits thus far. The blower is portable and has needed very little maintenance. It is homemade and can be towed easily with a pickup or tractor, Hunker said.

Minchew, of Palmer Course Design Co., uses this type of blower on other jobs "because of the great air quality, which virtually eliminates the smoke," he said.

Dicamba study

Continued from page 13

they are not of any health concern at the concentrations we observed."

Both of the phenoxy acid-type herbicides are widely used to control weeds in turfgrasses and general agriculture. They have been found frequently in surveys of pesticides and surface waters — and less commonly in ground water — and have therefore raised public concern. Although they have been studied frequently in agricultural settings, little research has been done on their persistence and mobility when applied to turfgrasses, especially high-sand-content USGA greens.

Snyder and Cisar reported that the average concentration of 2,4-D in percolate water over a two-month period following August 1993 and April 1994 applications was 2.6 and 1.2 parts per billion (ppb). The MCL for 2,4-D is 70 ppb.

The more mobile dicamba, they said, was discovered at concentrations of 2.5 ppb in 1994 and 1.7 in 1993. There are no MCL levels for dicamba, although 70 ppb is the most limiting of several legal standards for it as well.

The researchers also studied residue of the herbicides in grass clippings and thatch and found little about which to be concerned. "Considerably more dicamba, and especially 2,4-D, was recovered in clippings following the application in 1993 than was recovered in the 1994 study," they reported. "Nevertheless, in both studies no more than 0.25 percent of the herbicide applied was recovered in the clippings, indicating that clippings are not a major pathway for the removal of these herbicides from treated turfgrass areas."

In both years, peaks for concentrations of dicamba, and especially for 2,4-D, in soil and thatch were "clearly observable shortly after each of the two applications," the scientists said. "However, concentrations rapidly declined during the two weeks following each application, but still persisted at detectable levels for approximately two months."

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Country Club

Water study

Continued from page 13

Superintendents Association of America (GCSAA) Foundation.

Cohen said he was pleasantly surprised by the surface-water data, having expected higher concentrations of chemicals and a higher frequency of detection because of storm-water runoff. But he was unpleasantly surprised by high detection rates in the ground-water database.

"I think that if we got more data from more sites, the two [ground and surface water] would even out," he said. "I feel if we had more data from more golf courses around the country, and where the wells weren't immediately adjacent to managed areas, the ground-water detection rates would drop off significantly over time."

Indeed, a source of optimism is that the monitoring wells in the golf course studies were usually shallow and next to treated turf, whereas agricultural studies have usually focused on drinking-water wells that are deeper and farther away from treatment areas.

"The results are actually favorable for [golf courses] when one considers that fact," Cohen said.

Cohen recommended to the GCSAA Research Committee that an updated study be done in a year or two. "We learned there are many studies just beginning, or not yet finished," he said. "We think our research actually catalyzed interest in doing studies. We got several calls from golf course superintendents wanting information so they could perform research."

Citing the need for studies in the mid-continent and other areas, because of "major geographic deficiencies" in previous research, Cohen said, "It would be appropriate for others besides the golf industry to step up to the table, perhaps working jointly with the EPA [Environmental Protection Agency] and/or pesticide manufacturers on studies."

Despite geographic data gaps, some conclusions are apparent after reviewing the 16,700 database entries from the 38 golf courses in his study, Cohen said.

The concentrations of nitrate in ground water were surprisingly low — lower than what is typically seen in intensive agricultural areas, he said. Nitrate concentrations in surface water were also low. Pesticide detection rates and concentrations in surface water were somewhat lower than expected.

The federal standard for Maximum Calculation Level (MCL) or Health Advisory Level (HAL) of nitrate is 10 parts per million (ppm). The HAL is the upper concentration a person could

drink in water for a lifetime without showing any harmful effects. Levels slightly above 10 ppm might or might not be harmful.

Testing of wells, drains and lysimeters at 72 locations showed an average concentration of 1.6 ppm of nitrate in the ground water. Thirty of 849 data entries exceeded 10 ppm, but all but one of those were at a new golf course situated on former farmland.

Of 906 database entries for surface water, nitrate was found in 706 instances at an average concentration of 0.5 ppm.

Further, in ground-water monitoring for pesticides, Cohen said researchers found 160 detections in 12,214 data entries. "The typical detection limit," he said, is 1 part per billion (ppb), while some detection limits were at 1/10th ppb. Nine of the detections exceeded HALs or MCLs.

"We have wells next to tees. We have tests from drains under greens. These are not drinking-water wells in bedrock," Cohen pointed out.

Surface-water monitoring discovered that in 2,731 entries, pesticide levels exceeded MCLs or HALs five times, or 0.02 percent. Nineteen of the entries (0.7 percent) exceeded aquatic MACs (Maximum Allowable Concentrations for

aquatic organisms).

The average concentration was 0.07 to 6.8 ppb, Cohen said, depending on how non-detections were counted.

Saying the current study is based mostly on worst-case locations for wells and other test areas, he said, "One could infer that similar golf course studies would indicate a significantly reduced impact relative to agriculture."

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By MARK LESLIE

SCITUATE, Mass. — When Palmer Course Design Co. finishes rebuilding The Presidio in San Francisco, the country will be bracketed by its first two “environmental demonstration project” golf courses. The first, Widow’s Walk Golf Course, located on an old gravel pit and dump site in this coastal Massachusetts community, opened for play on June 28, to the delight of golfers and environmentalists alike.

“I don’t think any golf course has had more publicity than this one. That’s because of what it is and what it represents,” said Dr. Michael Hurdzan who, with lead designer Bill Kerman and input from various environmental groups, designed the course.

“We recognize, both as environmentalists and golf people, that we are all passengers on Space Ship Earth and that we need to conserve the resources we have here,” Hurdzan said at a media opening. “This is an enormous attempt to try to put together an exciting, playable, fun, affordable, maintainable golf course using 50 percent of the water, fertilizer, pesticides and fossil fuel that a normal golf course would use.”

“You’re now sitting on an area that was barren,” said Scituate Board of Selectmen Chairman Joe Norton. “It was an area that nothing grew on, nothing lived on and certainly no one enjoyed.”

Hurdzan cited others who worked on the project, especially habitat planner Bill Burbank of Abbellire Inc. in Worcester and East Sandwich; Roy Parker and Lou Haines of Soils Management Technologies of Arvada, Colo., who contributed Profile porous ceramic and humates; Scotts Co., which contributed all the turfgrass seed and initial fertilizer as well as coconut core used on some of the greens; and Kerman, “the senior designer who handled all the details.”

Time—and studies conducted by Terry Bastion of the ecological design firm Waterflowers in North Reading—will tell the impact of the golf course on the wetlands and habitat on the 118-acre property. But all stops were pulled in its development.

- G-1 bentgrass, a new variety that uses half the water of others, was used on the greens.

- Fairways and roughs were planted with Victory II and Banner II creeping fescue grass, which are disease-resistant, insect tolerant and need less fertility than others.

- Cart paths are built with recycled asphalt.

- Carpet was recycled for use in sod-face-type sand bunkers.

- The Smart Rain and Toro Sitepro computer-programmed systems operate the irrigation, optimizing water and chemical applications.

Environment comes 1st at Widow’s Walk

The golf industry is particularly interested in findings from the greens construction. Three different drainage systems were built on each of three different types of greens. One drainage system is the typical U.S. Golf Association herringbone-type pattern. Another is a flat drain tile (ADS Advantage) system

that is laid on the subgrade rather than trenched. The third is no drainage except a “smile” drain at the low point where the water will leave the green.

With each of the types of drainage are three types of green:

- a USGA-specified green with a 12-inch root-zone layer, intermediate layer, if required,

and pea gravel layer;

- a California Method green, which is a 12-inch profile of 100-percent sand on the subgrade with micronutrients in the top 2 to 3 inches of the green; and

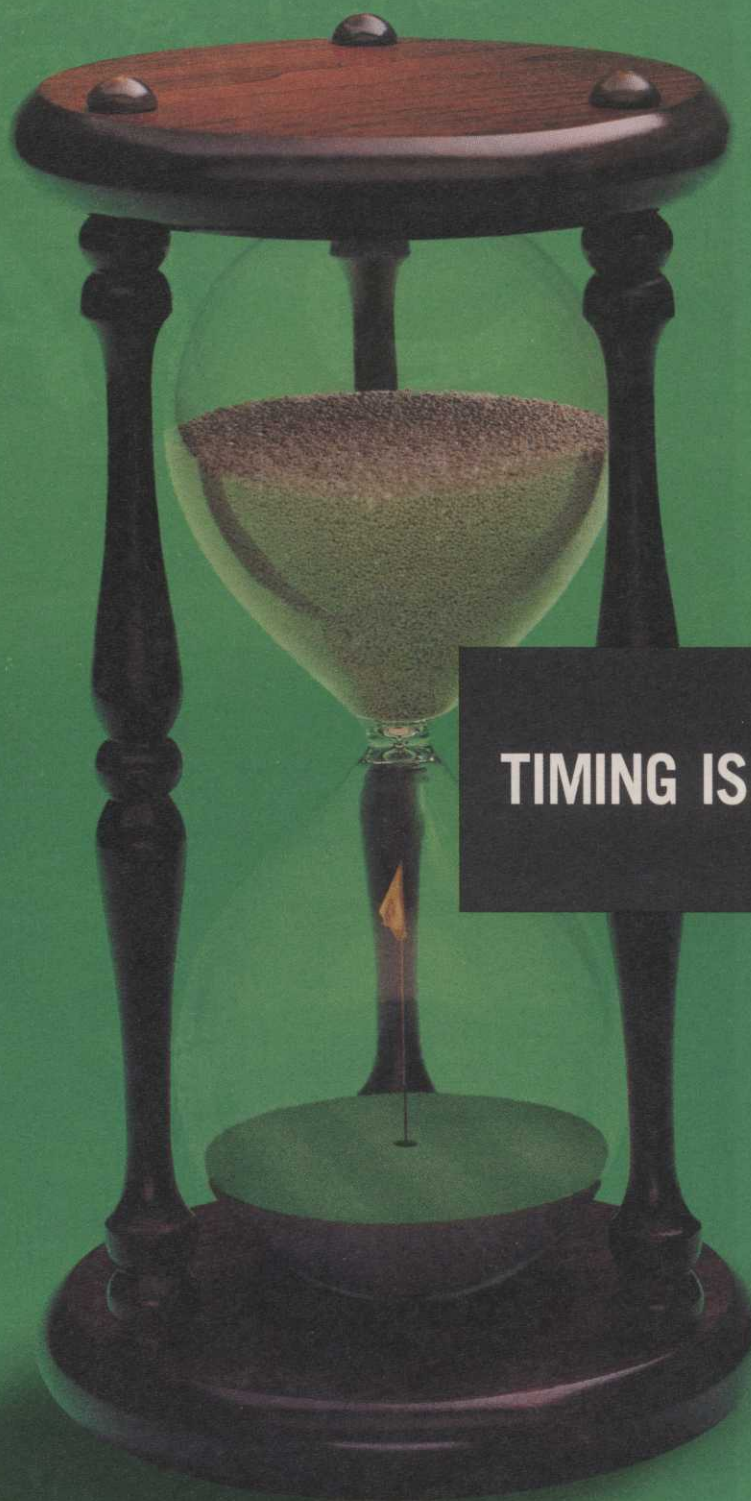
- a native sandy loam green, using the best available soil from the site as the greens matrix.

A leachate collection pit is in-

stalled at every green to provide water samples for Bastion.

“The habitat planning was as important as the course,” Hurdzan said. “We tried to leave the natural vegetation. There are wonderful communities of plants out here that have adapted over the years and we wanted to leave that. That is the look and feel we want.”

GCN JULY



TIMING IS EVERYTHING.

A golfer tees off over a pond 80 feet below on the par-4 17th hole, which exemplifies the ecological character of Widow's Walk Golf Course.

Peter Blais photo



BEST OF MAINTENANCE '97

Carpet-wall bunkers

Continued from page 13

Widow's Walk Golf Course here — an abandoned gravel site. "He's walking along and finds this ugly carpet under a bush, and all kinds of light bulbs go off with him, and him alone," recalled Widow's Walk superintendent Jeff Carlson.

Voila! The idea of the "carpet-

wall bunker" was born.

"Maybe this will change the face of American golf a little bit," Hurdzan said. "It will add spice to a linky golf course."

"As an alternative to sod, I can't think of a better one," said Carlson. "It has the potential to really stay in the industry."

"You had to have the right client to try it," Hurdzan said. "This was the perfect opportunity because of the experimental side of the project. Now that it's done it will be a much easier sell."

"I think sodwall bunkers add such a distinct flavor to a golf course that you can't replace any other way. The problem is maintenance. They have to be replaced every three to five years. You can't get anybody in North America to do it. I'm sure that, early on, sodwall bunkers were common here because of the Scottish influence. But at some point they died out, probably because of maintenance factors."

After experimentation with 6-foot and then 3-foot lengths of carpet, Carlson settled on short pieces, which can be built into "a little curvy wall kind of like a brick wall."

The carpet is flexible and can be turned a bit like sod for rounded bunker faces, he said.

Between each layer of carpet Carlson's crews spread 1/4 to 1/2 inch of soil and then seeded it. "We wanted the grass to grow and fill in. The seed buries its roots into the next carpet and gives it some structure."

Carlson recommended carpet that is not quite deep-pile shag, because it has to have body. Earth-tone colors like brown, beige and green are good, he said, because it tends more quickly to look like dirt quicker.

"Superintendents, given this idea, will fine-tune it and make it even better," he said. "It's labor-intensive to build, but it is to build a stackwall bunker, too. And these will never have to be rebuilt."

Meanwhile, a local carpet installer gleefully dropped off his carpet remnants for Carlson initially. "Now I'm getting carpet from everywhere."

...

Hurdzan acknowledged that for years he had searched for ways to build cost-effective sodwall bunkers.

"I've tried all sorts of things to build them: zoysia, old grass, young grass, stuff with a lot of thatch, painting the sod with lacquer so it wouldn't decay, things to try to slow down the decay of bacterium," he said. "But I concluded that organic matter decays, and so I've tried to come up with an inorganic source."

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Hoover, move over

By MARK LESLIE

CASTLE PINES, Colo. — Colorado superintendents are endorsing a new machine that removes sand from bunkers without damaging the subsurface and does it twice as fast as other methods.

"The great thing is, after you get done you haven't disturbed the subsurface of the bunker," said Marshall Fearing, superintendent at Castle Pines Golf Club here.

"It's not damaging any turf. It's pretty slick," said superintendent Alan Ogren, who was just finishing work on the first of 32 traps he intended to refurbish at Snowmass Golf Course in Snowmass Village.

Custom-made for Hall-Irwin by a company that manufactures a huge vacuum for cleaning up during water-line excavation, the machine includes a 4-inch suction hose fastened to the expulsion chute of a snowblower. As the operator walks the snowblower back and forth in the trap, the diesel motor-powered auger kicks up the sand through the hose to a hopper on a trailer that can be stationed 15 to 20 feet away.

"We just wanted to remove the sand, redo the faces and not mess with reshaping and regrading the subsurface," said Fearing, who refurbished about 20 bunkers during the winter and intends to do the rest next year.

"You can take the sand out of the trap without damaging the trap," said Tom Briddle, director of golf services at Hall-Irwin Construction Co. "After you get the sand out, if the superintendent wants to rebuild the trap or do the edges, he can do so without causing any damage."



Sand is vacuumed from a bunker at Snowmass Golf Course.

"When we did the traps at Keystone Resort we used the backhoe, and that wrecked a lot of the edges. Prior to that, we did the Sheridan with a Bobcat, and that ripped the bottom apart."

The machine, as yet unnamed but with patent pending, "amazed us when we first tried it," Briddle said.

Superintendent Kevin Ross, who is waiting his turn at using the bunker vacuum at Country Club of the Rockies in Edmond, said his crews normally remove sand from small bunkers by hand shovel and larger ones using a mini-excavator. The excavator can complete three small bunkers in a day, or a large

bunker in one or two days, he said.

Fearing said the savings in man-hours is "a tremendous amount of time. It was a real efficient way to redo a bunker. I would say we were able to accomplish this twice as fast."

While Castle Pines Golf Club re-did its bunkers during the winter when the course was closed, Fearing said that "especially in season, this is the way to go."

Subsurface damage is a key issue in bunker restoration, Fearing said. "One thing that happens with a big piece of equipment is, you destroy the subsurface and that's just getting the sand out. Then you spend a lot of time putting it back together."

"With this, there is no mess."

Fearing said the machine would work "perfectly" in removing just the top couple of inches. The hopper will hold a couple of tons of sand, he said.

At Snowmass, Ogren encountered slow going in a bunker filled with masonry sand. "It's like concrete," he said, deciding to use a small excavator to break through the hard top layer. "But as long as the sand is fluffed up and dry it works well."

"Anybody who does renovation work should have these," Briddle said. "They have the same problem I had when we did Keystone."

Once the sand is removed, another machine pours in new sand. The Vancouver-made Ty-crop machine, whose hopper holds 4 cubic yards "works very well," Fearing said. Dakota Peat of Grand Forks, N.D., is also making two machines called Turf Tenders 420 and 440, carrying 2 or 4 cubic yards of sand.

The sand is delivered from hopper to trap by a conveyor belt, getting the job done without damaging the edges of the bunker.

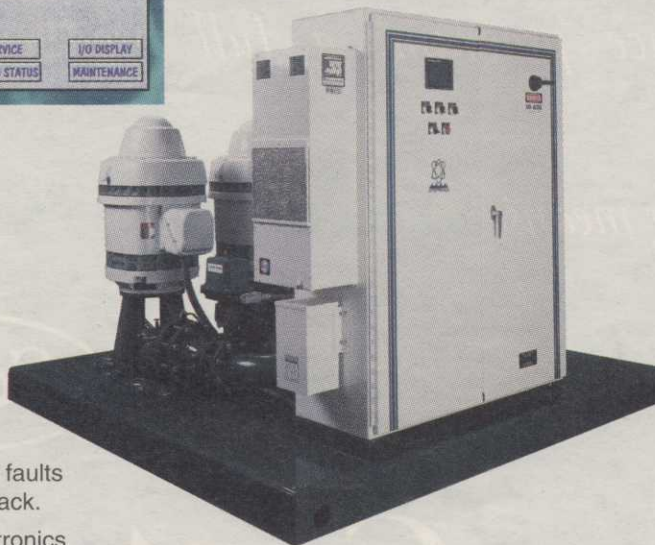
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Hose reels

Continued from page 13

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Many types of hose reels are on the market. We prefer to use one made by Hannay of

Westerlo, N.Y. We use one base reel that comes with two options: hand-crank windup, or electric windup. Both are excellent, but the electric windup costs double.

My equipment manager, Mike Koehn, fabricates hose-reel framing that we mount inside certain utility vehicles and small trailers. We simply bolt the reels to the framing or trailers. On one end of the reel there is a 1-inch pressure swivel joint. A 1-inch or 3/4-inch

hose can be used on the reel, depending on your preference.

At this point, we use a 1-inch MPT by 3/4-inch Insert fitting (we like 3/4-inch hose), threaded into the swivel joint. Then we attach a 5-foot-long section of hose with a female end and clamp it on the 3/4-inch insert side of the fitting. At the end of this hose we mount a quick-coupling key. The interior of the hose reel has a 3/4-inch FPT mounting area, where we

thread a 3/4-inch MPT by 3/4-inch Insert fitting into this mount. We then clamp our desired hose length(s) to the insert side of this fitting. Make sure this hose has a male end, so you can attach additional lengths of hose and any watering nozzles you might like to use. We install 150 feet on most of our reels and that works fine. The reels we use are capable of holding 250 feet.

Using these reels is simple.

Drive your vehicle close to the quick-coupling valve and attach the key end with the 5-foot section into that valve. Then pull as much hose off the reel as desired to do the necessary watering. When finished, unplug the quick-coupling valve and wind the hose onto the reel. The speed and efficiency is impressive. You can unwind or wind 100 feet of hose in about 20 seconds, and that beats any other method I know.

Barley straw

Continued from page 13

"Generally speaking, I'd say it works," said Gordon Witteveen, director of golf maintenance for the Board of Trade's five golf courses here.

Witteveen, who has two or three bales of barley straw in each of his half-dozen ponds, said, "We've implemented it and had pretty darn good success."

Two bales per acre of pond is sufficient, he said. He suggested wrapping the bale with chicken wire or fishing net to prevent its falling apart when it decomposes. The bale floats, anchored by a string tied to a cement block.

"In Canada we can't use any dye or chemicals for aquatic weed control in non-self-contained ponds. If the pond is self-contained, you can use chemicals, but you must get a permit for every application," Witteveen said. "Mechanical harvesters, or long rakes can take algae out. Fountains work well, too. This [barley straw] is another tool."

But why would barley straw rid a pond of algae?

"This is my theory," said Dr. Eric Nelson of Cornell University, who has seen this method work. "It ties up nitrogen during decomposition of the barley straw. And since it's the nitrogen in the water that promotes algal blooms, they stop."

"I have not seen any research to prove this. But it makes sense. When you mulch plants with wood chips sometimes those chips pull nitrogen right out of the plant."

One difficulty could be in finding pure barley straw to begin with. But the farmers Witteveen works with have a large percentage of barley in their fields, he said.

Meanwhile, using the bales adds a novelty to the course, right? "Everybody is talking about it on the golf course," Witteveen said. "They're asking, 'What are these bales of hay?'"

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CIRCLE #126

TO 'TREE' OR NOT TO 'TREE,' THAT IS THE QUESTION

● 'I can talk to a green chairman and say, 'Your job is not on the line here; the superintendent's is. Next time you drive by a sod farm, count the trees and look at the quality of the grass. Do you want toe Oconomowoc Arboretum or Oconomowoc Golf Club.'

— Craig Shreiner, course architect

● 'You all like trees. But I'll tell you, the game of golf is played from blade to blade, not from limb to limb.'

— Bob Brame, USGA Green Section

Ergonomics

Continued from page 13

could be affected by proposed new regulations.

But Adams said, "Old draft proposals are not relevant.

"Clearly the information we collected, in terms of baseline data for exposures and that sort of thing ... will all be used as we move forward to try to figure out

how to address the issue from a regulatory perspective. But the approach we will take hasn't been determined yet."

Adams said OSHA will conduct a series of conferences with "stakeholders" around the country to gather their input and concerns on effective practices of ergonomics. The next will be held Sept. 23 outside Buffalo, N.Y. The specifics will be announced from OSHA's 10

regional headquarters and through its site on the OSHA web page: <http://www.osha.gov>.

The first session, in January, drew more than 1,000 people.

"The clear running thread of everything presented," Adams recalled, "was that OSHA should proceed with a programmatic approach."

Adams defined "programmatic" as having a program that contains "top-management commitment to deal with the issue; employee involvement in the cost-effective solutions to problems they have; training and education; job analysis; and some type of intervention, whether it's engineering controls, rotation, job modification, tools, etc., and medical management.

"If they have a process in which all these things are dealt with, they're addressing ergonomics from a programmatic standpoint. It's not any one thing, but a process."

Asked whether new regulations might include such parameters as the 25-pound limit of 1992, Adams said: "I don't know that in the foreseeable short term we will have enough information to pick specific triggers like that. We may be able to say that there is a range of triggers.

"The issue can get so skewed when people get down to an individual's capacities to do a specific job. Maybe in our lifetime there will be science or technologies to allow us to say you can do this amount or that amount, but we're not there. Until then, there need to be boundaries. Those boundaries need to be flexible enough, in terms of industries and operations, to allow the process to continue. But they also need to be defined enough so that we try to limit the number of people who get hurt."

Adams thought those in the golf industry should look upon ergonomics as a cost- and manhour-saving issue.

"Folks who have successfully dealt with this," she said, "lowered their compensation rates, lowered their injury and illness rates, and lowered the severity of the injuries when they indeed still had some injuries."

Most important, she said, is that "this is not a one-time process. Dealing with ergonomics is never-ending. The easily recognizable things you fix quickly. Other things you don't see right away. With others, you might fix one thing and unwittingly create another; or you trade one stress for another one.

"Some liken it to the song 'Hotel California.' You can check out, but you can never leave. But it's clear the investment up front, while it seems cost-intensive, in the long term pays and pays and pays for itself."

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Degree-carrying 2nd assistants seen as a trend of the 1990s

By J. BARRY MOTHES

The steady supply of educated turfgrass graduates entering the job market year after year has led to more golf clubs and courses hiring degree-carrying second assistant superintendents, according to directors of some of the country's biggest and most highly-regarded college and university-based turfgrass programs.

"I think we've been seeing more and more head superintendents going with first and second assistants," said John "Trey" Rogers, an associate professor at Michigan State University. "They want more qualified people and for a few thousand dollars more [in salary] they can get an educated person as a second assistant. Their enthusiasm can make up for their

lack of experience and they're worth it."

Rogers said 30 of the 40 2-year turfgrass graduates at Michigan State this year are headed for second assistant jobs. He pointed out there are real practical advantages for superintendents at clubs and courses who have a full-time second assistant superintendent.

"If you only have one assistant and you lose him, you're in trouble," said Rogers. "But if you have two assistants climbing the career ladder, you'll have a second ready to step in when the first leaves which brings some stability to the program."

The story for college and university turfgrass graduates hitting the pavement in 1997 seems to be much the same as in recent years — excellent opportunities at the first assistant superintendent and second assistant level, but extremely tough competition for head superintendent's jobs, where 100 to 200 applicants are becoming the norm for head jobs.

"We're not having any problems placing graduates," said David Willoughby, associate professor and coordinator of the turfgrass management program at Ohio State University's Agricultural Technical Institute (ATI). Willoughby said almost all the 35 to 50 graduates from Ohio State's ATI this year will be starting as first or second assistants.

"The trend in the industry seems to be that you need to earn your wings," said Willoughby. "Just because you're a whiz student doesn't mean you're going to go right out and be a [head] superintendent. But most of our students are not ready to be head supers right away anyway. They're being trained to move up through the system." Willoughby pointed out there are exceptions, of course, such as a student who may be coming into a turfgrass degree program after five or six years experience on a golf course.

The hottest sector in the golf course industry job market, according to several turfgrass and golf course operations program directors, is for golf course mechanics — or, as they are known more and more, turf equipment managers. However, there's nowhere near the supply to meet the demand.

"We could place a 100 of them a year if I had them," said John Piersol, chairman of the divisions of golf course operations and landscape technology at Lake City College in northern Florida. "There are just not enough good programs training golf course mechanics, and I don't mean small engine mechanics, I mean golf course mechanics."

Lake City has had a mechanics program since 1973 and Piersol said he's seen the demand soar in the past six to seven years. Lake City will graduate 27 students with degrees in turf equipment management. Piersol said the group received well over 80 job offers.

"The equipment is so sophisticated and expensive that the golf courses have started screaming for qualified people," said Piersol. He said today's golf course mechanic — or turf equipment manager — has to be a far more broadly skilled person than in the past. "He or she has to be 50 percent mechanic and 50 percent manager. Someone who can set up a shop, organize a preventative maintenance program, use a computer, train and equip operators, and fix things... But the potential for a skilled, organized person is excellent."

Piersol said he hopes other turf equipment management programs start developing around the country. Officials at Delhi College in New York visited Lake City to study its program and launched a new program at Delhi last fall. And, as reported in last month's Golf Course News, officials at several Denver-area technical colleges are also looking into establishing some type of degree program for turf equipment managers.

"I hope they're successful," Piersol said. "We can't train all the mechanics in the country, the need is just too huge."

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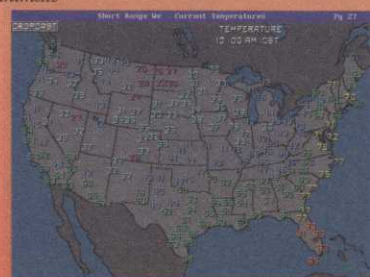
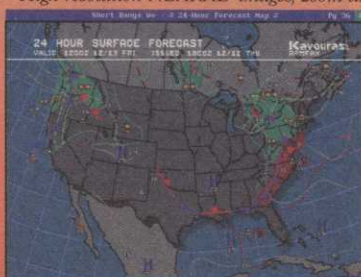
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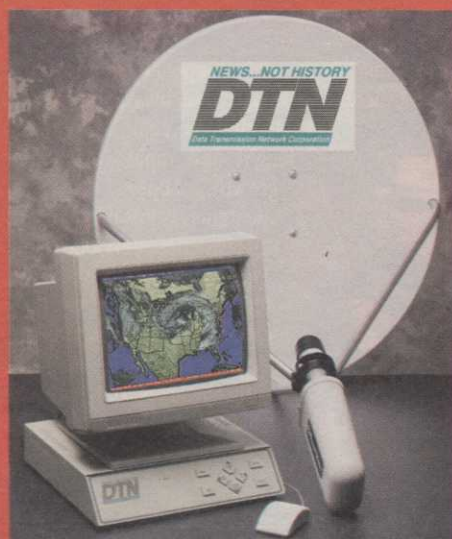
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GCN1297





THE WORLD OF DEVELOPMENT '97

An international environmental organization plans to develop 100 golf courses across the country, using land given to it by government agencies and individuals. A major developer begins construction of the largest (42-square-mile) golf course community west of the Mississippi River. New, more restrictive national wetlands regulations take effect but can't terribly slow construction as more than 400 new and expanded golf courses are unveiled to golfers.

While paradoxical in some ways, the 7th year of the decade of the 1990s added another rung to the ladder of spiraling growth in golf. In these pages we have put together a few slices of pie we hope give the flavor of golf industry this year.

— Mark Leslie

Notable Quotables

● 'To this day I've never had a 'job' — quote-unquote. My life is a continuous adventure, from one place to the other.'

— Dana Fry, course architect



Dana Fry

● 'By and large, it's [golf course construction] a pretty safe industry. You're dealing with dirt, not 2-by-4s.'

— Skip Lynch

● 'In the '20s there were pros who dabbled in golf course architecture. But if you had a golf course today, who would you rather have had design it — Walter Hagen, or [A.W.] Tillinghast or [Donald] Ross? I think it would be Tillinghast or Ross. And I think that's what's going to happen 20 or 30 years from now. People won't care that a big-time player who won two majors designed a golf course. They are going to want to know that it was Steve Smyers, or Bob Lohmann, or Stephen Kay.'

— Stephen Kay, course architect

● 'I was a one-employee show... I made sure I could park my dozer close enough to the tractor so I could jump from one to the other without having to hit the ground.'

— Allan MacCurrah, explaining his start in course construction



Allan MacCurrah

Audubon Int'l dives into development with a splash

Aims to plan and build 100 golf course facilities

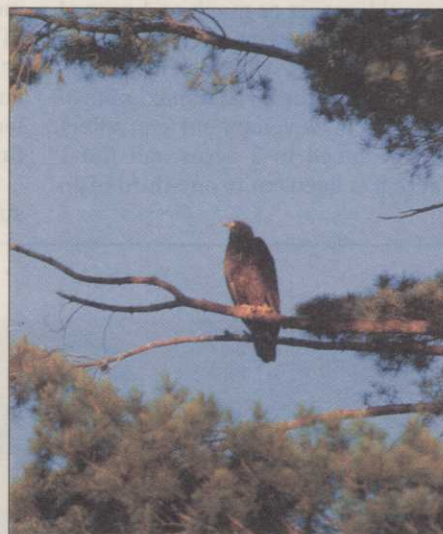
By MARK LESLIE

SELKIRK, N.Y. — When Audubon International (AI) entered the world of golf, no one would have dreamed of the heights it is about to reach — no one except, perhaps, President Ron Dodson.

AI has created the Audubon International Golf and the Environment Land Trust to accept "real property interest" that will be used to facilitate development of Audubon golf courses as environmental research and demonstration centers.

"We asked, Who better to implement our beliefs than us?" said Dodson. "One

Continued on page 24



A baby eagle finds a perch on a fairway at Garland Resort in Lewiston, Mich.

Backers ready to pour in \$300M to \$500M

By MARK LESLIE

SELKIRK, N.Y. — In its quest to develop perhaps 100 golf courses, the Audubon International Golf and the Environment Land Trust has found a number of individuals and two major federal government agencies offering land, and a partner has stepped forward to finance, develop and operate those facilities. Contracts could be signed by the end of this year.

While the U.S. Army Corps of Engineers and the Bureau of Land Reclamation (BLR) are offering up tracts of land across the country, a newly created firm,

Continued on page 25

GCN JANUARY



Carter (left) and father Jay Morrish prove blood runs thick in design business.

A Father & Son Union:
No hazards reported in partnerships

By MARK LESLIE

Tim Nugent was born on a golf course construction site. W. Bruce Matthews III grew up at Grand Haven (Mich.) Golf Course, managed by his father. Carter Morrish has been around the likes of Jack Nicklaus and Tom Weiskopf since he was a toddler. Heck, golf course architect Bob Cupp was his youth football coach. When Trent Puddicombe was born two years ago, his architect dad, Mark, assessed him this way: "Just another little shaper."

This father-and-son golf course design gig can no longer be dismissed as merely anecdotal. It has gone beyond fad to trend.

The golfing public generally knows the Joneses (Robert Trent Jones Sr. and sons Rees and Robert Trent Jones Jr.), the Dyes (Pete and Alice and sons Perry and P.B.) and perhaps the Nicklauses (Jack, Jackie and Gary). But, there are more: the Nugents (Dick and Tim), Morrishes (Jay and Carter), Robinsons (Ted and Ted Jr.), Aults (Brian and Eric), Cupps (Bob and Bob Jr.), Davises (Arthur and Lee), Phelps (Dick and Rick), Kernses (Gary and son Ron), Puddicombe (Sid and sons Grant and Mark) and Mootes (Bob and Dave).

The list goes on. There's Tom Fazio's boy in the dirt with his Tonka truck, and Dan Maples' son in his pile of dirt-cum-miniature golf course.

"Trent already has a toy John Deere dozer," said Mark Puddicombe. "He's the only kid with a USGA-

Continued on page 30

GCN JANUARY

Corps' flip on wetlands
regs will have wide impact

By MARK LESLIE

WASHINGTON, D.C. — The U.S. Army Corps of Engineers has changed a wetlands permitting regulation that will affect commercial and residential developers across the board.

Probably 10 percent of golf course projects built the last few years would have been affected by the new parameters had they been in effect, according to Dr. Stuart Cohen, president of Environmental & Turf Services, Inc. of Wheaton, Md.

The regulation is Nation Wide Permit (NWP) 26, which is routinely re-issued every few years. In recent years, it has

Continued on page 24



Wetlands at Hammock Dunes in Palm Coast, Fla.

GCN OCTOBER

Diablo es mas Grande

By MICHAEL LEVANS

WEST STANISLAUS COUNTY, Calif. — When Jack Nicklaus and Gene Sarazen team up on a course design, you know there's something big happening.



Gene Sarazen



Jack Nicklaus

The two legends have put their heads together for the first time on the design of The Legends West Course, one of two courses in phase one of Diablo Grande development 20 miles outside of Modesto, Calif. The course is scheduled to open next month.

At 33,000 acres — that's 42 square miles, or twice the size of the island of Bermuda — Diablo Grande calls itself the largest master-planned community west of the Mississippi. Once completed, Diablo will feature five residential neighborhoods, a polo and equestrian center, 45 acres of vineyards (in the foothills of Oak Flat Ranch), and a luxury hotel and European spa.

"The facility could have up to seven golf courses," said Don Panoz, president of the Diablo development who owns Chateau Elan in Georgia. Panoz is in the finishing stages of Diablo's first phase, 5,000 acres that will act as the hub, or village, for his final vision.

Continued on page 27

Audubon splash

Continued from page 23

of the criticisms we've had about our Cooperative Sanctuary System is that we have no assurance that our program will continue when management changes at a member facility. Audubon courses is one way we can deal with that issue. Plus, we want to do long-term research, education and community-improvement projects.

"We truly believe that a well-sited, designed and maintained golf course is good... The idea of developing environmentally sensitive public courses that will have reasonable greens fees and with learning centers aimed for families... We're pretty excited about this.

"We have been talking with interested parties in the golf course industry who have expressed interest in financially backing the development of Audubon golf courses."

To accomplish the new golf course system, AI has created another not-for-profit organization that is "joined at the hip with AI" — Audubon International Golf and the Environment Land Trust. The land trust, according to Dodson, is to focus on golf and the environment.

Thus far, he said, just in conversations "testing the water" for this proposal, the trust has been offered six properties, including one of 20,000 acres.

He cited a government agency in the West that has thousands of acres of property and wants to see public golf courses built as part of its recreational mandate. It has already required that any new courses built on its property meet Audubon Signature standards, Dodson said. "So, when I told them we could not only guarantee they would be Signature, but Audubon courses, they were very excited. They sent us a laundry list of properties to build courses on. We couldn't own them because it's government land, so we would have something on the order of a 50-year lease."

This venture is a greater step toward Audubon purity, Dodson said, because it ensures Audubon's programs in perpetuity.

AI hopes to help create a for-profit firm that will actually oversee design, construction and management of the new courses.

"As we see it, the hammer that AI will have over this development entity," he said, "is, first, we will be the landlord because we will own the land.

"And, second, our requirements that the company adopt the Audubon principles of sustainable resource management as part of its corporate structure. Since our environmental principles and programs actually will be written into their structure, it is much more than a simple license agreement."

New wetlands regulations to cause turmoil for some

Continued from page 23

allowed projects affecting 1 to 10 acres of isolated wetlands or stream headwaters. People could impact as much as 1 acre of wetlands without seeking permits. Under the new parameters, which went into effect in December, the 10-acre maximum of wetlands that a development can affect has been reduced to 3 acres and the 1 "free" acre has been cut to one-third of an acre.

"One-third of an acre is next to nothing — a few cart path crossings," said Ron Boyd, president of Williamsburg Environmental Group, Inc. in Williamsburg, Va. "This puts more people into the permit process. It will mean a lot more permitting and paperwork for the Corps... It also affects mitigation requirements, so more time and cost are involved there."

Williamsburg Environmental has consulted on golf projects where it has tried to

keep the wetlands impact under an acre, "so that it would only entail field verification and the project is off and running," Boyd said. "Now if you're at an acre you have to go through the permit process. It may add three to six months to the process."

Several states already require state-level permitting for properties affecting under an acre of wetlands. In those states, developers must deal with both the Corps of Engineers and the particular state agency.



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Golf Co. Audubon Int'l's partner

Continued from page 23

The Golf Company, has stepped forward as Audubon International's (AI) colleague. The partnership promises to be the most significant windfall of new golf course construction in the history of the game.

Saying that AI President Ron Dodson's forecast of 100 courses

"is pretty aggressive," The Golf Company President Stan Waterhouse nevertheless added: "We will build as many as makes sense. We have the resources to do whatever's necessary."

Waterhouse, a former regional vice president for ClubCorp. of America, said: "But by the end of the year, we will

have signed some contracts for projects. They will be under construction sometime next year."

"I don't know if we'll do one, two, or five at a time — it depends," said Dodson from his headquarters here. "We've already looked at properties in Missouri, Florida and Arizona."

The BLR and Corps of Engineers both operate under a mandate that they shall, as appropri-

ate, provide public access and recreation to lands under their management. The Bureau is responsible for water and works west of the Mississippi River and manages thousands of acres, much of it along water corridors.

Waterhouse predicted that many individuals will also offer land for Audubon golf courses. One on the east coast of Florida has already offered

a 20,000-acre property.

The key link to all these groups is maintaining effective environmental stewardship on each property:

- The Golf Company's corporate structure embraces Audubon environmental principles.

"It's personally important to me and it's part of the basis for our company," said Waterhouse, who once managed a Canadian course and Robert Trent Jones Golf Course, both of which won Environmental Stewardship Awards. "We believe very strongly that golf and the environment are inextricably linked. The growth of the future of golf is clearly tied to how well we do our job with regards to environmental issues. If we don't, we won't be able to build any more. That's been pretty obvious..."

"The principles are simple. Basically, you do the right stuff with the land and resources you're involved with. In a corporate sense, it doesn't make sense to build environmentally sensitive golf courses and then create radioactive waste."

- Each property would join Audubon International's Golf Signature Program — the organization's premier environmental plan which starts operating on a project before a course is sited and designed.

- An Audubon land trust team will be involved in a project from its inception. As Dodson said: "We essentially will become the environmental conscience of the project from the point of view of land-use management, habitat restoration and water and wildlife."

Dodson envisions a phased approach to development. Once a piece of property is proposed as a site, The Golf Company would inspect it and decide if, demographically and from a golfer's point of view, it is viable.

If the land gets a go-ahead, the company would perform an economic analysis and a team from Sienna College and the Audubon Institute would do "a full-blown environmental assessment encompassing the lay of the land, hydrology, geology, types of habitat and the watershed," Dodson said, as well as bring in an attorney to look at the permitting process and how it might affect the economics of the project."

After this phase Audubon will be able to say if the project should proceed or be dropped.

As Waterhouse explained: "Audubon is a participant, but they don't have the expertise or wherewithal to put a project together. They need someone on the business side of the deal, and that's the relationship we're trying to establish."

The intention is for all the courses to be public-access and affordable.



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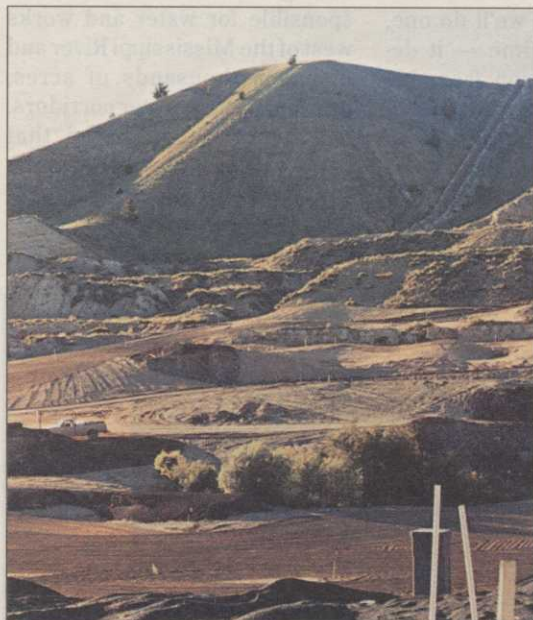
GCN APRIL

Old Works' magic: black bunker sand and much more

By MARK LESLIE

A NACONDA, Mont. — It's a legend before its own time, designed by a legend in his own time. Old Works Golf Course won't open until May 31, yet it has already made its mark: A Superfund cleanup site, which Jack Nicklaus called "one of the ugliest properties I've ever seen," transformed into a golf course that builder Chip Roe lauded as "breathtaking."

The former copper mine closed more than 90 years ago, but left behind a legacy of arsenic over its 250 acres. Turning it from a moon-landscape-like wasteland into a safe golf course presented immense technical and engineering problems — problems tangled in a web of legal hassles, extraordinary safety procedures and a sense of (as Roe said) "doing something for the children."



Jack Nicklaus called Old Works, with its mining flues and ovens, a golf museum.

"It has transformed this whole piece of property," said Old Works GC superintendent Fred Soller Jr. "Plus, the scope of the entire project has attracted a lot of interest from the EPA [Environmental Protection Agency] and scrutiny from people around the country waiting to see

Continued on page 46

GCN JULY

Blowing up quarry adds spark to Bay Harbor project

By NORMAN SINCLAIR

PETOSKEY, Mich. — Golf critics are running out of superlatives to describe Bay Harbor Golf Club, taking shape on a five-mile stretch of Lake Michigan shoreline in northern Michigan where once stood a cement factory and sand and gravel quarry. The 27 holes, 18 of which are open this season and nine of which will be ready for limited play in the fall, "shreds every adjective in the book," said golf writer Jack Berry.

Architect Arthur Hills had high praise for the site, describing it as the opportunity of a lifetime. The golf course is the centerpiece of a mega-million-dollar Victorian-theme development that includes a yacht club, condominium-suites hotel, and shopping and restaurant village.

Seven holes play along the water, some on bluffs 170 feet above Little Traverse



Bay Harbor Golf Club took shape on a 5-mile stretch of Lake Michigan.

Bay. Hills routed the 27 holes over and through four diverse geological formations — sand dunes, a quarry, lakeshore and wooded uplands.

The Links Course holes flow along the top of the rocky bluffs above the water bluffs, with fairways and some greens

Continued next page



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Continued from previous page

The 10,000-square-foot clubhouse has a commanding view of the bay as well as the 9th hole on the Quarry Course.

Three years ago the land was an environmental disaster dotted with poisonous piles of kiln dust, a 90-acre hole in the ground, and two huge cement and brick smoke stacks. "The place looked like a windswept lunar surface," said Andy Stempke, an environmental quality analyst of the Department of Natural Resources (DNR).

Today the smoke stacks are gone. The kiln dust has been replaced by rolling green fairways, and the huge hole in the ground is a deep blue-water harbor.

The yacht club boasts a 23,000-square-foot clubhouse and 500 slip marina. The "slipominiums," as they are called, sell for \$150,000 and include a yacht club membership.

The peninsulas created on each side of the dredged-out entrance to Quarry Lake gave the developers prime frontage that they turned into \$1 million lots featuring the bay in front and the new lake in the backyard.

The golf club is open to the public for now. When all 525 memberships are sold (opening price \$25,000) Bay Harbor will be a private facility.

Diablo es Grande

Continued from page 23

"It's probably the most incredible piece of inland property I've ever seen," said Griffiths. "It's a perfect piece of property for golf."

"The property was loaded with old California

"We had zero wetland impact, all of streams had stream buffers on them, we used fescues and other native grasses and irrigated only 85 acres. We were very careful," said Griffiths.

Work on the next four neighborhoods, which will stem off of phase one, is underway.

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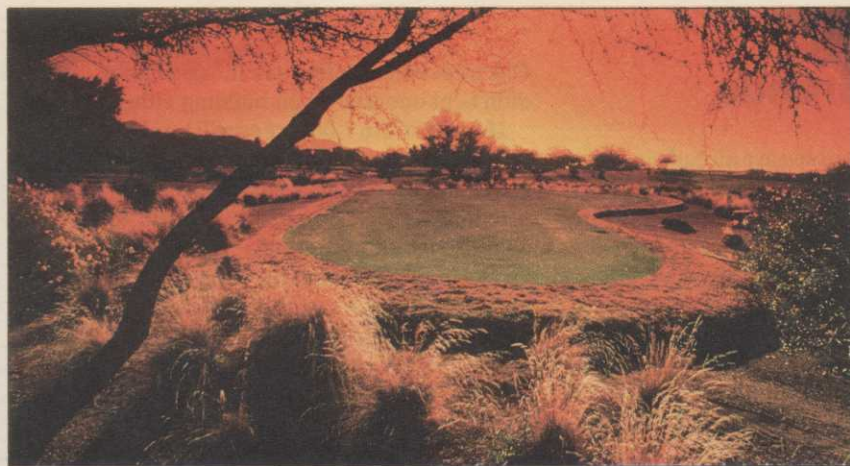
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TPC network takes off

By PETER BLAIS

The network of PGA Tour Tournament Player Club facilities will reach the quarter-century mark by the year 2000 with seven courses currently under construction or in planning and others being discussed, according to Chris Smith, director of special

The Tournament Players Club (TPC) at Scottsdale (Ariz.) is among the growing stable of TPC courses operated by the PGA Tour.

GCN NOVEMBER

projects for the PGA Tour.

The latest course to come aboard is the TPC at Wakefield Plantation in Raleigh, N.C. The Hale Irwin design broke ground Sept. 16 and is the first TPC course to be announced as the future home of a Nike Tour event, Smith said.

"It [the number of TPC facilities] is expanding because of the overall success of the TPC network," said Smith, adding that TPC clubs have garnered a number of operational and design awards.

The TPC network runs the gamut from private to public to resort facilities. With the exception of the TPC at Eagle Trace, which yielded the Honda Classic to the recently opened (1996) TPC at Heron Bay, all the PGA Tour Golf Course Properties owned and/or operated by the PGA Tour host Tour events.

The design arm of the PGA Tour — PGA Tour Design Services — works with the architect that the developer hires at each facility to make sure the Tour's needs are addressed. A PGA Tour player is usually also involved as a consultant or designer on the project. "Player involvement is important in the design of all TPC courses," Smith said. "All are built with the capability of hosting a major tournament, whether immediately or down the road."

Of the six courses currently under construction or in planning, three already have tournaments planned: The Energizer Senior Tour Championship at the Lanny Wadkins-designed TPC of Myrtle Beach (S.C.) scheduled to open in 1998; the John Deere Classic at the D.A. Weibring-designed TPC at Deere Run in Moline, Ill., opening in 1999; and the Burnet Senior Classic at the TPC of The Twin Cities opening in the year 2000 in Minneapolis.

In addition to the Myrtle Beach facility, three other TPC courses will come on line next year: TPC at Jasna Polana in Princeton, N.J.; TPC at Virginia Beach; and TPC at Snoqualmie in Seattle.

There's a huge benefit to tournament sponsors who use a TPC venue to host their tournament, Smith said. It gives them rent-free access to a tournament site as opposed to having to find a spot and paying rent. That translates into a bigger charitable donation.

Myrtle Beach is a good example of a community that worked with the PGA Tour on a new facility, Smith said. The announcement for the new TPC of Myrtle Beach facility was held at The Dunes Club, which had hosted the Senior Tour Championship, Smith said. Myrtle Beach Golf Holiday, the major golf marketing organization for the Grand Strand, is a partner in the building of the course.

What does the PGA Tour look for in deciding on a new TPC site?

"Our mission," said Keith Tomlinson, vice president of TPC

Continued on page 30

GOLF COURSE NEWS

The Critics All Agree...

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CIRCLE #113

On their own

GCN JUNE

Applegate leaves Player

STUART, Fla. — Overseeing construction of 35 golf courses in the last 10 years for Gary Player Design Co., Jim Applegate now will be putting his own signature on golf courses.

Applegate, the founder and former president of Player Design, already has two contracts on his desk for Signature Course Design and will finish projects already started with Player, he said.



Jim Applegate

"Rather than a sharp break in business, it's a very smooth, long-term transition," Applegate said. "In fact, I agreed with Gary last week to work on a project in New York State. We have four or five courses under construction and will finish those as well. It will take 1-1/2 to 2 years.

GCN APRIL

Dasher leaves Hill

WINTERPARK, Fla. — His background encompasses 16 years and more than 40 golf course projects as a lead designer for



Mike Dasher

Arthur Hills & Associates. His territory is "any point that's a nonstop airline flight from Orlando." His philosophy is to build a golf course "that works with the land."

Mike Dasher is on his own now, and defining points for Dasher Golf Design are crucial.

Starting his own design firm, Dasher said, has "always been on my mind. It was never a question of 'if' but 'when.'"

Averaging 2-1/2 courses a year during his time with Hills, Dasher intends to design two a year on his own, saying: "I'd like to stay a one-man show."

GCN SEPTEMBER

Phillips leaves RTJ II

GRANITE BAY, Calif. — Like the Marines, Kyle Phillips is looking for A Few Good Men — owners, that is.

Phillips, 39, has opened his own course design firm, leaving his position as vice president of design with Robert Trent Jones II after 16 years.

"I've worked on a lot of different sites — in the Caribbean, Europe and domestically and tackled a lot of problems," Phillips said. "That experience will be helpful. But the owners are very important, and it's crucial to get owners who are not only supportive in the design and construction process, but also in the operation of the golf course including the maintenance, which is so important."

Phillips, 39, has designed about 25 courses since joining Jones shortly after graduating from Kansas State University with a landscape architecture degree.

GCN MAY

Wright leaves partner

SINGAPORE — Rodney Wright is principal of the newly formed Wright Golf Design. During his eight-year partnership with Robin Nelson, Wright took seriously the marriage of golf courses to their surrounding environment and culture. He will continue this tradition. In 1995, Nelson and Wright accepted senior designer Neil

Haworth as a full partner. However, a slowdown soon thereafter convinced Wright it was time to strike out on his own.

GCN OCTOBER

Curley buys Landmark div.

SCOTTSDALE, Ariz. — Brian Curley, former director of golf course design for Landmark Golf Co., has signed a buy-out agreement with the firm to purchase its

Design Division. Curley has 20 years experience in golf, 11 in design with Landmark, where he worked with Pete Dye and Lee Schmidt. He recently collaborated with Fred Couples on The Plantation, a private club in Indio, Calif., and is working with him on The Palms in La Quinta, Calif.



Brian Curley

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TPC network takes off

Continued from page 28

Development, "is to be in locations that allow us to improve existing tournaments, provide a location that is designed for spectators from the outset, challenge the Tour pro and entertain the average golfer. We also provide a site where the tournament sponsor doesn't have to pay a rental fee. Charities are generally the sponsor. If we provide a rent-free facility, that leaves more for prize money and charitable donations. So our primary focus for development is in areas where the tournament

has outgrown its present facility and needs a new spot to reach its potential."

Much of the growth in the TPC network started during the mid-1980s was tied to the need for sites to hold PGA Senior Tour events.

The PGA Tour has traditionally opened two to three new TPC facilities annually, Tomlinson said. The Tour hopes to increase that to four to five a year, doubling the number of facilities within the next five to seven years.

The PGA Tour wants to be at least a part owner and operator of all the new TPC operations it opens, Tomlinson said.

Like father, like son

Continued from page 23
spec sandbox."

Bruce Matthews likens the heir apparen- cy of course architecture to that of old-fashioned apprenticeship.

"It's like a watchmaker, tinker and silversmith," said Matthews. "Look at what the Jones boys are doing: just what dad did. I'm doing just what granddad [W. Bruce Matthews] and Uncle Jerry [Matthews] did. The same with Dan Maples [son of Ellis]. All of us, doing what dad did, with our own twists."

Many sons of architects have gone into other fields altogether, only to return to their "roots" — outdoor work with their fathers. And others know from an early age they want to work in golf — in some way, or in whatever way they can — and never stray.

"Before joining me, Tim got a degree in engineering and construction management and was building high-rise office buildings," said Dick Nugent, whose firm is based in Long Grove, Ill. "I told him, 'You know all the skill of the construction industry, but you need to know about the money.' He went back to school and got an MBA, then came here; he has added a lot to our business."

Bruce Matthews and Grant Puddicombe were superintendents before jumping aboard their family design firms.

"I thought I'd always work on a golf course — in what role I wasn't sure," said Grant Puddicombe, who worked as a superintendent for two years before he and Mark confronted dad Sid, also a superintendent, at Christmas time 1980. They immediately set about opening their firm, headquartered in Nisku, Alberta, Canada.

"I've been around it [golf course design] my whole life," said Carter Morrish, "golfing out to Shoal Creek [in Birmingham, Ala.], traveling with Dad in the summers. It's always been in my head. It's just a natural thing."

A natural thing — in the genes, perhaps?

"I think it's a combination of genetics and/or background," said Jay Morrish.

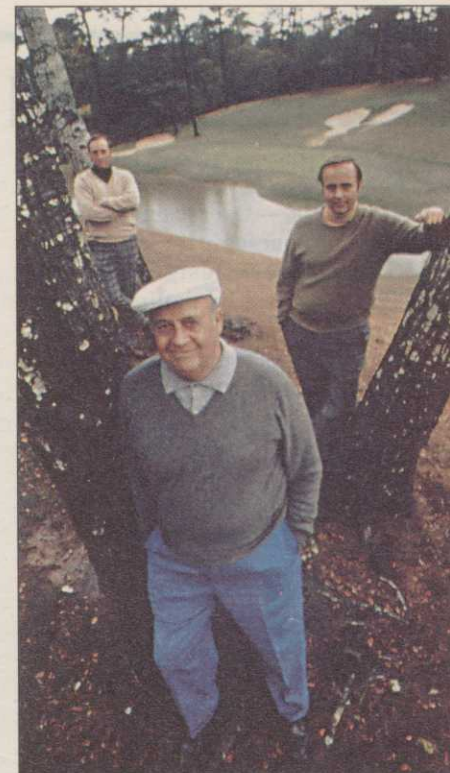
Sid Puddicombe agreed about the influence of experience. "I think it's just what children are exposed to," he said. "Growing up on a golf course and being involved in it, you get attached to it. They've tried other work and the love of golf has brought them back."

"He knows the business inside out, by osmosis, growing up in it," Dick Nugent said of Tim. "He knows all the fundamentals of drafting and drawing and presentations — how to shake the ideas off your fingertips onto the paper."

"In my teen years I was drawing golf courses," said Bruce Matthews. "I think it comes inherent in a love of the land. We were an outdoor family. While hunting and fishing, you look at land forms and how and why they happen."

In the various father-son businesses, there is give-and-take — both ways.

"There are a lot of things we've kept in perspective that our father taught us," said Grant Puddicombe. "Do it right. Do it once. For us the biggest way to keep quality control is not to do



The Jones Boys — sons Rees (back left) and Bobby flanking dad Trent at Spyglass Hill Golf Course in the 1960s — are perhaps the best-known examples of design legacies. While the Jones Clan has been honored as the NGF's 1997 Family of the Year, course architecture is filled with father-son teams.

too much work, to limit what we can control and handle."

"I've got my own style," Bruce Matthews said, "but if you superimpose one of my greens over one of granddad's, an architect could say, 'I know where that came from.'"

The children have added various dimensions to their fathers' businesses and design projects as well.

"When we added Tim, we expanded our abilities greatly, in everyday business, helping clients with their pro formas," said Dick Nugent. "When you do a golf course, you do a business plan, a *pro forma*, to come up with how you're going to pay for it. It helps if you're on the same page as your client... Tim also has a lot of ability in the design area. He has a good eye for things."

"I added maintenance and operations [know-how]," said Bruce Matthews, who has now opened his own company, Design 3, based in East Lansing, where Uncle Jerry also has a practice. "I had a turfgrass degree. Jerry has a landscape architecture degree and a master's in urban planning."

Carter "has taken a lot of pressure off me in taking field trips," said Jay Morrish. "We alternate trips and every third time we go together."

Yes, but who is the boss?

"I have the final say. I'm the boss," Dad Morrish said.

But Carter put his own spin on the situation: "He's the boss, but we're more partners than me working for him."

"I try to be," Sid Puddicombe said. "In most instances we sit down and go over the project. We have a great relationship and we use [third son and superintendent] Todd as a consultant. Until we're all totally satisfied we don't go ahead with anything."

Nugent put the question in perspective: "You don't teach your son anything," he laughed. "All you can do is listen. They just become more courteous about listening to you."

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GCN AUGUST

MADRID — Two golf courses that architect Robert von Hagge considers "as good as we've ever done anywhere" opened within a week of one another in June, here and in Bogogno, Italy.

Real Sociedad Hipica Espanola Club de Campo opened its first 18 holes here June 14. Seven days later, Circolo Golf Bogogno, situated west northwest of Milan beneath the Alps, opened its first 18 holes. Both facilities will expand to 36 holes, the Milan course to open in mid-1998 and the Madrid course in 1999.

One of the top clubs in Spain, Real Sociedad Hipica Espanola Club de Campo is moving its headquarters from downtown, where urban sprawl has affected its property, according to von Hagge. It is an equestrian and golf club with 4,000 members.

Situated on "severe" topography, the course boasts "17 wonderful golf holes," said von Hagge co-designer Rick Baril.

"When you have 17 out of 18 that are great, you're happy," he commented.

The clubhouse at Real Sociedad Hipica Espanola Club de Campo is under construction, and work on the second golf course should begin next summer, Baril said.



von Hagge progressive in Spain and Italy

N

An Old Country challenge

KINSALE, Ireland — The site sits entirely in County Cork on a peninsula whose cliffs plunge down to the Celtic Sea. It contains what its architect calls "the most natural [golf] hole God ever built." And, now complete, it stands as the model for new golf course construction in this country, passing stringent environmental permitting that stretched over five years and resulted in an ecological sanctuary and protection for some



fascinating historic landmarks.

The property is Old Head Golf Links, an 18-hole semi-private course designed by the American Ron Kirby with consultant Dr. Joe Carr, possibly Ireland's most successful amateur golfer of all time.

"I've never seen anything like this in my life, and others I've talked to agree," said Kirby, who has designed golf courses around the world for three decades.

Kirby said he had faced challenges this stiff (such as handling lava at Mauna Kea Beach Hotel Golf Course in Hawaii) but "not with this beauty."

History and modern-day golf meet here. Old Head is a national monument and ancient Royal site, fortified by a castle at the narrowest part of the promontory. Its history traces back to between 200 BC and 400 AD, and it is the only definitely known place directly connected by historians and academics with the Eirean Celtic tribe, who gave its name to Ireland as a whole.

E

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Player opens S. Africa 9

PLETTENBERG BAY, South Africa — The first nine holes at Gary Player-designed Goose Valley Golf Club are open for play here on the Keurbooms lagoon, complete with views of the Outeniqua Mountains and Indian Ocean. According to Goose Valley



Managing Director Clive Jandrell, the synergies of golf and real estate have already pegged this unique development a success. "With only 14 out of 272 homes still available for sale," Jandrell said, "the success of this project speaks for itself."

The second nine, clubhouse, swimming pool, squash and tennis course should be completed by mid-year.

Elsewhere, the Gary Player Design Company (GPDC) has finished the final nine holes at the 36-hole Fancourt Country Club in George.

The newest nine has been planted. Also, GPDC has been retained to prepare a long-term master plan detailing restoration at storied Durban Country Club, often listed among the world's best 100 golf courses.

GCN MAY

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Costa Rica takes golf plunge

FLAMINGO BEACH, Costa Rica — First it was fishing. Then surfing. And now, with the advent of its second and third golf courses, Costa Rica has joined the world of tourism. *Traveler* magazine has deemed Costa Rica's central valley the best climate in the world in which to live. *Sports Illustrated* rated its fishing the world's best.



And the makers of the movie *Endless Summer* declared they had found the No. 1 surfing spot on the globe at Tamarindo.

It was the surfing that attracted superintendent Jay Miller from Daytona Beach, Fla., to a job at Rancho Las Colinas, a golf course in Flamingo Beach designed by Ron Garl. Rancho Las Colinas, which anticipates opening the second nine around Labor Day, and the Robert Trent Jones II-designed Melia Conchal Golf Club, which will open the

back nine holes in June, are the first 18-hole tracks built here in 23 years.

RTJ II lead architect Gary Linn said there has been "a lot of talk about new golf projects — all on the west coast."

Costa Rica, Garl enthused, "is definitely an emerging market. It truly is a tropical paradise. It's one of the places that delivers more than it promises."

GCN MAY

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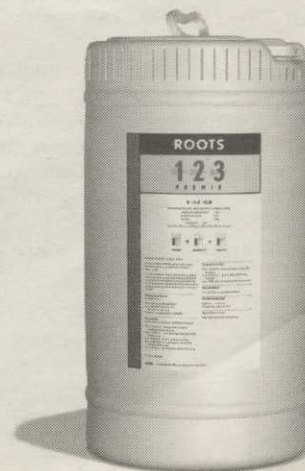
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Farms to fairways an American trend

By J. BARRY MOTHES

GRANVILLE, Ohio — Larry Bruce has been farming central Ohio land for more than 30 years and, with the 20th century creeping to a close, he decided there might be a better use for some of his acreage.

Like an increasing number of farmers across the country —

particularly in the Midwest states of Ohio and Indiana and parts of New England — Bruce, 50, decided to build a golf course on land once used for farming, in his case dairy and grain. The result is The Links at Echo Springs, a moderately upscale, professionally-designed 18-hole daily-fee layout within an hour's

drive of Columbus. Nine holes opened last year and all 18 will be ready for play this spring ('97).

Bruce's golf course is one of the more ambitious in a recent batch springing up on farms. Many of these new courses are sited on family spreads that have been in operation for generations. But today, facing the tough

economics of small- to mid-size farms, and younger generations less interested in pursuing farming careers than their parents and grandparents, those farms face uncertain futures. Golf courses have become a popular option — not only owing to the lure of profits but also because they preserve the open space farmers have built deep bonds

with through the years.

Several of the new courses popping up on farms are nine-hole "Mom-and-Pop" operations. Men and women who once worked 18 hour days tilling soil, planting and harvesting are now working 18 hours a day mowing fairways, selling green fees, serving food and watering greens.

After years in the feed and animal nutrition business, Barb and Mike Grinstead built their nine-hole Meadow Farms Golf Course outside Austin, Minn. It opened in 1995. The sporty 2,150-yard layout winds across a farm they've owned since 1973. The Grinsteads have three employees — themselves and their son. They are considering adding another, longer nine, maybe in 1998.

Robert Stoddard of North Haverhill, N.H., converted 60 acres of his 400-acre Blackmount Dairy Farm into a 9-hole golf course with an adjacent driving range. Stoddard, a non-golfer, is thinking of adding another nine soon. Stoddard designed the course with help from his nephew, a groundskeeper. He said some of his inspiration came from watching golf on television.

Bruce's Links at Echo Springs, by comparison, sits on the high-end of farms-turned-golf courses spectrum. It was designed by Barry Serafin, an architect based in New Albany, Ohio. Serafin has had a firsthand view of this latest farmland-to-golf-course boomlet. He said 10 of his last 12 projects have been on farmland, from the 9-hole semi-private Bellefontaine Golf Club to the 9-hole public Kyber Run Golf Course in Johnstown, Ohio. He's also in the midst of reviewing four potential new projects — all on farms.

"Of course, we're in Ohio," said Serafin, "and once you expand out of residential area you're into farmland. But there are a lot of golf courses going up on what used to be farms."

For some farmers, turning part or all of their farmland into golf can be a bittersweet transition.

"There's always some hesitation about whether they're doing the right thing," said Serafin, "but things change. If they sit down and look at a business plan, they see the potential for profit... You plant it once and mow it and maintain it. The numbers are what really speak to them."

Most of the farmers turned golf course owners and developers are relative newcomers to the game and the business. Bruce only took up the game eight years ago. Before the idea of a full 18-hole course took hold of his imagination, he had one green with four different tee areas on his farm.

"All my friends tell me I'm the luckiest guy, and I am," said Bruce.

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THE WORLD OF MANAGEMENT IN '97

Franchising, consolidation and money were the key words on the 1997 management front.

Arnold Palmer Golf Management led the way by franchising the Palmer name and operating systems to course owners who want to continue operating their own facilities.

U.S. Golf Communities and Golf Ventures Inc. were among several management firms that merged in 1997, while ski industry operations like American Skiing Co. and Intrawest expanded their holdings to include more golf courses to help provide year-round cash flow.

And many companies like Troon Golf Management, GolfTrust, O.B. Sports and others dove into the public and private capital markets in search of capital to finance their expansions.

— Peter Blais

GCN MARCH

Palmer Mgt. moves toward franchising

By PETER BLAIS

ORLANDO, Fla. — Arnold Palmer Golf Management Co. has unveiled a franchise program that allows course owners to use the Palmer name and proprietary operating systems, but permits course owners to continue operating their golf facilities themselves.

"No one has provided management services to people who want to continue running their own courses, until now," said Palmer Chief Marketing Officer Joseph Redling. "We created this system specifically for them."



Arnold Palmer

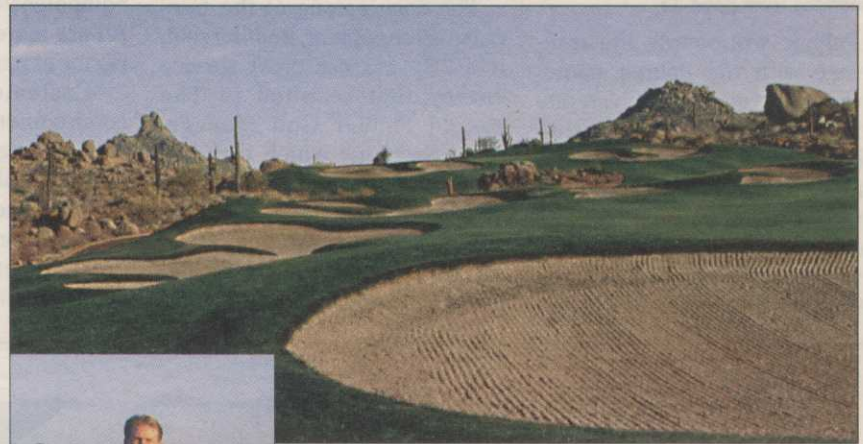
In exchange for an undisclosed annual franchise fee plus a percentage of course revenues, courses that pass a selective screening process can become part of a Palmer Management network that currently includes 20 courses nationwide.

Continued on page 34

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GCN JANUARY

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Above: The 18th hole at Troon North's Pinnacle Course. Inset: Troon Chairman Dana Garmany

Newly capitalized Troon

By PETER BLAIS

SCOTTSDALE, Ariz. — Formation of a new partnership between Scottsdale-based Troon Golf Management and Starwood Capital Group LLC of Greenwich, Conn., should help Troon expand its golf course management portfolio and acquire additional properties.

"We're looking at the East and Midwest," said Troon Golf President and Chief Executive Officer Dana Garmany. "We'll probably double our size to about 20 properties in the next 12 months."

Troon Golf's new partner, Starwood, is a 50-50 partner with Goldman Sachs in Westin Hotels. It

Continued on page 38

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GCN MAY

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Golf Trust of America to raise \$300 million

By PETER BLAIS

Golf Trust of America — a real estate investment trust established by the founders of The Legends Group in Myrtle Beach, S.C. — will raise \$300 million over the next three years allowing it to acquire at least 30 courses by the end of the decade, according to the investment banking firm that helped develop Golf Trust's original

February stock offering.

"Golf Trust owns 10 courses at this time," said Christopher Haley, senior research analyst with Wheat First Butcher Singer. "It expects to acquire another \$55 million in 1997, \$110 million in 1998 and \$140 million in 1999. That should allow the REIT to more than triple the size of its portfolio."

Continued on page 37

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GCN NOVEMBER

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OB Sports secures \$59 million, looks ahead

PORTLAND, Ore. — OB Sports has secured \$59.5 million of financing to solidify its financial position and pursue additional projects to add to its current six-course portfolio.

The Portland-based firm's goal is to develop a series of upscale, resort-style projects in each of the major metropolitan markets on the West

Coast, according to an OB Sports release. The courses will be referred to collectively as the OB Sports Golf Trail.

The financial package includes \$43.5 million in senior notes obtained from Pacific Life Insurance Co. along with \$16 million of growth capital ob-

Continued on page 37

Ski firms become major players

GCN FEBRUARY

American Skiing Co.

By PETER BLAIS

Skiing provides the monetary speed, but golf helps smooth out the financial bumps for American Skiing Company, a major Northern New England ski operator that is fast becoming one of the region's major golf course owners and operators.

Although it represents just 10 percent of ASC's total revenues, golf helps even out the company's cash flow throughout the year, according to ASC Chief Financial Officer Tom

Continued on page 35

GCN APRIL

Intrawest

By PETER BLAIS

COPPER MOUNTAIN, Colo. — The folks at Intrawest have reached the literal pinnacle of North American golf with the recent purchase of Copper Creek Golf Club, reputed to be the highest golf course on the continent.

The Pete Dye-designed layout at the Copper Mountain ski resort plus January's acquisition of the Tom McBroom-crafted Mont Ste. Marie ski resort and golf course near Ottawa,

Continued on page 38



Killington Golf Course is part of American Skiing Co.'s growing stable of courses.

GCN APRIL

GolfSouth finds new partner in ClubLink

By HAL PHILLIPS

GREENVILLE, S.C. — To compete for today's course operations contracts, it takes more than for-profit management credentials. It also takes deep pockets.

The pockets at GolfSouth LLC just got deeper following its alliance with Canada's only publicly



Continued on page 36

GCN OCTOBER

Golf Ventures, USGC tie the merger knot

By PETER BLAIS

ORLANDO, Fla. — Course operators Golf Ventures Inc. of Salt Lake City and U.S. Golf Communities of Orlando, Fla., have signed an agreement amounting to a reverse merger.

Golf Ventures operates three courses in Utah and Golf Ventures six golf properties and related

Continued on page 36

Palmer

Continued from page 33

Palmer will supply the franchisee with the Palmer name, proprietary operating systems, access to a national course supplies purchasing program and Palmer's marketing, sales and design support. Palmer has also partnered with Design Forum, a retail specialist and graphics designer whose services are part

of the Palmer franchise package.

The cornerstone of the franchise arrangement, Redling said, is a two-year customer service survey that resulted in The Arnold Palmer Golf Management System™ which includes detailed, proprietary models for all key business segments, including course maintenance and agronomy, sales and marketing, merchandising, food and beverage,

driving range, instruction, equipment services and training. All are aimed at providing a superior experience for golfers.

"Customer service has become something of a platitude in the management business," Redling said. "The hardest thing to do is exceed customer expectations in any business... We've created detailed management systems to provide affiliated

courses. They aren't abstract, but very distinct and have resulted in manuals that show specifically how to deliver quality service to golf customers."

The franchise concept is commonplace in other industries, but new to the golf business, Redling said. "There's a great deal of interest [among competitors] in what we're doing," the Palmer executive said.

KSL Fairways President Eric Affeldt, whose company manages roughly two dozen public courses nationwide, questioned the wisdom of standardizing every aspect of a golf course operation.

"I'm not sure all systems are transferable in golf," he explained. "We operate in micro markets. Customers look for different things in different places. You couldn't pick up everything we do at one of our Maryland properties and move it to Florida."

"There are some standardized back-of-the-house issues. But to put your name on so many different courses in different areas, and not manage them yourself, is pretty bold."

Affeldt also wondered how Palmer would follow up with its franchisees to make certain they adhered to the company's required quality level.

Redling acknowledged that golf "is not a cookie-cutter industry" because no two golf courses are exactly alike. But making customer service the focus at each facility is something that can be consistent from course to course.

Palmer's comprehensive screening process will help insure that only course operators willing to "raise the customer-service bar" and adhere to the company's strict measurement standards will be granted franchises, Redling said. Courses and facilities that are in need of upgrades will have to agree to make those changes before becoming part of the Palmer operation. In addition to frequent meetings with Palmer staff, customer surveys and mystery guest visits (similar to shopping services used in retail stores) will be conducted to check if customers are being treated as promised.

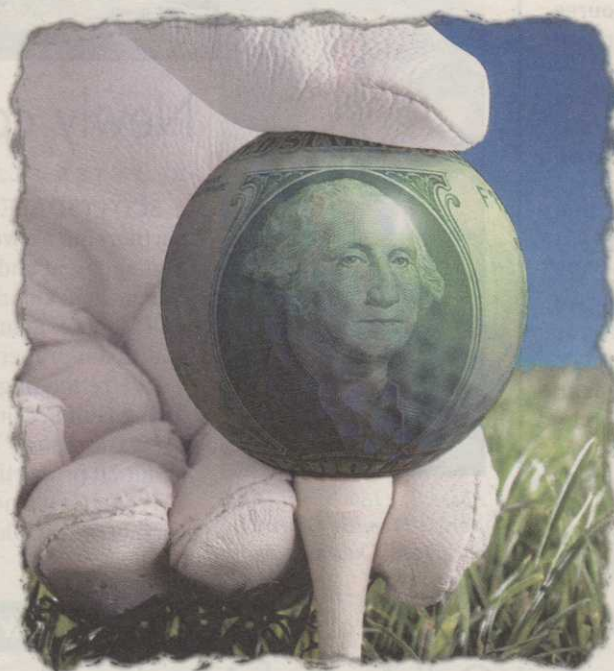
"If the course owner is unwilling to make the changes or adhere to the program, we'll move on," Redling said. "There will be a standard franchise agreement that both sides must meet."

Redling said Arnold Palmer "is the name most golfers can relate to... We have the brand name and the other Palmer companies to back it up — our equipment, apparel, course design, Design Forum and other Palmer companies."

Rich Katz, vice president of marketing with Billy Casper Golf Management, noted his company has worked hard to develop a consistent quality and superior customer service.

"Billy Casper himself has a wonderful reputation," Katz said. "But this business is a matter of rolling up your sleeves and going to work. The name helps. But the name players aren't your meeters and greeters. That is done in the trenches by the people you've trained."

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American Skiing

Continued from page 33

Richardson.

"Golf has been very important at Sugarloaf [USA]," noted Peter Webber, the Carrabassett Valley, Maine, resort's golf director and a member of the committee that coordinates ASC's four golf course operations. "The additional cash flow helps us through the summer. It lets us employ some of our best people on a year-round basis. It keeps the hotel rooms occupied and pulls in other summer business."

American Skiing operates eight ski areas — Sunday River and Sugarloaf/USA in Maine; Attitash Bear Peak in New Hampshire; and Killington, Mount Snow, Sugarbush, Haystack and Pico Mountain in Vermont. Sugarloaf, Mount Snow, Killington and Sugarbush have golf courses. Sunday River hopes to begin construction of a Robert Trent Jones Jr.-designed course this summer and ASC is considering building a golf facility at Attitash.

Golf wasn't a major part of ASC President Les Otten's plans back in 1972 when he first became Sunday River's general manager. Eight years later he purchased the Western Maine resort. Under Otten's leadership, Sunday River expanded its trails and lodging facilities and grew into one of the major ski areas in the country.

Sunday River's success paved the way for Otten's headlong assault on the New England ski/golf industry over the past three years.

First, he purchased Attitash in the summer of 1994. That fall he signed a lease to operate Sugarbush and bought the facility in May 1995. A month later he acquired Cranmore. In June 1996, Otten doubled his ski holdings and became a major player in the Northern New England golf market, with the purchase of S.K.I. Ltd., owners of Sugarloaf, Killington, Mount Snow, Haystack and Waterville Valley. In December 1996 he acquired Pico. Cranmore and Waterville Valley have been sold.

"It [ASC's acquisitions] reflect the consolidation taking place in the ski and golf industries," Richardson said. "Having many properties creates operating synergies and can create some interesting opportunities for customers."

The golf committee — which includes superintendents, pros, managers and marketing employees of the various courses — has already begun to explore group purchasing discounts on course maintenance supplies, Webber said.

ASC plans more cooperative marketing ventures among the

courses. "When Sunday River opens and if we build a course at Attitash, we could do week-long vacation packages that would allow golfers to play a different course every day," said Peter Johnson, ASC's marketing director for golf.

ASC currently offers stay-and-play packages at all its courses ranging from \$79 to \$119 per person per night, Johnson said.

Richardson expected American Skiing to finalize an agreement by late January with RTJ II to design and build a Sunday River course that could be ready for play by 1999.

"It will be a first-class facility, just like Sugarloaf," Webber said. "Sunday River will probably be a little more golfer friendly, with wider fairways, but still very much a wilderness golf experience."

Webber has walked the proposed site for the Attitash course, a river valley that would be well suited to a parkland or linksland course, he said.

Richardson said the company has also discussed upgrading the irrigation and drainage at Sugarbush; doing some "tweaking" of the Killington course; and adding another nine at Mount Snow. The possibility of another

nine or 18 holes at Sugarloaf is also under consideration, Webber added.

ASC has chosen to manage the golf facilities itself, rather than turn them over to a management company. "We don't concession out any part of our operations," Richardson said. "We'd rather do it ourselves, control our own destiny and cash flow."

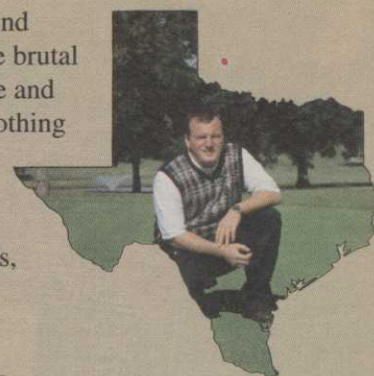
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ClubLink/GolfSouth

Continued from page 33

owned golf course company, ClubLink. ClubLink and the founders of GolfSouth — N. Barton Tuck, Jr. and Derrell E. Hunter — have agreed the Toronto-based firm will initially fund certain capital for GolfSouth through loans. The pact also gives ClubLink an option to acquire the shares held by Tuck and Hunter

in exchange for ClubLink shares.

For ClubLink, which operates six private clubs in Ontario, the alliance means a foothold in the U.S. market. For GolfSouth, it means the ability to compete with the increasing number of management companies which boast built-in funding sources. Among those firms hell-bent on acquisition are Santa Monica, Calif.-based American Golf Corp.

(AGC), capitalized through its REIT and sister company, National Golf Properties; Scottsdale, Ariz.-based Troon Golf Management, backed by the Starwood Capital Group, LLC of Greenwich, Conn.; and Orlando-based Palmer Golf Management, funded by Olympus Real Estate Corp. of Dallas.

"ClubLink was looking for a platform and an existing portfolio and management team," explained

Hunter, the president and chief operating officer at GolfSouth. "We were looking for deeper, more reliable funding sources.

"We feel like this relationship gives us an advantage, quite frankly, because ClubLink is a funding source that understands the golf business a lot better. They're in the business in Canada, which makes our affiliation a little different. Ultimately we may

evolve into a full-fledged merger."

Justin Connidis, vice president of corporate development for ClubLink, also expects the two companies to grow more interdependent.

"ClubLink and GolfSouth are jointly reviewing GolfSouth's capital and expansion plans," Connidis said. "It is the intention of ClubLink and GolfSouth to work together to establish and implement a business plan for GolfSouth which will both enhance its position as a leading U.S. golf course company and facilitate its ultimate merger with ClubLink."

Through its wholly owned subsidiaries — GolfSouth Management, Inc., GolfSouth Capital, Inc. and GolfSouth Clubs LLC — Greenville-based GolfSouth controls or manages 23 golf course projects: eight which remain in development, 13 existing operations in which the company has an ownership stake, and two it manages for outside ownership.

USGC

Continued from page 33

real estate scattered throughout the United States.

Under the pact, Golf Ventures will issue 26.6 million authorized, but unissued, shares of common stock representing 81 percent of the post-transaction shares outstanding. The assets of USGC will be merged with Golf Ventures.

"We're ready to go public and should close within the next 75 days," said USGC President Warren Stanchina in mid-September. "This will give us better access to more capital. We have an engagement letter from Oppenheimer [& Co. Inc.] to do our secondary offer."

The stock issue should raise \$50 million over the next nine months, Stanchina said, allowing USGC to pay off the remainder of its debt and look at acquiring additional golf course facilities and real estate.

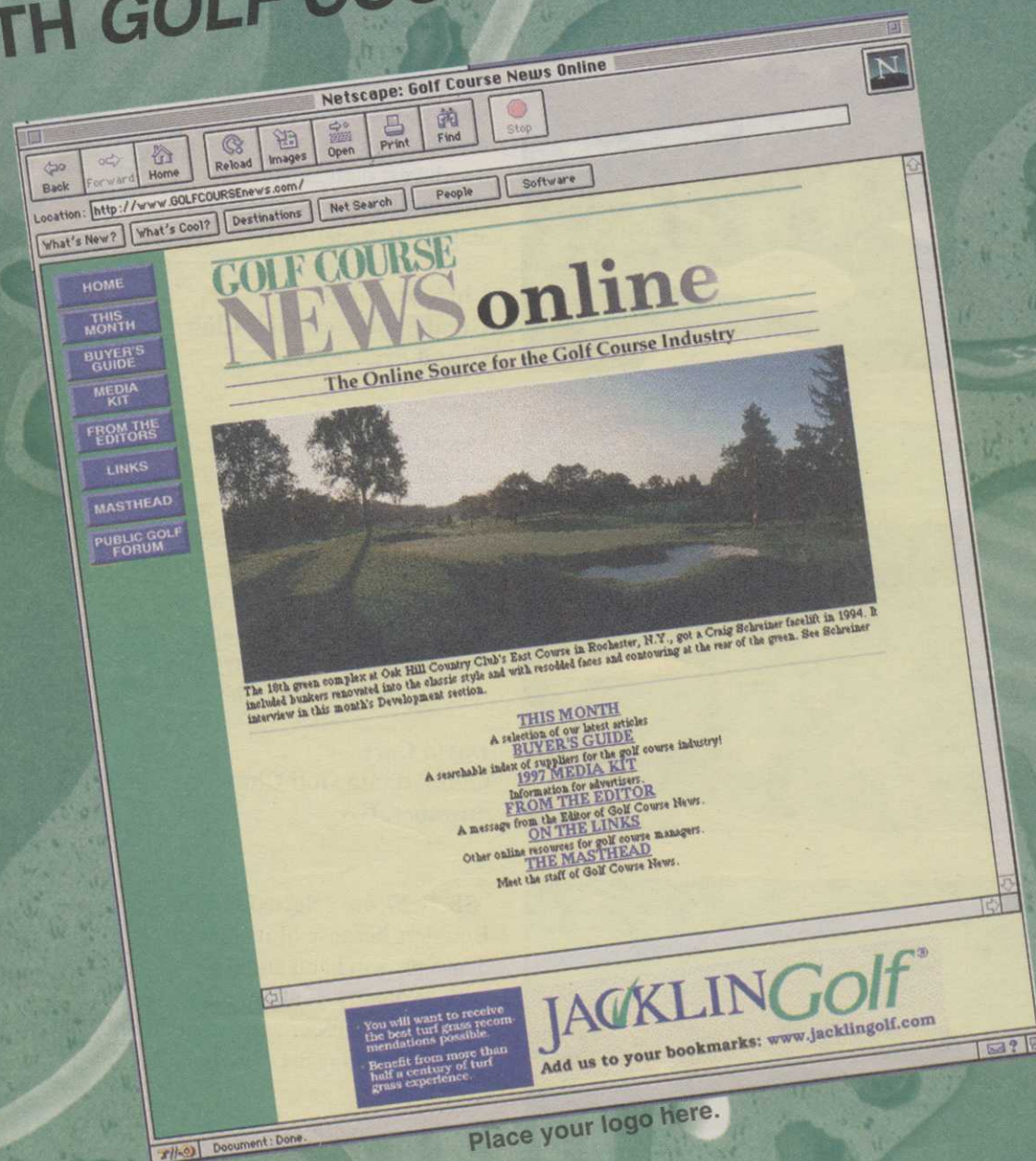
USGC's six projects are located in central and south Florida, North Carolina and Texas. They include such properties as Pinehurst Plantation (Pinehurst, N.C.) and Cutter Sound Golf and Yacht Club (Stuart, Fla.). Golf Ventures projects include Red Hawk International Golf & Country Club, Cotton Manor and Cotton Acres, all located in St. George, Utah.

Stanchina has 25 years experience in golf course community development, acquisition and management, and will become chairman of the board, president and chief executive officer (CEO).

Duane Marchant, Golf Ventures chairman, president and CEO, will remain a member of the board of directors and assume responsibilities as vice president/Western region. At closing, Golf Ventures will change its name to Golf Communities of America Inc.

GOLF COURSE NEWS

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Golf Trust

Continued from page 33

Golf Trust of America's goal is to use the estimated \$49.9 million raised through its initial Feb. 7 stock offering and a line of credit to acquire high-quality, daily-fee and private courses and lease them back to independent lessees, usually the prior owners. The lessees pay a fixed base rent and participating rent based on revenue

growth at the courses.

According to company literature, Golf Trust believes it will profit from keeping the management teams in place that made the courses successful in the first place, while the sellers enjoy tax and incentive benefits through participating lease arrangements that include a lessee performance option designed to encourage revenue growth.

"Golf Trust will accelerate the consolidation of golf course ownership in the United States, while allowing course owners to remain at their courses," Haley said.

Golf Trust, and National Golf Properties are the only two publicly traded REITs in the United States focused on owning and acquiring golf courses, Haley said. The 10 courses Golf Trust controls are the Legends Resort courses

(Heathland, Moorland, and Parkland), Heritage Golf Club and Oyster Bay, all resort courses located in Myrtle Beach; The Woodlands, a resort course in Gulf Shores, Ala.; Stonehouse Golf Club and Royal New Kent, a pair of upscale, daily-fee courses in Williamsburg, Va.; Olde Atlanta (Ga.) Golf Club, a daily-fee track in the Georgia capital; and Northgate Country Club, a private facility in Houston.

The company hopes to acquire upscale daily-fee and private courses with proven track records. The Legends Group's golf experience and the ability of existing owners to remain involved with their facilities through the independent lessee structure could make courses available for purchase that otherwise may never be put on the market, according to company literature.

OB Sports

Continued from page 33

tained from Rice, Sangalis, Toole & Wilson (RSTW), a Houston-based private investment firm. Piper Jaffray Inc. was the investment banking company which assisted OB Sports in this financial transaction.

"It's encouraging that both of these groups (Pacific Life and RSTW) took the time necessary to understand the unique qualities and philosophies of our company," said Jamie Cook, chief financial officer for OB Sports. "This will greatly enhance our ongoing relations; plus, they have each expressed a long-term intention to expand the investment relationship."

"We've analyzed several golf investments over the past year," said Jim Wilson, managing partner of RSTW, "and we believe the OB Sports Management team is one of the most experienced and innovative groups in the industry. The OB Sports 'turnkey' operation with design, construction and management capability provide the company with a competitive advantage. We believe OB Sports has targeted attractive markets and is poised for significant growth."

OB Sports President Orrin Vincent founded the firm in 1972 and has developed numerous golf projects in the Western United States. "I have always had a dream for OB Sports to grow to a point where we have at least one facility in each of the major metropolitan markets on the West Coast...the OB Sports Golf Trail," Vincent said. "I want a customer who enjoys the unique nature of our courses to know how he or she can locate an OB Sports facility in the next town they are traveling to, or better yet, in their own hometown."

Added OB Director of Business Development C.A. Roberts: "We're trying to be very selective about the projects we take on, basically upscale, resort-style facilities. We want people to have the feeling they are at a 4- or 5-star resort."

Current plans for more OB Sports Trail courses include two projects in Seattle (The University Club and Trophy Lake), one in Tucson (The Gallery), and one in Las Vegas. All are scheduled to open in late 1998 or early 1999. Each will be an upscale, resort-style property built upon a unique theme.

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Troon Golf

Continued from page 33

also established the Starwood Real Estate Investment Trust, a major hotel investment vehicle. Troon will manage all new Westin golf properties and consult on Westin's existing golf properties as needed, Garmany said.

"The partnership will allow us to develop a property in-house rather than have to look outside for investors, if that's what we choose to do," Garmany said. "Starwood is a great source of capital and expertise for us."

Troon Golf has developed and/or man-

ages many high-end Southwestern U.S. layouts, including Troon North and Legends Trail golf clubs here, The Golf Club at Vistoso in Tucson, Castle Pines North in Denver, Primm Valley Golf Club near Las Vegas and Scottsdale's Talking Stick, which is under construction. It has helped develop Cabo Real Campo de Golf in Los Cabos, Mexico, and The Falls at Palm Mountain in Palm Springs, Calif., as well as performing golf operations consulting at Las Brisas Golf Club in Santiago, Chile; La Cantera Golf Club in San Antonio, Texas; Troon Golf & Country Club in

Scottsdale; and Woodward Country Club in Birmingham, Ala.

Troon Golf is primarily a turnkey operation. "We do everything from the feasibility study through daily management of the course," Garmany said. "We have some management-only contracts. But we prefer to develop a course from the ground up."

That's what the firm did at its first course, Troon North. Since opening in 1990, the Jay Morrish/Tom Weiskopf Monument Course has been voted the top course in Arizona by some publications and among the top 100 in the country by

others. "We started with a core group of about six principals in the company," Garmany recalled, "and did everything ourselves. We felt if we were going to put our money into it, the best way was to control everything ourselves right from the start."

Not wishing to rush into a development without the resources to do the job properly, Troon Golf moved slowly through the first half of the 1990s, opening a new course every year or two. However, Primm Valley opened in December, and the company has two courses scheduled to open within the year: Castle Pines North this spring and Talking Stick in the fall. Construction of La Paloma also began in December.

"We've expanded to the point where we can do more than one course at a time," said Garmany. "We won't open a course early, though. Nine out of 10 courses open too early. But you get one chance to make a first impression and we don't want to mess it up."

Although the company has cut back on its fee work in favor of developing its own projects, it still provides consulting services. Troon Golf did the development work for the owner — the Salt River Pima-Maricopa Indian Community — at Bill Coore/Ben Crenshaw-designed Talking Stick. "We worked on a fee basis as a third-party consultant, hiring the architect, builder and subcontractors," Garmany said.

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Intrawest

Continued from page 33

Canada, brings the number of Intrawest golf properties to five.

The British Columbia-based "mountain resort company" as it likes to be called, plans to open a Doug Carrick-designed 18 at Panorama ski resort in British Columbia and a Cal Olsen layout at Mammoth Mountain, California, by July 1998.

"Golf will likely be a part of each resort and real-estate project we undertake," said Vice President of Marketing for Resort Operations Michael Davis, who oversees the company's golf operations. "Intrawest is committed to golf. We're looking to acquire more resorts. If there isn't a course already there when we acquire a property, then we'll build one if it's possible."

Intrawest entered the golf business in 1995 with its purchase of West Virginia's Snowshoe ski resort and its Hawthorn Valley Golf Course. Last year Intrawest purchased Stratton Mountain in Vermont and opened Le Geant at Mt. Tremblant near Montreal. Stratton has a 27-hole, Geoffrey Cornish-designed course. Le Geant has a Tom McBride 18 that placed second among Golf Digest's best new Canadian courses in 1996, Davis said.

"Golf helps with the seasonality of the mountain resort environment," Davis said. "We like to think we're in the mountain resort business, not the ski business. Golf is an important amenity for the summer resort and real estate developments."

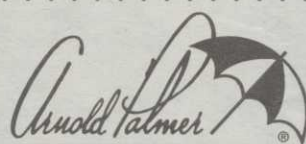
Golf accounts for five to 10 percent of Intrawest's total revenues, Davis said. But it also helps fill resort rooms that would otherwise go empty in summer; increases spending in ancillary businesses like restaurants and shops; and helps provide year-round employment for the company's key employees.

Intrawest manages all its courses. "Operating a number of courses definitely gives us some operational flexibility," he said.



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CIRCLE #132



THE WORLD OF SUPPLIER BUSINESS '97

Let's consider 1997 the year of the partnership. Through company mergers and long-term, exclusive arrangements, the big iron and chemical companies are aiming to expand their services while attempting to snuggle in tighter with their long-standing customer base.

The face of the golf course supplier business has a softer, more understanding smile plastered across it. Big business senses the need to become more intimate, more human. No longer will your favorite mower supplier just be your mower supplier. That mower supplier got to know you a little better this year and will be bundling services that you wouldn't expect to find from "just" a mower supplier.

We saw a golf car supplier jump into a tour sponsorship, two arch enemies in the chemical world buddy up, and more recently, we saw the number two iron supplier buy number four.

1998? Well, that's anybody's guess. It's a little too early to tell what the Textron acquisition of Ransomes could mean to the industry at large. So far, industry watchdogs can only speculate; but consider the powerful position Jacobsen will find itself in if it chooses to fold the best of Ransomes under the Jake umbrella. Stay tuned.

—Michael Levans

GCN SEPTEMBER

One-stop equipment deals on rise

By MICHAEL LEVANS

BLOOMINGTON, Minn. — As the industry sees more courses gathering under management umbrellas, the number of exclusive provider deals between management companies and manufacturers — including equipment, equipment maintenance and ancillary services — appears to be following suit.

In the past month, both the Toro Co. and Ransomes America Corp. have added substantial new agreements to their growing list of exclusive arrangements.

Toro cut a five-year deal with Whitbread/Marriott Hotels to be exclusive provider of turf equipment and maintenance for Whitbread's eight existing courses and two currently in development. Ransomes will be the exclusive manufacturer and maintainer for the eight courses under the watchful eye

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GCN APRIL

PGA Tour, Deere ink 3-prong deal

By HAL PHILLIPS

MOLINE, Ill. — In a deal that impacts three distinct segments of the golf industry, John Deere has reached an unprecedented nine-year agreement with the PGA Tour to provide turf equipment to the Tournament Players Club (TPC) network of courses, assume title sponsorship of the Quad City Classic and provide 385 acres for a new TPC course development here.

The nine-year partnership — comprising three consecutive 3-year leases — was an-

Continued on page 42

GCN MARCH

Heritage introduced in Las Vegas

By MARK LESLIE

LAS VEGAS — The federal Environmental Protection Agency (EPA) has expedited registration of the first

fungicide ever approved in its "reduced-risk pesticide" category — the broad-spectrum *azoxystrobin*, which represents a new and different class of chemistry.



"We are extremely excited," said Keelan Pulliam, business director of Zeneca Professional Products which, he said, mandated for *azoxystrobin* "the most extensive research in turf, ever — both by universities and companies."

"We are committed, with research and development, to support this market [turfgrass]," Zeneca President Robert Woods said at a press conference at the International Golf Course Conference and Show here announcing the new product, which is being marketed as Heritage. "It has significant importance to Zeneca as we move forward." Scotts and Zeneca will distribute Heritage.

Developed from natural compounds found in certain species of wood-decaying mushrooms, it has activity against plant pathogens from all four major fungal groups,

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GCN FEBRUARY



NEW PRODUCT OF THE YEAR: THE DRAGONFLY

Solo cart leads British invasion

By MARK LESLIE

CARMEL, Calif. — When Englishman John Tullis began to lose the mobility in his legs from illness, he didn't quit golf. Along with business partner Tony Brown, he put on his inventor's cap. The result: A one-man golf car designed to speed up play, defy worries about soil compaction and, for the physically challenged, make golf a viable recreation.

"Suddenly the cart is starting to move [in sales]," said Tullis from the Surrey, England, headquarters of his firm, CF Leisure Mobility Ltd., or A La Carts. "For years, we've been batting our heads against the traditional

Continued on page 42

GCN FEBRUARY

FTC gives blessing to Ciba, Sandoz merger

WASHINGTON, D.C. — The United States Federal Trade Commission (FTC) has cleared the creation of Novartis through the merger of Ciba and Sandoz.

Though the merger was first announced back in March of 1996, Novartis Crop Protection, Inc., was not formed until Jan. 1, 1997.

And the timing couldn't be better, as the new Novartis operation will conduct a week-long coming out party at the Golf Course Superintendents

Association of America show in Las Vegas, Feb. 6-12. So said Gene Hintze, formerly of Sandoz and now the head of Novartis Turf & Ornamental.

"For right now, you can call me director of Novartis Turf & Ornamental," said Hintze, who relocated to Novartis' North Carolina office. "In Las Vegas, we plan on hosting a media reception, Sunday evening the 9th of February. We will have a joint presence on the floor. A brand new Novartis booth. Distributor meetings — you name it."

GCN FEBRUARY

RohMid partnership a work in progress

By HAL PHILLIPS

PHILADELPHIA, Pa. — It's been nearly six months since American Cyanamid Co. and Rohm & Haas Co. formed RohMid L.L.C., a marketing and sales joint venture charged with developing, registering and commercializing a new insecticide, RH-0345.

The eagerly awaited product has a name, Mach II, and RohMid officials seem confident the federal Environmental Protection Agency (EPA) will register the product this year.

Yet the fate of grubs and soil-borne pests — the targets of Mach II — have taken something of a back seat, as observers of the turf and ornamental industry gauge the success of this unprecedented partnership. In a time of unmatched competition, mergers and acquisitions among multinational chemi-

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GCN JUNE

Industry seeks alternatives to field burning

By BOB SPIWAK

OLYMPIA, Wash. — A Washington Department of Ecology ruling which would eliminate burning of Kentucky bluegrass fields could have a severe impact on growers here. The ban, initiated last year, requires growers to reduce the number of acres burned by one-third each year, with a total ban by 1998.

Field burning has been the traditional way to eliminate post-harvest straw from the fields, at the same time killing pests and diseases. Some growers maintain that the fires also promote new growth and better yields. Some 60,000 acres in Washington are affected.

Ironically, no such action is contemplated by the state of Idaho, which shares the Rathdrum Prairie with its Washington neighbor. Thus, an imaginary state line separates a 10,000-acre plain, with burning allowed east of the line, but not west.

According to Linda Clovis, executive director of the Intermountain Grass Growers Association, the ban was instituted by then DOE Director Mary Riveland. Clovis maintains that when Washington Gov. Mike Lowry announced he would not seek re-election, Riveland arbitrarily imposed the ban, eliminating public notice and the normal public-hearing procedure. "She knew she'd be out of a job," said Clovis, "and rushed this [ban] through. In my opinion it circumvented due process."

However, according to a January article in the *Moscow-Pullman Daily News*, a study by several Washington State University professors concluded that benefits gained by reduced field burning outweighed the costs, and this prompted Riveland to mandate the ban.

The phase-out of burning is to allow the growers to devise alternatives. So far, said Skip Allert of Jacklin Seed in Post Falls, Idaho, there has been little success. "Last year," he explained, "they [growers] tried to bale the straw after combining, without much success."

Allert, Jacklin's grower service field representative, said alternative measures such as harvesting straw or plowing cost the growers more and do not kill weed seeds or diseases. Chemical treatments have been tried, but they, too, are coming under fire.

Washington State University and University of Idaho, along with Jacklin, are examining other means. One is close-clipping the grass, then vacuuming the residue. "We need more basic research," said Allert. "What genes we need to change, for instance.

But there is a costly time lag — a year before we get the crop out, another year to see the results."

Asked about the effect the ban will have on bluegrass prices, Allert said Washington bluegrass is not going to be the way

it was. It can be grown in Idaho, but it is just a matter of time until there is a curtailment there as well, he said.

Clovis agreed and said that although no legislative action is pending, a group of environmen-

Continued on page 43

GCN JANUARY

Biological firms discovering the 'joys' of FIFRA

By ALAN B. NICHOLS

WASHINGTON, D.C. — Squeezed by the high cost of chemicals and environmental/social pressures to reduce their use, a growing number

of golf course superintendents around the country are turning to biocontrol management programs as a supplement to conventional practices.

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Examine the Difference



Rohmid

Continued from page 39

cal conglomerates, can cooperation really work? What lessons are there to learn?

In search of answers, *Golf Course News* sought out two primary players in the partnership: Janet Giesselman, Turf and Ornamental product manager for Rohm and Haas and chair of the

four-person board overseeing the joint venture; and John Thomas, PhD, manager of the RohMid project.

Golf Course News: How has the partnership worked out so far?

Janet Giesselman: It really couldn't be better. We're having a great time and we're getting a lot done. We've submitted for registration on target for a launch in 1997. But more important, we've laid the groundwork. Because

these are such large organizations, we had to be sure we had the processes in place—for manufacturing, administration, processing, delivery. How the joint sales force will be selling through distribution... These people needed to get to know each other.

GCN: How are the responsibilities divided up?

John Thomas: What we've decide is, we'll be using the full resources of both companies. We

have formal agreement on that, an administrative services agreement, that outlines all marketing and logistic functions.

JG: We spent a lot of time here—a year of negotiations. And we covered a lot of ground. We covered everything that we could think of. So there wasn't a lot of disagreement on responsibilities before we formed the company.

JT: We're governed by a series of agreements. We took it in

a step-wise fashion. The development agreement was sorted out before the joint-venture agreement, for example. Then we had an agreement for manufacturing, administrative services, etc. It allowed us to focus on each step one at a time.

GCN: We've been told you had a unique incentive for sorting out disagreements.

JG: Well, we have a four-person board. There's no tie breaker. If the board can't agree on an issue, it goes to upper management of the parent companies. So, we're highly motivated to work things out... We've had heated discussions, but we've also reached resolutions fairly quickly.

JT: The incentive is, we recognize that our higher management has said, "Hey, you know the business. The issues aren't unusual. We believe you can handle them and we've empowered you to do so."

Heritage

Continued from page 39 according to research.

Steve Gipson, superintendent at Fairlawn Country Club in Cleveland, said at the conference that using the product "can break the pattern of using sterile inhibitors after sterile inhibitors. It gives us an opportunity to break that cycle. Sterile inhibitors aren't bad, but this will extend the life of sterile inhibitors."

"It is the only fungicide to control both brown patch and pythium," said Dr. Bruce Clark of Rutgers University, one of several university researchers who studied *azoxystrobin*. "It provides up to 28 days of control."

Dr. Joseph Vargas of Michigan State University also touted its replacement of mercury-based products and "excellent control of snow mold."

Clark pointed to Heritage's low .2- to .4-ounce usage rate and "low-risk environmental profile." Indeed, when mixed at four and eight times the mix rate, it reportedly did not harm turf.

Superintendent Mike McNulty of Philadelphia Country Club, one of more than 170 superintendents to test the product, said: "The only thing it does not control is dollar spot, and there are many other products that do that."

It has proven effective against summer patch, takeall patch, anthracnose, pink and gray snow mold, red thread, fusarium patch and other fungi, according to Clark.

"It's wonderful to see a different mode of action come on the market," he said, adding that it is compatible when mixed with other products, such as those that fight dollar spot.

"We looked at a dozen [products] and there is no sign of incompatibility."

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PGA, Deere

Continued from page 39

nounced at an April 2 news conference at Deere's world headquarters.

Other golf industry corporations have associated themselves with professional tour events, including The Scott Company's sponsorship of The Tradition, a Senior PGA Tour stop. However, the Deere deal goes several steps further. Indeed, it's one of the longest sponsorship agreement ever entered into by the PGA Tour.

"It's a fantastic deal," said Clair Peterson, Deere's manager of advertising and promotion for Golf & Turf Products. "Obviously, the Tour was interested in stabilizing the PGA Tour event that's been played in the Quad Cities for 26 years. But it was really a result of both parties meeting objectives. We've been a presenting sponsor of the Quad City Classic for two years. The PGA Tour was looking for a title sponsor. We challenged each other to see what else we could achieve."

Most important to Deere's Golf & Turf Products Division is the maintenance component, which makes the Moline, Ill.-based company the official golf course equip-

ment supplier to the PGA Tour's 15 owned and operated courses. Lease financing will be provided by John Deere Credit.

"I don't think people know a great deal about leasing equipment," said Peterson. "Our leasing plan allows the TPC courses, as it allows any course, to stay current. With leasing, you no longer have a graveyard of old equipment that has outlived its use. After four years, it becomes very expensive to properly maintain equipment. Leasing really fits in with the industry trend towards containing maintenance costs."

Cal Roth, director of golf course maintenance operations for the PGA Tour's TPC courses, said he sees definite advantages to leasing arrangements like the one outlined in the new agreement. "You're upgrading to new technology," said Roth. "I think that's one of the key advantages. There is also some savings in operational costs if you're managing a fleet on a three-year basis. You're not going to get the larger expenses for repairs."

Roth said TPC golf course maintenance crews have historically used mostly Jacobsen machinery. The new agreement between Deere, the PGA Tour and the Quad City Classic changes that.

Dragonfly

Continued from page 39

'no-carts' attitude. Gradually it's getting through to management and committees that everybody is getting older. We all have hips and hearts and knees, and why should an elderly member suddenly not be able to play the game any more?"

Tullis and Brown, who have been manufacturing three-wheel golf carts that can be folded up and carried in an automobile, invented the Plytronics one-man machine a year and a half ago, and last year introduced it to the marketplace in the United Kingdom.

They have struck a deal with American entrepreneur John Killip of Carmel, Calif., to market the car under the name Dragonfly in the United States. The unit became available in the United States in a limited quantity in December. Killip has established Houston as the American manufacturing center, although his Uni-Car/U.S. office is located at P.O. Box 22798 here.

Plans to market it in other regions of the world have also taken off. Plytronics already are selling the unit in Australia, Belgium and Switzerland. Distributors are under contract in Norway and Denmark and negotiations are underway with others in Germany, Holland, Spain and Portugal.

With a 30-to-1 gear ratio, twin electric gear boxes and a 48-volt solid-state battery, the Dragonfly travels 8 miles per hour and has the power to glide up steep inclines.

One-stop shop

Continued from page 39

of Myrtle Beach National Co.

Toro already has agreements on the books with Canadian Pacific Hotel Group and Valderrama, the home of this month's Ryder Cup matches. For Ransomes, Myrtle Beach is its fifth contract.

From an administrative standpoint, the deals seem to make sense. From the management side, companies get a total package which helps cash flow and the company's yearly budgeting process. From the manufacturer's side, the company can easily track equipment maintenance records, allowing the equipment maker to take a piece of equipment back and keep it in circulation with more confidence.

Outside the financial benefits, the deals create "a mutually beneficial comfort level" between the two parties, said Peter Whurr, director of marketing at Ransomes. "When you put a deal together, the customer benefits because he knows he now has a direct route into the company. It's more of a business partnership, even though he's still the customer. We can now say, 'If you want some help, just call us.'"

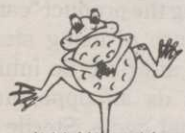
"It allows us to put together a total package," said Don Masini, managing director of international sales at Toro. "Following that, it's easier for us to follow up and keep in contact with the customer in order to meet all their needs," Masini said.

According to Masini, the exclusive provider deal was an American concept that is growing, and will continue to snowball, overseas, where management group ownership is skyrocketing.

"Outside the U.S., there aren't that many that are pay and play. So funding is getting more difficult," said Masini. "If you don't have the funds then you can't improve the golf course, and the members don't want to increase the dues they're paying."

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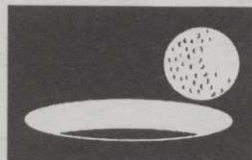
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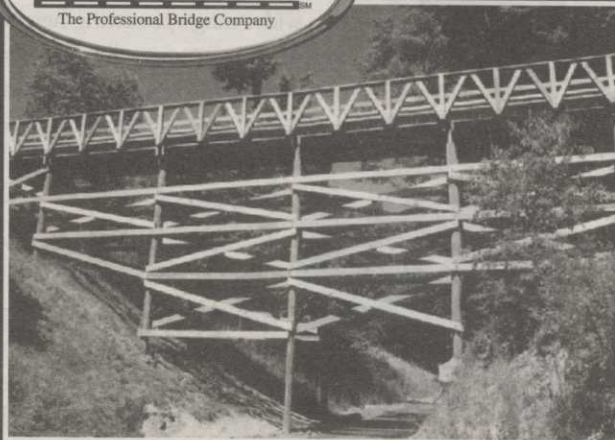
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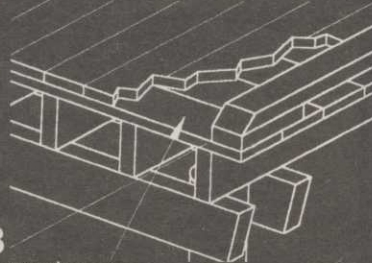
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CIRCLE #136

Burning alternatives

Continued from page 40

talists plans a different strategy: suing individual growers when they burn their fields. For now, with only Washington being affected, Clovis believes smaller growers, some of whom may have fields of 20 or so acres, will get out of the business.

Canadians, she said, are keeping an eye on developments in the two states, possibly intending to enter the bluegrass business. The climate is right, and more than 90 percent of all Kentucky bluegrass propagation is in the Pacific Northwest.

Patricia Hoffman heads a citizens group in the Spokane area called Save Our Summers (SOS). Founded in 1995, the group's primary concern is with health. "We founded the organization in response to 30-odd years of grass burning with no concessions [from the growers]," she said. "In 1963 there were only about 16,000 acres being burned in the region, including Idaho. And now the acreage burned is around 100,000."

"There have been fatalities as well," Hoffman said. "Two asthmatics, one in Washington, one in Idaho, died within 12 hours of smoke intrusion. That's a pretty high price to pay for golf courses."

In Idaho, The Clean Air Coalition plans to base lawsuits against growers by invoking the state's trespass law, according to *The North Idaho Business Journal*, "...to prove that the invading smoke constitutes a trespass on another landowner's property."

SOS is attracting more members and now numbers about 1,500. The group was actively lobbying to suppress grass burning, and with the current ban is "very gratified with the Department of Ecology's action."

Bluegrass industry spokespeople regard the conflict as an emotional issue blown out of proportion as a health concern. Countering this, the DOE and SOS feel there is enough evidence to support their contentions that the smoke is indeed harmful to human lungs, especially those of persons with respiratory problems.

EcoSoils

Continued from page 40

EcoSoils Systems, Inc. a San Diego technology company, thinks it has solved this challenge with its Bioject Biological Management System. However, EcoSoils must clear a major hurdle — the same hurdle many chemical formulators must clear — before it will see its units in many more golf course irrigation systems.

The company's Bioreactor, first designed to deliver nitrogen fixing microbes to the soil, must be approved by the Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The company is currently preparing to submit to the agency test protocols and to conduct field testing.

The Bioject Bioreactor automatically dispenses starter cultures of microbes (inoculum) and their required food sources (media) into a fermentation chamber where the microbes grow into high population numbers. Once the desired volume is achieved, the inoculum-laden slurry is spread over the course via the existing irrigation system.

The system is currently in place some 200 courses, including two Chicago facilities: North Shore Country Club in Glenview, Ill., and Congressional Country Club outside Washington, D.C.

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8 — GCSAA Seminar on Maximizing Teamwork in Atlantic City, N.J. *

9-10 — GCSAA Seminar on Managerial Productivity in Milwaukee. *

9-11 — New Jersey Turfgrass & Landscape Expo in Atlantic City, N.J. Contact Richard Caton at 908-821-7134.

9-11 — Georgia Turfgrass Conference and Show in College Park. Contact Doug Moody at 770-975-4123.

11 — Massachusetts Recreation and Park Association State Conference in Sturbridge. Contact Carol Kilcoyne at 508-650-1126.

15-17 — Texas Turfgrass Conference and Trade Show in San Antonio.

16 — GCSAA Seminar on Employee Safety Training in Oklahoma City. *

1998

January

5 — GCSAA Seminar on Maximizing Turfgrass Disease Control in Nashville, Tenn. *

5 — GCSAA Seminar on The Microbiology of Turfgrass Soils in Portland, Ore. *

6 — GCSAA Seminar on Lake and Aquatic Plant Management in Charlotte, N.C.

7 — GCSAA Seminar on Personal Stress Management in Pleasanton, Calif. *

8 — Northeast Turf and Grounds Exposition in Albany, N.Y. Contact NYSTA at 800-873-8873.

8-9 — GCSAA Seminar on Golf Greens: History, Theory, Construction and Maintenance in Oak Brook, Ill. *

9 — GCSAA Seminar on Understanding Hispanic Employees in Phoenix. *

11-15 — National Institute of Golf Management's 15th Annual Education Program in Wheeling, W. Va. Contact Oglebay Resort's Department of Continuing Education at 800-624-6988, ext. 4019.

12-13 — GCSAA Seminar on Golf Course Restoration, Renovation and Construction Projects in Atlanta. *

12-13 — Arkansas Turfgrass Association 10th Annual Conference and Trade Show in Little Rock. Contact Angie McSwain at 501-664-8048.

12-16 — Cornell Turfgrass Management Short Course in Ithaca, N.Y. Contact 607-255-1792.

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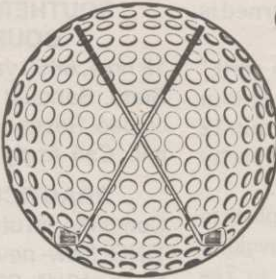
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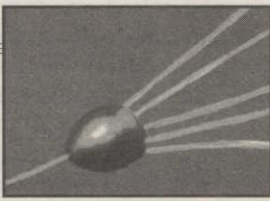
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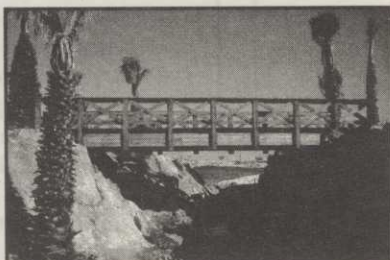
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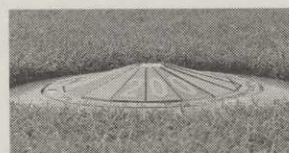
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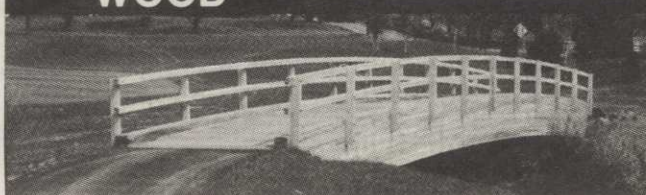


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*Appears in regional editions.

Old Works

Continued from page 26

if it will fly."

Indeed, has any project drawn so much attention from so many varied groups? The federal and state EPAs had representatives on site every day during construction. The Montana Fish and Wildlife Department, U.S. Department of Justice, environmentalists of every ilk, sportsmen, townspeople.

"There are 100-year-old pictures that show not one blade of grass was growing on that 200 acres," said Kirk Welsh, di-

rector of field operations for North America for Nicklaus Design.

Soller confirmed the deadness of the property in his initial contact with the Audubon Cooperative Sanctuary Program. He listed "none" under "existing species." Yet, today there are moose, elk, deer, bluebirds... "You name it, it's amazing," said Welsh.

"When grass started turning green people were driving off the road," said Sandy Stash, general manager for the Montana Division of Atlantic Richfield Co. (ARCO). ARCO bought the old mine

from Anaconda Minerals Co. in 1977 and closed it down in 1980. Later, the federal government formed the Superfund and mandated that companies clean up toxic sites around the country. ARCO, not Anaconda Minerals, was stuck with the costs.

Superfund, Stash said, is "a you caught it you clean it law."

Faced with a \$60 million cleanup bill, ARCO sought a better way out. Grabbing hold of an off-the-cuff suggestion of a golf course from the then-county manager, the company began several years of negotiations with the federal EPA. The

struggle, she said, was convincing the state, EPA and Department of Justice that this was a good idea.

"Once they bought into the concept they were a wonderful partner," Stash said.

ARCO spent about \$15 million building Old Works. It will be turned over to the County of Deer Lodge and operated by the local golf authority board.

Approvals aside, building a golf course on a smelting site, with its ovens and flues, was a chore that consumed most of Tom Roe & Son Construction's time for nearly three years.

Some parts of the work took twice as long as normal — two weeks instead of one to build a green, for instance.

The course was shaped, lined, capped and reshaped, and finally seeded or sodded.

First, Soller explained, subdrainage was installed. Roe capped this with 2 inches of crushed limestone as a buffer zone between the subgrade and the cap. An 18-inch layer of heavy clay material was then spread over the whole site, and, on top of that, a sand-loam material in which compost was incorporated as the growing medium.

Roe's crews spread 60-mil PVC liner under the bunkers, greens, tees and the two lakes on the property.

Special care was taken with the greens. Herringbone drainage was installed. The liner was cut and fit down in the drainage, with the intent that no water will ever go through it. Because engineers felt that the gravel layer of the greens might puncture the liner, a 3/8-inch felt material was laid over the liner. Only then were the normal U.S. Golf Association-spec greens built — minus only the choker layer.

The materials used? The subgrade took 600,000 cubic yards of material, while trucks hauled in 550,000 cubic yards of heavy clay and 150,000 cubic yards for the growth cap, according to Soller.

Chip Roe estimated that there were 500,000 square feet of liner under one of the two manmade lakes and 200,000 square feet under the other.

The water supply, Soller said, comes from on-site wells and from water captured by the lining material. The front nine drains into a lake on the 5th hole. When that overflows it feeds into the second lake on the back nine, which serves as the irrigation pond.

Perhaps most eye-catching of all the facets of the course is the jet-black sand in the bunkers. Created decades ago when water was pumped into the hot slag from the mining operation, the sand, Nicklaus said, is "the best material he has ever hit out of in his life."

"Thomas Turf Labs tested it out beautifully," Soller confirmed, "And it gives the course a really unique appearance." A number of waste bunkers (called "low-maintenance bunkers" on this Superfund site) give the course aesthetic flash as well.

Through it all, Nicklaus has carried the mining theme through to the finished product. Old flues and ovens provide a fascinating backdrop to the fairways, greens and tees.

"The idea," Nicklaus said, "was to put up signs at each hole to give a brief history for people to understand what's there. It's like a museum."

The result is a Nicklaus signature design that sits halfway between Glacier and Yellowstone national parks, with a \$20 green fee.

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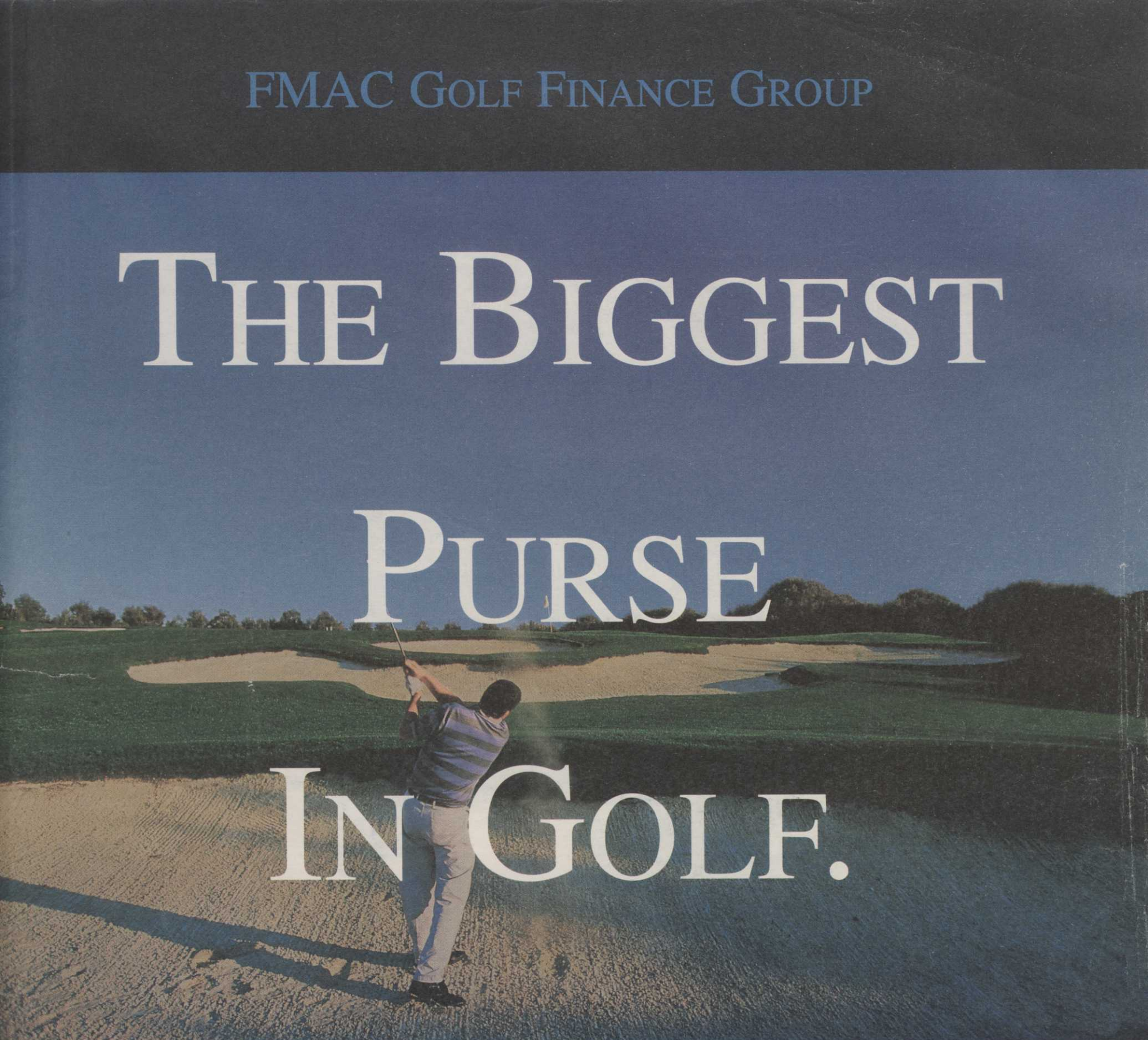
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