

GOLF COURSE NEWS

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Permitting planner Dianna Almini, here with senior architect Neal Meagher, puts Graves & Pascuzzo Design Co. on the fast track in the approval process. See page 49.

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Troon inks first international deal

By PETER BLAIS and wire service reports

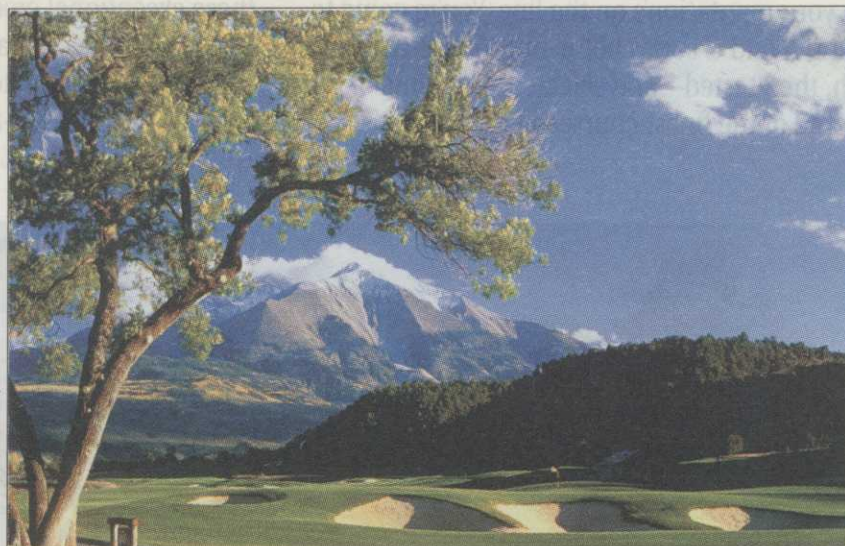
SCOTTSDALE, Arizona, USA — Troon Golf, a major U.S. course development and management firm, has expanded into the international market with the addition of two of Scotland's most famous layouts, the Ailsa and Arran courses at Turnberry.

The Scottsdale, Arizona-based company will manage the two courses and hold a minority subordinated ownership interest.

The resort was acquired for approximately \$51.5 million by Starwood Lodging Corporation, based in Phoenix, Ariz., from Nitto Kogyo Co. Ltd., a golf course ownership firm based in Tokyo. Nitto Kogyo had owned the 800-acre development since 1987 and invested \$35 million in the property.

"Today [Dec. 23, 1997], is a momentous day for our company," said Troon President Dana Garmany. "Ex-

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Dick Durance II photo

River Valley Golf Course near Aspen, Colo. — a new Crown Golf property opening in April.

Philippines puts golf development on hold

By M. LEVANS

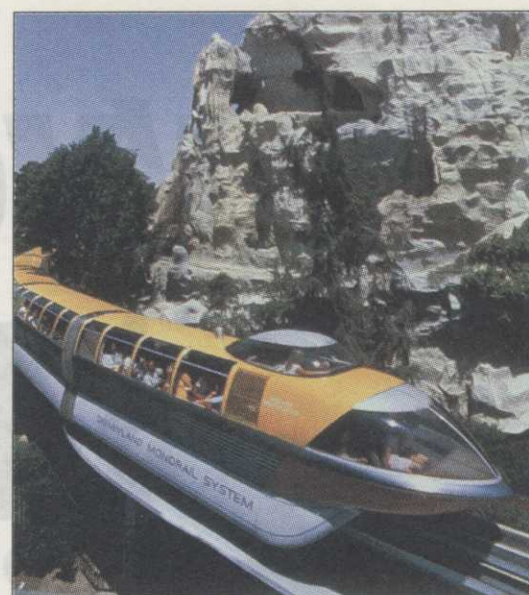
MANILA, Philippines — The Philippine government has ordered a halt to the building of new golf

courses due to water shortages caused by the El Nino weather pattern.

The Philippine Department of Agrarian Reform (DAR) stopped processing land conversion applications by golf course developers until the drought situation ends, which may not be until mid-1998.

"This is an initiative...to conserve water in the light of the El Nino phenomenon and the growing criti-

Continued on page 60



It's GCSAA Showtime!

It's time to lace up the comfortable shoes. The GCSAA's 69th International Golf Course Conference and Show rolls into sunny Anaheim, Calif., February 2-8, with more than 650 exhibitors and seven days of conference sessions. For more details on GCSAA annual awards, conference schedule and ways to get the most out your show experience, see pages 43-48.

Course projects upgrade disadvantaged communities

By JERRY ROSE
and PETER BLAIS

PHOENIX — What do you usually see behind the flagstick on the front cover of most golf magazines?

Pounding surf, red rock cliffs, majestic mountains, virgin forests.

Rarely do you see smoke stacks, turnpikes or housing projects. But it's the courses built with these backdrops that often have the most positive impact on their immediate surroundings. A new golf development in a less-than-desirable part of town can have a tremendous influence on the local community's overall economy.

A perfect example is the Raven Golf Club at South Mountain in Phoenix. It was built in 1995 at a cost of more than \$14 million, almost all of which was spent with local companies involved in the development project. It also provides 80 jobs to local residents with an annual

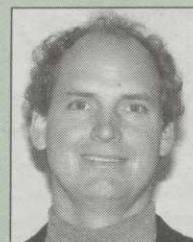
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BEST BUILDERS OF THE YEAR

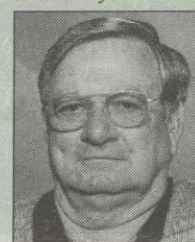
Landscapes Unlimited and its president, Bill Kubly, have won the Golf Course Builder of the Year Award, while President Howard Barnes and V.P.J.W. Thomas of Quality Grassing & Services grabbed Best Small Builder of the Year Award. A Small Builder Honorable Mention Award goes to Turf Drain, Inc. and its president, Geoffrey Cortlett. See pages 38-42.



Bill Kubly



Geoffrey Cortlett



J.W. Thomas



Howard Barnes

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BRIEFS

SOMERVILLE, N.J. — Somerset County parks officials have said the county should build a fifth 18-hole public course in the next few years. The county's four courses are heavily used and golf has become a steady revenue source, providing \$5.6 of the park commission's \$10.3 million operating budget for 1998. The target area for the new course would be in Branchburg or neighboring Hillsborough.

...
CALIMESA, Calif. — The Southern California PGA is pursuing a plan to build two 18-hole daily-fee courses and new headquarters for itself in Oak Valley, a 6,700-acre master-planned community. The Southern California PGA wants the two 18-hole layouts along with a teaching center and practice range as well as business offices for the local PGA section.

...
RICHMOND, Va. — Golf course architect Lester George of Colonial Golf Design, Inc. of Richmond has been chosen to oversee renovations on two of the three 18-hole golf courses at the private Country Club of Virginia. Bunker and tee renovations are complete on the Tuckahoe Creek Course, a Joe Lee-Rocky Roquemore original design. George will now create a master plan for renovations to the 18-hole Westhampton Course.

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Florida course general manager shot by former pro

MOUNT DORA, Fla. — The general manager of the Mount Dora Country Club was shot and killed last month by an 85-year-old former golf pro, who then turned the gun on himself and committed suicide.

Apparently upset over charges he abused the course, former pro Ernie Tardiff reportedly entered the pro shop shortly after 7 a.m. Jan. 7 and argued with general man-

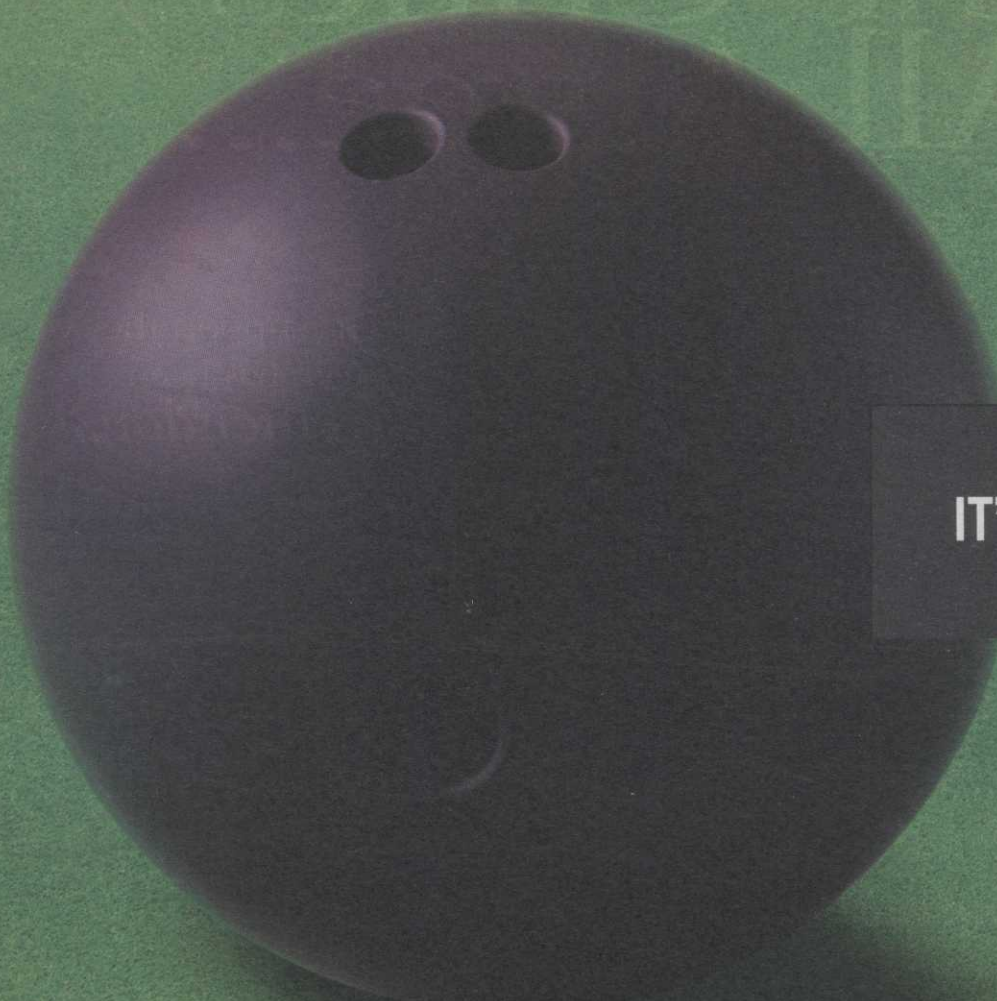
ager Douglas Victor Passen, 58.

Tardiff shot Passen in the stomach and side with a .380-caliber semiautomatic pistol. Tardiff called 911 and asked police to come to the club. He then phoned his wife, told her to pick up his golf cart, and then fired a single bullet into to his own head.

Tardiff died at the scene. Passen, who survived surgery for removal of a kidney

and his spleen at Orlando Regional Medical Center, died several days later.

The club's administration replaced Tardiff as a teaching pro in the mid-1980s. He continued to play at the club, but refused to follow certain rules. He would reportedly play without first obtaining a tee time, drove his cart over greens and engaged in dangerous play. The board of directors had written letters to Tardiff citing specific incidents. Police found the most recent letter in Tardiff's pocket following the shooting.



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Golf short-changed in U.K. sports funding

Less than 1 percent of Lotto pot goes to golf

By TREVOR LEDGER

MARKET DRAYTON, Shropshire, England — The United Kingdom National Lottery was designed to benefit "worth causes" in the fields of the arts,

sport and national heritage. In the three years since it's inception, however, the lottery has paid out a mere 4.4 million pounds to golf projects of all descriptions across the entire nation — a figure split among 30 applicants.

Golf awards so far have amounted to less than 0.7 of one

percent of the total sports grants awarded to date. Compare this with netball — 1.4 percent, rowing — 2.13 percent, gymnastics — 1.55 percent.

While 4.4 million pounds is not to be sneezed at, the fuller picture is at least confusing, if not downright disturbing for the game of golf.

Since golf is the second largest participatory sport in the country, it would stand to reason that that golf should be at least in the top half of the awards table.

The medical opinion of golf is encouraging. It offers good, low impact exercise which is suitable for all but the seriously infirm. As already stated, the sport is astonishingly popular with demand for golf courses outstrip-



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Daniel Garner, Owner
The Grizzly Course at Gold Mountain
(Graeagle, CA)

"Legacy's customer service is **terrific!**"

Michael L. Dingman, VP & Director of Golf
Environmental Golf & Glen Annie Golf Club
(Santa Barbara, CA)

"The G90's (heads) are **just great!**"

Wade Vecchio, Superintendent
Cotton Ranch Club
(Gypsum, CO)

"I **absolutely love** the Genesis Central!"

Chris Smith CGCS, Superintendent
Bittersweet Golf Club
(Gurnee, IL)

"Legacy's service, responsiveness and product quality has all been good. Their **technical support** has been **superior!**"

Jeff Whitfield, Director of Golf/General Manager
Persimmon Woods Golf Club
(Weldon Spring, MO)

ping supply steadily. So where is the problem?

One of the lucky 30 who managed to extract money from the Lottery is the Horsehay Village Golf Complex. The very ethos of this centre is to promote Golf to all of society and maybe this is the crucial factor.

Faye Westrop of the Sports Council Lottery Helpdesk confirms that to attract Lottery Funding a project must, "... be open to everybody and actively encourage increased participation in the sport."

Given that Golf is a booming industry in the U.K., it would be a poor project indeed that failed to increase participation. However the crux of the matter lies elsewhere, the motives of the project proposer. In order to qualify for funding the project must be non-profit making. Therefore the likes of Horsehay Village are at least in the running for a lottery grant due to the fact that they are public courses designed as a civic amenity rather than as an exclusive club.

This would appear therefore to be yet another very good reason for an expansion of public golf course construction in Britain. Provided that they are of a "high standard," which is another of the criteria explained by Faye Westrop. On the face of it this is great news for the growing band of newcomers to golf—good, affordable golf courses funded by a body dedicated to "Sport for All", the Sports Council. Yet it hasn't happened.

It is possible that the extremely complex application process has been responsible for some failures of funding but this is unlikely given the Local Authority Structure which thrives on paperwork etiquette. The only possible answer then must be that Local Authorities are simply not applying for funding.

A spokesman from the British Institute of Golf Course Architects (BIGCA) confirms and explains this curious inactivity. "In order to qualify for Sports Council funding, the project must come up with at least 35 percent of the capital required." This appears to be a major stumbling block for hard pressed local authorities who are cutting back on essential services and will

Continued on page 86

GOLF COURSE NEWS

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Domestic course construction still going strong

New openings top 400 mark for third consecutive year

Another 429 golf courses opened in 1997, the third consecutive year the number has cleared the 400 mark, according to the latest figures released by the National Golf Foundation.

While the figure is down slightly from 442 a year ago and the record 468 in 1995, the number of course openings should remain steady or perhaps even increase over the next couple of years.

A record 932 courses were under construction at year's end. That's up almost 10 percent from the end of 1996, when 850 courses were under construction.

"When I came to the NGF in 1987 we were opening about 200 projects a year," said NGF Vice President of Communications Bill Burbaum. "Now we're up over 400 over the past three years. It's mind boggling."

Of the 429 new courses, 285 (66 percent) were new facilities and 144 (34 percent) expansions of existing courses. Of the 932 under construction, 655 (70 percent) are new and 277 (30 percent) are expansions.

The 429 figure includes both nine- and 18-hole courses, and figures out to 316 18-hole equivalents.

The flowering public course market continued in full bloom during 1997 with 334 daily-fee and 48 municipal courses together making up 89 percent of the new courses built last year. The trend should continue with 86 percent of the courses under construction — 677 daily-fee and 128 municipal — being of the public variety.



Pictured above is the 10th hole at StoneWater Golf Club in Highland Heights, Ohio, among the 429 golf courses that opened in 1997 and marking the third straight year the new course figure has surpassed the 400 mark. StoneWater is a Michael Hurdzan/Dana Fry design featuring stunning cut stone and water that comes into play on 16 holes. Gregg Foster and Craig Immel are the founders of the 18-hole, private course. Foster is owner and president of Elyria Foundry and a member at several prestigious private clubs including Pine Valley (Clementon, N.J.), Olympic (San Francisco) and Double Eagle (Columbus, Ohio) golf clubs. Immel, a former president of the Northern Ohio PGA, brings 25 years of PGA private club experience to StoneWater.

U.S. courses opened in 1997

	New	Expansions	Total
Daily fee	226	108	334
Municipal	30	18	48
Private	29	20	49
Total	285	144	429

U.S. courses under construction, Dec. 31, 1997

	New	Expansions	Total
Daily fee	487	190	677
Municipal	90	38	128
Private	78	49	127
Total	655	277	932

Source: National Golf Foundation

Golf construction and participation continue to rise throughout Europe

According to a special report released in conjunction with Golf Europe '97, the game is enjoying some healthy gains in that part of the world.

The report was released by Messe Munchen GmbH, a German company that staged Golf Europe '97 in Munich.

The report shows that participation and golf course development were both up in 1996.

More specifically, the report notes that, in 1996, the number of people with golf club memberships in Europe rose by 5.7% to 2.8 million. [Note: Most of Europe's golfers are members of a golf club.]

The report contained no information on rounds played or golfer demographics.

Sweden, Germany and France recorded the greatest increases in numbers of golfers. The report notes that these countries were also the home of 56 of the 229 new courses that opened across Europe last year.

At the end of 1996, Europe was home to 5,331 golf courses.

In its look at golf consumer spending, the report estimates that golf merchandise sales rose 3.3% in 1996 across Europe to \$1.3 billion in U.S. dollars. Included in this total are sales in golf course pro shops, sports retail shops, department stores and by mail-order businesses.

While still sizable, the 1996 increase in golf consumer spending in Europe was less than what it was in 1995 when sales rose 6.3%.

This slowdown, according to the report, was the result of a cooling off of the economy and lower retail prices due to the dollar's lower exchange rate throughout 1996. The "price wars" that erupted during the year between the various golf retail outlets were cited as another factor.

Great Britain, Sweden and Germany led the way in golf sales last year with \$422 million, \$234 million and \$153 million respectively.

The report based much of its information from data received from golf associations in 14 of the 29 countries that make up the European Golf Association. In addition to Great Britain, Sweden, Germany and France, the other members of this group are Austria, Belgium, Denmark, Finland, Ireland, Italy, the Netherlands, Norway, Spain and Switzerland. The report notes that these countries make up 95% of the total European golf market.

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Development visits Santa Barbara, finally

SANTA BARBARA, Calif. — After numerous struggles, the first regulation-length courses built in Santa Barbara in 25 years have opened for play. Both will be open to the public.

Glen Annie Golf Course, a daily-fee, par-72 layout with panoramic views of the Pacific Ocean, was designed by Robert Muir Graves and Damian Pascuzzo. Glen Annie features a double green, a large lake that comes into play on three holes, and a unique amphibian walkway for an endangered species of frog. Steve Montanez, a former superintendent at North Ranch Country Club in Westlake Village, is the new superintendent at Glen Annie.

Rancho San Marcos, a \$16 million project designed by Robert Trent Jones, Jr., is a par-71, semi-private layout with five par-5s and six par-3s. The course moves through 300 acres with views of Cachuma Lake and the Santa Ynez Valley as well as the San Rafael and Santa Ynez mountains. There are 1,700 trees on the property, including oaks that are 200 to 300 years old. The course superintendent is Scott Nair, a former head superintendent at the Boulders Resort in Carefree, Ariz.

Toughest course in U.S. sells for bargain price

KANEOHE, Hawaii — A golf course rated one of the toughest in the country was sold for less than 15 percent of its \$82 million construction cost.

The Koolau Golf Course, located at the base of the Koolau Mountains in Windward Oahu, attracted a single offer of \$12 million when bids were opened. The buyer was CCL Holdings (USA) Ltd.. The company's investments include hotels, golf courses and other commercial real estate. The 18-hole course — known for its challenging terrain and many ravines — sits on 250 acres and features a 123,000-square-foot clubhouse and 1,000 additional acres.

According to a foreclosure agent, more than 300 individuals or groups expressed interest in the property. The course was originally developed by the Minami Group, a Japanese firm that bought the acreage during the Japanese investment boom in the late 1980s. Minami hired course designers Dick Nugent and Jack Tuthill to lay out a course on the varied land. Half of the holes feature ravine crossings and there are more than 80 bunkers.

The facility's luxurious clubhouse features a two-story waterfall, floor-to-ceiling windows with views of Kaneohe Bay, and an interior courtyard.

Two new golf facilities set to come on line in San Jose

SAN JOSE, Calif. — It's been nearly 30 years since a new public course opened here, but 1998 will be a boon year with two layouts scheduled to welcome the city's golfers.

The Tradition Golf Club, located about a mile south of the Calero Reservoir in south San Jose, plans to open a 27-hole public facility in July. Meanwhile, just a couple miles away, the course known as the Riverside Golf Course will open a new 18-hole, daily-fee course designed by Jack Nicklaus in September and thereafter be known as the Coyote Creek Golf Club. Once the

Nicklaus Signature Course opens at Coyote Creek in September, the existing 18-hole layout at Riverside will be renovated into a second Nicklaus design that will be known as the Valley Course. The Valley Course should be ready for play by summer 1999.

"The luxury we have with the new design is being able to take advantage of the best of both worlds in California," Nicklaus told the *San Jose Mercury News*. "The layout will actually wind beneath the highway, with rolling terrain to the west and mountainous terrain to the east."

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Phoenix city officials enter fray with plan to save Adobe GC

PHOENIX, Ariz. — In the latest installment of an increasingly bitter two-year fight, the Phoenix City Council has stepped in with a plan to save the Adobe Golf Course, a course built in the 1920s in one of the city's most prominent neighborhoods. The owner of the Adobe course has said it wants to develop housing on the golf course property, or receive fair compensation.

In exchange for preserving the Adobe course, the council voted to allow the owner, Kabuto Arizona Properties, to build up to 70 units on about five acres near the course's clubhouse. The building would not affect the course.

Kabuto, however, has said the council's decision does not go anywhere near far enough and that the matter will most likely end up in court.

Debate surrounds Calif. course entrance

CATHEDRAL CITY, Calif. — Just how important can an entrance to a golf course be? Well, if you're officials in the neighboring cities of Cathedral City and Rancho Mirage, very.

Cathedral City officials have been miffed by the Ritz-Carlton's plan to have the main entrance to its new \$12.5 million golf course in neighboring Rancho

Mirage. The 18-hole course will be built on 86 acres in Rancho Mirage and 105 acres in Cathedral City along the base of the Santa Rosa Mountains.

Cathedral City officials have said that the city had been promised its own golf-cart entrance, while the developer Winchester Development Co., the company building the golf course, said the idea was dismissed long ago. Cathedral City officials have said a separate Cathedral City entrance would provide convenient access for residents and also help lure hotels as part of their efforts to revitalize downtown.

One possible compromise is a free shuttle service from Cathedral City to the golf course's main entrance in Rancho Mirage, although no final decisions have been made.

Environmentalists fail to stop Ojai, Calif. golf course

OJAI, Calif. — An environmental group has lost again in its efforts to stop an exclusive 18-hole private golf from being built by a company owned by Japanese media tycoon Kagehisa Toyama. But questions remain whether the course will ever get built.

The Environmental Coalition of Ventura County has been trying to prevent the Farmont Corp. from building its course on its Ojai Valley property. The proposed 18-hole layout, designed by golf course architect Pete Dye, would be built along Highway 150 west of the Ventura River. The facility will also include a 20,000-square-foot clubhouse and restaurant, three lakes covering 800 acres and a driving range. Players would reportedly have to pass a golfing test before being allowed to play the course and only 35 rounds of golf would be allowed daily.

The project has been tied up in litigation since 1993. An attorney for Farmont has said the chances the course will be built are decreasing and that Toyama is old and in poor health.

PUBLIC GOLF FORUM DATES SET

YARMOUTH, Maine — October 26-27 will be the dates for the *Golf Course News*-sponsored Public Golf Forum, the leading conference for managers and superintendents of public-access golf facilities. The two-day event will be held at the Rancho Las Palmas Resort in Rancho Mirage, Calif.

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Microsoft executive buys Puget Sound layout

OLYMPIA, Wash. — Retired Microsoft millionaire Scott Oki has bought Indian Summer golf course, site of the Puget Sound Nike Open.

Oki, whose other holdings include Echo Falls Country Club, a semi-private course in Snohomish, Wash., and The Golf Club at Newcastle, a 36-hole daily-fee course under construction outside Seattle, is chairman of

Indian Summer LLC, which bought the private, par-72, 7,026-yard course from Aoki Corp. of Japan. Indian Summer, designed by five-time British Open champion Peter Thomson and Michael Wolveridge, opened in 1992.

Indian Summer's gated housing development, which includes 480 home sites, was sold separately to Crystal Investments LLC.

Seattle links opens this summer

NEWCASTLE, Wash. — Work is ongoing on the 36-hole Golf Club at Newcastle, a much-anticipated project set on the flanks of West Cougar Mountain outside Seattle and Bellevue, which is expected to be one of the premier golf sites in the Pacific Northwest when it opens this summer.

At least one of the two 18-hole layouts designed by golf course architect Bob Cupp was due to open this spring. But heavy rains last summer pushed the target date back to this summer. Greens fees for both courses are expected to be in the \$75 range. An earlier plan to develop one of the courses as a private course was dropped.

Work on the facility's 40,000-square-foot clubhouse has been ongoing this winter. The clubhouse will include a restaurant, pub, sit-down banquet facility for 400 and a corporate meeting room. The courses are expected to become the future host site for an annual private golf tournament hosted by PGA Tour star Fred Couples.

Las Vegas GC may receive needed facelift

LAS VEGAS, Nev. — The Las Vegas Golf Club, the city's only municipal 18-hole course, could be headed for a tune-up.

City officials have been negotiating with Golf Enterprises, Inc., to pump more than \$4.4 million worth of improvements into a golf course that has fallen into disrepair in recent years due to heavy play and a lack of investment.

Golf Enterprises, Inc., the operators of the course, have said they are committed to improving the conditions of the layout. According to Joseph Guerra, executive vice president, some of the improvements being considered are rebuilding several greens, improving tee areas, installing new irrigation and cart paths, creating a new artificial lake and enlarging parking areas.

Salt Lake City to open new track

SALT LAKE CITY, Utah — Southeastern Salt Lake Valley is about to gain a much-needed public course. The county's newest layout — the Old Mill Golf Course — is set to open May 1.

Old Mill, which boasts a \$9.5 million layout designed by Gene Bates, and a \$2 million clubhouse, is already being touted as one of the top new courses in the area. The clubhouse will have a large banquet room, reception facilities and spectacular views.

The par-71 course will measure 6,750 yards from the back tees and feature large, undulating greens. The front nine is relatively open while the closing four holes are hilly and cut out through native oak brush.

GOLF COURSE NEWS



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Minn. pol suggests kids' course

ST. PAUL, Minn. — Minnesota Governor Arne Carlson is proposing a 27-hole championship course for children in Blaine, a town just north of the Twin Cities.

The proposed \$9 million National Youth Golf Center would be partly state-funded and built next to the existing National Sports Center in Blaine. Tee distances would be set up to accommodate younger players, although the course would be regulation length to allow adults to play with children. Children would be given priority for tee times and the course would be used for training and also youth tournaments.

If approved by the Legislature, construction could start later this year and the course could be open for play by 2000.

Under Carlson's plan, the Minnesota Amateur Sports Commis-

sion would own and operate the golf programs while the PGA Tour Golf Properties would operate the course on a non-profit basis. The World Golf Foundation, the Burnet Senior Classic and the Minnesota Fairway Foundation will promote youth golf programs and introduce programs to inner-city youth.

Oklahoma City club names new general manager

OKLAHOMA CITY — Thomas Barnard, who has managed golf clubs in three different states, has been named general manager of the new Gaillardia Golf and Country Club.

Barnard, 48, was most recently general manager at Spanish Hills Golf and Country Club in Camarillo, Calif.

He also headed the Villas and Golf Club at Grand Cypress Resort, managed the Melrose

Club on Daufuskie Island, S.C., and oversaw Sherwood Country Club in Thousand Oaks, Calif.

A native of Saginaw, Mich., Barnard held marketing positions at Boca Raton Resort and Club as well as at Grand Cypress Resort in Florida. He was also part of the preopening management team at Opryland Hotel in Nashville, Tenn.

What do these two things have in common?



- A.** They're both round
- B.** Both are made in the U.S.A.
- C.** The more you have, the more cents it makes
- D.** All of the above

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TPC track likely for San Antonio

SAN ANTONIO, Texas — The PGA Tour has asked La Cantera Development Company to add a few more holes to its existing course and consider building a Tournament Players Club (TPC) track.

La Cantera Golf Club hosts and sponsors the Texas Open, an annual PGA Tour event.

According to the *San Antonio Express-News*, the PGA Tour wants to alleviate the long walks and noise associated with the fifth, sixth, seventh, eighth and ninth holes by building additional holes on the south end of La Cantera. The fifth through ninth holes sit along La Cantera Parkway and the seventh overlooks "The Rattler" roller coaster at Six Flags Fiesta Texas amusement park.

The Tour also reportedly wants La Cantera to explore the possibility of building a new TPC course adjacent to the existing course. TPC courses are owned, operated or licensed by a subsidiary of the PGA Tour and designed by Tour members in consultation with established architects.

If a TPC course were built at La Cantera, it would most likely become the new site of the Texas Open and insure the event would stay in San Antonio.

NH FACILITY MAY ADD NINE

FRANKLIN, N.H. — The new owners of Mojolaki Country Club are considering a nine-hole expansion to the original Wayne Stiles design. Gil Lambert bought Mojolaki for \$800,000 in early January. Lambert said he will begin renovations to the clubhouse immediately and undertake a feasibility study for the nine-hole expansion.

Newman, preservationists want to buy Conn. course land

EASTON, Conn. (AP) — Paul Newman is donating \$500,000 to help preserve land that developers want to turn into a golf course.

The actor, who lives in the neighboring town of Westport, said the money would come from proceeds of his Newman's Own food products.

At issue is a 740-acre tract owned by BHC Co., a water utility. National Fairways Inc.

wants to buy the land and turn it into an 18-hole golf course and 103 luxury condominiums.

"I've hiked this land," Newman told the Planning and Zoning Commission on Jan. 5. "I think the developers are being very shortsighted. Fifty years from now, the people who worked to save this land will be remembered as heroes."

Do-it-yourselfers receive plaudits for Conn. layout

PUTNAM, Conn. — Chalk one up for the do-it-yourself golf course construction industry.

Mike and Sally Donovan, both casual golfers with no experience or background in golf course design or construction, built the 18-hole Putnam County Club in rural eastern Connecticut on a \$1.5 million budget.

The course, with many stand-alone holes ringed with trees, bunkers and ponds, has received high marks from area golfers following the opening of the back nine last July. One National Golf Foundation official called the Donovan's creation "extraordinary."

Mike Donovan, who was a landscaper at the time they launched the project five years ago, convinced his wife to build and operate a golf course after the two of them struggled to find tee times at other local courses. The couple had also been discussing starting some kind of sideline business, but their thinking had been more along the lines of a crafts center or catering business.

But, after finding a 200-plus acre site in Putnam, where Sally Donovan grew up, along with a house, the Donovans were on their way in the golf course business. For five years, they worked up to 16 hours a day operating bulldozers, backhoes and excavators to clear and shape a heavily forested woodland area. They also had help from the extended family. The front nine opened in 1995.

The Donovans, who lived four miles from the course when they began building it, now live in a house they built off the eighth green.

Pine Valley to get public neighbor

PINE HILL, N.J. — There may soon be another world-famous course in New Jersey with a two-word name starting in Pine. The difference is this one will be public.

In what should be one of the more highly-anticipated projects in the New York-Philadelphia corridor, developer Eric Bergstol is moving ahead with plans to build

an upscale, daily-fee 18-hole course designed by Tom Fazio in the same neighborhood as the ultra-exclusive Pine Valley. It will be called Pine Hill Golf Club.

Along with what is being described as a "world-class" golf course, Pine Hill will also offer a hilltop clubhouse offering views of the Philadelphia skyline.

HERE.THERE. EVERYWHERE.

HOW'S THAT FOR APPLICATION GUIDELINES?



Bates redesigns Fla.'s Boca Resort Course

By MARK LESLIE

BOCA RATON, Fla. — There was so little left of the William Flynn design at the Boca Resort Course here that when architect Gene Bates remodeled the 70-year-old layout, little was said about "maintaining the integrity" of a classic design. The name was the only thing that remained

the same with the Dec. 17 re-opening, according to Bates.

"There is not one aspect of the old course that's still there," Bates said. "We rerouted it and built a new course. It had some age to it and its interest level was mediocre."

"It needed a physical and mechanical facelift as well as pizzazz."

Situated at Boca Resort and Club, the course was designed by Flynn in 1926. But it underwent numerous modifications over the years.

When Miami Dolphins and Florida Marlins owner Wayne Huizenga bought the property recently, he gave Boca Resort President Michael Glennly the

go-ahead "to add sizzle to the property," Bates said.

With the decision came \$5.5 million to carry it out.

Construction crews created waterfalls and natural-looking streams out of kokina rock. They transplanted 110 large live oak and ficus trees onto the course, using a 70-ton crane to move several and two 50-ton cranes to relocate one of the huge trees.

Bates transformed the relatively flat property, adding elevation changes that now reach 40 feet.

Central to the design is Mt. Boca, a 20-acre mini-mountain built in the middle of the property using soil from dug-out lakes.

"We have tees playing off the top of it [Mt. Boca], two greens that play up into it, and two holes that turn off of it," Bates said.

Despite sitting on only 95 acres, he said: "We created mounding so you can't see people on other fairways. It's like you're in your own little world."

Bates built "unique modified Mackenzie-style bunkering featuring a lot of fingers and flashes," he said. "The sand really shows up well."

The new par-71 layout plays from 4,600 to 6,200 yards over four sets of tees.

"The pros who played at the re-opening were surprised at its resistance to scoring at that yardage," Bates said.

He said the new Champion Bermudagrass was used on the greens, and after an average of 60 days of grow-in, "every one of them putted extremely true and looked really mature," he said.

Crown Golf built the course — a fitting decision since patriarch Lester Crown's father-in-law owned the property in the 1940s and '50s.

Boca Resort and Club also owns Boca Country Club, located on waterfront property about a mile west from the resort.

Redstone plans new Houston facilities

HOUSTON — The Redstone Group of Houston is planning a new, \$20 million, master-planned community with two courses on a 613-acre portion of Josey Ranch in northwest Harris County.

Jacobsen/Hardy Golf Course Design has been selected to design the daily-fee courses. Described as upscale, the courses will be set into mature trees and wind around existing Cypress Creek. Construction on both courses and the first 100 building lots will begin this spring.

Routing plans for the courses are complete. Landscaping will feature perimeter horse fencing with stone columns and a high-profile entrance in the form of a to-be refurbished grain silo.

Redstone, which owns the four-star, four-diamond Houstonian Hotel, Club & Spa in Houston, expects to break ground on an additional project early next year. The company owns 460 acres in Ft. Bend County with plans to develop a private club with two 18-hole Rees Jones-designed courses.



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West Palm track names new director

WEST PALM BEACH, Fla. — Ibis Golf & Country Club has named Mike Reynolds its new director of golf. Reynolds will be responsible for overseeing the short- and long-term development of golf operations.

For the past decade, Reynolds has been head professional for Wheatley Hills Country Club on the north shore of Long Island in East Williston, N.Y. Prior to that he worked for six years at two Palm Beach County (Fla.) golf clubs. Reynolds also worked in Puerto Rico and the Virgin Islands.

Ibis is owned and managed by the joint venture of Gale, Wentworth & Dillon, a full-service real-estate firm headquartered in New Jersey, and The Blackstone Group, a privately held merchant bank headquartered in New York City.

Bradenton links open for play

BRADENTON, Fla. — The Links at Greenfield Plantation, Manatee County's newest 18-hole course, has just opened for play.

The 6,709-yard daily-fee layout was designed by Chip Powell. Each hole features four sets of tees and a full-service clubhouse was scheduled to be finished by February. Prince Construction Co. of Palmetto, Fla., handled course construction.

Greenfield Plantation is a housing development that includes 211 homes in the first phase and up to 600 additional sites later. The project is being developed by Bradenton businessmen Dick Turner and Lloyd Williams.

CENTRAL FLA. COURSES HELP FINANCE EFFLUENT PIPELINE

HAINES CITY, Fla. — The Diamondback Golf and Country Club and Grenelefe Resort's golf courses will be part of a \$1 million project to develop a five-mile pipeline to provide effluent water to the courses. The project is expected to take 16 months to complete and the cost will be split between the courses and the Southwest Florida Water Management District. The new line is part of an ongoing effort to reduce reliance on the local aquifer.

Suburban Boston landfill to become the home of new golf facility

QUINCY, Mass. — Thanks to millions of cubic yards of dirt from the Big Dig roadway and tunnel project in downtown Boston, a former landfill site in nearby Quincy will be transformed into a public recreation facility featuring an 18-hole championship course and driving range.

The city of Quincy and Quarry

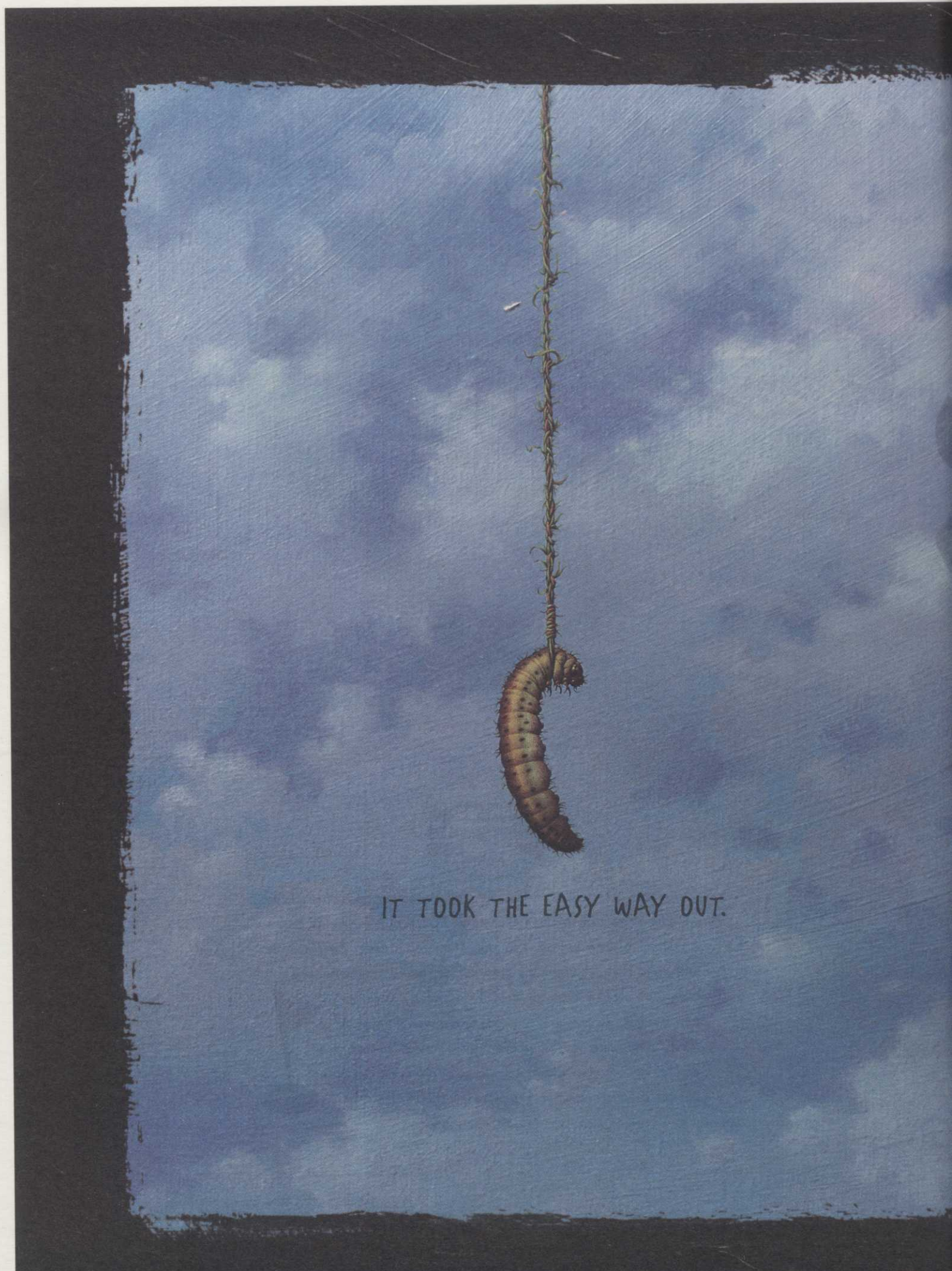
Hills Associates, the developers of the course, have reached an agreement with officials of the Central Artery-Tunnel project to take at least 4 million cubic yards of excavated Big Dig dirt onto the 350-acre former landfill site. The developers will use the dirt to contour the course, driving range, hiking trails, ball fields and clubhouse.

The city of Quincy will receive a \$12 per cubic yard tipping fee which will be handed over to the developers and essentially finance the entire project.

To cope with the massive influx of fill, a new exit ramp off Interstate 93 has been built to provide direct access to the dumping site. And the arrangement comes just

in time. Huge piles of clay, glacial till and old fill have been growing in a holding area in South Boston that was nearing capacity.

Meanwhile, Quarry Hills Associates and the city of Quincy are talking with the neighboring town of Milton to acquire adjacent land that would allow developers to build a 27-hole course.



IT TOOK THE EASY WAY OUT.

NGF finds 'Riverside' to be most popular course name

Pine Valley, which has been around since 1919 and annually sits high atop the list of 100 greatest golf courses in the United States, is one of the most venerable names in golf.

Little wonder, perhaps, why 12 other courses across the country bear the same name as the famed Clementon, N.J., venue.

However, according to a computer search of the National Golf Foundation's (NGF) database of 14,500 golf facilities in the U.S., Pine Valley is far from the most popular name in golf.

This distinction belongs to the name Riverside, which appears in various forms no less than 46 times within the NGF facility database.

The oldest member of the Riverside group is Riverside Golf Club in North Riverside, Ill., an 18-hole private club that opened for play in 1893. The most recent addition is Riverside Golf Academy, a nine-hole public course in Indianapolis, that opened its doors just this year.

The great state of Texas is

especially partial to the name. There you'll find six Riversides... including three Riverside Golf Courses as well as a Riverside Club, Riverside Country Club and a Riverside Golf Club.

A look at other names on this list reflects the affinity golf course developers have long had for water, especially lakes... as in Lakeview, Lakeside, Lake-wood and Twin Lakes.

Curious as to whether other names might be proving more popular among today's newer courses, we asked the computer to search the database and look at only those that had come online over the last 20 years.

Interestingly, neither Riverside nor anything having connection with a lake was among even the top 50 on this list. It instead shows that the trend among today's newer courses is very definitely toward names that conjure up the likes of meadows, plantations, hill, prairies and creeks.

Also, the search revealed that only one of the 13 Pine Valleys in operation across the U.S. today has been built over the past 20 years. Among the others on the list of facilities sharing famous names; Colonial [11], St. Andrews [9], Oak Hill [9], Riviera [6], Inverness [6], Southern Hills [5], Cherry Hills [5], Oakmont [3], Oakland Hills [3] and Oak Tree [3].

...

The preceding article appeared in the November/December issue of Golf Market Today and is reprinted with permission of the National Golf Foundation of Jupiter, Fla.

Renovated Palm Aire hosts Nike

POMPANO BEACH, Fla. — The Palm-Aire Country Club & Resort showcased its renovated Palms Course during the Nike Tour stop last month.

Palm-Aire Resort Management Corp., which purchased the 90-hole Palm-Aire facility in late 1994, invested \$4 million in the Palms Course makeover. The Palms Course, one of four 18-hole championship courses at Palm-Aire along with an 18-hole executive course, was originally designed by golf course architect William Mitchell in 1960.

Palm-Aire Resort Management is also planning to invest \$3 million in refurbishing the Oaks Course this year. The Oaks Course was designed by Tom and George Fazio. Tom Fazio will be consulted on changes. The Oaks is scheduled for completion in 1999.

LINKSCORP PURCHASES SOUTH CAROLINA FACILITY

NORTHFIELD, Ill. — LinksCorp, Inc. has purchased Hunter's Creek Plantation Club. A semi-private club located in Greenwood, S.C. — 45 miles south of Greenville — Hunter's Creek features 27 holes designed by Greenville-based golf course architect Tom Jackson. LinksCorp is a golf course management company based in suburban Chicago.

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Pre-show notes, facts and dispelled rumors

I would first like to extinguish the rumor that John Deere will be announcing their first golf car on the floor of GCSAA's 69th International Golf Course Conference and Show. Our sources at Deere tell us that it's just not happening — yet.

• Second, the early word from the National Golf Foundation (NGF) is that another 429 golf courses opened (that's including expansions) in 1997, making it the third year in a row the number has gone over the 400 mark — and it doesn't look as if that number is going to dwindle any time soon.

There are, at this time, 932 courses currently under construction, more than any other year since the NGF has been keeping these records. And since, historically, two-thirds of the courses under construction come online the following year ... well, you do the math.

To keep this boom rolling into the millennium — which it just might do anyway — the industry must be concerned about budging the stagnant player participation numbers. The time seems to be right. With the baby bomber market getting older and the predicted glut of young and eager Tiger Wood's fans, we may finally see movement in those numbers if affordable golf and targeted learning and teaching programs become the norm. If that happens, well, keep your eyes peeled for a nice, inexpensive 140-acre plot.

• The UK government has cleared Textron's acquisition of Ransomes. According to wire sources, Secretary of State for Trade and Industry Margaret Beckett said she has decided not to refer the proposed acquisition by Textron of Ransomes to the Monopolies and Mergers Commission — meaning that the governmental hang ups that Ransomes Chief Executive Officer Peter Wilson spoke of last month (see *GCN*, January, 1998) are of little concern at this point.

According to Ransomes, the new shareholder vote date was scheduled for January 27, which is, unfortunately, eight days past our February deadline. So if your reading this editorial on the show the GCSAA show floor, you may want to do a little investigative reporting yourself at the Ransomes booth. From our report in *GCN* January (page 67), the probable deal is looked upon quite favorably by both Ransomes and Jake distributors.

• If you are, in fact, walking the show floor or taking a much needed break at GCSAA, you may want to take a deep breath and another bite of nourishment. Create an agenda. What do you want to take back home with you? Don't get crushed in the sensory overload.

• Required reading this month is at the bottom of this page. Ron Fream's guest commentary on the state of the golf industry in Asia gives *GCN* readers a solid overview of the economic crisis and its effect on golf. Very few people have as much experience in the Asian market than Fream, and we thank him for taking the time to piece together his thoughts.



Michael Levans,
editor

Builder's awards offers compelling look inside the industry

Accolades. We all love them. Too often they are not uttered until the funeral. *Old Farmer's Almanac* publisher and Geiger Bros. owner Ray Geiger, knowing he was about to die, held his own wake before he passed on a few years ago so that he could hear all the nice things people had to say about him.

Well, few of us can, could, or would do such a thing. And so it was fascinating, instructive and downright uplifting to receive so many unsolicited testimonials in the last month about the golf course builders who had been nominated for *GCN*'s annual Best Golf Course Builder and Best Small Golf Course Builder awards.

It presented a compelling look, in fact, at the people in this industry — at both ends. First, there are the golf course builders whose livelihood depends on how well they do their job and please their clients. At the other end are the clients — developers, course architects and superintendents — who would go out of their way to tell us how impressed they are with a certain builder.

At the risk of sounding too kissy and mushy, and even like an outright "homer" for the golf course construction industry, I gotta say: I'm impressed.

Here's course designer Dana Fry's handwriting: "The best things about Niebur Golf are the quality of job superintendents and shapers. They are as good as it gets in this business. They also have what I believe to be the most important thing in any business, and that is a good leader in Joe Niebur. When he tells you something it is not an empty promise. He gets the job done right, and he is a great person to work with."

Here's BocaWest Country Club President and General Manager Jay DiPietro saying: "Simply put, Ryan Golf [of Florida] exceeded our expectations in each of the categories listed on your questionnaire. After making a few notes prior to compose this letter, I thought to myself, 'Who would believe this; it sounds too good.' But the fact remains that Ryan Golf deserves the highest marks for each category."

Here's York Downs Golf & Country Club General Manager Leo A. W. Blindenbach saying of Turf Drain, Inc.: "The professionalism shown by [President] Geoff Corlett and his crew was beyond the call of duty. The members are thrilled with the results and the incredibly small amount of inconvenience caused by such a major overhaul."

Here's architect Jim Engh saying of RBI Golf: "These guys did a phenomenal job on a tough project [Red Hawk Golf Course in Castle Rock, Colo.]."

Unsolicited comments, all. And these companies **did not win**.

This is a testimonial for the industry, methinks. By and large, and especially compared to other industries, the back-biting is rare; the teeth-clenching is minimal; and seething rhetoric is usually reserved for those outside the industry.

Dost I flatter too much? Well, perhaps. But sometimes flattery is true.

• One of my favorite comments came from Lester George of Colonial Golf Design about Best Small Builder winner Quality Grassing & Services.

"Their renovation work is particularly excellent," he told me. "They're so surgical and they mess up so little."

"Surgical?" I laughed.

"Anybody can lop off an arm," George said, "but these guys can do delicate facial stuff."



Mark Leslie,
managing editor

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GUEST COMMENTARY: OVERVIEW OF THE ASIAN ECONOMIC CRISIS

Golf in Asia: Near-term hardship, long-term benefit

By RON FREAM

The press, television and radio have been full of stories discussing Asian economic turmoil, which came to a head in Bangkok in mid-1997. Over the past six months, around the region, country by country, Asia has suffered varying degrees of economic instability. Predictions are dire for the near term in numerous countries. But what are the implications for golf course development and golf in Asia during this period of eco-

conomic instability?

The situation we have now actually began to appear several years ago. The following is a quick survey of how we got to where we are today:

Thailand began experiencing a real estate and golf membership sales slow-down about three years ago. Real estate sales around golf in Malaysia began slowing several years ago. Membership sales also began softening several years ago due to over supply. Membership values quit escalating across Japan more than four years ago.

In China, real estate sales around golf have been declining or marginal for perhaps two years. Home sales on golf

courses really have not taken off in China. Membership sales have slowed. Across Asia, the decade-long speculative rise in club membership prices also was in decline before the Thai Central Bank imploded.

In Indonesia, the large population and expansion of the middle class helped buoy the demand for membership golf. The international tourism market has been supportive of some resort development as well. India has been in political and associated economic disarray for nearly two years while golf development has been sporadic and poorly implemented in most cases to date.

In Taiwan, population demand

pressure and limited supply helped support existing courses. Land acquisition and site limitation difficulties have been holding back golf development there. Korean instability is of recent origin, surely helped by the onrush of expanding economic disarray elsewhere. Membership sales will slow. Membership values will drop, at least in the near term.

Manila has pent-up demand for residential housing and golf. A relatively soft readjustment in the Philippines economy should help to support the demand. However, access to loans for property development and real estate purchase, or golf membership purchase, is tightening. Existing courses are seeing good volumes of play.

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You've got Poa on 3.



Summer Patch on 7, 8 and 9.



Crabgrass on 6.

**You may be
managing
your course
one problem
at a time.**



Fire Ants on 8.



Turf Stress on the back 9.



Pythium on 13, 16, 17 and 18.



And a Board Member on the first tee.



Pythium
Yellow Tuff



Dollar Spot
Summer Patch
Anthracnose



Crabgrass

At Novartis, we're committed to continually bring you innovative products. And now we'd like to introduce an entire series of products — the Novartis Total Turf Program.

Finally, all the tools you need to manage your course from tee to green and all season long can be found in one total program.

Primo®. The ultimate foundation for turf.

The Novartis Total Turf Program begins with Primo for Pre-Stress Conditioning. That's because extensive testing has proven that treating with Primo is the best way to prepare a golf course and strengthen turf in advance to cope with extreme conditions such as drought, heat and disease, that make up a typical season.

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Simply put, Barricade is the longest-lasting and best-performing preemergence herbicide for the control of Crabgrass, Goosegrass and Poa Annua. That's because Barricade has low solubility and volatility, meaning it stays where you put it in the weed germination zone.

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Finally, a disease management program that lasts all season long.

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We combine even more protection.

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Poa Annua
Goosegrass



Dollar Spot
Summer Patch
Anthracnose



Pythium
Yellow Tuft



THOROUGH WAY TO PROTECT YOUR COURSE.



Fairway
Brown Patch



Oak Wilt
Dutch Elm Disease



Fire Ant Control



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unmatched aeration capabilities, unlike high speed motors that sacrifice operating efficiency and aeration capability.



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Otterbine is the leader in the science of aeration. Read what we've learned in 40 years as the market leader in aeration – ask for your free copy of "Pond & Lake Management." It's a guide to help you make the right decisions on aerator sizing, placement, and the scientific reasons behind those recommendations.

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After a successful start, let's continue our cooperation

By CAROL BROWNER

Enjoyment of outdoor experiences is one of the primary reasons so many Americans place high priority on protecting the environment. For more than 14 million Americans, golf provides this kind of enjoyment — and a

solid connection to preserving and enhancing environmental quality.

What else would one expect from an activity whose goal is literally, "The Green?"

For that reason,

it is important for us to remember that the U.S. Environmental Protection Agency and the golfing community share the goal of a beautiful and healthy outdoors.

This message of cooperation and understanding is one that I conveyed three years ago, when I first wrote in *Golf Course News*. Since that time, I am proud to say that, working together, we have made a great deal of progress on our joint mission to build stronger ties, and to make them work for the benefit of both golfers and the public at large.

Let me recap some of our proudest joint accomplishments:

- The Golf Course Superintendents Association of America (GCSAA) signed on as a full partner to the EPA Pesticide Environmental Stewardship Program (PESP), while the U.S. Golf Association has become a supporting partner. GCSAA has developed a pesticide safety training course for members under a grant from PESP.

- With GCSAA's support, EPA has launched a program of fast-track registration of reduced-risk pesticides. This program is already paying off for all parties by reducing environmental risks and product development costs for registrants and making new pesticides available for users.

- Three years ago, EPA joined with environmental and golfing organizations to convene the first-ever Golf Environment Summit Conference, which was held at Pebble Beach. This commitment continued through to the following year, when a second conference was held at Pinehurst. Those conferences produced an excellent

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Carol Browner is administrator of the U.S. Environmental Protection Agency.

Photo courtesy of Audubon International



Wildlife Links begins to bear fruit

By JOHN TORSIELLO

WASHINGTON, D.C. — The firstfruits of the 3-year-old Wildlife Links program are expected this year, according to the National Fish and Wildlife Foundation, which has undertaken the program for the United States Golf Association (USGA).

Established to fund research, management and education projects to provide information on wildlife management issues on and around golf courses,

Wildlife Links is funding several ongoing studies, including preparation of manuals on bird conservation and wetlands management for golf courses, both of which are due out this year.

Meanwhile, progress is reported on a study on amphibian conservation on golf courses; restoration of pollinator habitat on and around golf courses; and a managed lands database project.

"We were funded \$100,000 by the

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Turfgrass info goes on-line

Latest NTEP study findings on site

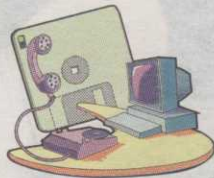
By MARK LESLIE

BELTSVILLE, Md. — No longer will golf course superintendents need to wait month on end to see progress reports on turfgrass tests from the National Turfgrass Evaluation Program (NTEP).

NTEP is on-line, with its own home page: www.ntep.org/ntep OR hort.unl.edu/ntep.

"It makes sense that we allow people easy access to the information we have," said NTEP National Director Kevin Morris from his office here. "We can post updates, corrections, etc. much quicker than in print. It is a way to circulate information accurately and quickly."

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Michigan State's TIC full of data

The Turfgrass Information Center (TIC) at Michigan State University has announced the

global debut of the Turfgrass Information File (TGIF) database online through the World Wide Web. The continuing 10 year project to provide access to turfgrass research online is now fully available through almost any computer and features easy search capability and convenient access. Over 40,000 items are searchable using more than 300,000 keywords.

For full details about TIC and TGIF, Turfgrass Information Center homepage on the Web is at:

<http://www.lib.msu.edu/tgif>.

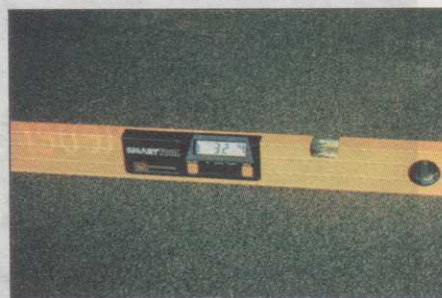
Continued on page 21

Gadgets can make jobs more efficient

By MARK LESLIE

EDWARDS, Colo. — Some of the most effective tools for golf course superintendents are found, not at the turf equipment supplier's, but at your friendly neighborhood electronics and hardware stores.

Kevin Ross, the Country Club (CC) of the Rockies superintendent who has gained a reputation for innovations that solve problems on the golf course, told a Public Golf Forum audience they can save time — and anxiety — with a few purchases from this unlikely source. Among



The Smart Level at work.

the items, he numbered:

- The Smart Tool, which measures slope.
- The Pocket Secretary voice organizer.

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GOLF & THE ENVIRONMENT

On being a conservator

By RON DODSON

The word "conservation" has a thrifty meaning. To conserve is to save and to protect, to leave what we ourselves enjoy in such good condition that others may also share the enjoyment. It is an expression of good manners to nature and to our fellow citizens, including those generations that have not yet been born. Why shouldn't that politeness extend beyond our own parents and offspring to our great-great grandchildren?

Only a little more than 300 years ago, the whole North American continent had been little altered by human activities. It was a temperate-zone Garden of Eden, the last of the sort that existed on earth. In the forested parts of what is now the United States, trees not only covered the ground, but they also grew to their greatest size and then continued to live until storms or lightning overthrew them, or until they died of old age. Other areas of the continent were carpeted with long prairie grasses, which served, like the forest and its undergrowth, to bind the soil and thus prevent it from being washed away by rainfall

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Taking advantage of GIS & GPS

By KEVIN P. CORBLEY

LAKEWOOD, Colo. — What good is a computerized map of a golf course, anyway?

"Ninety-five percent of golf course maps are no good at all because they're paper and they're out of date," said Larry Rodgers, president of Larry Rodgers Design here.

Computerized digital maps, on the other hand, are accurate, easy to update and gaining wider acceptance every day among golf course superintendents.

People are finding new uses for them in maintenance, construction and daily operations at courses around the country.

Digital maps would have found their way into course superinten-

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Wildlife Links program's firstfruits coming

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USGA each of the first two years of the program and we moved up to \$200,000 for 1998. I guess Tiger Woods has helped us out," foundation spokesman Katie Distler said with a chuckle.

The non-profit foundation, devoted to the conservation of natural resources, has recommended that a study on the impact of pesticides and nutrients on ponds, streams and lakes associated with golf courses be funded in 1998. It will also recommend two additional projects this year, Distler said.

"The USGA has realized that the amount of land they are involved with is significant and that there are environmentally sensitive issues such as the effect pesticide and fertilizers have on runoff water. Wildlife Links goes one step beyond the USGA's Audubon Cooperative Sanctuary program. That program is excellent, but Wildlife Links is designed to supply specific information to be used at the ground level by management at existing courses and at those that will be built in order to protect the environment."

"For years," Distler said, "there wasn't much interaction between golf course managers and the environmental community — until this. These studies will answer questions that people have been grumbling about for years."

For instance, she observed, the study on amphibian conservation on golf courses has involved construction of six experimental wetlands, 70 to 120 yards into the rough along the 15th fairway of a course under construction in the Baltimore, Md., area. Researchers will study the effect golf course chemicals have on tadpoles and frogs in the ponds. Frogs, because of their permeable skin, are especially susceptible to even the slightest environmental disturbance.

It is believed the study will lead to new pond design and knowledge about the overall effect of herbicides, insecticides and fungicides on the golf course environment.

Distler said a wetlands management manual, to be published this year, will not only be useful for golf course superintendents but for other land-use managers as well.

Dr. Kimberly Erusha, director of education for the USGA, said the Wildlife Links program is "an extension of our efforts to reach out to other groups and our long-standing commitment to the environment."

"There are obvious concerns with pesticide and other chemical applications on golf courses and we need to study how those things affect wildlife," she said. "I think everyone will be able to

benefit from the findings of these studies."

Under the Wildlife Links program an advisory panel of experts representing federal and state agencies, conservation organizations and universities defines research priorities, reviews proposals from researchers and monitors and evaluates approved projects. Projects tabbed for priority are

those that will determine how golf courses can be maintained as "biologically productive sites," and those that will produce recommendations regarding wildlife issues that can be incorporated into long-term management strategies and golfer education.

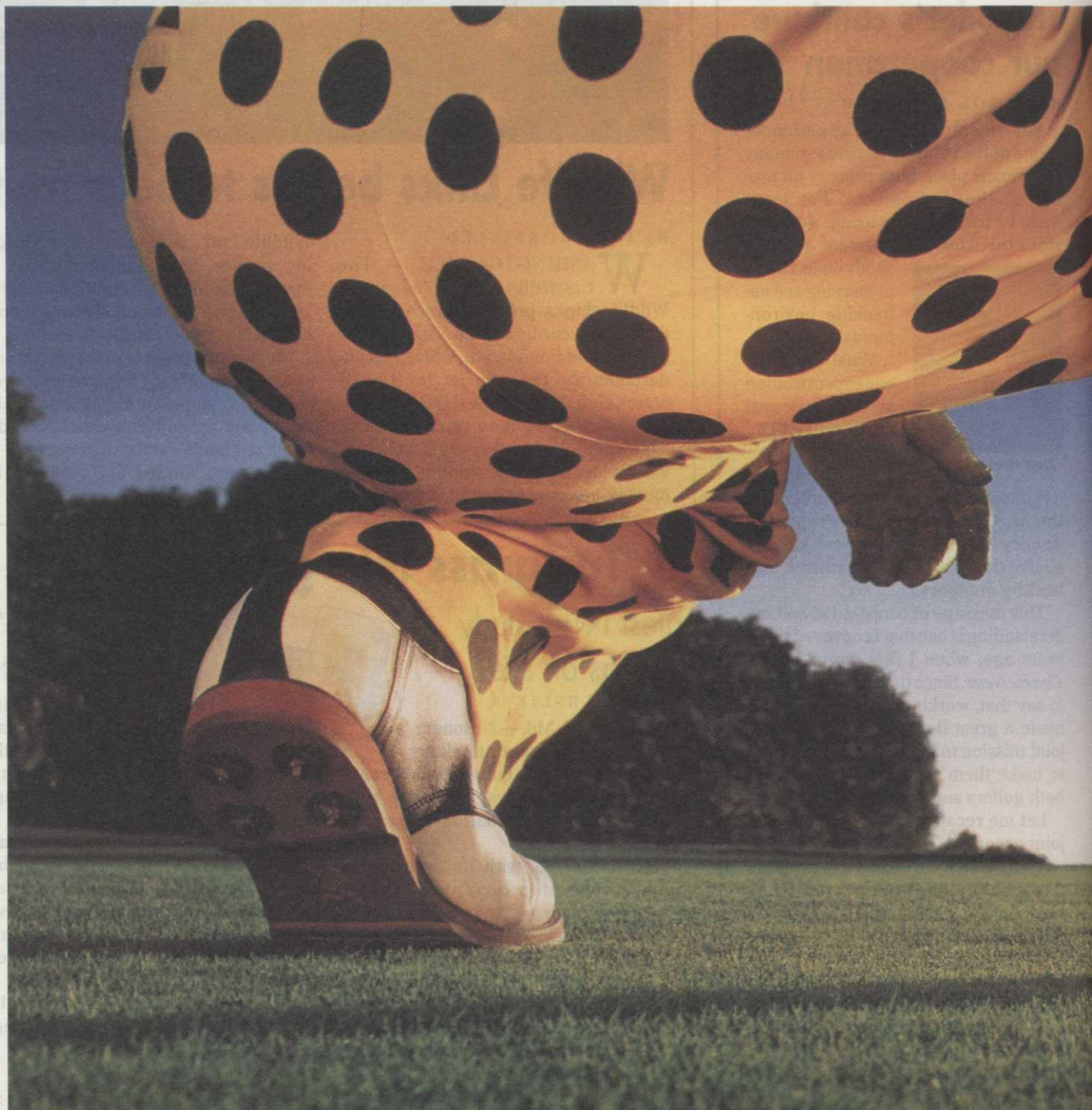
The USGA makes the final decision on what programs will receive funding. Dr. Peter

Stangel, director of the neotropical migratory bird and conservation initiative for the National Fish and Wildlife Foundation, chairs the panel.

"We are truly excited," said Distler of the foundation's partnership with golf. "The USGA is totally committed to Wildlife Links and we feel like we are going to be able to get the very best programs out there because of that commitment."

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— Katie Distler
Nat'l Fish & Wildlife
Foundation



We never said you wouldn't see unattractive spots on your course. They just won't be dollar spots.

NTEP on the Net

Continued from page 19

The mainstay of the web site will be current progress reports, containing each of the many tables on bentgrass, ryegrass, bluegrass, fescues, zoysiagrass, St. Augustine grass and the other turfs being tested around the country by NTEP.

"Also, we wanted a place for people to get other information

about us — our mission and what we're doing — and a way to correspond with us easily, to offer suggestions and constructive criticism, and other items of interest," Morris said.

NTEP's newsletter will also be posted on the site, along with a links section to connect readers to related web pages. "We're still building the links section," Morris said. "It includes a directory of seed companies and the

grasses they sponsor. That has developed from the turfgrass variety list we have published for years. It allows you to pick a species and see all the varieties available in it and the companies that sponsor those varieties.

"We're looking for ideas on how we can make it more useful, and hope for input from readers. We're considering a database."

TGIF data on-line

Continued from page 19

Initially a cooperative project of the USGA Turfgrass Research Program and the Michigan State University Libraries, TGIF was intended to provide online access to all published materials reporting on aspects of turfgrass and its maintenance. TGIF has grown steadily in size and accessibility, beginning with dial-up

modem access in 1988 and Internet (Telnet) access in 1993. TGIF content is based primarily on the O.J. Noer Memorial Turfgrass Collection at the Michigan State University Libraries. Online content and services will be added steadily to the website.

Some sections will be "public," while others, including full access to TGIF itself, will be available to subscribers only.

Conservators

Continued from page 19

and streams to be lost in the oceans. The running waters were kept under control by this cover of vegetation and by the spongy humus in the ground, so that droughts and floods affected them much less than they do today. And clear, instead of muddy, water furnished the suitable home for huge numbers of trout and other fresh water animals.

The extraordinary richness of the North American plant life in field, woodland, and river valley was unequalled in any other temperate part of the world and the abundance of animal life matched that of the vegetation. The accounts of all the earlier discoverers and travelers are filled with wonder at the richness of food resources in the oceans, the hoards of wild fowl, fur-bearers, deer and many other kinds of beautiful and useful animals that flourished everywhere in this New World.

As stewards of our much altered landscape, each of us carries a responsibility. Human beings are part of our living environment, and play a consumptive role. In order to sustain ourselves economically and environmentally as the population grows and our natural resources dwindle, a "conservation ethic" must be renewed. Not an "anti-everything ethic," but a realization that the very systems that we are polluting and using up are the systems we depend upon for our lives.

Some people would lead you to believe it is impossible to have jobs and a clean environment — that human actions are inherently bad for the environment and that all of our actions create a negative impact on the environment. But that simply allows us to duck the responsibility for our own actions. We can do our jobs — on the course, at home, at schools, and in and around office buildings.

The simplest activities can reduce our own environmental impact. All you have to remember is the word "conservation" — to not be wasteful and to be aware of how each of our daily activities impacts the world around us and the people around us. And to be aware that what we do in our life is more important than we sometimes think, not only those closest to us, but as a legacy to those yet to come.



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design dictates. Change orders and project re-bids are reduced to less than one percent. "Contractors do much more exacting work because the guessing and interpretation of blueprints are eliminated," said Rodgers. "With the design map in the GIS, the GPS can find a contractor or maintenance worker directly to any specific head location on the course."

MAINTENANCE MAPS USED FOR MAINTENANCE AND OPERATIONS

When Rodgers first started using GPS and GIS, he only mapped those features relating to irrigation. But after he began leaving the maps behind as a courtesy to his clients, they started asking him to map trees, bushes, cart paths, utility equipment and property boundaries.

Although only a small percentage of golf courses have full-scale GIS software, a growing number have AutoCAD or other digital viewing software with database capability. They immediately saw the value of the maps and database.

One of the most common uses of the GIS maps is to manage the trees, bushes and turf. Course managers are storing information about when each bush was planted, what fertilizer should be applied to each tree, and what pesticide has been applied to the grass that year.

"They are saving money by making their chemical applications much more efficient," said Rodgers. "And with the push of a few buttons, the superintendent can print out exact totals of pesticide applications to provide the EPA in accordance with government regulations."

Many superintendents are printing out hard copy maps to give to their grounds crew so they know exactly which areas to trim, signs to repair and irrigation system components to service. Some are even using the digital maps to arrange the layout of grasslands, retaining ropes and concession stands during tournaments.

"Of all the current digital mapping tools, the most important is the GPS receiver. It can locate a specific point on a course by viewing a large GIS course in real-time," said Rodgers. "It's like having a map that can find a specific point on a course in real-time."

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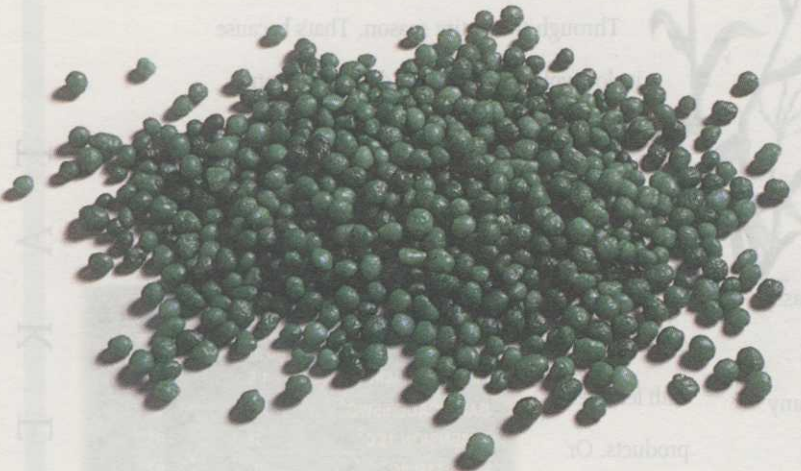
need the estimate because the design is so exact thanks to the accuracy of the GIS map upon which the design is made," said Rodgers. And, perhaps more importantly, mistakes in the field are drastically reduced. Construction contractors can use the same GPS and GIS equipment to go back to the field and lay the pipes and place the sprinkler heads precisely where the

ing position points and attribute information for all features to be mapped. They are stored in a GIS database via pen-top computer in the field and then transferred to AutoCAD back at Rodgers' office where the irrigation design takes place. Once the system is designed in AutoCAD, Rodgers creates the construction document and sends it out for bids. "The project bids seldom ex-

To lay in an irrigation system, we have to know exactly where the turf is—all the fairways, greens and tees—as well as the water hazards and bunkers. We had to find a way to map these ourselves or rely on outdated blueprints. At the outset of a project, Rodgers' crew takes about three days to walk the course with a portable GPS receiver, collect-

den's office sooner or later, Rodgers said. But what brought GPS and GIS mapping technology to his attention was the efficiency and quality they could provide his irrigation design business. He has been using these cutting-edge techniques for over a year on all design projects at new and existing courses.

CRABGRASS



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If crabgrass is a growing problem on your turf, you're not using the right herbicide. What you need is Pendimethalin. No other pre-emergent offers a broader spectrum of control. Fact is, this high-performance herbicide effectively controls crabgrass, annual grasses, weeds, and many annual broadleaf weeds. And Pendimethalin has excellent soil tolerance. University and field research studies have shown that Pendimethalin provides consistent, superior weed control—yet offers tremendous tolerance to warm- and cool-season turfgrasses.

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Using GIS & GPS

Continued from page 19

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"Contractors do much more exacting work because the guessing and interpretation of blueprints are eliminated," said Rodgers. "With the design map in the GIS, the GPS can lead a contractor or maintenance worker directly to any sprinkler head location on the course."

MAPS USED FOR MAINTENANCE AND OPERATIONS

When Rodgers first started using GPS and GIS, he only mapped those features relating to irrigation. But after he began leaving the maps behind as a courtesy to his clients, they started asking him to map trees, bushes, cart paths, utility equipment and property boundaries.

Although only a small percentage of golf courses have full-scale GIS software, a growing number have AutoCAD or other digital viewing software with database capability. They immediately saw the value of the maps and databases.

One of the most common uses of the GIS maps is to manage the trees, bushes and turf. Course managers are storing information about when each bush was planted, what fertilizer should be applied to each tree, and what pesticide has been applied on the grass that year.

"They are saving money by making their chemical applications much more efficient," said Rodgers. "And with the push of a few buttons, the superintendent can print out exact totals of pesticide applications to provide to the EPA in accordance with government regulations."

Many superintendents are printing out hard copy maps to give to their grounds crews so they know exactly which trees to trim, signs to repair and irrigation system components to service. Some are even using the digital maps to arrange the layout of grandstands, retainer ropes and concession stands during tournaments.

"Of all the current digital mapping applications, the most ingenious may be at Badlands Golf Club, where GPS receivers have been attached to every golf cart. The starter can monitor the progress of play around the course by viewing a large GIS screen showing actual cart locations in real-time," said Rodgers.

"Now that's a practical application."

Next month: The last in this series, will examine future applications of GPS and GIS technologies on golf courses we will see in the coming years.

Kevin Corbley is a Denver-based freelance writer specializing in GIS, GPS and remote sensing. He may be reached at KCorbley@aol.com.

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PRODUCT	Rate (lb ai/A)	% Control 97 DAT	% Control 129 DAT
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PENDIMETHALIN 60WDG	1.5+1.5	98	98
BARRICADE 65WG ^a	0.75	100	100
DIMENSION 1EC ^b	0.5	99	99
TEAM .87 FG ^c	1.5+1.5	88	82

Ohio State University 1996

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which makes the weed seed

PRODUCT	Rate (lb ai/A)	% Control 84 DAT	% Control 154 DAT
PENDIMETHALIN 60WDG	3.0	100	93
PENDIMETHALIN 60WDG	1.5+1.5	100	99
BARRICADE 65WG ^a	0.75	100	95
DIMENSION 1EC ^b	0.5	100	86
RONSTAR 2G ^c	2+2	97	24

Virginia Polytechnic Institute & State University

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^aTM Novartis ^bTM Rohm & Haas Company ^cTM Rhône-Poulenc ^dTM DowElanco

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Stevinson Ranch's Barrett out front on environment

By DOUG SAUNDERS

The 10th hole on the Savannah Course at Stevinson Ranch in California is bordered by a towering stand of cottonwood trees that rise up from a thick tangle of underbrush. From the deep recesses of this 60-acre wetland, the cacophony of countless birds fills the air. As golfers look down the rolling fairway of the 430-yard par-4, their vibrant songs add to the setting. They study the route they want to play, but peer into the wetland hoping to glimpse one of the hundreds of songsters in the bramble. Golf here is more than the course itself, it becomes a grand path through nature.

Stevinson Ranch in California's Central Valley is a new course that not only has made strides to be a great golfing experience, it set out to be a model of environmental excellence. It is one of only five golf courses in the world, and the only one west of the Mississippi River, that has achieved Signature status from Audubon International. This designation is bestowed upon golf projects that from their outset commit to being a sustainable ecosystem that both protects and enhances wildlife habitat and natural resources through its design, maintenance, and management.



Natural waste areas like this are a part of Stevinson Ranch's allure.

Superintendent Roger Barrett has been aboard at Stevinson Ranch since May 1996 and has overseen the evolution of a work in progress.

"The relationship that we have with Audubon International as a Signature course is very unique in that we have implemented various programs from the moment that plans were being prepared for the course," Barrett said. "Throughout the design, care was taken to preserve natural habitat for wildlife, help to maintain migratory patterns for animals, and create mountings and grading that will benefit both irrigation and drainage."



In conjunction with the course design, there are guidelines for the design and construction of all of the infrastructure, including clubhouse, maintenance buildings, storage buildings to make them environmentally safe and energy-efficient. The idea is to minimize the impact to the entire ecosystem that has been created on the property.

For the golf course itself, the design team of architect John Harbottle III and project developer George Kelly wanted to produce a hard, fast playing surface which would emulate the true Scottish links style that highlights a playable surface rather than a wall-to-wall



Roger Barrett and Audubon International President Ron Dodson at Stevinson Ranch.

parkland look. This style lent itself to creating a course that would work well on a plot of land that has a high natural water table because they could limit irrigation use to a minimum.

"This has been an interesting challenge to work on a course where a hard and dry stand of turf is the goal," Barrett said. "We get a lot of heat in the summer and cool, foggy days in winter. At our course a little brown is a good thing, not something to be feared. We are showing many other facilities that you can provide a strong, healthy stand of turf without excessive use of water and chemicals."

Barrett began his career in turf management in 1960 after graduating

Continued on page 26

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Focus on Barrett

Continued from previous page

from the University of Massachusetts. Following short stints at various courses in the region, he worked on the construction of Glastonbury Hills Country Club in Hartford, Conn., in 1965. He remained as superintendent there until he headed west in 1991.

Glastonbury was a traditional parkland course, where a wall-to-wall manicured look was the ideal. Barrett came to Stevinson Ranch as part of the management team of O.B. Sports, which runs the facility and whom he worked for in the Las Vegas area for a time. The concepts at Stevinson presented a new perspective and a refreshing approach to turf management for Barrett.

"The biggest changes has been developing a program that promotes healthy turf that can withstand stress on its own. Here at Stevinson we use two-thirds less chemicals than would be needed on a course [with wall-to-wall coverage]. Our water usage is carefully monitored and determined through need. Through careful daily monitoring of conditions we can be more specific in determining outbreaks of any weed or insect infestations.

"We try to not take any drastic remedies until it is absolutely necessary. This tolerant approach to disease and infestation control is the responsible way to go," Barrett said of his carefully documented IPM program.

Around the golf course, the influence of the Audubon program abounds, both seen and unseen. For example, more than 50 bird houses have been installed to encourage nesting by the 85 species of birds that have been spotted onsite. More houses are added each year as over 80 percent of the houses are now occupied. The course's weather station gauges evaporation rates to help determine how much water is needed to be added each day. The carefully designed irrigation system has more than 1,000 heads that can be individually controlled to deal with trouble spots.

Unseen to the golfer are the subtle influences of the Audubon Signature program guidelines. The four 750-gpm irrigation pumps are energy-efficient variable speed pumps rather than single-speed units.

The maintenance buildings are heavily insulated with double-pane windows to improve both heating and air-conditioning efficiency. All concrete floors in the building are specially sealed to keep

residues and spills from soaking into the surface. Buildings use skylights and quartz lights to cut down electrical usage. Even the grading of parking lots is done in such a way that all runoff can be contained and controlled on site.

"All of these facets of our approach to the management of our facility seem like small items, but they add up to creating a more sustainable

environment that can be a model for other golf facilities," Barrett said.

Barrett manages a crew of 20 in the summer and 15 during the winter. The spacious main building includes individual lockers, shower, and a full kitchen. The neat appearance helps develop a sense of pride in the work force that carries on out to the golf course.

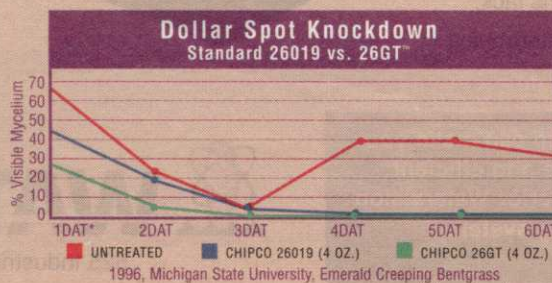
"I have many other superin-

tendents in the state come to Stevinson to see what we are trying to accomplish here," Barrett said. "The direction we have taken to be an environmentally sensitive facility doesn't mean the quality of the course has to suffer. In actuality, we are showing to other courses that careful maintenance can improve the product for the golfer. We have seen the other courses making strides to improve."

In an effort to make the model of Stevinson Ranch more accessible to the general public, Barrett is beginning a program of adding nature trails into some of the course's hundreds of acres of wildlife habitat. The trails will help school groups and individuals enjoy and appreciate the beauty of the site. That appreciation is something that Barrett and Stevinson Ranch hope to nurture for years to come.

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TOUGH TURF DISEASES
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For years, you've relied on CHIPCO® 26019 brand fungicide to deliver the best brown patch and dollar spot control available.



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Rondina elected Engine Assn. head

EXTON, Pa. — The Engine Service Association board of directors has elected Alan Rondina of W.J. Connel Co. in Foxboro, Mass., as president, heading a new slate of officers.

Rondina is joined by Vice President John Billiou of Billiou's Inc. in Porterville, Calif., Secretary Mark Loftin of Loftin Equip-

ment Co. in Phoenix and Treasurer Jim Starmer of Dixie Sales Co. Inc. in Greensboro, N.C.

Elected by the general membership to serve three-year terms as directors of the association were Loftin, Rondina, Dick Clements of Medart Inc. in Fenton, Mo.

The Engine Service Associa-

tion was incorporated in 1970. Its central distributor members provide services to manufacturers, dealers and consumers. Central Warehouse Distributors of Air Cooled gasoline and diesel engines, or equipment utilizing such engines who are interested in membership in the ESA should contact: ESA Headquarters, 210 Allen Drive, Exton, Pa. 19341; telephone 610-363-3844.

Engine Service group offers certification

EXTON, Pa. — The Engine Service Association has announced that its Central Distributor Members is offering OPE Technicians Certification tests the first Thursday of every month through 1998. These national tests days are in addition to a broad range of ongoing test dates and sites offered by the Association's Central Ware-

house Distributor Members in conjunction with their update schools.

OPE Certification tests will be offered in the following disciplines: Four Stroke, Two Stroke, Compact Diesel, Electrical, Drivelines/Hydraulics/Hydrostatics, and Generators.

Test registration forms and a complete list of test dates are available through any Engine Service Association Member (Central Warehouse Distributor) or by calling the Engine Service Association Headquarters.

The Engine Service Association was incorporated in 1970. Through its Central Distributor Members, it is well positioned to provide service to manufacturers, dealers and consumers. Distributors and educational institutions interested in taking a more active role in Technician Certification should contact: ESA Headquarters, 210 Allen Drive, Exton PA 19341, Tel. 610-363-3844, Fax 610-363-3817.

Le Sage given Ilona Gray award

BEDMINSTER, N.J. — Armand H. Le Sage, superintendent of White Beeches Golf & Country club, was presented with the 2nd Annual Ilona Gray Environmental Award from the Alliance for Environmental Concerns (AEC) at the organization's annual meeting here.

The AEC is comprised of individuals from the pesticide-regulated community in New Jersey. The activities of the organization include representing the user community at state regulatory and legislative meetings; educating members concerning certification, training and licensing through their newsletters, seminars and conferences; and networking with allied professionals and product manufacturers to provide factual responses to issues and concerns.

Le Sage has served twice as president of the AEC and has been on its Pesticide Regulation Task Force. He has represented AEC throughout the U.S., at National Alliance meetings. Le Sage is an active member of GCSAA, serving on many committees, currently its Public Relations Committee, and is undergoing training in its Ambassador Public Speaking Program and the GCSAA Audubon Program for Schools. He is also a member of GCSNJ; on the board of directors at NJTA; on the board of trustees of the First Congregational Church of River Edge, and is a guest lecturer in the Turf Management Program at Rutgers University.

patch than the standard CHIPCO® 26019. In fact, CHIPCO® 26GT™ was as much as 48 hours faster. That means you'll see activity against disease mycelium within just 24 hours after application. And that means faster turf recovery. You can also count on CHIPCO® 26GT™ to give you both preventative and curative activity against dollar spot and

Brown Patch Knockdown Chipco® 26GT™			
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UNTREATED	PRESENT	PRESENT	PRESENT
CHIPCO® 26GT™	PRESENT	NONE	NONE

*0DAY = Spray applied; DAT = Day(s) After Treatment
1996, Ohio State University, PennCross Bentgrass

brown patch. • Best of all, new CHIPCO® 26GT™ gives you the same powerful, broad-spectrum, long-lasting disease control you've come to expect from CHIPCO® 26019. Now you don't have to sacrifice quality and duration for quickness.

You get them all with new CHIPCO® 26GT™.

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Gadgets save time, effort

Continued from page 19

- Radio headset.
- Cordless telephone.
- A bubble level.
- Bristar, a "non-explosive demolition agent."
- Vinyl, adhesive lettering.
- Bicycle water bottle cages.
- Cement and PVC pipe.
- Collar Stick.

One of the great, and exciting, facets of a superintendent's job are the odd obstacles they sometimes face, Ross said. "And I like to think of new ways to solve problems. But sometimes the answer is down to your local store."

The Smart Level, for instance. "You can measure green surface slope, or the slope while installing drain pipes," he said. "The longer you have it, the more uses you think of for it."

The Smart Level came to Ross' attention when renovating CC of the Rockies' greens with Jack Nicklaus. "Jack has certain criteria for greens surface slope. He likes most of his puttable areas with 1 degree or less slope."

When the Nicklaus people appeared with the Smart Level—voila!

"We do all the puttable areas in our greens construction renovation using this tool now," Ross said. "You can tweak at 4/10ths of a degree if you like with this tool."

He said the instrument, which comes in 2- and 4-foot lengths, is excellent also for finding flat areas to consistently Stimpmeter greens. "Your eyes are deceptive," he said. "You may think a green is relatively flat and you put this Smart Level down and it reads 3 to 4 percent. That's quite a difference."

Ross' crew has also used the tool in bunkers. "We don't have any downhill lies in shooting toward the greens," he said, "so we have the bunker floor flat or with a slight uphill slope toward the green."

The tool now costs around \$100, he said.

The Pocket Secretary, containing 18.4 gigabits of information and trained to the voice of its owner, is a wonderkind, Ross said. "I carry it with me all the time. It records 100 messages, buzzes me for meetings. If I want to call somebody I just say that person's name and it reads out their phone number."

"It's so good I bought one for my assistant."

Though it once cost \$3,000, he said, it now can be bought for under \$100.

While Ross bought a headset for himself, he now has an extra unit for crew members. "If an assistant is operating a backhoe

or something where it is loud and he can't hear, it works well," Ross said. And the cost is only \$30 to \$35.

"When we bought a cordless telephone for the house," he said, "I thought, 'This is the greatest thing we've ever done. I can leave the room, go downstairs...' Well, think of it for the golf course."

Ross bought a 900 MHz phone (available for about \$130 today) and said, "It's very valuable to

us. This phone allows me to be up to 200 yards from my office. If you are waiting for an important call, you can clip it to your belt and do things around the office or shop. You can do such things as check supplies when you're on the phone with a sales rep, for instance."

"This pays for itself quickly."

The bubble level, meanwhile, is tiny but immensely helpful. His crews use it to level irriga-

tion heads, rather than by sight.

Explaining his use of Bristar, Ross said, "If you have ledge or rock areas, no matter how much topsoil you haul during construction, you have problems with it."

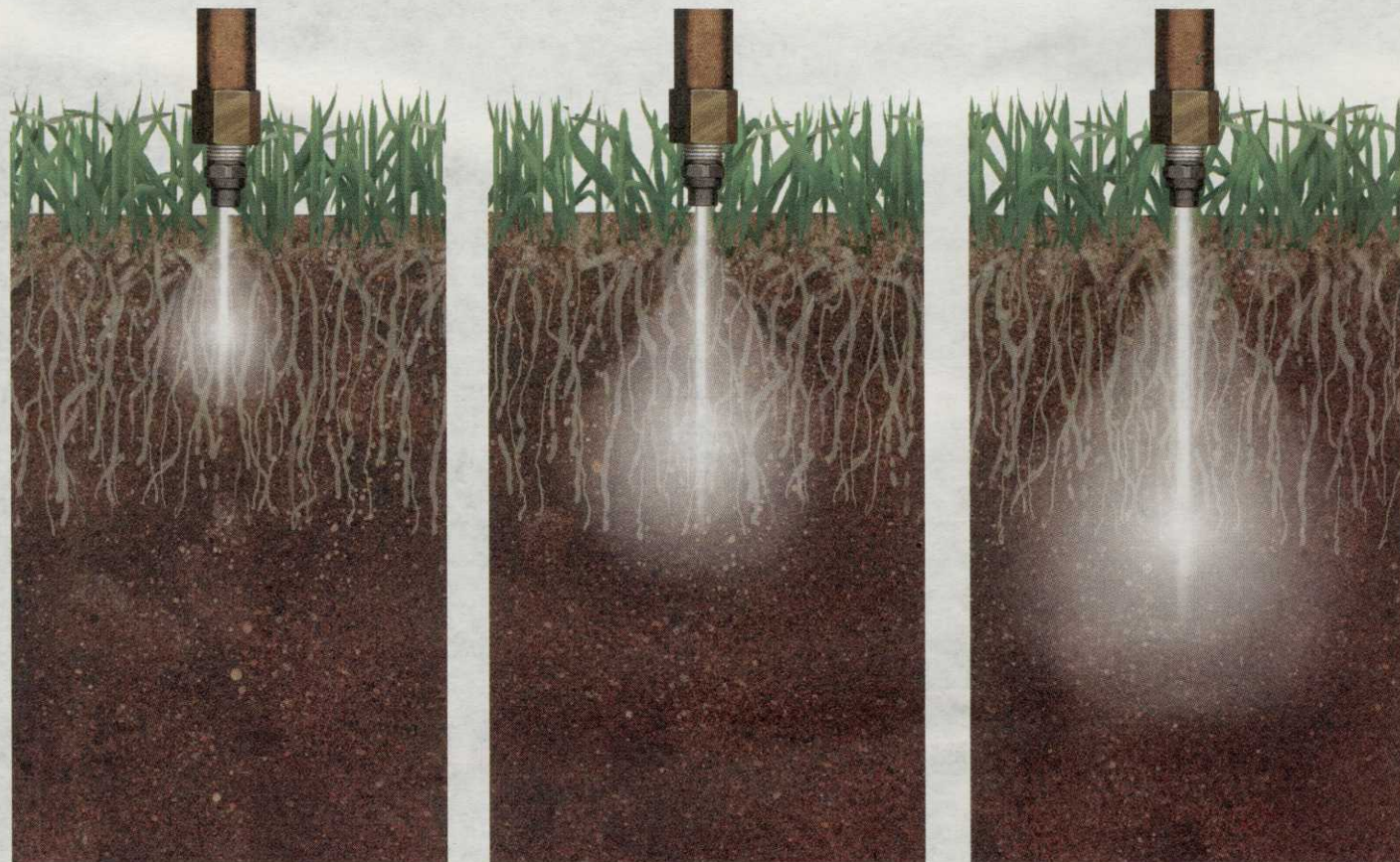
The non-explosive solution is to drill down into the ledge or rock, and add this material into the hole. The Bristar expands and cracks the rocks or ledge, so that it can be hauled away.

The vinyl adhesive lettering is

used in many ways for organization—and protection—at CC of the Rockies, from marking fairway mowers to labeling types of fuel.

"Every year someone puts diesel in the gas, or gas in the diesel," Ross said. His solution: Have a sign company punch out little vinyl letters, a "G" for gas, "D" for diesel and "M" for mixed, and label each fuel can correctly.

Continued on next page



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N.Y. assn. honors SUNY Delhi's Morales

SYRACUSE, N.Y. — The New York State Turfgrass Association (NYSTA) awarded its 1997 Citation of Merit to Dominic Morales, Chairman of the Department of Plant Science at SUNY Delhi.

The Citation of Merit is awarded to a member of the turf industry who exemplifies the goals of the association. Among the qualities considered by the board in choosing a recipient are:

dedication to turfgrass research and education, involvement in and support of association activities, interest in promoting careers in the turfgrass industry, and the admiration and respect of peers and colleagues.

Morales was awarded the Chancellor's Award for Excellence in Teaching at SUNY Delhi. He has appeared as a visiting

lecturer at the University of New Hampshire, NYSTA Conferences, Cornell's Turfgrass Management Short Course, and numerous industry organization meetings. Morales has coordinated and implemented a work study program for high school students interested in horticulture practices and gives presentations on career opportunities

in the green industry. He developed a Master Gardener Program with Cornell Cooperative Extension of Delaware County, and works with area schools to upgrade and develop maintenance programs for athletic fields.

Active in NYSTA, Morales has served on committees and is a recent appointee to the New York Greengrass board of directors.

He is a member of the Golf Course Superintendents Association of America, Associated Landscape Contractors of America, International Society of Arboriculture, and New York State Nursery/Landscape Association.

Morales received his associate degree in ornamental horticulture from SUNY Farmingdale, his bachelor degree in plant science from the University of New Hampshire at Durham, and his masters in environmental horticulture from the University of Connecticut at Storrs. He has been instrumental in developing the curricula at Delhi, initiating an internship program and an industry advisory committee, increasing student scholarships, and a master plan for the Plant Science Valley Complex. This plan, which began in 1976, grew to include the Turf Education Center and the back nine of the Delhi Golf Course.

Using gadgets

Continued from previous page

Since Ross's course is divided into Red, Green and Blue sections, the mowers are marked with a large vinyl dot the color of its section.

"You can spend a lot of money and buy the packs of letters and numbers at [the department store], in which case you have a lot of leftover letters you'll never use, or you can have exactly what you want made," Ross said. "We did all our gas and other signs made for a hundred dollars."

The cement and PVC pipe come in handy with CC of the Rockies' many bird houses. A member of the Audubon Cooperative Sanctuary System for Golf Courses, the course has a number of bird boxes that are removed during the winter time. Feeling that "nothing looks worse than crooked birdhouses," Ross had crews sink PVC sleeves in the ground and cement them so that they cannot get crooked. The sleeves are marked with flags during the winter snows and easy to spot in the spring when the bird boxes are reinstalled.

So, what place does a bicycle water bottle cage have on a golf course? "In the mountains, at 7,500 feet elevation, where we have tremendous sun intensity and 1-degree humidity, you have the symptoms for altitude sickness," Ross said. "One preventative measure is to keep hydrated. I tell all my crew when I hire them to keep a water bottle with them."

The collar stick was invented after many years of seeing collars lose their uniform width, Ross said.

"We just tapped the outside height adjusters, cut lengths of metal rod, threaded the rod into the adjusters, made a marker on the outside, and bingo — perfect collar widths every time," he said.



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The large 160-gallon tank and the only mechanical agitation in its class creates and maintains even mixtures and allows for the use of wettable powders, liquid concentrates and polymers.

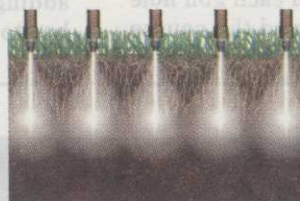
Simple adjustment allows you to achieve the ideal injection depth without changing valves, jets or other equipment. The accumulator and pump disperse 8 gpm at user-selected pressures of 2,000 to 3,500 psi.



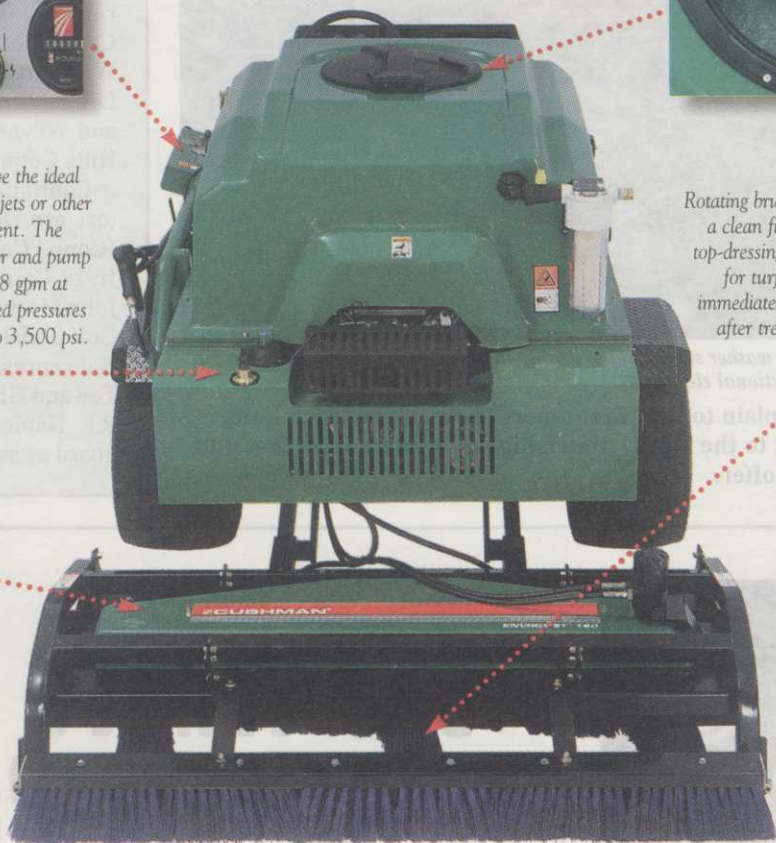
Rotating brushes provide a clean finish with top-dressing capability for turf that is immediately playable after treatment.



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Wash racks: New lessons from the Old Course

By TERRY BUCHEN

ST. ANDREWS, Scotland — As the world's first golf course, The Old Course at St. Andrews offers golf purists the opportunity of a lifetime to come and play, observe and appreciate "The Home of Golf." On every teeing ground, a golf ball washer stand is situated near the middle tee markers to help steer golfers in the right direction to the tee that is used by the majority of players.

The stand is a simple and elegant rectangle made of wood, which is treated with a wood preservative to help protect it from the elements and the occasional irrigation cycle when it is needed.

The wooden stand is mounted on four metal legs, making it quite portable. It is usually positioned near the middle teeing ground for easy access, while helping to scatter foot and pull cart traffic as well. The golf ball washer is a simple but effective design:

- a wooden paddle, with a notch in it to hold one golf ball;
- replaceable brushes on either side; and
- a chain to keep the paddle from being removed.

The washer compartment holds an ample supply of water, which is diluted with a non-slippery detergent.

This is replaced as needed, sometimes as often and as once as a week.

The trash collector is quite effective. A metal grate, which is hinged on one side, opens like a door to keep the trash from blowing away in the ever-present winds at this golf Mecca.

Each stand lists the hole number, par and yardage. Also included is one of the most famous aspects of The Old Course: each hole has its own distinct name, which corresponds to the scorecard as well. Diagrams of each golf hole are not wanted since golfers who have played the course



Terry Buchen photo

Golf ball washer stands at the world's most famous golf course are simple, with functional elegance.

can explain to the "first-timers" how to play each hole, adding to the spirit, friendship and camaraderie that golf has to offer.

GROSSO HEADS CONN. CHAPTER

BALTIC, Conn. — Anthony Grosso of Pautipaug Country Club here has been elected president, heading a new slate of officers of the Connecticut Association of Golf Course Superintendents.

Grosso, who succeeded John Napier of Stanley Golf Course in New Britain, is joined by Vice President Brian Skelly of Old Lyme (Conn.) Country Club, Secretary Jud Smith of Orange Hills Country Club in Orange and Treasurer Peter Pierson of Pequabuck (Conn.) Golf Club.

Elected to two-year terms as directors were Peter Cure of Crestbrook Park Golf Club in Watertown, Dan Rackliffe of Longshore Club Park in Westport and Wayne Urban of Farmingbury Hills Country Club of Wolcott.

Continuing on the board as directors are Dennis Houle of Redding (Conn.) Country Club, Les Kennedy Jr. of Country Club of Waterbury, John Motycka of Skungamaug River Golf Club in Coventry and commercial representative Owen Regan of Tee and Green Sod, Inc., in Exeter, R.I. Napier will continue on the board as immediate past president.



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INSIDE

Upfront Prep

Dr. William Torello has ideas on 'sparing turf' the effects of harsh winters. Start in the fall. 17

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High demand for sod stock. 53

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ALL IN THE FAMILY
Robert Trent Jones Sr. (left) has teamed with elder son Bobby to form a new architectural entity, RTJ Golf Ventures. For story, see page 37.

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Image enhanced but golfers insist on 'green' look

By PETER BLAIS
ORLANDO, Fla. — Most golfers view superintendents as trained professionals and the person most responsible for course conditions — news course managers should find encouraging considering national efforts to elevate their image. Disturbingly, however, few golfers recognize the Golf Course Superintendents Association of America (GCSAA) as the superintendents' national organization. Also troubling was the unwillingness of most golfers to accept poorer playing conditions in exchange for reduced chemical and water use on their courses. According to a recent survey of golfers conducted by the National Golf Foundation.

Continued on page 30

STUDY SHOWS:

Name designers pull higher dues and green fees

By PETER BLAIS
HARRISBURG, Pa. — Private courses designed by signature architects command higher initiation fees and higher dues.

MAKE THE CALL!

Griffiths



Shinn Golf Club in Nigata, Japan, a new design from incoming ASGCA president, Denis Griffiths.

Ciba-Sandoz deal creates new firm: Novartis

By HAL PHILLIPS
Consolidation in the chemical trade continues apace, as Des Moines, Ill.-based Sandoz Agro and Greensboro, N.C.-based Ciba — both divisions of enormous Swiss conglomerates — have agreed to join forces, creating a \$6 billion agricultural giant. The new entity will be known as Novartis, a name Bill Liles, head of Turf & Ornamental, says is his fourth corporate identity in a decade. Liles, for example, then came Ciba-Geigy, for

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QA

Harivandi: Effluent and salt tolerance studies reaping benefits

Dr. Ali Harivandi, a 1995 recipient of the Golf Course Superintendents Association of America Distinguished Service Award, has been a regional advisor specializing in turf, soil and water with the



Dr. Ali Harivandi

University of California Extension in the San Francisco Bay Area since 1980. He has written and spoken extensively, particularly on the topics of reclaimed water use and recycling grass clippings. Harivandi earned his doctorate in turfgrass management at Colorado State University and is a member of the GCSAA Technical/Resource Advisory Committee.

Golf Course News: What is your research showing in the area of reclaimed water use on golf courses?

Ali Harivandi: We have a couple projects. We just concluded a study with colleagues at the University of California at Davis looking at using potassium chloride as a water softener instead of the traditional sodium chloride products. We want to see if the residential and industrial use of water softeners containing potassium chloride instead of sodium chloride would have any effect on the resultant reclaimed water and whether that would impact golf course turf and plants.

One of the main problems with reclaimed water is excessive amounts of sodium. It is one of those ions that contributes to the total salinity of water. Sodium by itself can also ruin the soil structure. It is a toxic material. If we can move from sodium chloride to potassium chloride water softeners our recycled water would be better for everyone, including those who use it for golf course irrigation.

That information is very useful to water agencies responsible for treating the water and providing reclaimed water to users. Some municipalities are in the process of banning the use of water softeners altogether. If we have a water softener with potassium chloride, there is no problem and no reason to ban them.

We have a lot of research on salt tolerance, sodium tolerance or boron tolerance among turfgrasses. But there is not as much information available on the salt, sodium, or boron tolerance of other plants used on golf courses and in landscaping — trees, ground covers, shrubs and things like that. Some of these plants are much more sensitive to those materials. Since there is not enough information, we have just started a project, again with our colleagues at Davis, to screen most

of the non-turf plants we use in California. We'll do 20 a year and determine their salt-tolerance levels. In a few years we should have a good database and be able to recommend certain trees, ground covers or shrubs at golf courses where they use reclaimed water.

GCN: Can you update us on your grass clippings and recycling research?

AH: I don't have an active grass recycling project right now. That research was finished last year and has created quite a bit of interest, especially here in California, where landfill space is a big issue. In California we are running out of landfill space, which I understand is also a problem in the Eastern

states. Golf courses are not a major source of green waste since many already recycle their material. The few that move their material out won't be able to do it much longer, and, if they can recycle the material on the property, will benefit [from our research].

A few of the golf organizations, like Pebble Beach Co., have

started extensive recycling programs. Pebble's program includes not only grass clippings, which it basically leaves on the ground, but also composting using all the materials gathered from the golf courses. For the next five years or so, some of my energy will go toward composting and the use of

Continued on next page

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Daconil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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Prostar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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Chipco 26019	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subdue	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Banner Maxx	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bayleton	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Eagle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sentinel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Turfgrass Diseases

ZENECA Professional Products

Q&A: Harivandi

Continued from previous page

composts for turf purposes. I haven't started a project yet, but I'm talking to people and looking for funding. I won't concentrate on making compost, but after it is made how that compost could be used, either as a soil amendment or top-dressing material for general-purpose turf, which would include fairways and roughs. That

would be a useful piece of research to undertake in California.

GCN: Can you tell us about the grasses you are evaluating for the National Turfgrass Evaluation Program (NTEP) trials?

AH: We are evaluating creeping bentgrass on two experimental greens at one of our municipal courses, one pure sand and the other soil. The plan was to water these greens with reclaimed water and see if any one

of these varieties, and there were about 20, performed better with reclaimed water. That project will happen. Unfortunately, something went wrong at the treatment plant and the golf course can't get reclaimed water, but is getting fresh water instead. That project is on hold. But it should [eventually] give us good information on creeping bentgrasses where reclaimed water is used for irrigation.

We've started the NTEP/USGA/GCSAA on-site, creeping bentgrass evaluation project. There are 30 sites throughout the country. We received 18 different creeping bentgrasses and will begin evaluating them in January at Crystal Springs Golf Course on the San Francisco peninsula. The course is in the San Francisco watershed, an environmentally sensitive area. The course is maintained at the high-

est professional level to reduce the environmental impact. The green, designed by Robert Trent Jones Jr.'s office, is located in an environmentally sensitive area and should get a lot of publicity.

GCN: Are you doing any work on drought-tolerant plants?

AH: We have looked at buffalograsses and their suitability for use in Northern California, primarily roughs and, in some cases, fairways. We started six or seven years ago during the drought here. We have developed quite a bit of information and released two varieties patented by our colleagues at UC-Davis. We continue that work because there is interest, although, since the drought ended, people have kind of forgotten what they were looking for...We are looking at weed management in buffalograss.

There is another grass that not many people are using...It is a grass for minimal-use areas, roughs, the fringe of fairways and around bunkers. We have looked at hard fescue and done a lot of research in terms of its management, fertility, herbicide tolerance, water requirements and so on. It has been used in many areas as a ground cover. Spanish Bay in Monterey is one of the best-known courses to use it.

We are continuing our work to develop more information and just started a project to look at its sodding characteristics. So far, people have been mainly seeding it. One of the main disadvantages is its slow germination and slow rate of seedling growth. Here in California we have every weed imaginable, all ready to emerge once you put a little water on the soil, meaning problems with weed invasion the first couple of years. So we are trying to produce sod and see whether it will root easily or not. We can produce harvestable sod at eight months. We sodded at two different thicknesses, transplanted them and are looking at their rooting characteristics under different fertilization regimes. It seems we should not have a problem and be able to get rooting with very little fertilizer. That would benefit golf courses, especially around bunkers or small areas where they just want to sod and not mess with seeding or weed control.

GCN: Are there any other areas you would like to explore?

AH: Doing research for the sake of doing research is not that unique. We should look at how that information is communicated to the golf course superintendent. What are some of the successful educational programs, regional meetings where superintendents come together on a regular basis, for the purpose of getting education? Are we successfully getting that information to our clientele, the superintendents? Many people are, but it seems to me it's not something we talk about very often.



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The silent majority: Discovering how members feel

By TERRY BUCHEN

WILLIAMSBURG, Va. — Superintendents always seem to know the golfers who like what we are really doing, whether providing smooth, firm and fast putting surfaces, or consistently attending to detail throughout the golf course and grounds. Conversely, critics always seem to be there, also — vocal about things they do not like.

We always know how the vocal supporters and critics feel about many subjects because they tell as many people as will listen to them.

Whether it be to our face, the green chairman, course owner, manager or club president, these vocal individuals make sure they tell anyone and everyone what they think about almost everything that goes on.

A random survey at any one individual golf course would probably number the vocal golfers at no more than 25, maybe 50 at most.

The next obvious question is, what about the silent majority of golfers who feel the opposite and are quiet about it? What's really on their mind? Are they mostly happy but do not want to bother anyone on the staff? Are there some matters they are not happy about but do not take the time to speak with course managers? Is the silent majority in the club just for the fun of it, not wanting to get involved whatsoever?

Most superintendents we have spoken with feel the best way to discover what is really on the mind of the silent majority is to talk with them as much as possible. And what better way than to play golf with a different group of them each week?

Most feel that simply by asking the silent golfers what they really like and don't like about the course would open them up, especially when they are allowed to voice their opinion quietly during a round of golf. The biggest way to get them to open up is to be a good listener and to ask specific questions if they do not express much of an opinion.

Why go to this bother to possibly open up "a can of worms"? Most superintendents felt the silent majority is the true individuals who really run the course operation and they are the ones who will usually be in the most powerful positions when push comes to shove. Many superintendents also feel they must always know what the golfers like and dislike because they are the

"customers," and if we do not monitor our job performance by how they feel, it might be too late and job changes inevitably will result.

Some courses send out surveys to all of their golfers in hopes of getting a feel for what they want. Some pretty good results have come forward.

Unfortunately, many times these surveys have a low percentage of return and still do not voice what the majority of golfers really feel.

So, most superintendents believe talking with a golfer in person is still the best way to communicate with them and playing golf with them, or

walking a few holes with them while they play has the most positive effect.

At the same time, showing golfers that the superintendent takes the time and energy to talk with them shows that superintendents really care. This is one of the best public-relations tools in the world.

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Fla. Turf Assn. donates \$63,000 for research

TAMPA, Fla. — More than \$63,000 was raised to benefit turfgrass research at the Florida Turfgrass Association's (FTGA) 45th Annual Conference & Show here.

Contributions were made to the FTGA during the association's annual Awards Lunch on Sept. 6. Donations included \$5,000 from Harrell's, Inc.; \$45,000 from the Seven Rivers Chapter of the Florida Golf Course Superintendents Asso-

ciation (FGCSA); \$4,000 from the Everglades Chapter of the FGCSA; \$6,000 from the Palm Beach Chapter of the FGCSA; \$2,500 from the Ridge Chapter of the FGCSA; and \$1,000 from the Treasure Coast Chapter of the FGCSA.

The association's officers and directors for the 1997-98 year were installed. Educational scholarships were also awarded to turfgrass students at the University of Florida and Lake City Community College and the association's coveted "Wreath of Grass" was awarded to Charlie Campbell of DowElanco for outstanding contributions to the turfgrass industry.

Combined New England show set

PROVIDENCE, R.I. — The first New England Regional Turfgrass Conference and Show will take place March 3-5 at the Rhode Island Convention Center here. The show is a combination of the annual Massachusetts, Rhode Island and New Hampshire turf shows and will include representatives from all six New England states as well as New York and New Jersey.

Presented by the New England Regional Turfgrass Foundation, the event has officially replaced the individual state shows and will be held annually.

The conference portion, Building Together for Tomorrow, will offer industry seminars for turf professionals; recertification credits can be earned at these programs. The show portion will boast over 300 exhibitors.

To register, people should call 401-848-0004.

Batavia Farms' Peca elected NYSTA president

SYRACUSE, N.Y. — The New York State Turfgrass Association (NYSTA) 1998 officers and directors were elected by attending members at the annual meeting at the Turf and Grounds Exposition.

Elected president of NYSTA was Anthony Peca Jr., president of Batavia Turf Farms in Batavia. He has served as both an officer and board member for many years.

Peca was awarded the Nursery Professional of the Year Citation for 1997 from the Genesee Finger Lakes Landscape Association.

John Fik now assumes the role of vice president. He is employed by Marriott Management Services at Hobart and William Smith College in Geneva. Fik has served as conference education chairman on multiple committees for the association.

Joe Hahn, superintendent at The Country Club of Rochester, was elected secretary/treasurer. Hahn has hosted many national golf tournaments while working in the Rochester area.

Incoming directors for 1998 are James Diermeier, employed by Reader's Digest Association in Pleasantville, serving the Hudson Region; Angelo Ranieri, of Susquehanna Valley Central School District in Conklin, serving the Mohawk Region; and Robert Scott of DowElanco in Springfield, serving the Atlantic Region.

Current directors serving NYSTA are Kenneth DeCerce of NYS Education Department, Clifton Park; James Hornung of North American Park in Buffalo; Michael Maffei of Back O' Beyond in Brewster; John Rizza of Grassland Equipment and Irrigation Corp. in Latham; and James Seaman of Shaker Ridge Country Club in Colonie.

Stephen Smith of PIE Supply Co. has served for many years as an officer and/or director for the association, and continues on the board as past president.

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ATLANTA NAT'L HIRES CUNNINGHAM

ALPHARETTA, Ga. — Atlanta National Golf Club has appointed Timothy M. Cunningham course superintendent.

Cunningham has been at Atlanta National since 1991 and has been the assistant superintendent since 1994. He is responsible for directing all golf course and clubhouse grounds maintenance and improvement work at Atlanta National, a design of Pete and P.B. Dye.



TPC network's clean machines

By TERRY BUCHEN

LAS VEGAS — Keeping golf course maintenance equipment clean is a top priority with superintendents and their staffs, and some really high-tech equipment can help keep up with this undertaking.

One excellent example is at The TPC at The Canyons, where superintendent Kim Byron Wood has the latest and greatest state-of-the-art cleaning equipment, now used extensively in the TPC network.

"Cleaning and waxing our equipment is a top priority, so our equipment will last much longer, will be much easier for our equipment technicians to service and for keeping our equipment looking new all of the time," said Wood.

Woods has a pressure washer, that has a natural gas-fired burner/heater, that is used only by our equipment technicians, where they wax each piece of equipment after washing it, prior to servicing and any repairs. Next to the pressure washer, looking left to right,



The state-of-the-art, environmentally friendly wash rack at The TPC at The Canyons, designed with efficiency in mind.

is a large red-colored hose reel with a large 1-inch diameter high-pressure water hose that comes from the irrigation system. Two green-colored signs warn employees not to drink the irrigation water, even though it is domestic water that is pumped into a irrigation lake and then re-pumped onto the course and maintenance center complex.

The smaller gray-colored hose reel, and hand trigger-operated wand, are for the pressure washer. Next comes another red-colored hose reel that has a high-pressure air hose, with a larger yellow-colored safety sign warning employees that "eye protection is required while using air hose."

On the far right side is another red-colored larger hose reel with another

large 1-inch diameter high-pressure hose originating from the irrigation system, Wood said.

"Our drainage grate has a small mesh screen material over it so grass clippings and other smaller debris does not go into our oil and grease separator vault," Wood said. "We pay an annual permit and inspection fee for this, so our licensed disposal company can take periodic tests to make sure we are in compliance with the city, and then it is emptied out as needed."

Wood said he is "extremely pleased with our equipment cleaning area which was well thought out, taking many good ideas and formulating them into an effective system as part of our TPC and PGA Tour team concept."

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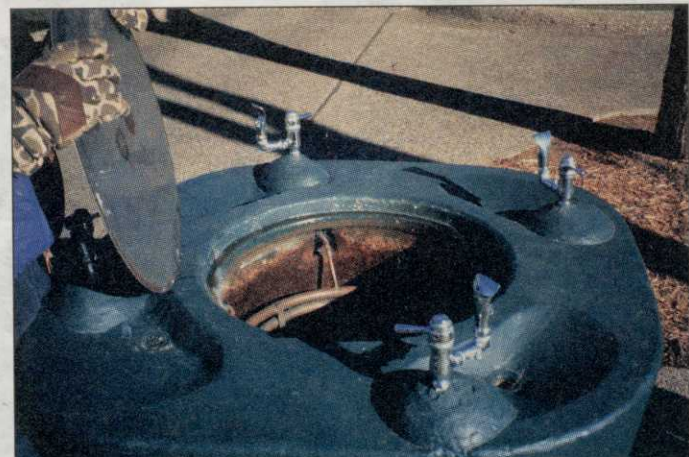
By TERRY BUCHEN

DALLAS — Many fun things are done in a big way in the state of Texas. A fine example is a unique design of an on-course drinking fountain at The Northwood Club, where golf course superintendent Scott Ebers joined the staff in 1997.

"We have an area, near the tunnel that goes under the roadway which separates our golf course, where a few greens and tees are near each other, making for a good traffic flow of golfers going back and forth," Ebers said. "To accommodate our members and their guests as best as possible, a larger-than-normal drinking fountain was strategically placed which has four drinking faucets that can be used all at one time."

To keep the water as cold as possible during the warm summer, Ebers' staff places ice cubes over a complex series of copper tubing coils, which keeps the water very cold. As each day progresses, one of the staff checks the ice levels, which are replaced as needed. The melted ice water goes into the same drain piping that is used for the faucets, so no surface water accumulates on the cart path or turfgrass areas.

"There are some times when two or three foursomes



The Northwood Club's drinking fountain that can service an entire foursome at once.

come to this drinking fountain at the same time and since this drinking fountain design can handle each foursome at once, it really satisfies our golfers in a rapid fashion," Ebers said.

The drinking fountain is painted green, color-coordinated with our other golf course accessories on The Northwood Club's grounds, he said.

Rutgers offers introduction to golf course turf management

NEW BRUNSWICK, N.J. — Rutgers' Cook College Office of Continuing Professional Education is offering an introductory two-day course designed for groundskeepers, foremen and crew members who have fewer than two years experience, or little or no formal education in turfgrass management. Students will receive a comprehensive overview of the golf course industry, behind-the-scenes insight into the responsibilities of the superintendent and the assistant superintendent, practical, useful tips you can use immediately on the job, techniques to overcome the daily challenges faced by golf course managers,

current golf course management practices, and networking opportunities with the area's top superintendents and your future colleagues.

Meanwhile, in Bedminster, a two-day symposium is planned on environmental management on the golf course. Both the golf industry and environmentalists agree: Only healthy plants can survive the pounding turf takes from golfers, diseases, insects and other stresses. Promoting plant health is not only the best way to minimize chemical use; it's the best way to maintain the playing surface golfers' demand. This symposium will provide practical strategies-condensed on to checklists you take home — to minimize potential impacts and maximize environmental benefits of operating a golf course. More information is available from Keith Wilson at 732-932-9271.

Browner comment

Continued from page 19

"principles document" that is a major part of the foundation for our common effort.

• Across the nation, many high-quality golf courses have been (and are being) developed on reclaimed Superfund, Brownfields and sanitary landfill sites — areas that had been holding their surrounding neighborhoods back. These projects have become beacons of hope for many other communities now looking to transform their own troubled sites into magnets for jobs, prosperity and reaction.

These various accomplishments have a common theme — that environmental protection and economic progress go hand-in-hand. And no one knows that better than the superintendents of those golf courses that have adopted environmentally progressive techniques such as integrated pest management, state-of-the-art water conservation, wetlands creation and restoration, species habitat programs and native plant landscaping. These courses are reaping cost savings in pesticides and irrigation, and becoming more attractive to players and avoiding expensive battles with neighbors and government agencies.

While we have every right to be proud of these and other achievements, our job is not done.

For example, with regard to water quality, there are some issues of special interest to golf course owners and operators.

Ground-water contamination, much of it caused by the leaching of chemicals from surface to aquifer, is a double-edged sword for golf courses. On one hand, the pesticides used on a course can leach into aquifers and, in turn, travel for miles and cause contamination in nearby communities. In addition, because many golf courses depend on underground water supplies to meet at least some of their irrigation and drinking-water needs, the contamination of these supplies could add tremendously to the cost of operations as they become more dependent on municipal water.

With some aquifers already in grave condition, let us intensify our efforts to advance pollution-prevention strategies that will reduce pesticide use and protect water supplies.

A second important issue is wetland protection. *Golf Course News* readers are well aware of this issue, and finding a resolution satisfactory to all parties will challenge us greatly. But we must do everything we can to find common ground and take necessary steps to protect wetlands, which serve as a natural buffer and filter for runoff pollutants from courses and other resources, and which are so critical to ensuring a safe, healthy environment.

Thanks to the surging popularity of golf among young people — intensified even further in the last year by Tiger Woods — members of the golfing community have an enormous opportunity to use this sport as a tool to reach out to youngsters and help build a better future for the country. And many in golf are stepping up and contributing in a big way. In addition to programs aimed at getting more young people to take up golf, some courses are offering themselves for use as outdoor class-

rooms for nature study — and are working with schools, garden clubs and community groups to help young and old alike learn about the hundreds of species of flora and fauna that constitute a golf course's ecosystem.

I am certain this link between golf and community education is going to pay huge dividends in the future, and I commend all of the course operators and superintendents who have undertaken these types of initiatives. They are making a real difference.

At the same time, there is even more that must be done in the educational arena. The demand by many golfers for a stereotype course of manicured lawns from tee to green underlies some excessive use of pesticides and irrigation. Educating them about consequences and options is a monumental challenge, to be sure. But addressing that challenge will go a long way toward resolving the difficult issues courses will otherwise face in the years ahead.

I urge course and club manag-

ers to give special attention to this issue, and I welcome your suggestions on how EPA can assist you in this effort. As always, we stand ready to work with you toward finding creative solutions.

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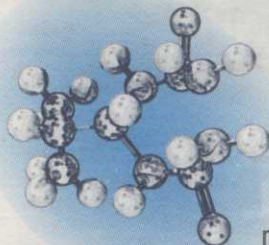


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Landscapes Unlimited returns to winner's circle

Kubly's company named Best Builder of the Year

By MARK LESLIE

LINCOLN, Neb. — Two decades ago would-be golf course designer Bill Kubly took a golf course construction job until he could afford to be a course architect. Today, Kubly's Landscapes Unlimited, Inc. has been named Golf Course Builder of the Year for the fourth time in the last six years — and he has no intention of changing careers.

"I wake up every day thankful that I found something to do — just by accident — that I've enjoyed for a long time," said Kubly from his offices here. "It happened purely by accident. My degree is in landscape architecture. I started in golf course construction right out of college. I felt when I was financially able I would get into design, but I fell so much in love with construction that I've stayed with it."

In *Golf Course News'* 9th annual Builder of the Year survey, the 21-year-old Landscapes Unlimited placed first, with an average mark of 96.527 out of a possible 100.

Golf course architects nominated 12 companies for the award. Three-time winner Wadsworth Golf Construction Co. did not enter the competition. Winners were determined by responses from the developer, architect and superintendent on each of a company's projects completed in 1997. They were asked to rate the construction firm's work through a series of questions.

Ryandolf-Eastern of Deerfield Beach, Fla., finished second in the balloting; Niebur Golf of Colorado Springs, Colo., third; Crown Golf of Glenview, Ill., fourth; and 1996 winner SAJO Construction, Inc.



The 18th hole at Quarry Oaks Golf Course, designed by John LaFoy, built by Landscapes Unlimited, and voted by *Golf Digest* as the Best New Affordable Course.

of Richmond, Texas, fifth.

Unsolicited accolades poured in from those surveyed about Landscapes Ultd.

"We have had the opportunity to build numerous courses around the country and [they] are the finest and most detailed contractor we have worked with," said developer David Chapman of The Traditions Club in La Quinta, Calif. "I cannot tell you how impressed I am with them. Simply the best."

"Everything Landscapes does is first-class," said Ross McCown of Quarry Oaks Golf Course in Lincoln.

"There are very few firms that would react to site and weather conditions as favorably, aggressively and creatively as Landscapes Unlimited did on our project," said M. Lee Niles of Southern Irrigation Consultants, who worked on the Shady Oaks Country Club project in Fort Worth, Texas. "Their staff and their efforts are reflective of a firm that exemplifies the standards and qualities of the Golf Course Builder of the Year."

I wake up every day thankful that I found something to do — just by accident — that I've enjoyed for a long time.

— Bill Kubly

Did Kubly foresee this type of success when he formed his company?

"No. I thought when I got into this business that it might last 10 years and we'd be done building golf courses. Fortunately, I was wrong," he said. "Our volume is 50 times more than I ever thought it would be."

Kubly attributes his success to surrounding himself "with people a lot smarter than me, people who are very hard workers, who are very committed — not only to Landscapes Unlimited but to the game of golf, though that sounds like a cliché."

Saying that he owes a lot to Richard

Watson of Richard Watson, Inc. in Lincoln, where he cut his teeth in course construction, Kubly singled out Landscapes Unlimited Executive Vice President Kirk Kyster, Vice President of Construction Jim Barger, Vice President of Irrigation Roy Wilson, General Manager Brad Schmidt and his many project managers for their contributions to the company.

"I can't do all the things I used to do because we have so much work," he said. "I remind guys the reason we're successful is our reputation. Yes, we do want to grow, but we want to grow and be able to maintain that quality level we're famous for. If we had enough high-quality people we could have 10 more jobs tomorrow."

Landscapes Unlimited has "stabilized at 15- to 25-percent percent growth each year," Kubly said.

The firm has added two project managers, each of whom manages three or four jobs; four superintendents and three new irrigation superintendents as well as office staff, he said. Landscapes now employs more than 600 in-season and 350 in the off-season.

"We don't want to overgrow," Kubly said. "Plus, we feel the business has probably peaked in the number of courses that will be built in a year. You hate to over-expand and then not be able to keep all those people busy."

He foresees the golf industry continuing to open 400 or more courses a year for the next two or three years, then slowly declining.

The firm works on 25 to 35 jobs during the year, including quite a bit of renovation work, mostly on 18-hole courses.

"We had six or seven major renovations this year," Kubly said. "It's a good business. It's fun working for existing clubs. You get a lot of day-to-day feedback. And it's most fun with clubs needing a major facelift. You have many club members — and sometimes city forefathers — who really appreciate what's being done. ... We did a major renovation at Ben Hogan's course, Shady Oaks in Ft. Worth, this year and the response was so uplifting, working with people who appreciate what you're doing."

"You wonder how long [golf industry growth] can sustain itself," he said "That's a good reason for us remaining in the renovation end of the business."



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Quality Grassing takes home Best Small Builder honors

By MARK LESLIE

LITHIA, Fla. — Question: Which builder jumped into new golf course construction in both Hemispheres at once?

Answer: The same firm that has been named Best Small Golf Course Builder for 1997 — Quality Grassing & Services, Inc.

Golf Course News' named Quality Grassing its second annual Small Builder award-winner after an extensive nomination and survey process that involved voting from developers, architects and superintendents of projects built in 1997 by the Florida firm. Quality Grassing won the honor with an extraordinary 96.973 rating out of a possible 100.

GCN Publisher Charles von Brecht announced the selection and added that the first-ever Honorable Mention Award for Small Builder of the Year will be given to Turf Drain, Inc. of Novi, Mich. Last year's Best Small Builder, MacCurrah Golf, finished third. The awards will be presented during the annual banquet of the Golf Course Builders Association of America in Anaheim, Calif., Feb. 6.

"This is a wonderful award, but I deserve none of the credit. My people do," said President Howard Barnes, co-owner with J.W. Thomas. "We hire good people, pay them well with good benefits and keep them. We treat them like family. The first person I ever hired still works for us, managing one of our grass turf farms."

The company's name has actually been misleading in the last decade. Although it started in 1983 as an agricultural contractor specializing in grassing, the firm began renovating golf courses in 1985. Then,

in 1992, golf course architect Steve Smyers asked Barnes to build a golf course in Australia. It came at the same time the company was awarded the contract to build the Lloyd Clifton-designed West Chase Golf Course in Tampa.

Since then, Quality Grassing's star has been on the rise.



"Actually, word of mouth has been the main factor [in the success]," said General Manager Bobby Price. "We have a very good reputation, and the industry is starting to get to know who we are. In the past when people heard our name they assumed we were a sodding or seeding company. Now we have two or three courses under our belt; the architects are happy with our work; the ease with which we complete the projects is becoming known; and the word is spreading like wildfire."

Indeed, in 1997 Quality Grassing completed work on several major renovations and two 18-hole golf courses — Worthington Manor in Poolesville, Md., and Elks Run Golf Course in Richmond, Va. The results?

Joseph G. Harrison Jr., a board member at Ocean City Golf & Yacht Club, said of Quality Grassing's work on the Ocean City, Md., course's complete redesign and reconstruction: "Given a project of this scope, we anticipated that there would be issues which would come up during the course of construction and would need to be resolved. On every occasion they were resolved amicably, rapidly and to our complete satisfaction."

New course or renovation, the golf work is all satisfying, said Barnes. "We operate a stabilization and sod division. But this



Photo by Dale Moore

Quality Grassing & Services, Inc. carried out the Lester George design at Ocean City Golf & Yacht Club in Berlin, Md.

is a lot more rewarding. It's a different type of people, highly qualified people, people who don't feel 'get it done at the cheapest price,' but rather 'get it done right.' They want quality and they will sacrifice the cost to get it. Whereas in road work they go with cheapest and don't worry about quality."

It has been satisfying financially as well. Quality Grassing did \$14 million in business in 1997, and Barnes projects \$20 million or more in 1998.

Barnes, a member of the Florida Turfgrass Association board of directors and various committees, puts major emphasis on his employees paying close attention to the job at hand.

Said Price: "On golf courses, you've got to be able to understand what the architect envisions and do that out on the field. We have quality shapers and project managers who have that ability and foresight. So the architect doesn't have to return time after time to correct it. That

makes their job a lot easier, and it makes the project move a lot faster."

Architects agree.

"I can't imagine working with a better firm," said Lester George of Richmond, Va., who teamed with Quality Grassing on four projects last year. "Everything they do is professional, with courteous response and at very high speed. They are the kind of contractor who makes architects look good."

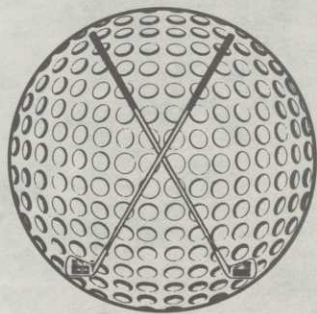
"They did not hesitate to go 'above and beyond' the letter of the contract to please me and the client," agreed course designer Brian Ault of Ault, Clark & Associates in Kensington, Md., who worked with the builder on Worthington Manor Golf Course. "They did a terrific job! I hope they do another one of our projects next year."

The quality work, Price said, is "a team approach." When a new supervisor comes aboard, he oversees one project. He is

Continued on page 42

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CIRCLE #159

Turf Drain's high marks earn first-ever Honorable Mention Award

By MARK LESLIE

NOVI, Mich. — When Geoffrey Corlett and wife Susan started Turf Drain Inc. in 1987 with one trencher, a tractor and two employees, yes, they envisioned success. It was in their marketing plan. Today, it is in their portfolio.

Turf Drain did not win Small Builder of the Year honors, but because it obtained such substantial marks from its clients, Golf Course News will present the firm a first-ever award for Honorable Mention.

"We just could not overlook Turf Drain's high achievement and extraordinary ratings from the architects, developers and superintendents they worked with," said GCN Publisher Charles von Brecht, who will present the honor at the Golf Course Builders Association of America's annual banquet on Feb. 6 in Anaheim, Calif. "We may never do this again. But we could not avoid it this year."

Indeed, while Quality Grassing & Services won the top award with a 96.973 rating out of a possible 100, Turf Drain came in at 96.477.

"We hope and work very hard for success," said Corlett, whose firm celebrates its 10th anniversary this year. "It's in our mission statement: Satisfy your clients, perform quality work and maintain high morale within the staff."

Yet, success in the world of golf course renovation was not the kind the Corletts foresaw when they started Turf Drain in Guelph, Ontario, as an agricultural drainage firm in 1986. Corlett possessed a landscape architecture degree from Ryerson College in Toronto and, in 1985, earned an agricultural engineering degree from the University of Guelph.

By happenstance, Turf Drain's entrance into golf came while the firm was doing a drainage project on a farm.

"The golf course next door called us up to come over and do some drainage," Corlett said. "At the time we had a D-9 with a plow on the back. So we brought over a D-9 dozer, which was a 47-ton machine and far too heavy for a golf course. After that, we decided golf course work was a neat thing to do, so we built our own trenchers. They are laser-equipped, so all grading is done with laser control. We became a specialist in golf course drainage because no one else in that day used laser technology that didn't do damage to the golf course."

In 1991, when Canada's economy hit a recession, the Corletts formed Turf Drain, Inc. in Novi, which is separate from the Guelph operation.

And today, Turf Drain does no new course construction, just renovation projects. Just 5 percent of the work is stand-alone drainage projects,

Corlett said.

And clients agree: Turf Drain does renovations well.

Jim Wyllie, turf and management consultant who worked with York Downs Golf and Country Club in Unionville, Ontario,



plus! The members are

and its reconstruction of bunkers on its 27-hole layout, said in an unsolicited comment: "This was a first-class project from start to finish. They did what they said the would do —

thrilled."

"We have had three different contractors of the past few years and Turf Drain is by far the best. They were fair in pricing and worked with me as the superintendent," said Ed Hock, superintendent at Walnut Creek Country Club in

Continued on next page

PREVENT
GRUBS.
STOP THEM IN
THEIR TRACKS.
OR MAKE SURE
IT'S NOT EVEN
AN ISSUE.

By MICHAEL HURDZAN

Builders are the heroes of projects

There is a tendency for people to attempt to isolate the one person who seems the most responsible for something of note. Perhaps it is because we wish to have a solitary figure to focus on, for admittedly, it is much easier to praise a general than all the soldiers of his army, a conductor instead of the orchestra, or the quarterback instead of the team. Although we

know better, we sometimes forget that the person being singled out is tall only because he stands on the shoulders of people who helped him or her achieve their distinction. The world is filled with such unacknowledged people, whether it be the families who make personal sacrifices to permit our hero or hero-

ine to rise, or the friends, associates, or subordinates who directly assist the effort. In the field of golf course development, there is a tendency to focus on the architect instead of the unsung artist, namely the golf course contractor.

In fact, the terms "contractor" or "builder" do not do these men

and women justice, for they are artisans in the strictest sense. Their tools may be bulldozers, earthmovers and tractors, but their medium is the earth and the best of these craftsman can mold the landscape to produce earth sculptures we call tees, greens, mounds and bunkers. They understand the subtleties

of nature, landforms and natural processes, and strive to blend the necessary artificiality of golf features imperceptibly into the surrounding environment.

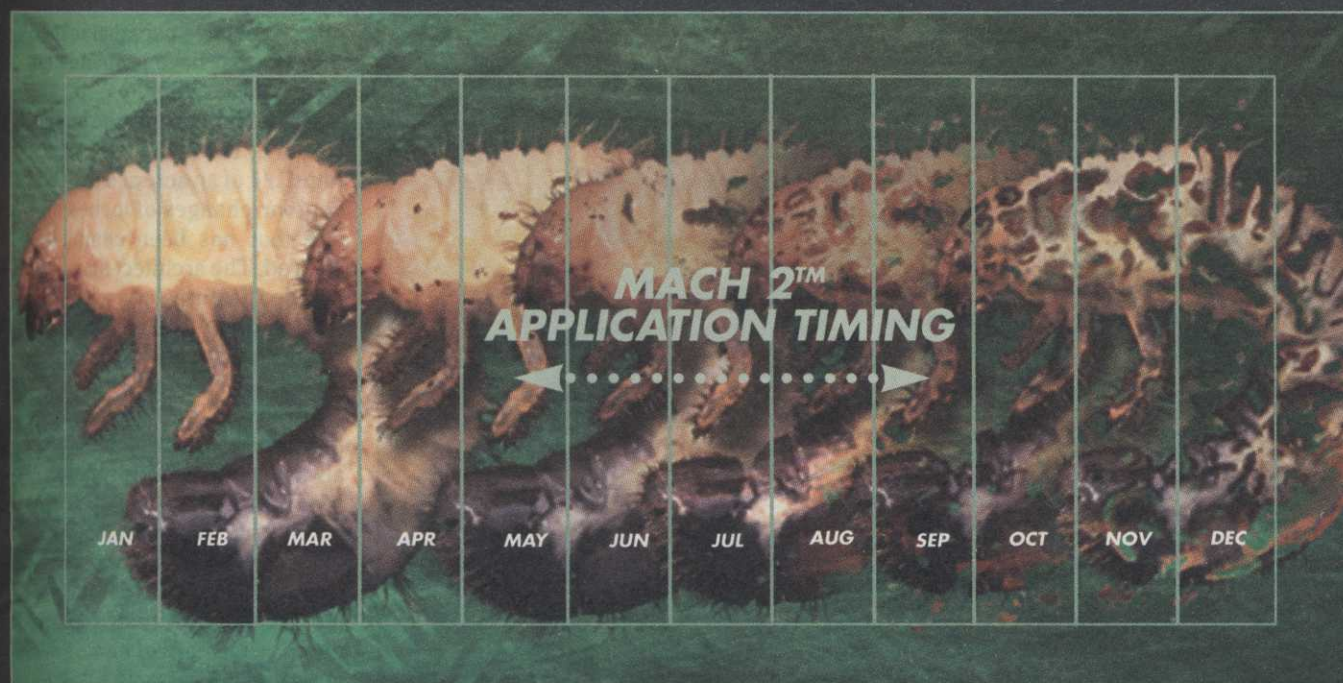
In addition, these people know that fine turf must be grown and maintained on the soils and slopes they leave, so much attention is given to agronomic matters such as topsoil, drainage, seedbeds, fertilizers and seed or stolons.

They work against unpredictable weather, unforeseen geological features, and competing weeds and animals to meet an unforgiving ideal planting time. Besides their natural opponents, there are delays caused by humans such as unresponsive suppliers, vandalism, or strikes by other trades or unions.

Their equipment and crews are specialized for golf course construction and thus can achieve a naturalness of contours that is uncharacteristic of road and/or sewer contractors.

The convention is to call these artisans "contractors," and so I shall, but in your mind there should be a clear distinction between contractors and golf course builders. Actually, a better name is "builders." Their

Continued on page 42



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Turf Drain cited

Continued from previous page

South Lyon, Mich.

"Actually, they finished under budget on our course," said Ron Foote, superintendent at Michigan State University. "That enabled us to make more improvements on other sections of the course."

"Turf Drain is quality, quick, clean, courteous, and professional with owner and architect relationships," added course architect Bruce Matthews III, whose Design 3, Inc., of East Lansing has worked on five projects with the contractor.

"We're unique. What we do and all we've ever done is golf course remodeling," Corlett said. "Mostly they are private clubs, usually between 70 and 100 years old."

Key to Corlett's plans is maintaining control of growth. The firm did 48 projects in 1995, 56 in 1996 and 60 in 1997. "We're endeavoring to reduce that number but do larger projects," he said. "That will control growth. Once we hit a 20-percent increase, we stop."

From the single trencher and lone tractor of 1988, Turf Drain's stockpile stands at more than 250 pieces of equipment.

That's enough to keep busy 26 full-time salaried and 65 full-time seasonal personnel on projects from the Great Lakes Region to the Eastern Seaboard.

Hurdzan on builders

Continued from page 41

national organization, the Golf Course Builders Association of America (GCBA), has greatly contributed to the growth of golf and is celebrating its 25th anniversary.

Having established what they are, we should examine who they are and what they do to earn the

title of hero. Not many firms in the world do only golf course construction. One reason is because the scope of the work is so varied and complex that few companies can organize, equip and train people to handle the work. Not only must the golf course builder be an expert in construction, he must be an astute busi-

ness person to comply with all of the legalities attendant to construction.

Although more courses are being built than 10 years ago, the competition during bidding can be fierce, requiring small profit margins. Once selected, the builder must execute all this work in a tight timeframe, hoping that delays and forced overtime wages will not eat up all the profit. Most contractors find

such bidding and working conditions intolerable and thus they do not enter golf course construction, or they last a very short time.

Further, since golf course projects are so scattered it means that these men and women must be apart from their families for long periods, or develop an almost nomadic family experience.

The obvious question is, why do they persist in golf course

construction? The answer is that these people are true artisans who find reward and take pride in the work they do. To remain in this business and produce high-quality golf courses requires that a builder put a bit of himself or herself into every roll, every mound, every green, every feature. They are creating as they construct and they feel good about each day's work.

But if golf course construction is so creative, what is the function of the golf course architect? The architect plans at a macro-scale and is concerned with about 150 or 200 acres or more at a contour interval of perhaps one or two feet. The architect must plan the relationship or elements on a site that may not allow intensive personal inspection, or that have problems not clearly discernible.

On the other hand, the builder works at the microscale of perhaps 1/4 of an acre at a time and contour changes of inches on a site that has been completely cleared. The architect may draw detailed features at a scale of 1 inch equals 10 feet, but the builder must construct that feature at 1 inch equals 1 inch.

No matter how sophisticated the plans are drawn, there must always be field interpretation of those drawings; and it is this ability that separates the great builders from the wannabes. This ability is learned from technical training, repeated experiences, and years of honest constructive criticism. But it is not solely of intellect, for the great contractor has a superb imagination, reliable intuition and good eye-to-hand coordination.

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Continued on page 86

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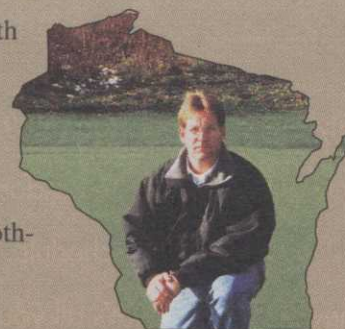
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The Golf Club of Purchase • Purchase, NY



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Quality Grassing

Continued from page 39

supervised by a veteran project manager. This familiarizes him with, and works out wrinkles in, Quality Grassing's standard operating procedures.

Project managers are on each project, and both Barnes and Thomas visit each site. Thomas, a vice president who oversees construction operations, visits each project two or three times a month during construction.

Did Barnes ever envision this type of success when he left his sales manager position with the contractor who built fuel systems for NASA's Cape Canaveral?

"Yes," he answered flatly. "Even in 1983 to '85, I was figuring how I could do work on a golf course. It's golf. I've always been interested in it — any part of it. Just mention Arnold Palmer's name and it's a pleasure to talk about him."

How to get the most out of the GCSAA conference and show

By RAY DAVIES

There are 63 things on the "to-do" list and only sufficient resources to accomplish a handful today. Which five or six tasks are most important? What is to be done about the man items on the list that have been there all year, or could it be - many years? Do you accept the problems as beyond the budgets reach, or do you continue to wage war on them until a solution is found?

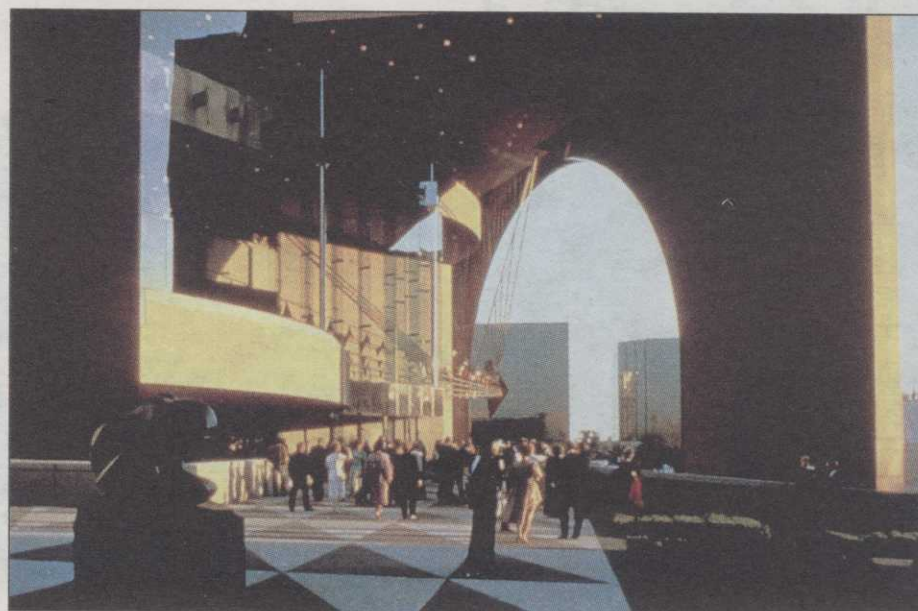
The value a superintendent brings to the operation of a golf course maintenance operation is directly proportional to the quality of his decision-making skills. Some may accept this perspective at first glance as too simple. But, in its simplicity lies a truth that should motivate you to action prior to getting on the plane for Anaheim the first week in February.

Each day we make many decisions regarding the utilization of assets commit-

ted by our boards, committees, or owners to the maintenance of the major profit-producing asset of the business. Much of our decision making is based on the implementation of the routine maintenance plans for course set-up and mowing. But it's the highly leveraged activity of utilizing discretionary labor is where we solve the nagging problems faced by the golf course. This is where we make our reputations as superintendents who dramatically improve our courses.

The GCSAA conference and show presents many opportunities to improve the quality of your decisions. The quality of our decisions is directly correlated to the quality of the information we have at our disposal prior to making the decision. We will solve more problems and implement more effective programs by attending the conference and show with a plan to obtain the information we need to make effective decisions.

1. Determine what information you need.



The Orange County Performing Arts Center is just one of the many attractions in Anaheim.

2. Make a plan to meet with the people best able to provide the information.

3. Follow the plan.

I always make a list of all the information needed that could come from the conference, the show or the participants. It helps to put down all the issues you are faced with in your current position. This

calls for an assessment of your course. I try to look at the course from a number of perspectives - the more the better.

1. The membership's, or golfer's.
2. The owner's or upper management's.
3. The golf professional's.
4. The club manager's.

Continued on page 48

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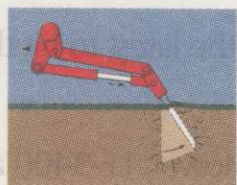
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CIRCLE #102 / GCSAA BOOTH #1518

Mastroleo wins Distinguished Service Award

The board of directors of the Golf Course Superintendents Association of America (GCSAA) has selected David Mastroleo, superintendent at Hillcrest Country Club in Los Angeles, to receive the 1998 Distinguished Service Award.

The honor recognizes Mastroleo's outstanding contributions to the superintendent profession and is an expression of gratitude by GCSAA for his many efforts and achievements in advancing the golf

course management industry.

The award will be presented Feb. 4, during the Opening Session of GCSAA's 69th International Golf Course Conference and Show, to be conducted Feb. 2-8 at the Anaheim Convention Center.

A second-generation superintendent and 44-year GCSAA member, Mastroleo took his first superintendent job at Arrowhead Country Club in Wheaton, Ill., in 1953. He moved to Los Angeles to

Continued on page 86

CONFERENCE SCHEDULES

ONE-DAY SEMINARS

MONDAY, FEB. 2

- The Challenge of Owning a Golf Course (.7)
- Drainage Systems (.7)
- Employee Safety Training (.7)
- Focus on the Military (.7)
- Improving Your Negotiating Skills (.7)
- Irrigation Scheduling Techniques (.7)
- Maximizing Turfgrass Disease Control (.7)
- Options and Their Application in Pest Management (.7)
- Protecting Natural Resources on the Golf Course (.7)
- The Superintendent as Grow-In Manager (.7)
- Turfgrass Ecology (.7)
- Turfgrass Stress Management (.7)
- USGA Intermediate Rules of Golf (.7)

TUESDAY, FEB. 3

- Budgeting and Forecasting (.7)
- The Challenge of Owning a Golf Course (.7)
- Developing Your Hazard Communication Program (.7)
- Golf Course Safety, Security and Risk Management (.7)
- Insect and Disease Management for Warm Season Turfgrass (.7)
- Irrigation Water Quality (.7)
- Lake and Aquatic Plant Management (.7)
- Maximizing Job Satisfaction (.7)
- Personal Stress Management (.7)
- So You Want to be a General Manager? (.7)
- Strategies for Managing the Turfgrass System (.7)
- The Superintendent as Grow-In Manager (.7)
- USGA Golf Course Rating System (.7)
- Wetlands and Golf Courses (.7)

WEDNESDAY, FEB. 4

- Certification Exam Study Guidelines (0)
- Financial Essentials for the Superintendent (.7)
- Lake and Aquatic Plant Management (.7)
- Maximizing Teamwork (.7)
- Maximizing Turfgrass Disease Control (.7)
- The Microbiology of Turfgrass Soils (.7)
- Scouting, Sampling and Monitoring Golf Course Pests (.7)
- Turfgrass Stress Management (.7)
- Weed Control (.7)
- Wildlife Management and Habitat Conservation (.7)

THURSDAY, FEB. 5

- Advanced Weed Management (.7)
- Calculations and Practical Mathematics for Use in Golf Course Management (.7)
- Design, Construction and Maintenance of Chemical Storage Facilities (.7)
- Enhancing Your Value as a Professional Golf Course Superintendent (.7)
- Financial Management (.7)
- Golf Course Construction Management and Grow-In (.7)
- Human Resource Management (.7)
- Integrated Disease Management for Bermudagrass Golf Courses (.7)
- Irrigation Efficiency (.7)
- The Microbiology of Turfgrass Soils (.7)
- Practical Tree Management (.7)
- Problems and Solutions: Using Annuals and Perennials in the Golfscape (.7)
- Reclaimed Water Irrigation (.7)

INNOVATIVE SUPERINTENDENT SESSIONS: PARTS I&II

FRIDAY, FEB. 6 & SATURDAY, FEB. 7

- Continental breakfast and roundtable discussions. 7-9:30 a.m. (Friday, Feb. 6)
 - 7-8:30 a.m. (Saturday, Feb. 7)
 - Several 15-minute presentations from superintendents sharing their successes and innovative ideas.
- (Friday's session will have Japanese and Spanish interpretations.)

CONCURRENT EDUCATION SESSIONS

THURSDAY, FEB. 5

- 9-11:45 a.m. • The Inside Scoop on Bentgrass
This session will provide a broad perspective of the new bentgrasses with specifics on establishment, renovation, and management.
- Managing Turf To Protect the Environment
Investigation of turfgrass management programs.
- 2-4:45 p.m. • The Inside Scoop on Bermudagrass
Taking a look at new types of bermudagrass and the management practices they require.
- Environmental Success Stories
A review of environmental successes ranging from economic values of conservation to research on golf and wildlife.

TWO-DAY SEMINARS

MONDAY & TUESDAY, FEB. 2-3

- Basic Principles of Turfgrass Management (1.4)
- Business Communication and Assertiveness Techniques (1.4)
- Design, Construction and Renovation for IPM (1.4)
- Golf Course Restoration, Renovation and Construction Projects (1.4)
- Introduction to Soil Science (1.4)
- Irrigation Part I: Equipment Use and Selection (1.4)
- Managing People for Peak Performance and Job Satisfaction (1.4)
- Plant Health Care and Pest Management for Golf Course Trees and Shrubs (1.4)
- Plant Nutrition and Fertilizers (1.4)
- Spanish for Golf Course Management (1.4)
- Turfgrass Identification and Utilization (1.4)

WEDNESDAY & THURSDAY, FEB. 4-5

- The Assistant Superintendent: Managing People and Jobs (1.4)
- Basic Turfgrass Botany and Physiology (1.4)
- Disease Identification and Control (1.4)
- Environmental Considerations in Golf Course Management (1.4)
- Golf Course Construction Techniques and Management (1.4)
- Golf Course Design Principles (1.4)
- Golf Course Restorations, Renovation and Construction Projects (1.4)
- Golf Greens: History, Theory, Construction and Maintenance (1.4)
- Introduction to Integrated Pest Management (1.4)
- Irrigation Part II: System Design, Operations and Management (1.4)
- Managerial Productivity (1.4)
- Managing People for Peak Performance and Job Satisfaction (1.4)
- Planting Design for the Golf Course (1.4)
- Preconstruction and Construction Management (1.4)
- Salt-Affected Turfgrass Sites: Assessment and Management (1.4)

HALF-DAY SEMINARS

WEDNESDAY, FEB. 4

- Classic Golf Courses and the Master Architects (.35)
- Developing a Successful Superintendent/Employer Relationship (.35)
- Guest Architect Seminar with Robert Lohmann (.35)
- Managing Turfgrass Root Systems (.35)
- Time Management for the Golf Course Superintendent (.35)
- Turfgrass field Seminar (.35)
- Weather Information and How to Use It (.35)

THURSDAY, FEB. 5

- Causes, Detection and Management of Localized Dry Spots (.35)
- Managing Multi-Course Facilities (.35)
- Time Management for the Golf Course Superintendent (.35)

SATURDAY, FEB. 7

- Precise Sprayer Calibration, Tank Mixing and Record Keeping (.35)
- Extending/Protecting Pump Station Life (.35)

SPECIAL INTEREST PROGRAM

WEDNESDAY, FEB. 4

- 2-5 p.m. • The First Timers Orientation Session. Come in as an amateur attendee and leave as a professional conference participant.

THURSDAY, FEB. 5

- 7:45 a.m.-4 p.m. • Golf Course Decision Makers
Golf Outing and Lab Owners and employers of superintendents only. An inside look at the daily challenges of superintendents. Play 18 holes during the lab. \$35
- 2-5 p.m. • Public and Resort Golf Forum: Topics will include: Trends in daily fee operations, the diversity in public and resort golf, and the politics and competition between private facilities and municipal golf courses.

FRIDAY, FEB. 6

- 2-5 p.m. • Greens & Grassroots: The American with Disabilities Act and Golf Courses
A panel of experts will be discussing topics such as the ADA and its impact on golf, compliance issues, case studies and advice on handling complaints.

SATURDAY, FEB. 7

- 9 a.m. - noon • Career Development Forum: When Does My Career Become a Second Choice?
Learn how to make positive career moves to improve the quality of your career.

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Davis awarded '98 Leo Feser

Darren Davis, superintendent at Olde Florida Golf Club in Naples, Fla., will be presented with the 1998 Leo Feser Award on Feb. 4 at the Opening Session of the Golf Course Superintendents Association of America's (GCSAA) 69th International Golf Course Conference and Show in Anaheim, Calif.

The annual GCSAA award honors the most outstanding superintendent-authored article, published in the association's monthly magazine, *Golf Course Management (GCM)*. The winner's name is engraved on a plaque for display at GCSAA headquarters in Lawrence, Kan.

GCSAA's Publications Committee selected Davis' article, titled "Sowing the Seeds of Knowledge," which was published in the December 1996 issue of GCM. The piece provided methods by which superintendents can teach school children about environmental principles. Davis said he was encouraged to write the article because golf course superintendents are the people most responsible for educating the public about the environmental benefits of golf courses.

"I have made an attempt to educate as many people as I can on the benefits that a golf course provides," Davis said. "It's a subject I feel strongly about, and have consequently given many school tours at Olde Florida and have gone to many classrooms to give slide presentations. One of my goals was to help fellow superintendents understand the value of this task."

A GCSAA member for eight years and a graduate of the Penn State's turfgrass management program, Davis has been at Olde Florida since 1992. He has also served as an apprentice superintendent at Augusta National and assistant superintendent at The Loxahatchee Club in Jupiter, Fla.

The award honors Leo Feser,

a pioneer golf course superintendent and a charter member of GCSAA. Feser is credited with keeping the association's official publication alive during the Great Depression. For three years, he wrote, edited, assembled and published each issue of the magazine from his home in Wayzata, Minn.

MacCurrach honored with scholarship fund

Allan MacCurrach, senior agronomist for the PGA Tour until his death at age 57 on Jan. 14, 1997, will be honored through the annual Allan MacCurrach Memorial Scholarship, announced by the PGA Tour and the Golf Course Superinten-

dents Association of America (GCSAA).

The MacCurrach Memorial Scholarship, consisting of two \$2,500 awards, will be given each year to the second- and third-ranking scholars in the annual GCSAA Scholars Competition. The top scholar is named winner

of the Mendenhall Award, given in memory of the late Chet Mendenhall, who served as GCSAA President in 1948 and was a charter member of the association.

The GCSAA Scholars Competition, administered by the

Continued on page 86



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Standard set to introduce Soil Butler

Standard Golf Co. is set to introduce several new products at the GCSAA show. Among Standard Golf's new product offerings are the Seed and Soil Butler and the Range Mate club washer. The new Seed and Soil Butler features a wire stand to hold it firmly in place on the tee. Constructed of durable polyethylene for long life, the Butler's attached lid keeps the divot repair mix dry. The Range Mate club washer is designed to help players clean their clubs quickly, safely and effectively. For more information, contact Standard at (319) 266-2638.

CIRCLE #250

Getting the most

Continued from page 43

5. The worker's.
6. A woman's.
7. My own.

I also try to think about seasons. Many of the issues that we are working to improve are affected by the seasons.

Good questions are the key to creating this list. Here are a few of the questions I ask myself

prior to attending the conference each year:

What issues do the golfers want addressed for the next season?

It is important to be working on solving the problems that our customers feel are most important, as well as the ones we know are important. Now comes the hard part. Write them down.

What issues have been on the back burner because of a lack of resources?

The major reason a fresh eye brings solutions to problems that have plagued a course for many years is quite simple. Years have passed since anyone has attempted to solve an accepted problem. During this time the profession has developed solutions that have gone unapplied at the particular course. The fresh eye simply applies current knowledge to the old problem.

What problems do I have that

if remedied would have the biggest payoff to the membership?

The mind of the superintendent needs to be set upon the problems that will bring the most improvement. A critical decision is in selecting the most important problems to solve.

What needs do I have related to irrigation?

Changes in this area are fast and furious. It is usually a rich area for new information on old problems.

What needs do I have related to equipment?

This is the primary attraction at the show. What new machine is available that will cut labor costs or improve performance over my current beast.

What labor needs do I have?

It doesn't matter what the issues are: training, retention, seasonal workers, a mechanic, or regulatory compliance. This is an area that is getting more attention from superintendents and the market. It may not be as easy to access as finding a new fairway mower, but information on these topics are becoming more plentiful each year.

What materials that I use are not producing the results I require?

This includes sand topdressing, fertilizers, pesticides, or any other material that affects the quality of the golfing experience we provide.

This process generates the list of questions to be discussed at the conference and show. With a little thought you will be able to bring with you a list of informational goals that will guide your activities, or at least influence your conversations.

I usually take a notebook with me to the conference and write one question at the top of each page. Each night I review the notebook to see what I learned that day. It also makes me aware of opportunities to gain the information I require.

How you perceive the conference will have a direct effect on how productive the experience will be. If you plan carefully and work the event, you will find plenty of time to meet with old friends, make new ones, and improve your decision-making by providing yourself with the informational resources.

Grund introduces Snap-In

Grund Guide will introduce its new Snap-In Marker, which is compatible to the Toro 730, 750, 760, and 780 series sprinkler head covers. Simply remove the existing snap-in and insert the Grund Guide adaptable part. For more information, contact Grund at 800-971-7233.

CIRCLE #251

Otterbine introduces Giant Fountain

Otterbine Barebo Inc., a manufacturer of pond and lake aeration systems and fountains, will announce its new giant fountain series. Pricing, availability and specifications for this spectacular fountain will be made available beginning in the year 1998. For additional information on the Giant Fountain series contact 1-800-AER8TER.

CIRCLE #252

GOLF COURSE NEWS

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CIRCLE #127/GCSAA BOOTH #1767

BRIEFS



GRAHAM, PANKS SPLIT

Player consultant David Graham and architect Gary Panks are terminating their 10-year association in golf course design. Graham is concentrating on a full PGA Senior Tour schedule, while Panks will continue to focus on course design and share more of the credit with his staff, including senior designers Gary Stephenson and Michael Rhoads. The firm will continue to operate its Phoenix and Dallas offices under the name of Gary Panks Associates.

WHAT'S IN A NAME? ENGH KNOWS

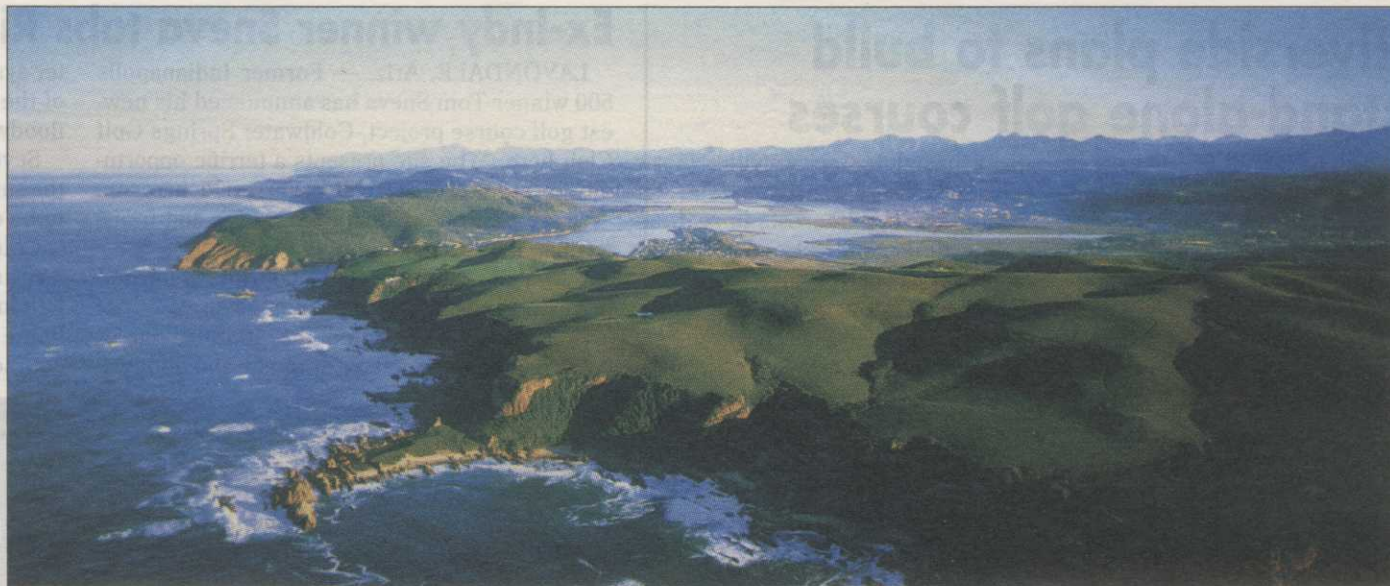
James Engh of Castle Rock, Colo., has changed the name of his golf course design firm and has established a web site on the World Wide Web. The firm previously known as Global Design Group, Inc. has been renamed James J. Engh, Golf Design Group, Inc. The web site can be contacted at www.enghgolf.com.

PARAGON OPENS IN ATLANTA

NORTH PALM BEACH, Fla. — Paragon Construction International, Inc., has opened its Eastern Region office in Atlanta. The office will oversee the day-to-day operations on all of Paragon's construction projects located east of the Mississippi River and north of mid-Florida. The Atlanta office is Paragon's fourth corporate office to open in North America. Others are located in North Palm Beach, Fla.; Phoenix, Az.; and Puerto Vallarta, Mexico. Outside of North America, Paragon has offices in Singapore and the Philippines.

SOCIETY HONORS GOLF DIMENSIONS

WHITTIER, Calif. — GolfDimensions has been honored by the Southern California Chapter of The American Society of Landscape Architects with two 1997 Quality of Life awards. GolfDimensions received both an Honor Award and an Award of Excellence in the Water Reclamation and Conservation Design categories for the Desert Willow Golf Resort located in Palm Desert. The awarding committee stated: "The project reflects a high level of responsibility to the environment while providing an attractive, challenging sports experience. This course will hopefully set a trend to create recreational arenas in which local natural character has aesthetic value."



Too good to be true? Golfplan will design 18 holes here at the Sparrebosch Clifftop Estate and Country Club in Knysna, South Africa.

South African property an eye-lifter for Fream

KNYSNA, South Africa — Working a site that is "nearly too good to be true," Golfplan has been retained to design 18 holes here at the Sparrebosch Clifftop Estate and Country Club, a US\$100 million residential resort development situated on spectacular headlands overlooking the Indian Ocean.

Groundbreaking is scheduled for March 1 and the course will be the

southernmost on the African continent when it opens with a planned New Year's Eve 1999 celebration. This will provide Golfplan a unique bookend, as the Santa Rosa, California-based firm also designed the continent's northernmost course: the 27-hole Golf de Tabarka Resort in the Tunisian port city of Tabarka.

"When we opened Tabarka in 1992, people called it the Cypress Point of the

Mediterranean," said Ron Fream, Golfplan founder and principal. "So it's fitting that our first South African project will be Sparrebosch, because the site couldn't be more suggestive of Pebble Beach."

Developed by PK Developments Ltd. of Bangkok and Cape Town, the Sparrebosch project will feature a 150-room hotel and more than 400 holiday/

Continued on page 60



Permitting planner Dianna Almini consults with Neal Meagher, senior architect with Graves and Pascuzzo Golf Course Design.

Designers offer permitting services

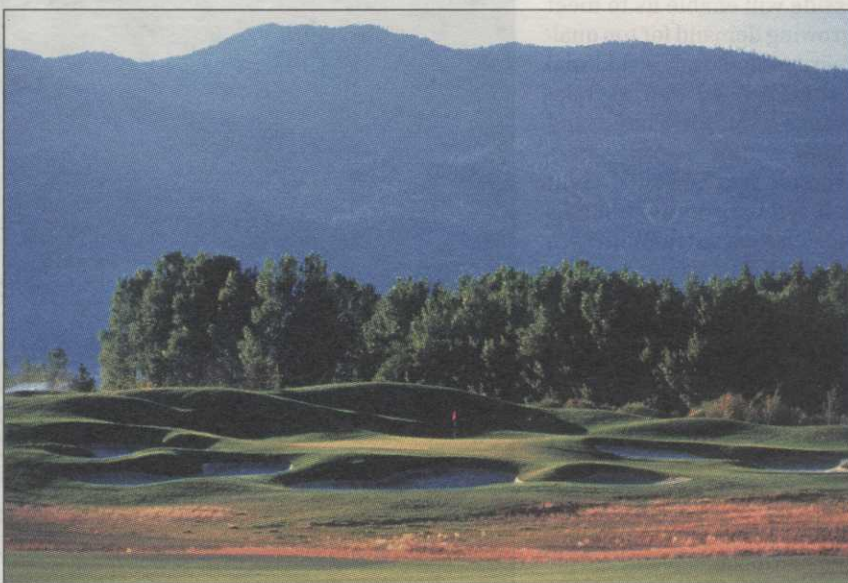
By MICHAEL LEVANS

WALNUT CREEK, Calif. — Looking for a way to stick out in the growing crowd of golf course designers, Robert Muir Graves & Damian Pascuzzo Limited have decided to bring development services in-house to help clients get past what is often the toughest obstacle for any golf development, permitting.

To head this effort, Graves and Pascuzzo hired Dianna Almini as director of development services. Almini is charged with the task of weaving clients through the maze public agencies often assemble, a job she had been doing as an independent consultant for the past 12 years in California.

Almini sees her new position becoming a chief selling point for the design firm. "For the most part, we believe that everybody who is in this market can de-

Continued on page 56



The 5th hole at Lightning 'W' Ranch Golf Club displays the beauty of the Pascuzzo-Graves design.

Q & A Pascuzzo turns a break into a successful career

Damian Pascuzzo is managing partner of Graves and Pascuzzo Golf Course Design & Development. Pascuzzo oversees the firm's Walnut Creek, Calif., office, where his duties include establishing design standards, overseeing office production work, site qualification, project management, construction inspection and design. Pascuzzo earned a bachelor of science degree from California State Polytechnic University in 1981 and a year later joined Robert Muir Graves, who, since 1955, has participated in more than 650 golf course architectural projects worldwide.



Damian Pascuzzo

Golf Course News: How did you and Bob Graves team up?

Damian Pascuzzo: I was getting out of college and looking for a job. So I called him up and he was gracious enough to invite me to come talk with him. What I thought would be an hour interview turned out to virtually be all day. We talked about golf for a third of

the day, jazz for a third and aviation for a third. It was evident we got along beautifully, but he just didn't have any openings at the time.

Bob called me about a year later, said he had an opening and asked if I was still interested. I said, 'How about Monday morning?' We've

Continued on page 58

Riverside plans to build stand-alone golf courses

JACKSONVILLE, Fla. — St. Joe Corp. has bought Riverside Golf Management Co., a Jacksonville-based business with a decade of experience in the development, operation and management of championship quality golf courses. Riverside was founded by former U.S. Amateur Golf champion, PGA Tour pro and ABC golf analyst, Steve Melnyk, who will continue to direct Riverside as a part of St. Joe.

"The addition of Steve Melnyk and his team of experienced professionals at Riverside Golf to the St. Joe Corp. will be great for our company, for Florida, and for golf," said St. Joe chairman and chief executive officer Peter S. Rummell.

"We plan an ambitious program of building and operating stand-alone, high-quality, daily-fee golf courses as well as teaming Riverside with other St. Joe divisions to jointly design, develop and operate both independent golf courses and courses within integrated communities. Riverside will enable us to meet the growing demand for top quality recreational and residential opportunities, as well as take advantage of St. Joe's huge land holdings."

Riverside has managed eight upscale semi-private golf courses in the southeast teaming with some of golf's foremost architects. Riverside currently operates three courses at Clemson in Jacksonville and Atlanta. Riverside and St. Joe have plans to develop or acquire a large portfolio of new courses over the next five years.

Melnik said Riverside would continue to meet the rapidly growing demand for championship-caliber, semi-private golf courses. "For many golfers, private club membership is not practical," said Melnyk. "We're going to develop high-quality facilities within a semi-private, structure to provide a better alternative."

"I'm excited about joining the St. Joe team," said Melnyk. "For those who love golf it is more than a game — it is a way of life. The growth potential for golf, driven by strong demographics, has only just begun to be tapped. Together, St. Joe and Riverside will design and develop great tests of golf."

Melnik, 50, played on the PGA Tour for ten years until 1982 when he joined CBS Sports as a golf analyst. In addition to his work at Riverside, Melnyk is also the founding chairman of First Coast Community Bank in Amelia Island, Fla.

St. Joe, a publicly held com-

pany based in Jacksonville, is Florida's largest private land owner and has interests in real estate, timber and railroads. The company recently acquired the major assets of Arvida, one of the nation's most respected community developers.

Ex-Indy winner Sneva tabs Richardson for course

LAVONDALE, Ariz. — Former Indianapolis 500 winner Tom Sneva has announced his newest golf course project, Coldwater Springs Golf Club here. "The site presents a terrific opportunity," said golf course architect Forrest Richardson. "We are basically taking a flat canvas and transforming it into a golfing roller coaster."

Sneva's first project, The 500 Club, is located in north Phoenix and opened in 1990.

Richardson has routed the 18-hole, par-72 course as part of a master drainage and floodwa-

ter system for the community, taking advantage of the massive earthmoving required to handle floodwater in and around the 500-acre site.

Several of the golf holes rise 20 to 30 feet above the surrounding fairway areas, which are planned to be carved out of the former farmland.

Coldwater Springs is being planned as part of a residential community development aimed at helping to bring Avondale more into the growing home market of Phoenix's West Valley. The course is expected to open for play in the fall.

A FEW WORDS ABOUT NEW CHIPCO ALIETTE SIGNATURE.

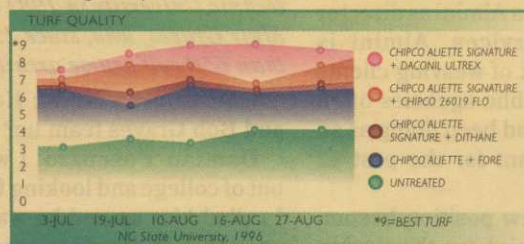
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CONWAY, Ark. — Golf course architect Greg Clark and his company, Fairway Golf Course Development, Inc. of Lonohe, are building two new courses, including Bunker Hill Golf Course 11 miles from Conway on the Arkansas River and Wolf Mountain Golf Course in Poteau, Okla. Bunker Hill gets its name from a 1920s one-room country school house of the same name. The old school sets to the left of the 1st fairway and is being restored as a museum.

With a scheduled spring opening, Bunker Hill Golf Course will be a 6,600-yard, par-72 layout with a lot of water. Clark has incorporated views of the river with a gentle rolling terrain to create a short but testy venue. Tees and fairways will be a Bermudagrass, roughs will be fescue. Greens will average 5,000 square feet. Bunker Hill will be semi-private. A selection of riverview and golf course lots will be offered.

Greg Clark designing two tracks

Wolf Mountain Golf Course is part of an 1,100-acre resort development set in the San Bois Mountains. Atop a mountain plateau, the development will have approximately 400 golf course and mountainview homesites, a resort/lodge with a conference center, tennis center, swimming pools, hiking and nature trails and equestrian center.

Clark believes this is the best piece of

raw land he has ever worked with. Mountain views, highlighted with a clear running stream, will make golfers feel as if they are playing in the Rocky Mountains, he said.

Wolf Mountain will be a 7,100-yard, par-72 layout. Each hole will have four large teeing areas and generous fairways. Because of the altitude and seasonal climatic conditions, Clark has chosen a Bermuda/ryegrass blend for tees and fairways. Bentgrass greens will average 6,000 square feet. The opening of this semi-private facility is scheduled for summer.

Phoenix firm offers internship

PHOENIX, Ariz. — Golf Engineering Associates (GEA), an irrigation design and consulting firm, has formed an internship program for college juniors and seniors majoring in agricultural or civil engineering, landscape architecture or turfgrass sciences.

GEA will offer a stipend in addition to fulfilling the requirements of any accredited school's formal internship program.

"Our company is very much involved with on-site field work, so any applicant we accept must be able to move from the drafting boards to the rigors of a construction site without hesitation," said Gary S. Kaye, founder of GEA.

"Being able to teach these specialized skills to students is really rewarding for us, and we are forming ties with the future professionals of the golf development industry."

Undergraduate students are encouraged to contact Marietta Del Bello at 602-863-7770.

Johnston goes to work easily

HILTON HEAD ISLAND, S.C. — Could any golf course architect be nearer to a project he's working on than Clyde Johnston at the Sea Pines Club Course here? At the most it is 800 yards from Johnston's office door to the par-3 11th hole of the private course. Close enough to wander over at lunch to check the progress of his renovation program of the venerable course.

Constructed in 1973, four years after its sister course, Harbour Town Golf Links, Sea Pines Club Course was the fourth and final course built at Sea Pines Plantation. The original design came from Frank Duane, with architectural consulting from Arnold Palmer.

Johnston's renovation of the Club Course will begin in the spring, concentrating on restoring the original quality of playing conditions of the championship layout, while modernizing the irrigation and drainage of the course.

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CIRCLE #110/GCSAA BOOTH 308

SANTA BARBARA, Calif. — Santa Barbara area golfers have a challenging new daily-fee golf course to play, with the opening on January 15 of Rancho San Marcos Golf Course. The Robert Trent Jones, Jr.-designed course is located on rolling hills adjacent to Highway 154 overlooking Lake Cachuma and the Santa Ynez Mountains - land that once comprised the San Marcos land grant.

RTJ II's Rancho San Marcos opens for play

"It is rare to see a new course that exhibits so much maturity from the very beginning," said Michael Abbott, Director of Operations. "With its combination of hundreds of century-old oak trees, breathtaking views of Lake Cachuma and Robert Trent Jones, Jr.'s outstanding design - Rancho San Marcos is a golf course that has emerged as a

spectacular natural extension of the surrounding landscape."

Rancho San Marcos has some unusual and historic amenities, such as the outdoor, sandstone fireplace near the first tee for a little added warmth for those brisk, early-morning tee times; fresh fruit stands situated along the course to supply golfers with a refreshing snack that is also

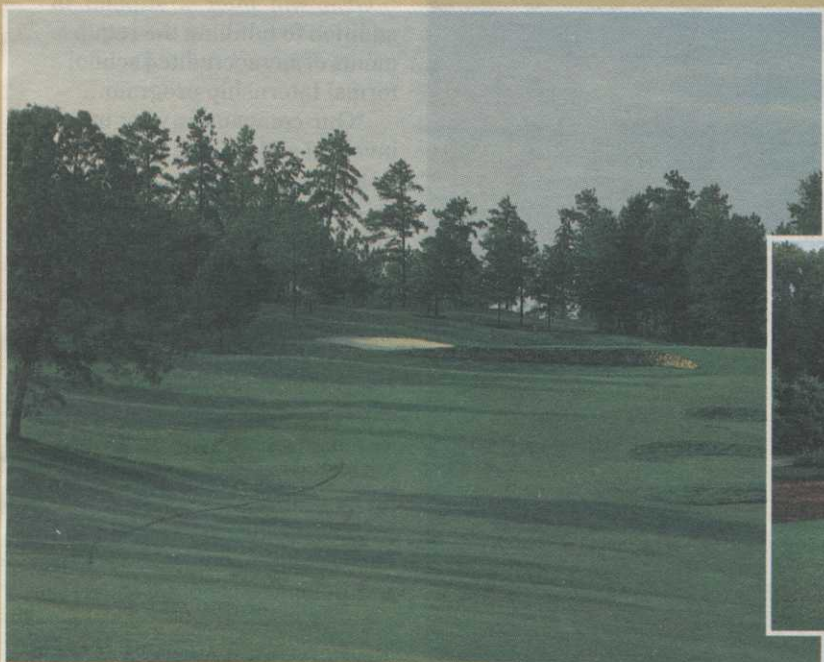
reminiscent of the orchards that were once part of the history of the San Marcos property; architecture that is authentic to the early 1900s when San Marcos was a working ranch; and an old stagecoach trail that has been preserved so golfers can relive a little bit of history as they ride the trail which has been incorporated into a segment of the golf cart path.

Developed and financed by Rancho San Marcos Golf Partners, a group of 25 local Santa Barbara families, the 7,000-yard course is the result of more than 10 years of work by the partners together with thousands of area residents who supported the project.

"As long-term residents of Santa Barbara County, my partners and I were committed to providing an environmentally sensitive, unique and powerful outdoor recreation experience for those who visit Rancho San Marcos Golf Course," said Rob Robinson, general partner of Rancho San Marcos Golf Partners. "We couldn't have done it without the support of the local community and we think they will be please with what we have accomplished."

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\$4.7M infusion dries up muddy Legion Memorial

EVERETT, Wash. — A mammoth subsurface remodeling that transforms city-owned Legion Memorial Golf Course from often-muddy conditions to one of the driest facilities in the Puget Sound area will open in mid-1998.

Completed last fall, the project was carried out by Burns Golf Design of Fernandina Beach, Fla., and builder Daylen, Inc. of Fresno, Calif.

The \$4.7-million project includes more than \$1.3 million for drainage. In the past, the course, which averages more than 70,000 rounds a year, was plagued by extremely muddy conditions much of the time. Some 70 acres are being capped by a 6-inch sand layer over drainage lines installed on 50-foot centers.

The course dates back to the 1930s, and has basic greens, only a couple of sand traps, no irrigation and just a few drainage ditches. The remodeling will include rerouting of several holes, all new greens, more than double the existing tee space, and the addition of four new lakes, a waterfall and recirculating stream, and more than 50 sand traps.

The course will play to par 72 from five sets of tees, ranging from 4,705 to 6,737 yards.

HAMLET WIND WATCH REMODELED

HAUPPAUGE, N.Y. — Architect Stephen Kay has completed extensive renovations to the 18-hole, par-71 Hamlet Wind Watch Golf Club here. The course was bought last year by the Holiday Organization. Kay enlarged and remodeled greens on the 2nd, 5th, 8th and 16th holes, more than 70 sand traps filled with imported white sand, and selected tees lengthened by as much as 50 yards.

New military base funding? All from consumers' on-base spending

By PETER BLAIS

PHOENIX — Falcon Dunes Golf Course at Luke Air Force Base, which opened Dec. 22 here, is a good example of the modern-day realities of military course funding.

No taxpayer dollars were used to build the Gary Panks-designed, 18-hole course, said Luke AFB Business Operations Chief John Beckett. Funding came from money spent by consumers at Luke facilities, particularly the base exchange, social clubs, bowling center and other recreational activities.

Profits from those operations go into a central construction fund. Various



Falcon Dunes, the Luke AFB course was built with no taxpayer funding.

Many people 'see a golf course on an Air Force base and assume tax dollars paid for it. That's not true and we want people to realize it.'

— John Beckett
Luke AFB operations chief

projects apply to the funding program and moneys are awarded based on the project's ability to pay back those funds. The \$8.7 million golf course project showed sufficient promise to receive funding. The course itself will be self-supporting, using no government employees or money in its daily operation.

"A lot of people don't realize that," Beckett said. "They see a golf course on an Air Force base and assume tax dollars paid for it. That's not true and we want people to realize it."

Taxpayer funds were commonly used to build courses prior to the late 1980s when massive military cutbacks were

instituted, Beckett explained. In most cases, any military course built today must be self-sufficient.

"I think we are the first new course built for the Air Force in quite a few years," Beckett said. "It's funny, because most of our bases have courses. Luke never had one because we never had the land, even though we are in a prime part of the country to play golf."

Parts of the base and nearby sections of Maricopa County flooded in 1992. As a result, the county and Air Force decided to build a flood detention basin. The county and military shared the expense. The Maricopa County Flood Control District deeded the land to Luke with the understanding the Air Force would maintain the integrity of the detention basin. Detention basins are suitable for recreation, so Luke AFB officials decided a golf course would be a perfect use for the property. Channels located throughout the course would carry any flood waters

away within 36 hours.

Falcon Dunes offers affordable golf for its customers, which consists of 5,000 active-duty and 40,000 retired military personnel, 1,000 civilian employees and their guests. The course should accommodate 60,000 rounds annually, with green fees ranging from \$8.75 for young, enlisted military personnel to a maximum of \$20. "A lot of the young guys can't afford golf in the Phoenix area," Beckett said, "particularly in the wintertime. We have a tiered fee structure so young guys can get involved in the game."

Falcon Dunes has an unrestricted walking policy, although carts are available. Plans are in the works to start a caddie program to give youngsters on the base a chance to play the game and make some money.

Despite low green fees, Luke cut no corners in building Falcon Dunes. There were few change orders and the course was completed 2 1/2 months

'A lot of the young guys can't afford golf in the Phoenix area, particularly in the wintertime. We have a tiered fee structure so young guys can get involved in the game.'

— John Beckett
Luke AFB operations chief

ahead of schedule. It has all the bells and whistles found at other area courses such as continuous cart paths and a complete pro shop with fixtures designed by ProCraft, a well-known Oregon-based clubhouse accessories designer. Greens are planted with Tifdwarf Bermudagrass, fairways and roughs with 419 Bermudagrass, and 328 Bermudagrass on the bunker faces for contrast. Effluent irrigation water comes from the base's wastewater treatment plant, which lacked an adequate disposal site until the course was built.

"Overall it's a quality project," Beckett said. "You want the young active-duty folks, who have friends or relatives come out to visit, be able to bring them someplace of which they can be proud. I think we've accomplished that."

Profits from the course will help provide additional money to underfunded, quality-of-life programs such as daycare, arts and crafts and the like, Beckett explained. The course's fiscal year ends Oct. 1. Projections are that the course, driving range, pro shop and food and beverage operation will show a \$280,000 profit during the first nine months and \$400,000 annually thereafter.

Strange joins muni design team

PORTSMOUTH, Va. — PGA Tour pro and local son Curtis Strange is lending his name, and expertise, as a design consultant, to improve the municipal Bide-A-Wee Golf Course and The Links at City Park here.

The city park facility will include a nine-hole executive course, lighted driving range, natural grass putting course and pro shop. The new learning center will offer youth programs, lessons, equipment, tournaments and affordable golf for every skill level.

Portsmouth City Manager Ronald W. Massie said: "Pros just don't put their names on shoddy products. Our courses will speak to quality."

Quality golf facilities improve the livability of a community for its residents and will attract business and spur commercial development nearby, he feels.

The Links at City Park opened in November. Bide-A-Wee closed in November, with a scheduled re-opening next summer.

Total improvements to the two courses total approximately \$5 million.

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PGA's Brooks designing daily-fee Ft. Worth layout

FORT WORTH, Texas—Mark Brooks Golf has announced construction has begun on Southern Oaks Golf Club, an upscale daily-fee facility located 15 minutes south of downtown Fort Worth. Featuring an 18-hole layout designed by 1996 PGA Champion Mark Brooks, the facility will also include an expansive 15-acre practice and teaching area, an 8,400-square-foot clubhouse and an indoor/

outdoor pavilion with seating for more than 200 that will be used for tournaments and corporate outings.

Brooks was able to take advantage of the site's natural landscape and wooded areas because golf course routing was given a top priority by developer, Timberchase Development Co.

"The routing is the heartbeat of any course, and in many cases, is the only

permanent feature of a golf course," said Brooks. "The Southern Oaks project will benefit tremendously from its natural environment, and I look forward to creating the centerpiece of this unique community."

Nine holes at Southern Oaks are strictly core golf. Only three holes will have home sites on both sides, but will be buffered by 300- to 350-foot-wide corridors. Alternate routes of play and multiple tee boxes

have been incorporated into the par-71 design, allowing the yardage to vary from 5,500 to over 7,200 yards.

The 300-acre course and practice facility will be at the center of a planned residential community developed by Timberchase.

Wadsworth Golf Construction Co. of Plainfield, Ill., is building the course.

Southern Oaks will be managed by Mark Brooks Golf and is scheduled to open for play on Oct. 1.

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Thunder Hill GC to reopen 'easier'

MADISON, Ohio —

Thunder Hill Golf Club here is in the midst of a \$1.5-million renovation project by Meadowbrook Golf Group, Inc.

"Many golfers have played Thunder Hill and left the facility saying, 'It's an interesting experience, but it's really too difficult to play regularly.' That won't be the case when the renovation work is completed," said Michael Rippey, president of Meadowbrook Golf Group's Development Division. "Thunder Hill will still have its 'bite' from the back tees, but golfers playing from one of the other sets of tees will enjoy the round, with all the challenge the course has to offer."

When the course re-opens for the 1998 season, it will play to nearly 7,400 yards. Because there will be at least five sets of tees on every hole, its modified layout will be fair and enjoyable to players of all ability levels, Rippey said. The forward-most set of tees will play to approximately 5,500 yards.

Among the work completed or planned prior to the re-opening of Thunder Hill:

- Hundreds of trees have been removed from various holes in an attempt to widen the line of sight from tee to landing area and from fairway to green. Removing several of the trees resulted in greater hole aesthetics.

- Many water hazards were drained and reconfigured. Some were taken out of play to remove forced carries from tees, while others were removed for aesthetic purposes.

- Underbrush is being thinned and removed to increase playability.

- Bunker redesign work is underway to create better hole definition and a style which conforms to Thunder Hill's natural shapes.

- Tee area is being increased and reshaped.

- All fairways are being converted to bentgrass, and many landing areas will be widened.

- Certain hole widths will be widened.

- Drainage projects are aimed at promoting uniform turf quality.

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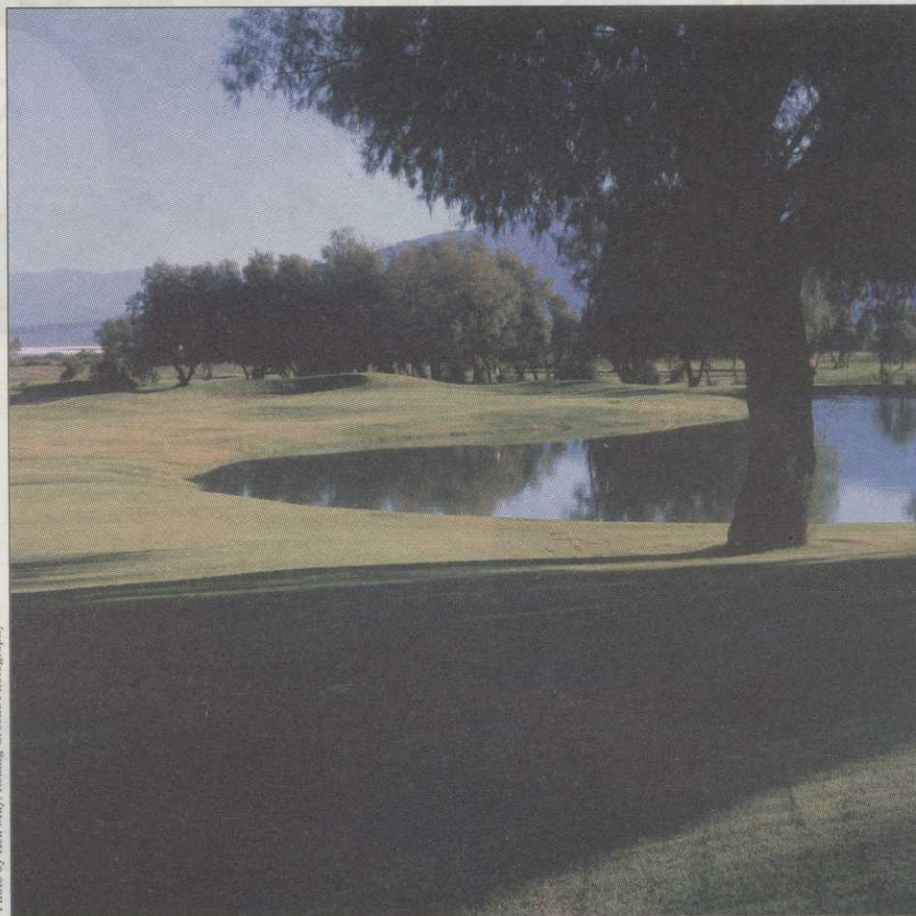
Death Valley given new life

DEATH VALLEY, Calif. — The Furnace Creek Inn & Ranch Resort's 18-hole golf course has undergone a \$1.3-million renovation. Headed by Perry Dye of Dye Designs, the renovation includes five completely redesigned holes and a new irrigation system.

At 214 feet below sea level, the track is the lowest grass golf course in the world. Its fairways are lined with palm and tamarisk trees, and it offers breathtaking views of the surrounding Panamint Mountains from anywhere on the course.

The five redesigned holes include two par-3s, two par-4s and one par-5. The irrigation system has been designed to insure wall-to-wall green even while enduring Death Valley's celebrated heat. Other renovations include improvement of the tee boxes on all holes and additional design modifications and bunkering throughout the course.

In addition to working on the lowest grass course in the world at Furnace Creek, Dye also designed the highest-elevated course in the Western Hemisphere.



The lowest golf course on earth gets a Perry Dye-designed facelift.

Rees Jones' Rio Secco track opens

HENDERSON, Nev. — Rio Hotel & Casino, Inc. subsidiary, Rio Development Company, Inc., opened Rio Secco Golf Club in late October in this Las Vegas suburb.

Designed by Rees Jones, Rio Secco Golf Club plays to a par 72 over 7,250 yards. It is planned that there will be at least 15 minutes between tee times, to provide an enjoyable experience for all players.

Company President James A. Barrett Jr. said: "The Rio Secco Golf Club was developed by us as an additional amenity for customers of the Rio, a destination resort. The course is now available for play. Individuals who are not Rio hotel/casino customers may call the golf course for available tee times and rates. Presently, the course fee for customers of the Rio will be \$190 per round, and for others the course fee will be \$300 per round.

The clubhouse is scheduled to open in April.

Architect's on-staff permitting specialist speeds process

Continued from page 49

sign a pretty decent golf course," said Almini. "In order to set ourselves apart, we decided to provide a service that other firms were not providing."

The key to making this new service work is based on Almini's ability to give clients access to the permitting, political and environmental realities that revolve around a given project. Once those parameters are established, the designer steps in to illustrate what sort of golf course the client can expect to achieve on

that particular property.

By eliminating the layers of outside consulting, Almini said that the firm can save clients time and money with this congealed, in-house team.

"In most cases, developers would have to buy that service through land-use attorneys or environmental consultants. We can go through now as a team, and assess that for them. We can tell them how long it may take, who will oppose them and how to diffuse that opposition."

Time, in most cases, is of the essence.

Permitting can take anywhere from one to five years. The average hovers around 24 months.

"Politically, we can save them years," said Almini. "We know how to go into a community and quickly establish relationships with officials, if we don't have them already. Most developers don't have the time to go and do the coffee sessions in someone's kitchen. I do that."

Almini's new position is starting to make a difference. Orlando, Fla.-based

Signature Resorts Inc. recently signed on with Graves & Pascuzzo for a project in Napa County due to the new service.

"It was a project that Dianna had intimate familiarity with," said Eric Lambdin, senior analyst at Signature. "She has a very strong knowledge of the political dynamics of Napa County. If you don't have that knowledge it can be quite treacherous for a developer."

According to Lambdin, the established development services team gave the project, which has yet to be named, an edge.

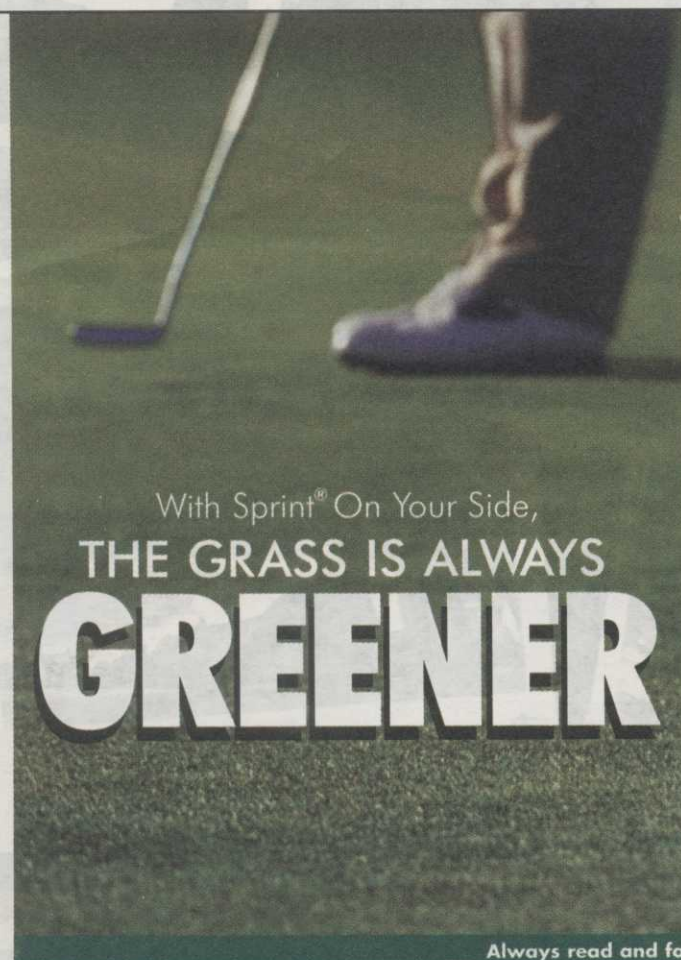
"A developer typically ends up with kind of a team anyway, but they end up taking a piecemeal approach. Not to say that those teams can't be successful — they can be very successful. But you can enhance your possibility of success by having a team that has worked together. Their level of communication is 10 times better than when you bring in a couple people together and hope that the dynamics work."

Almini, who started out doing similar work for subdivisions, shopping malls and hospitals, thought that getting away from those large, commercial projects and into golf would be a breeze.

"It was a slap in the face," she said. "I see more opposition to golf courses than the commercial projects I've permitted. Golf and the environment don't mix. The golf industry has done a great job of informing those inside the golf industry. We have lots of trade publications that tell us all these great movements toward pesticide reduction and the Audubon programs. But American households aren't aware of these movements. They believe we're going to be contaminating their backyards."

In those cases, Almini will be called upon to put out the fire.

"The key to this business is to assess the issues before they blow up," she said.



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Smyers' Kokopelli opens for limited play

MARION, Ill. — Steve Smyers has completed the design and construction of Kokopelli Golf Club here. Stretching across 200 acres of rolling meadows and woodlands, the 7,150-yard par-72 Kokopelli is open to the public for limited play until the desired level of membership is reached.

Developed by southern Illinois native Gary Mayer, Kokopelli offers a pure golf experience with no homes. Open meadows and thick stands of oak, birch, sycamore and maple provide the setting, while buffalograss and native fescues border the fairways, creating the look of Midwestern prairielands.

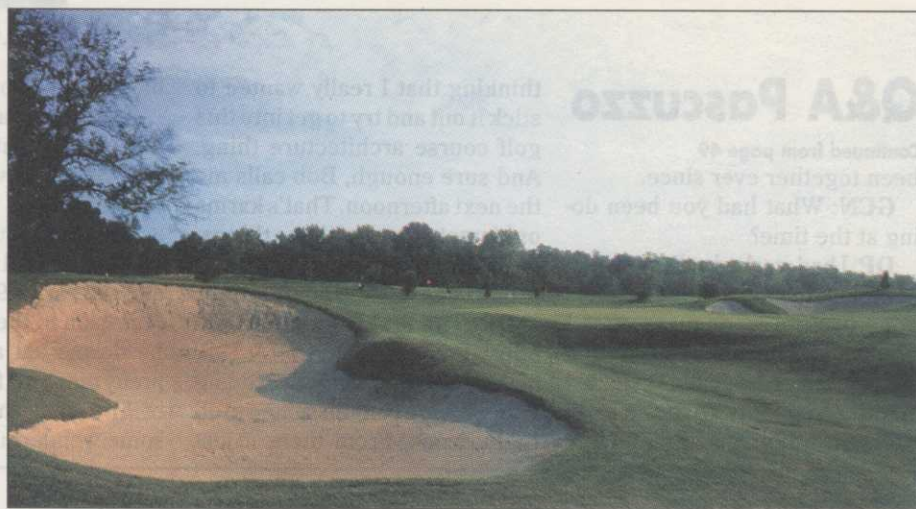
Aided by Kokopelli's rolling terrain and good soil, Smyers was able to create a test of golf with a modest construction budget, allowing Mayer to keep green fees in the \$25 to \$30 range.

Smyers' design uses every area and natural feature on Kokopelli's 330-acre tract of land, including a coal-mining strip pit filled with clear spring water that comes into play on the dramatic par-4 13th and par-3 14th holes. In doing so, he took advantage of the prevailing wind and created great balance and variety in the course by positioning each hole in a different direction than the preceding one.

"The contours of the putting surfaces

relate to the contours of the fairways which relate to the length of the hole, the direction of the prevailing wind and the lay of the land," Smyers said.

"Greens have rolls, slopes and contours and all are carefully positioned in accordance with the strategy of the golf hole. Some contours are there to accept a golf shot, others to work the golf ball off of ... Slopes and contours can aid or penalize the golfer, depending on where he positions his shots."



Fazio adds riding, walking trails to Conn. design

EASTON, Conn. — A Tom Fazio-designed 18-hole golf course, incorporating a public walking and riding trail, is planned by Trout Brook Valley here.

Having filed a plan with the Conservation Commission of the town to develop the private golf club and 103-lot subdivision on 687 acres, Trout Brook Valley hopes to begin construction in 1998. The property is located on the western border of the town.

The walking and riding trail will offer recreational access to the property that has not been allowed in the past.

"This is a great opportunity to build a premiere golf club and fine homes in a very private country setting," said Marc C. Bergschneider, chairman of National Fairways, which has offices in Greenwich and Fairfield. "We designed this project to conform with the inherent rural nature of Easton, limiting the number of homes and protecting the open space."

POLK COUNTY GETTING COURSE

OCALA, Fla. — WestAmerica Corp. will build an 18-hole golf course and other facilities on 285 acres it is buying in Polk County, within a 10-minute drive of Walt Disney World. Daniel M. Boyar, president and chief executive officer said, WestAmerica plans to develop this property into a destination timeshare resort which will also include 500 residential units, a swimming pool, shopping arcade, and other facilities. The purchase contract with Dr. James P. Gills of Tarpon Springs calls for a closing on or before July 10. The total purchase price is \$5.7 million.



TO: Robert Sackman, GCS

FROM: The Greens Committee, Tall Oaks Country Club

RE: CONGRATULATIONS!

Dear Bob,

We want to thank you for the exceptional job you and your staff did with the course this past year. Despite some rather harsh weather conditions, you were able to keep play at its all time best. In fact, guests from surrounding clubs frequently commented on what great shape our course was in and wondered what your secret is. We know it's a lot more than magic, but whatever you do — aside from your hard work — it has made the membership very proud.

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Q&A Pascuzzo

Continued from page 49
been together ever since.

GCN: What had you been doing at the time?

DP: I had worked at Disneyland summers during college and had gone back to work there after I graduated. The funny thing is that the day before he called I rejected an offer to go into Disney's management-training program. I was

thinking that I really wanted to stick it out and try to get into this golf course architecture thing. And sure enough, Bob calls me the next afternoon. That's karma or kismet or one of those things.

GCN: What was the first project you worked on with Bob?

DP: The first from the beginning was Santa Clara Golf & Tennis Club. Within a month of doing that, we were commissioned to do La Purisima. From there it just

blossomed through the 1980s.

GCN: Bob had a very successful practice dating back to the mid-1950s. How did you fit into the business?

DP: Bob's business had been quite successful through the 1960s and the early 1970s. There was a recession in the mid-1970s when he downsized a little bit. I was pretty much his first associate type of hire after that. But he's had some wonderful people work for

him—John Steidel, Robin Nelson.

Our staff grew dramatically in the 1980s. It grew from Bob and me to 11 or 12 people by 1990. We were doing projects all over the world—Asia, Guam, Canada and the Western United States, which has always been kind of a home base for us.

GCN: What's the major thing you've learned from Bob?

DP: Honesty and integrity. He's a very unpretentious guy.

He'll go out of his way to help you and never burn bridges... As designers, we all have these really cool ideas about things we really want to do. Sometimes we can't do them and that gets frustrating. But he taught us that the project is the most important thing, not your personal monument.

GCN: Most of your projects have been in the Western United States. Are you looking to expand to other regions?

DP: We have made inroads on the East Coast. We have one project under contract and hope to have a second within 30 days. Our goal is to definitely work throughout the country. As designers, it appeals to us to work with different environmental conditions, with different landscapes, and different market conditions. Upscale, daily-fee golfers are a little different in Ohio than they are in California.

We've never pursued international work very hard. But when it has come our way, it's been fun. We did a couple projects in Canada. We did a major renovation to a course south of Vancouver called Richmond Country Club. We did a renovation near Whistler called Squamish Valley Country Club. We built a course between those two called Furry Creek. In the movie *Happy Gilmore*, the scene where Adam Sandler fights with Bob Barker was filmed at Furry Creek. ... We've done several courses in Malaysia, one in Guam and a lot of planning work in Japan and Korea.

GCN: From a design standpoint, is there anything that you consistently see in a Damian Pascuzzo project?

DP: I hope not. Our clients vary so much that I really try to understand who their market is, what their development objectives are, and then design accordingly. On a very elementary level, Bob has ingrained in me a sensitivity toward maintenance and playability for all levels of golfers. But we try to tailor everything toward the specific client.

We have a client who has 135 acres on a steep site. But there are 2 million golfers within 10 miles. We're going into the project knowing the course will never make the cover of *Golf Digest*, but we're going to build a really fun course that's going to make these guys a lot of money. We're not building a monument. We're looking at it mostly from a business perspective. There's a very specific market niche there that we're trying to fill, and our job is to deliver that product for our client.

Occasionally, you get a project like La Purisima, where the client gives you 300 wonderful acres and says 'Find the best 18

Continued on next page

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Q&A: Pascuzzo

Continued from previous page

holes possible.' That's a very different game.

The one thing that has influenced me is something Alister Mackenzie wrote in his book. He said the game should be approached with a "sense of adventure." I love that phrase. Golfers really respond to what they see. We all love standing on an elevated tee and being able to rip a long drive or carry a bunker, tree or chasm. Those little challenges, threats, or taunts that you can incorporate into the course are the sort of things golfers respond to and lend to the enjoyment of the game. That's the one thing that we try to incorporate into all our courses. We'll present you with an opportunity if you are courageous enough to take it.

GCN: Do you have a favorite course of your own?

DP: I don't have one that I wouldn't like to go back and remodel. You always feel that. A year later you say, 'Boy, if I could just go back I'd do this differently.'

But the test for me is whether I could be happy playing the course every week as a member. I could play La Purisima every day of the year and not get tired of it. It's the overall experience. It's a very strong test, especially from the blue tees. The white tees don't beat your brains out too bad. It's 300 acres of rolling hills just north of Santa Barbara, a marvelous setting. There's a real good rhythm to the golf course, the holes are all a little different, and you're not hemmed in by anything, not even other fairways. The overall experience is very enjoyable. You're not distracted by condominiums or freeways. It's a great opportunity to socialize with your friends and concentrate on your game.

GCN: You're regarded as one of the pioneers in the use of CADD systems for golf course architects. Why is that?

DP: When I was coming out of college, we were just getting into the use of computers in landscape architecture. I used to pest-er Bob to no end about getting into computer-aided design. We picked up our first system in 1987, right when the 386 hit the market. We had one of the earliest versions of AutoCADD and have been at it ever since. I know we were one of the first using it in golf course architecture because the ASGCA asked me to give talks on the use of computers in design back in 1986-87. Mike Hurdzan and Clyde Johnston also got involved.

Today so many of the young guys have grown up with computers and couldn't imagine life

without them. I'd bet at least 20 have worked complete CADD systems into their practice.

GCN: Have the costs to build golf courses increased?

DP: Unfortunately, costs continue to rise. When I first started working for Bob, he built a course in Washington for \$800,000. Now I can't even put in an irrigation system for that. It's unfortunate, but there are a number of factors that play into it.

One is the quality of the sites we're given. The premium sites are rare these days. Consequently, there is a lot of earth moving, remediation, landslide fixes. And certainly the environmental scrutiny we come under raises costs. We are protecting things, real and imagined, more than we ever did before.

GCN: How is the difficulty of environmental permitting affecting the industry?

DP: The most frustrating thing is that the permitting process is so difficult, so time-consuming and so financially intensive that only the big boys can play. It's becoming more and more difficult for the smaller developers to get projects off the ground because their pockets just aren't deep enough. And that's bad for everybody.

GCN: Is there anything especially positive about the current

development market?

DP: The one really encouraging thing is the outreach to newcomers to the game. ... If we can find these 10-, 20- and 30-acre parcels in urban areas that we can convert into pitch-and-putts and practice ranges, that bodes well for the game. I hope we can see some get built, then we could be looking at 30 million golfers instead of the 22 or 24 million we're at today.

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Golf being put on hold in Philippines

Continued from page 1

cism that these projects compete with our water supply," said Artemio Adasa, undersecretary of the Department of Agrarian Reform.

Adasa said two golf projects — Riviera Golf and Country Club in Silang, and Covite and Mount Arayat Golf and Country Club in Arayat, Pampanga — have been stopped and future projects will also be rejected as

long as the water shortage continues.

According to reports from Manila, a presidential task force monitoring golf course projects will form teams to inspect the water use of golf courses, particularly those without water permits.

"The good thing is that the government is showing a concern for the implications of adverse environmental factors," said Ron Fream, founder of Santa Rosa,

Calif.-based Golfplan, which has several projects going in the Philippines. "But the short-term solutions don't help anyone."

Water shortages have been a reoccurring problem for golf course developments in the Philippines, where a reported 150 courses are up and running. Since this problem continuously plagues the region, Fream said that golf course developments are going to have to work smarter, with long-term solutions in mind.

"Developments need to work with in-

termittent water supplies and design cost-effective irrigation systems that don't water the entire course. You have to conserve," said Fream. "Tourism is growing and they have to address the problem."

Fream's current project in Silang for Kuok's Shangri-La Hotels was designed to take the sewage-treated water from the eventual community and reuse it on the golf course. The project will have reservoirs on site to store 30 days worth of irrigation water.

South Africa

Continued from page 49

second homes. The Golfplan-designed course will occupy land known as East Head, one of two dramatic sandstone bluffs standing sentry at the mouth of Knysna Lagoon, a natural amphitheater that features a maze of tidal lakes, the resort town of Knysna and myriad species of wildlife — all framed by the dramatically serrated Outeniqua Mountains to the north.

"I've been working in golf course design for 32 years, all over the globe, and I've never seen anything quite like the site on East Head," said Fream. "It's nearly too good to be true: mild climate, 100-foot cliffs, the crashing waves below. The vistas are out of this world; the Indian Ocean can be quite rough in this area, which makes for wonderful animation in the seaside views — lots of white water."

"Even more impressive is the natural character of the terrain, which is covered in heather and features fantastic movement. It looks as if there has been an army of shapers working here for centuries."

Senior architect David Dale, who will head up the project for Golfplan, has routed a 6,764-yard layout in the Scottish Highland tradition. The design will depend primarily on the land's considerable natural contour, as only 400,000 cubic meters of dirt will be moved.

"The word 'Sparrebosch' — like 'tundra' or 'marshland' — is used here to describe a specific ecological system unique to the South African coast," Fream said. "Since the fall of apartheid, the South African government has become more stringent when it comes to environmental concerns. As a result, the permitting process was extremely complex; there was much revising and adjusting. We worked very hard to reach a preservational design solution."

Sparrebosch PK Developments Ltd. has targeted the second-home/holiday market from England to Southeast Asia. Located some 500 kilometers southeast of Cape Town, the village of Knysna is located in the heart of South Africa's fabled Garden Route that runs along the southern coast from George to Plettenberg Bay.



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New look, new name for Md. track

BERLIN, Md. — The Newport Bay Golf Course at Ocean City Golf & Yacht Club here, previously named the Bayside Course, has been completely redesigned and reconstructed and will open for play this spring.

The course was renamed due to the extensive changes and improvements, which the owners feel offer better play options and magnificent views of Newport Bay. Golf course architect Lester George, of Colonial Golf Design, Inc., in Richmond, Va., completed the design and has been overseeing the project since it started in January 1996. Quality Grassing of Lithia, Fla., handled construction.

Ocean City Golf & Yacht Club is a 36-hole private club, which is open to the public for resort daily-fee play. George was given a free hand to change the course as he deemed necessary.

"It's a totally new course with all new tees, greens, bunkers, irrigation and cart paths," George said. "I have redesigned or renovated every hole and the practice range."

The land used for holes 17 and 18 was originally allotted for use by the yacht club, but the vistas were too impressive to not be part of the course, President Joe Harrison said. "What is unique about the layout of Newport Bay at Ocean City Golf

& Yacht Club is the amount of waterfront property used in the golf course."

The course provides broad, sweeping views of Grey's Inlet and Newport Bay from each hole. Eleven of the holes are bordered by the pristine salt marshes and waters of Newport Bay, incorporating many marsh features never before achieved.

Newport Bay Golf Course is a "new course" today, after Lester George's renovation work.



Weed, Scratch Golf sign pact for two courses

PONTE VEDRA BEACH, Fla. — Golf course designer Bobby Weed has signed an agreement with Scratch Golf of Hilton Head, S.C., to design two new courses — one in Biloxi, Miss., and another on Hilton Head Island. The Biloxi course, as yet unnamed, will be an 18-hole public facility. The course on Hilton Head Island will be a nine-hole addition to Hilton Head National, which already has 18 holes of golf.

Hilton Head National's additional nine just got underway. Construction on the Biloxi course is pending permit approvals.

Weed has worked with Scratch Golf most recently at the World Golf Village, where he is the project architect for the first course, a resort design that will host The Legends of Golf beginning in 1999.

"I am very enthusiastic about the opportunity to continue my relationship with Scratch Golf," Weed said. "Our project at The World Golf Village for Scratch Golf is nearing completion, and everyone is pleased with the look, feel and playability of the course."

Meanwhile, Weed also designed the World Golf Village Slammer & Squire Course, which will host the Legends of Golf in 1999.

The Legends of Golf was the first event for senior golfers and led to the formation of the Senior PGA Tour. "It is only fitting that Sam Snead and Gene Sarazen are the player consultants for this course," Weed said. "They are both true legends of the game."

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Courses cornerstone of communities

Continued from page 1

payroll of approximately \$1.9 million. And, 95 percent of its annual expenditures are spent with local companies.

According to Phoenix City Councilman Cody Williams, who represents Raven's district, not a single new housing development was built in the area after the early

1970s. This dearth of activity wreaked havoc upon the district's economy and its quality of life.

"It used to be that this was a thriving area with an economically diverse population that supported all kinds of businesses and amenities for its residents," Williams said. "However, during the 1970s many of the more af-

fluent families began moving to other, newer areas of town, and most of the businesses went with them. Thunderbird Country Club was the exception. Those homes held their values and remained a strong part of the community."

Today, Raven Golf Club at South Mountain is a cornerstone of redevelopment for the entire

area. The course has gained statewide and national attention and has attracted scores of people to south Phoenix who otherwise would have no reason to visit the area. Likewise, a variety of new businesses and real-estate developments are in the works.

So far, two new residential communities are under development as a result of Raven's presence with six additional homebuilders and two commer-

cial entities considering projects in the area. Among the first to ante up was The Pines at The Raven, a community of 80 new single-family homes built adjacent to Raven Golf Club at South Mountain where prices range from the \$140s to the \$160s.

"This community wouldn't be here if it were not for Raven Golf Club. And, I think the same holds true for the majority of new activity in this part of town," said Barney Feldman, designated broker for The Pines at The Raven.

One of the beneficiaries is John Augustine, owner of Phoenix-based Desert Tree Farms, a company that manufactures plants from seed, cuttings and tissue cultures for landscape projects. The explosive growth of golf developments across the area has created an incredible demand for the types of high-quality, drought-tolerant trees and plants Augustine specializes in manufacturing. His business averages about \$5 million in sales each year, and Augustine estimates that 15 percent of that revenue is either directly or indirectly attributable to the golf industry.

Elsewhere, the \$20 million Desert Pines Golf Club in Las Vegas opened in late December 1996. The Walters Group built the Perry Dye-designed course in 96-acre Nature Park, a nice-sounding name for a neglected piece of city-owned property bounded on four sides by freeways and public streets in an economically depressed area.

"The golf course is located in a section of town that needs an infusion of new business," said City Councilman Gary Reese, who represents Las Vegas' Ward 3 where Desert Pines was built. "We expect other developments to look at investing in the neighborhood."

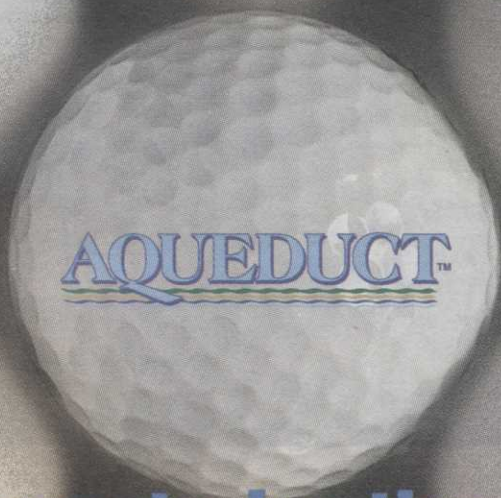
Walters Group subsidiary Southwest Golf bought the land and operates the course. Chief Operating Officer Allen Jones noted that a 2,000-employee family court building, a couple municipal buildings and several restaurants have dressed up the area in recent years. Many vacant lots have been cleaned up, Jones said, and local residents make up a good part of the course work force.

In a city where \$100-plus greens fees are the norm, Desert Pines lets city and Clark County residents play for less than a third the charge for out-of-town players. The course has also initiated golf learning programs for underprivileged youth with requirements for school attendance, good grades and proper course etiquette.

"Another thing I like about it is that when we started there was virtually no wildlife here," said Bill Walters, principal of The Walters Group. "Now hundreds of birds, especially roadrunners, sandpipers, doves and waterfowl, have returned. Their presence really adds to the experience."

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BRIEFS

**STUMPP BECOMES MASTERS VP/FINANCE**

ORLANDO, Fla. — Lynne Stumpp has joined Masters Golf Corp. as vice president of finance/controller. Previously a senior accountant with Litton Laser Systems, Stumpp is responsible for implementing financial policy and

managing the financial information for all Masters-managed facilities. A graduate of the University of Central Florida, she is a certified public accountant and a member of the American Institute of Certified Public Accountants. Masters is a full-service, turnkey golf course and club management firm that handles 12 golf projects.



Lynne Stumpp

MARRIOTT BUYS PALM SPRINGS TRACK

BETHESDA, Md. — Host Marriott has successfully acquired control of Marriott's Desert Springs Resort and Spa. The transaction will result in the company investing \$60 million in the Desert Springs Marriott Limited Partnership in the form of a participating loan. The Desert Springs Resort and Spa consists of 884 large guest rooms and two 18-hole championship golf courses.

WESTIN MISSION HILLS CHANGES HANDS

PHOENIX — Starwood Lodging Trust, a leading United States hotel real estate investment trust, has agreed to acquire the Westin Mission Hills Resort in Rancho Mirage, Calif., for approximately \$118 million. Starwood said in a statement it will buy the 438-acre, 512-room property from California-based TLS Partnership, a subsidiary of Takanaka Corp. The deal is expected to be completed in December. Takanaka will remain a minority partner in the property. Starwood Lodging and Westin Hotels will have 100-percent control of the property's two golf courses.

LINKSCORP BUYS S.C. FACILITY

NORTHFIELD, Ill. — LinksCorp, Inc. has purchased Hunter's Creek Plantation Club. A semi-private club located in Greenwood, S.C. — 45 miles south of Greenville — Hunter's Creek features 27 holes designed by Greenville-based architect Tom Jackson. LinksCorp is a management company based here.

GOLF COURSE NEWS

Crown sits well atop this leader

Midwest management company will open two courses this spring

By PETER BLAIS

GLENNVIEW, Ill. — This spring's grand openings of River Valley Ranch Golf Course near Aspen, Colo., and South Mountain Golf Course in Draper, Utah, will expand Crown Golf Properties portfolio of managed, leased and owned properties to better than two dozen nationwide.

"From the operations side of the business we approach them all the same," said Crown Executive Vice President of Golf Operations Scott Flynn. "As a company, there is still a strong interest in owning and developing. I think we've done more developing than most other management companies. We're fortunate that we're part of a larger company that has the financial wherewithal to also develop golf courses."

Steven Crown is the company's president

Continued on page 70



South Mountain GC in Draper, Utah, is a new Crown Golf property coming on line this spring.

Meditrust to accelerate Cobblestone's plans for course acquisitions

NEEDHAM, Mass. — The Boards of Directors of The Meditrust Companies have signed a definitive merger agreement with Cobblestone Holdings, Inc., parent of Cobblestone Golf Group, Inc., under which Meditrust will acquire all of the outstanding preferred and common stock of Cobblestone for Meditrust stock valued at approximately \$241 million.

In addition, \$154 million of Cobblestone debt and associated costs will be either refinanced or assumed as a condition of closing.

The transaction will position Meditrust as a leading consolidator in the golf industry. With the acquisitions of Cobblestone and La Quinta Inns, Inc., Meditrust will have a total market capitalization of approximately \$8 billion.

Based in Del Mar, Calif., Cobblestone is a privately held company and one of the leading owners and operators of golf courses in the United States. Cobblestone has a portfolio

of 25 facilities with 29 courses in major golf markets in Arizona, California, Florida, Georgia, Texas and Virginia. The portfolio includes 11 private country clubs, six semi-private clubs and eight daily-fee courses. The company has achieved significant growth in revenues and EBITDA since its formation in 1992.

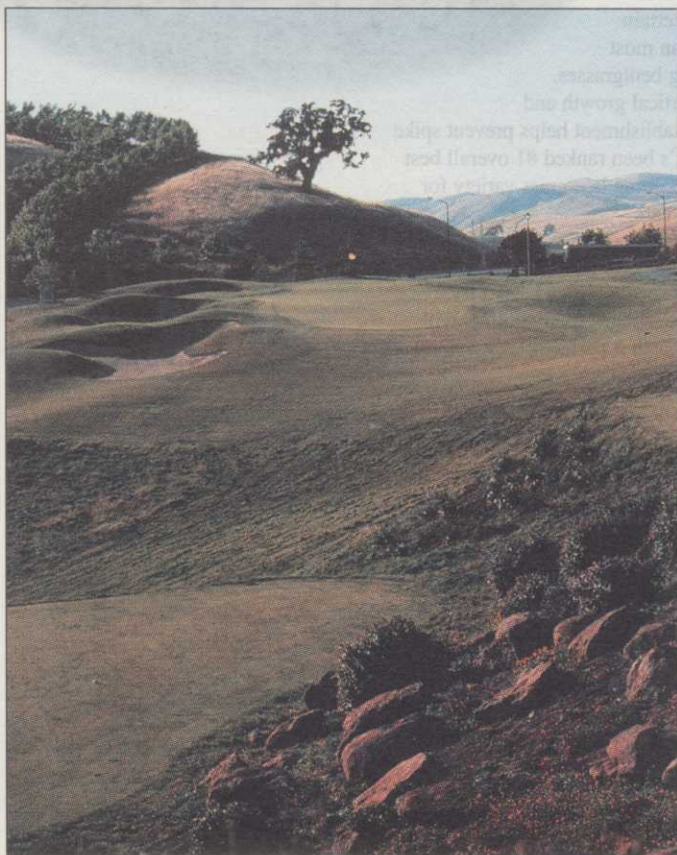
Following the transaction, James "Bob" Husband, president and chief executive officer of Cobblestone, will continue to serve in his current capacity as president and CEO of Cobblestone. Cobblestone's headquarters will remain in Del Mar and its properties will continue to be operated by Cobblestone management.

Abraham Gosman, chairman of the boards of directors of The Meditrust Companies, said: "This transaction with Cobblestone adds leisure to the lodging platform that Meditrust established with the announcement of the La

Continued on page 63

NGP ACQUISITIONS

SANTA MONICA, Calif. — National Golf Properties Inc. has acquired three new courses which it will lease to American Golf Corp. The new facilities are Ron Fream-designed Oakhurst Country Club in Clayton, Calif. (left); Gettysville Golf & Country Club in Knoxville, Tenn.; and Spanish Hills & Country Club in Camarillo, Calif. NGP also sold Skyline Woods Country Club, a private club located in Elkhorn, Neb., to a local investor for \$2.5 million. Financially, the company reported funds from operations of \$12.9 million in the quarter ended Sept. 30, 1997, a 16.6-percent increase from \$11.1 million in the same quarter a year earlier.



Family Golf buys MetroGolf Inc.

MEVILLE, N.Y. — Family Golf Centers Inc. has submitted a cash tender offer for all of the outstanding common shares of MetroGolf Inc. at a price of \$1.50 per share.

MetroGolf's board of directors unanimously approved the agreement and recommended that shareholders tender their shares.

MetroGolf operates eight golf facilities in major metropolitan locations. Family Golf owns, operates or is constructing 57 golf-related facilities in 18 states.

In other news, Family Golf will be title sponsor of the 2-year-old International Junior Golf Tour (IJGT), a not-for-profit organization based in Hilton Head, S.C., that enables junior golfers to showcase their competitive skills

Continued on page 69

Golf Trust growth continues

CHARLESTON, S.C. — Golf Trust of America, Inc., a self-administered real estate investment trust (REIT), has acquired three new courses in Florida, and single facilities in South Carolina, Georgia, Kansas and Ohio.

Black Bear Golf Club, an 18-hole public course located in Eustis, Fla., was designed by P.B.

Dye. Black Bear was nominated as one of the top New Golf Courses in 1996, by *Golf Digest* and voted one of the top "Women Friendly" by *Golf for Women*. Granite Golf Group will lease and operate the course under an arrangement that provides for an initial term of 10 years, with six 5-year options. Under a similar arrangement with

Golf Trust, Granite also leases the Tiburon Golf Club located in Omaha, Nebraska and the Club of the Country, situated in Greater Kansas City, Kansas.

Lost Oaks, formerly known as Tarpon Woods Golf & Country Club, an 18-hole, daily-fee course located near Tampa, Fla., was acquired for approximately \$5.9 million in cash. GTA expects to fund an additional \$1.25 million in up-

grades and renovations to the facility. It is leased to an affiliate of Troon Golf Management. Troon Golf, an affiliate of Starwood Capital Group, LLC, also operates the golf course facilities at the nearby Innisbrook Resort.

Bonaventure Country Club is a 36-hole golf facility located in Fort Lauderdale, Fla. The two courses will be leased to an affiliate of the owner and operator of Emerald

Dunes Golf Club, one of the top public courses in Florida. The initial term of the lease will be 10 years, with two 5-year options.

Wildewood Golf Club and the Country Club at Woodcreek Farms, a 36-hole private facility, is located in Columbia, S.C. The purchase price was \$10.5 million and includes the issuance of operating units in Golf Trust of America, LP, valued at \$4.5 million. The course will be leased to the current operator, Stonehenge Golf Development, LLC.

Eagle Watch Golf Course, an 18-hole daily-fee course designed by Arnold Palmer and located near Atlanta will be acquired for approximately \$6.4 million, including the issuance of operating units in GTA's operating partnership. Eagle Watch was owned by an affiliate of the prior owner of Olde Atlanta Golf Club, one of the 10 courses acquired by GTA through its initial public offering. Eagle Watch is leased to an affiliate of its prior owner.

Raintree Country Club, an 18-hole public course near Akron, Ohio, was purchased for \$4.5 million, including \$3.3 million in operating units of GTA. The course will be leased to an affiliate of Raintree Country Club Inc. The company funded the acquisition with proceeds of the \$100 million line of credit provided by NationsBank, N.A. and other lenders.

The company has an interest in 19 courses in Florida (5), South Carolina (4), Georgia (2), Virginia (2), Alabama, Kansas, Nebraska, North Carolina, Ohio and Texas.

Golf Trust also recently announced that the company's equity offering of 3 million shares of common stock was priced at \$25-5/8 per share. Golf Trust also granted to the underwriters an option to purchase an additional 450,000 shares of common stock to cover over-allotments. Managing underwriters for the offering are BancAmerica Robertson Stephens, A.G. Edwards & Sons, Inc., Raymond James & Associates, Inc. and Wheat First Butcher Singer.

The net proceeds from the offering will total \$71.8 million. Golf Trust intends to use the proceeds to repay approximately \$59.1 million of debt and to pay the cash portion of the purchase price for additional golf properties.

Company Chairman Bradley Blair commented, "We are very pleased that Golf Trust's shareholders have demonstrated their confidence in our focused strategy in the upscale sector of the golf course ownership business. The additional equity provided by this successful offering will enable the company to continue acquiring high quality golf courses and leasing them to qualified independent lessees."

GOLF COURSE NEWS

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Golf Ventures officer resigns post

ORLANDO, Fla. — In response to a Securities and Exchange Commission complaint, Duane Marchant has resigned as an officer and director of Golf Ventures Inc., which recently merged with Orlando-based U.S. Golf Communities Inc.

Marchant was president and chief executive officer of Golf

Ventures for several years prior to the November 1997 reverse acquisition reorganization with U.S. Golf Communities. The combined company was renamed Golf Communities of America and Marchant most recently served as its vice president and regional manager.

Marchant resigned as a result

of a recent filing of a SEC complaint against him, the company (Golf Ventures) and certain other former officers and directors of the company. Marchant had earlier agreed with the company that he would resign if such an action were taken by the SEC.

Warren Stanchina, chairman and chief executive officer of Golf Communities of America, said: "The company is aware that

former officers, directors and control persons have apparently not complied with their obligations under the securities laws, precluding the company from complying with such requirements in the past. We respect Mr. Marchant's decision to resign in light of the recent SEC complaint. The company is committed to full and complete public disclosure and to a fair and

open trading market in its common stock. We are working diligently with the Securities and Exchange Commission both to remedy historical disclosure issues and resolve the recent SEC civil action."

The company will ask shareholders to approve the name change to Golf Communities of America at the next shareholders' meeting.

Fairways buys Wis. track; adds 4 new managers

MANASSAS, Va. — KSL Fairways has purchased its fourth property in Wisconsin and added three new members to the company's management staff.

The Virginia-based firm recently acquired Silver Spring Country Club (CC) in Menomonee Falls, Wis. In addition to 36 holes of golf, Silver Springs has an indoor/outdoor practice center, clubhouse, dining and banquet rooms. Among the management firm's 29 golf properties are three other Wisconsin facilities — Mequon CC and Willow Run Golf Club (GC) in Milwaukee and Lake Windsor GC in Madison.

New KSL staffers include:

- Jim Stanfill, general manager of Tantallon CC in Fort Washington, Md. Stanfill has seven years of experience in the golf industry and formerly worked with American Golf Corp. in Las Vegas.

- Doug Wayne, general manager of Broadway CC in Virginia Beach, Va. Wayne has 10 years of golf management experience and previously worked for Cobblestone Golf Group in Midlothian, Va.

- Jason Frandsen, general manager and director of golf at Countryside GC in Roanoke, Va. Frandsen has nine years experience in the golf industry and formerly worked with Brassie Golf Corp. in Greenville, S.C.

RDC PREPARES TO OPEN NORTH CAROLINA FACILITY

PARSIPPANY, N.J. — RDC Golf Management has opened The Crossings at Grove Park in Durham, N.C. Situated on State Highway 98 between Durham, Raleigh and Wake Forest, The Crossings is a semi-private club with a 5,000-square-foot clubhouse. The club opened for limited play in November and will have a grand opening this spring. RDC acquired the project in 1996 from Torrey Homes of Atlanta. Total development costs of the course were \$5 million. RDC and its affiliates own, lease and manage 11 courses at eight locations along the East Coast.



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PERSONNEL CORNER

By VINCE ALFONSO

If you read my column monthly, you know I talk a lot about my days in the grocery business back in Memphis, Tenn., with my dad. In one article I noted my father taught me all aspects of the business. I was taught everything from the cash register to how to make his special pork sausage and all things

Cross-training can lead to gold medal success

in-between. I became much more than a triple-threat kind of guy. I became an octouples (I made up that word) threat kind of guy. In other words, by the time I was 16, I could do it all.

As I look back over my years as a golf course owner, I can see I have displayed a consistent behavior in the area of hiring. I tend to hire people who can do or are willing to

do (with training) many different jobs. I tend to hire people who like the variety and vitality of doing totally different tasks, often times, one right after the other and different from one day to the next.

It wasn't until I sat down to write this article that I truly understood why I tend to do this. Once again, I found myself going back to the years I spent

working at Weona #88. I had to face the fact I do what I do because my dad taught me to do it. Vince Sr. believed in cross training employees. He certainly didn't call it that. My dad simply saw it as the way for him to get the best bang for his payroll buck. And you know what? I realize now my dad made a believer out of me. That is why I

Vince Alfonso Jr. is a 40-year, golf-industry veteran, president of Alfonso Creative Enterprises Inc., and owner/PGA professional at Kimberling Golf Course near Branson, Mo. He can be reached at 417-739-4370.

stress this variety of tasks thing in my hiring practices. Yes, I am a firm believer in cross training employees, not just because my dad did it, but because I saw then and have seen in my own experience that it works.

If you don't intentionally hire with cross training in mind, or believe you hire people to perform a specific task for your company as efficiently and effectively as they can, day in and day out, then I would like to challenge you to change your thinking.

You see, I don't just believe it works, I know it works. Let's take one of my present employees at Kimberling Golf Course, for instance, my son Jason. He cooks barbecue in our special cooker, prepares any of our soups and sandwiches in the Memphis Cafe, washes a mean dish, rings a great cash register, takes an order with style, cleans a table spotless, vacuums with a flare, cuts a green with precision, applies fertilizer and fungicide with accuracy, waters hot spots perfectly, fits golf clubs like a professional, changes grips in a flash, sells men's and women's apparel, shoes and accessories, makes people feel welcome at Kimberling with his pleasant smile, has great phone presence and manners, closes the register at night, makes the deposits, balances the daily reports, types in Word Perfect, sends e-mail, surfs the net, helps create our advertisements, plans and stages some of the best golf outings in the business, and that's not all. I could go on. The truth is, all our employees at Kimberling do a wide variety of tasks for our business. From Norm who opens up each morning to Simon, who comes in after school, to my two Toms, who do everything from cutting down trees to repairing golf cars. My entire staff is truly cross trained.

I am absolutely confident that we get more done with fewer people than most businesses our size. And I can truly say that our people never, ever get bored.

I believe cross training is good for the employee and good for the employer. And in my book, two goods absolutely, positively make a GREAT. Please give cross training of your employees serious consideration.

I'd like to write more on this subject but you will have to excuse me. I have to go cut some turkey before the lunch crowd gets here, review some proofs of our current print ads, pull up some golf cars before the 1 p.m. skins guys arrive and... Oh, well, I'm sure you get the picture.

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Nitto files for financial protection

TOKYO - Nitto Kogyo Co., a major golf course operator (see Troon Golf/Turnberry story), and its subsidiary Nitto Life Co. have filed with the Tokyo District Court for composition with its creditors, rendering the companies effectively bankrupt.

The court ordered that the two companies' assets be protected. Composition is an alternative to bankruptcy in which creditors agree to accept partial payment in full settlement of their claims.

According to the Tokyo-based companies, they have liabilities totaling some 345.5 billion yen, including Nitto Kogyo's 276.2 billion yen.

Nitto Kogyo said the application for an out-of-court settlement is aimed at protecting its club members' right to play golf, adding it will continue operating courses, including the Narashino Country Club in Chiba Prefecture, east of Tokyo, as usual.

Nitto Kogyo, which used to have Masashi "Jumbo" Ozaki among its contract professional players, has fallen into financial trouble due to an increase in applications from members for withdrawal of deposits caused by a plunge in the value of memberships following the bursting of the economic bubble in the early 1990s. Nitto operates 30 courses in Japan and six overseas.

Troon/Turnberry

Continued from page 1

pansion into global markets is a critical part of Troon Golf's future growth. Having our first international addition be Turnberry [and its Ailsa course], which is recognized by all major golf publications as one of the top 25 golf courses in the world, leaves me nearly speechless. I would like to especially thank John Sauter, our executive vice president and chief operating officer, for his time and commitment to the project. John sourced this deal and was the lead negotiator."

Built at the turn of the century, Turnberry lies on Scotland's west coast about 60 miles south of Glasgow. Of the two courses, Arran is the shorter at 6,014 yards. Ailsa measures 6,957. The Third Marquis of Ailsa commissioned 1883 British Open champion Willie Fernie to design both courses. By 1905, the two layouts (though only 13 holes each) and the hotel were completed as possibly the first hotel and golf complex in the world.

The Royal Flying Corps used the fairways as a pilot training station during World War I. Following Major C.K. Hutchinson's redesign of the two courses in 1938, Turnberry again served as a major military installation during World War II as the Royal Air Force constructed an air base that littered the area with buildings and concrete runways.

The dogged efforts of Frank Hole, managing director of then owner British Transport Hotels, resulted in sufficient financial compensation from the British government to underwrite the rebuilding of the courses, which was completed by 1951. Philip Mackenzie Ross redesigned the Ailsa course to its current layout. Turnberry has since hosted the British Amateur Championship, Walker Cup and three British Opens.

In addition to the two courses, Turnberry includes a 132-room, five-star hotel, which will be managed by Westin Hotels & Resorts. Turnberry is registered with Historic Scotland, which maintains jurisdiction over changes and improvements. The resort also contains several undeveloped areas offering future expansion opportunities. Approximately 365 of the 800 acres are developed.

Troon Golf plans a more aggressive marketing campaign, particularly in the United States, on the hotel side of the operation, Garmany said. The only change on the golf course side would be some rerouting of the Arran course.

"There are some plans that go back to an associate of Mackenzie Ross who planned to take the course out by the

sea," Garmany said. "Depending on entitlement possibilities, I could see us taking four holes of the Arran course out along the water and clearing some land for a better practice facility on the internal part of the Arran course. The Ailsa course, which hosted the British Open, we're not going to touch."

"We have a very good [personnel] team there. We have, we think, the leading superintendent in Europe in George Brown. The one thing we do know is that you don't go into markets with different cultures and try to force your own onto those groups. Anything we can do to help, we certainly will. But we also know that it is a very well run golf operation."

Troon Golf also manages 20 golf courses in the United States including Troon North Golf Club in Scottsdale; The Ridge at Castle Pines North in Denver, Colorado; Innisbrook Resort in Tampa, Florida; LaCantera Golf Club in San Antonio, Texas; Mission Hills Resort in Rancho Mirage, California; and LaPaloma Country Club in Tucson, Arizona.

As for the future, Garmany said, Troon Golf would like to add one, two or three new European properties by the end of 1998.

Troon hires vp; adds three new courses

SCOTTSDALE, Ariz. — Troon Golf named John Easterbrook vice president of operations and added three California golf courses to its portfolio.

Easterbrook has 13 years of golf management experience with Hyatt Golf and Marriott Golf. "The move to Troon Golf will allow me to focus on my strengths in the areas of multi-facility management, along with becoming a part of our company's international growth," said Easterbrook.

The new courses include Rams Hill in Borrego Springs, and two courses at the Palm Springs Westin Mission

Hills Resort—the Pete Dye-designed Resort Course and Gary Player-designed North Course.

Rams Hill is part of a privately gated, residential and resort community. Ted Robinson designed the 18-hole track located adjacent to Anza-Borrego Desert State Park.

Built in 1987, Dye's Resort Course hosted the PGA Senior Tour's and LPGA Tour's Qualifying Finals. *Golf magazine* named Player's North Course to its top 10 new resort course list in 1991.

"On the whole," the Troon executive said, "we think for the next 10 to 12 years the market in Europe may be stronger than the American market...Our next expansion would be Asia and Australia, which are in somewhat of an economic upheaval right now. We're going to wait and see how the chips fall there financially."

There may be some opportunities at that point for expansion into that market.

"We may be in Australia before Asia. We are looking at some development opportunities in Australia, which we think is an easier cultural mix for us than Asia would be, although we do have some expertise on our team that has done work in Asia."



The 9th hole of the Ailsa course at Turnberry, a new Troon Golf property.

Mike Klemme/GOLFOTO

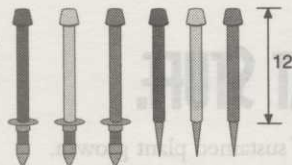


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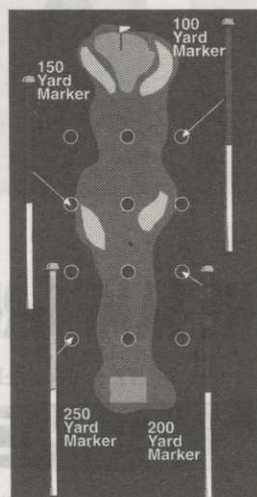


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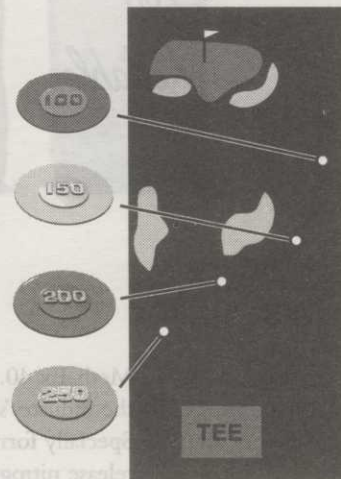
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NGF adds guides to courses, ranges and retailers

JUPITER, Fla. - The National Golf Foundation has introduced four new industry directories to complete an effort it began earlier this year to make hardbound copies of its golf business databases available as marketing and reference tools.

The new directories contain the names, addresses, tele-

phone/facsimile numbers and other information for businesses in four U.S. golf market segments including:

- Off-Course Golf Retail Stores
 - Regulation Length Golf Courses
 - Par 3 and Executive Courses
 - Driving Ranges
- "These new directories are

powerful supplements to the corporate directory that we created two years ago," said NGF Research Manager Jim Kass, who headed up development of the four new directories.

The original corporate directory — the *International Directory of Golf* — runs more than 550 pages listing 7,500 compa-

nies and 14,000 executives involved in the business of golf.

"Altogether, we now have five business directories that cover the entire spectrum of golf in the U.S.," said Kass.

In addition to more than 14,000 facility names, addresses and telephone numbers, the *Golf Course Directory* provides key contact personnel and information relative to facility type (e.g.

daily fee, municipal or private), size (regulation, par-3 or executive), total number of holes, year it opened, and whether the complex includes a practice range.

The *Executive & Par 3 Course Directory* was developed for those interested in only this niche of the market. These 1,700 facilities also appear in the *Golf Course Directory*.

The scope of information available in the *Driving Range Directory* is similar to that of the aforementioned directories, with the exception that the size of each of the 1,700 facilities is measured by the number of tee stations.

In the *Directory of Golf Retailers*, store size is presented in terms of square footage. This directory lists 2,000 off-course golf retail stores doing business across the country. Where applicable, their corporate headquarters offices are included.

As Kass is quick to point out, this new family of directories does not contain everything that's in the NGF database for each of the market segments.

"For example," he said, "for those who want customized work, we can do special runs on resort courses... or pull up data on such things as green fees and management companies... or furnish mail labels for any segment and in any format desired."

The *Golf Course Directory* is \$99 to NGF members; \$199 to non-members. The *Driving Range, Par 3/Executive and Off-Course Retail Shops* directories are \$49 each to members; \$99 to non-members. The *International Directory of Golf* is \$30 for members; \$60 for non-members.

For additional information on the directories, customized runs or mail labels, NGF members should call 888-NGF-2500 and non-members 800-733-6006 or submit an e-mail request to ngf@ngf.org.

For more information on other titles in the NGF's library of business publications and related information services, visit the Foundation's Web site at www.ngf.org.

TRANSEASTERN BUYS FLA. TRACK

NAPLES, Fla.—Transeastern Properties has acquired Embassy Woods Golf & Country Club in Naples, representing the sale of 750 lots, 12 new homes and all recreational amenities, for approximately \$9.7 million. Transeastern will change the name of the community to Glen Eagles Golf & Country Club. In addition to the clubhouse, Embassy Woods now includes a championship 18-hole golf course and bundle golf memberships, where buyers automatically acquire golf memberships with the purchase of a home.

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NGF library now accessible through Internet

JUPITER, Fla. — For more than four years, the National Golf Foundation has been building and indexing its golf business library. Exceeding 27,000 different literature items and growing by as many as 6,000 new items each year, the NGF library searching system can now be accessed from the NGF's Internet web site at www.ngf.org.

And for a limited time, the NGF Library can be searched for free by anyone who has a NGF Library password and access to the World Wide Web. After the free trial period is over, subscriptions will be sold on a quarterly or annual basis with members of the National Golf Foundation receiving substantial discounted rates.

Free passwords to access the NGF Library can be requested through the NGF's web site at www.ngf.org, on the "Information Services" page.

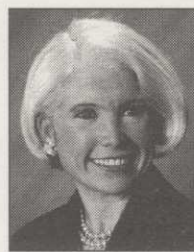
"With an NGF Library password, visitors to the NGF web site can now conduct keyword searches of the 27,000 items that are currently housed in the Foundation's collection of golf business literature," says Charles Mayberry, the NGF's Director of Information Services. "In addition to research studies, government publications and newsletters, the collection also contains thousands of articles that have appeared over the past five years in the golf industry's trade and professional magazines, journals and many of the nation's newspapers."

The NGF's library collection offers information on over 1,500 different industry-related topics ranging from advertising and promotion to measurement systems and zoning. Library searches can be conducted by subject, title, author, publisher, date or any combination of the five fields. The search service

will provide the user with an abstract of each item in the library and if the user wants a complete text of any item located, an online order form to receive a copy resides on the web site.

"In talking to those who have already taken advantage of the library," says Mayberry, "we're finding that it's being put to many

different uses. Some are looking for market insights and competitive intelligence; some are looking for ideas or solutions to operational challenges while others want information that will help them with a legal matter. We're also seeing an increased usage by the media, who use it for story research."



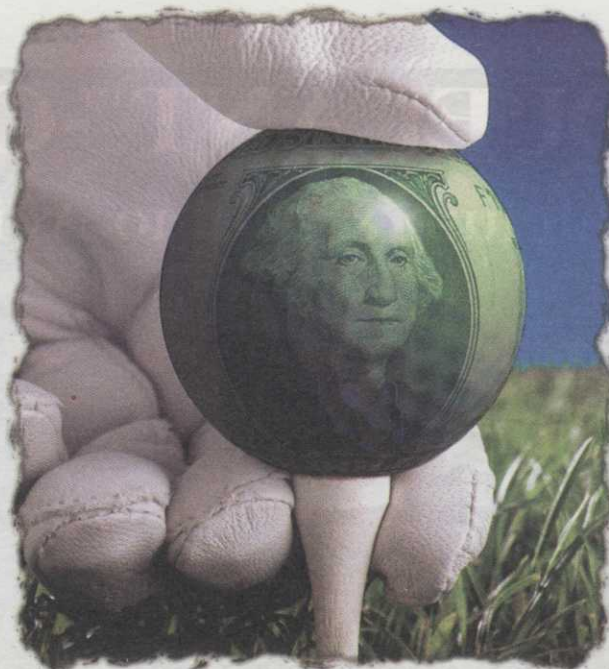
Gloria Ortega Rex

served three years as senior auditor with the accounting firm of Coopers & Lybrand. She earned her bachelor's degree from the University of Florida and master's from Florida Atlantic University.

NGF promotes Rex to vp

JUPITER, Fla. — The National Golf Foundation has promoted Gloria Ortega Rex to vice president of finance. Rex has served as NGF controller since 1991. Prior to joining the NGF, she was assistant vice president and assistant comptroller for First Federal of the Palm Beaches in West Palm Beach, Fla. She also

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Family Golf

Continued from page 63

in tournament play at leading U.S. golf courses. The tour has attracted on average 100 golfers between the ages of 11 and 19 representing 31 states in 11 countries, and is an important source of talent for college recruiters.

Dominic Chang, president of Family Golf, said: "Our sponsorship of the Junior Golf Tour reinforces the commitment we share with IJGT to making golf accessible to every age and skill level. Our successful summer-long program of golf clinics for disadvantaged youngsters in the New York City metropolitan area will be extended to other U.S. cities in 1998, and our practice centers offer the opportunities for every member of the family to learn and enjoy the game."

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Crown Golf

Continued from page 63

and chief executive officer and a general partner in the family-owned firm, Henry Crown and Company, which includes diversified manufacturing operations and real-estate ventures. The Crown family organization has been in the hospitality business for more than 40 years, planning,

developing and building a number of high-end resorts and real-estate developments.

In 1994, the firm began doing third-party management contracts for other development firms and golf course owners. Its first contracts were a pair of West Coast courses followed in early 1995 by the purchase of GreenVisions, an existing Midwest management

company then headed by Tim Miles. Miles has remained with the suburban Chicago firm as executive vice president of construction and development.

The company went on to win management contracts with major developers such as Sanyo Foods, owners of Tustin (Calif.) Ranch; Pacific Life, owners of Tijeras Creek in

Rancho Santa Margarita, Calif.; Boeing Co., owners of Longbow Golf Club in Mesa, Ariz.; Northeast Phoenix Partners, owners of Wildfire Golf Club in Phoenix; and General Dynamics, developers of Empire Lakes Golf Course in Rancho Cucamonga, Calif. "Our business has grown dramatically in California, Arizona, Colorado and Utah,

and in order to receive the time and attention desired, we decided to add a new region," Flynn said.

The firm now has four regions with a vice president of operations in each — East, Central, Pacific and the recently added Mountain region. Rob Kohlhaas, most recently general manager at Wildfire, heads up the new Mountain region. Buck Page oversees the newly named Pacific region.

Asked what differentiated Crown from other management firms, Flynn said: "We think it comes down to the people you have in place. There aren't a lot of secrets in the golf industry, so it's working with the best people you can find.

"The organization has a long history in the hospitality business. Early on it brought the same type of approach to service delivery and quality standards that were more prevalent in the hotel business. A lot of us in the organization worked in those properties.

"We're also fortunate the owners of our company are long-term players. They see our future way down the road. I've talked with people in other organizations and they struggle a bit with venture-capital money and the demand for short-term returns. There is some uncertainty out there with some of those companies."

Developers have approached Crown about international projects in China and Europe, but the company hasn't found the right opportunity, so far. "We still think there are opportunities here [U.S.]," Flynn said.

The company has no numerical goals in terms of adding courses. "We're at a numerical stage now where the management structure makes sense. I've talked to a lot of companies that are going through that 6-, 8-, 12-course level where it becomes a real challenge to add facilities. If we could add a handful of high-quality facilities each year, we'd be thrilled. Obviously prices are climbing in the acquisitions market, but we still bump into some good deals here and there."

Flynn sees the percentage of courses run by professional management companies — currently estimated at somewhere between 5 to 8 percent of the U.S. course supply — growing steadily into the foreseeable future.

"We're seeing more and more real-estate and resort developers who have been through it [running a course]

Continued on next page

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Granite Golf assigns managers to new positions

PHOENIX, Ariz. — Granite Golf Group, Inc. has realigned several key staff positions based on the company's rapid growth in recent months.

MG Orender becomes senior vice president of acquisitions and golf operations for Granite Golf Group, Inc.; Brian Jackson becomes chief operating officer for Granite

Golf Management, Inc.; and S. Adele Jones is now senior vice president of business development for Granite Golf Management, Inc.

Granite operates more than 30 courses throughout North America and is also responsible for three courses in various stages of development.

The firm recently signed an

agreement to lease Whispering Woods Golf Club, a semi-private golf course. The par-70 layout, designed by Ellis Maples, is located in Whispering Pines, N.C. Granite will lease and operate the course under an arrangement with South Course Limited Partnership that provides for an initial term of 10 years, with two 5-year options.

Welch named CMAA education director

ALEXANDRIA, Va. — The Club Managers Association of America (CMAA) named Gordon Welch its Director of Education and Lifetime Professional Development. Welch has been a club manager since 1987 and active in CMAA since 1988. In his new post, he will work closely with the Club Management Institute to further develop CMAA's lifetime professional development program. He will also spearhead all World Conference education programs and help maintain standards for the Certified Club Manager and Master Club Manager designations.

AGC to operate Long Island track

RIVERHEAD, N.Y. — American Golf Corp. (AGC) has been awarded the contract to manage the new Long Island National Golf Course here. The 18-hole course is scheduled to open next spring.

The challenge of transforming a sod farm into a premier daily-fee golf course fell to designer Robert Trent Jones Jr.

Jones' par-71, 6,800-yard layout features dramatic elevation changes, two double greens and a double fairway, and some 40 sand and grass bunkers.

"Long Island National will have the feel of the great private clubs in Southampton such as Shinnecock Hills and National Golf Links, but the great news is that everyone will be able to enjoy this top golf experience," said AGC Regional Marketing and Sales Director Mark Tansy.

A host of amenities include a clubhouse with a wrap-around porch overlooking the 18th green, driving range and pro shop.

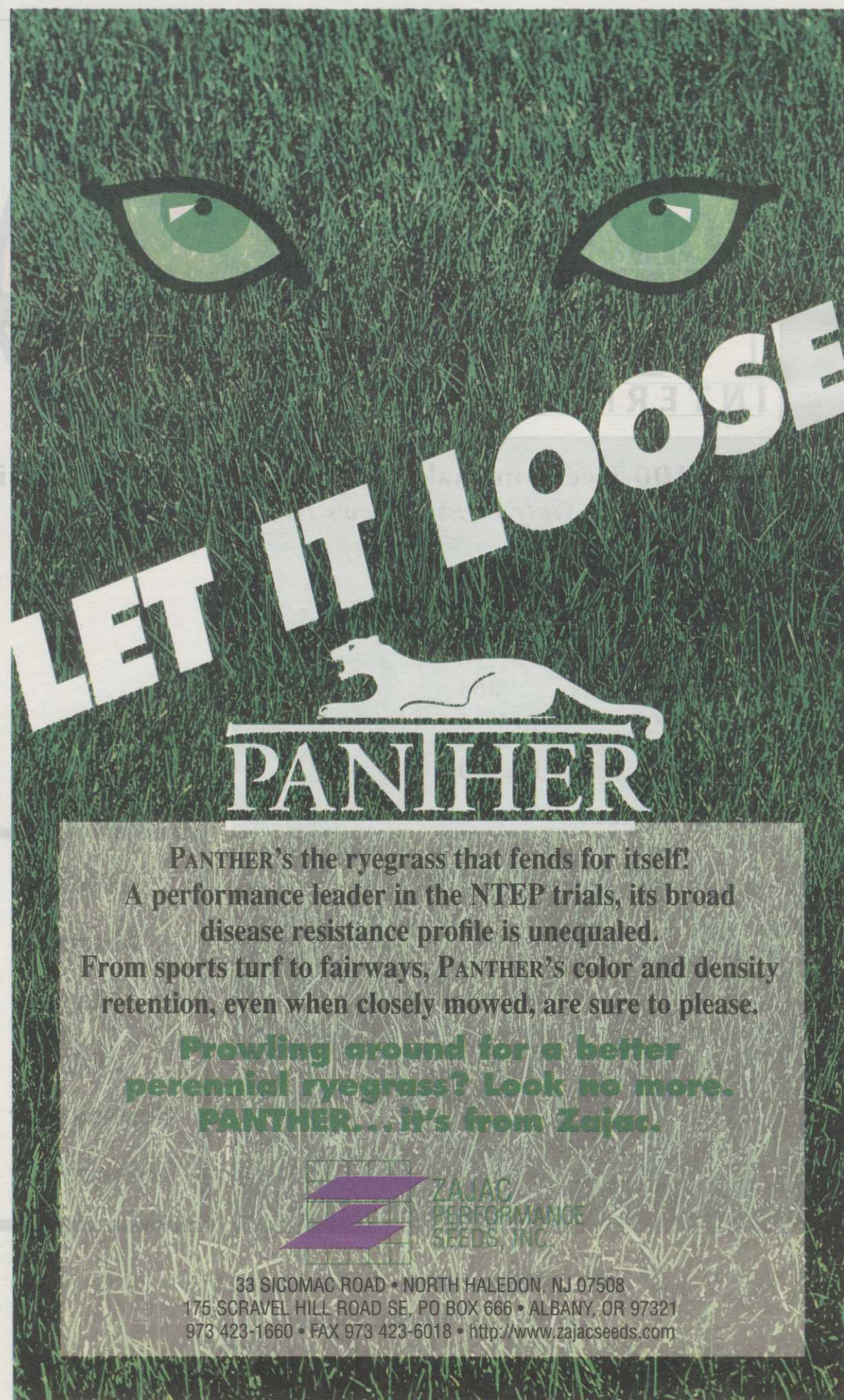
Crown Golf

Continued from previous page

before and coming to the realization that it is very time intensive. Their core business is residential or hotel development. Their management team's time is best spent focusing on that and working with a management company on the golf component.


"We're seeing developers who don't consider golf a necessary evil or just an expense line on the marketing and promotion budget. They see that a well-positioned golf course, designed so it can be maintained economically, can serve both purposes — providing marketing exposure and economic benefit. Those people, more than anybody, are looking to companies like ours to make that happen."

GOLF COURSE NEWS



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CIRCLE #150/GCSAA BOOTH #1766-68

ClubLink track named best new Canadian layout

KING CITY, Ontario, Canada — ClubLink Corporation's Lake Joseph Club property in Muskoka, Ontario has been awarded Canada's Best New Golf Course in 1997 by *Golf Digest* magazine.

"We are very pleased that the first course developed and built by ClubLink has received this

kind of recognition," said ClubLink President Bruce Simmonds.

Another Thomas McBroom design previously won the award in 1995 for The Links at Crowbush Cove, located on Prince Edward Island.

ClubLink is currently constructing a 45-hole, McBroom-

designed course named RattleSnake Point Golf Club in Milton, Ontario. It is scheduled to open in June 1999.

ClubLink's corporate development plans include expanding its presence in Muskoka, a major Ontario resort and conference area, continuing its growth in the Ottawa market, and building its

market share in the Greater Toronto Area by introducing daily-fee clubs under the trademark of DAILY MEMBER GOLF(TM).

ClubLink has completed the purchase for \$6.95 million of the Aurora (Ontario) Golf & Country Club and is revitalizing the property, which includes two 18-hole courses.

ClubLink recently announced third-quarter and year-to-date

results. Revenue for the third quarter ended Sept. 30, 1997 was \$14.8 million, up 51 percent over \$9.8 million recorded during the same period in 1996. Income before depreciation, interest and taxes was up 79 percent to \$5.5 million for the three months ended Sept. 30 compared to \$3.1 million for the third quarter in 1996.

Simmonds also remarked that, "ClubLink continues to increase its investment in GolfSouth through secured loans to GolfSouth for its recent acquisition and current renovation of the 36-hole Foxfire Resort and Country Club in Pinehurst, N.C. and its construction of several new GolfSouth courses in the Washington, D.C. area and at Louisiana State University."

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Cobblestone

Continued from page 63

Quinta acquisition. With Bob Husband and his group, we gain an excellent management team to speed the rapid consolidation of this sector. We envision Cobblestone as the core of a number of golf-related acquisitions that we at Meditrust have planned in this extremely fragmented industry."

David H. Wong, a general partner at Brentwood Associates, the private equity firm that co-founded Cobblestone, noted, "We believe Cobblestone is an excellent example of the partnership of capital and management successfully generating fundamental value creation through acquisitions and internal growth. We are very pleased with the outstanding returns produced by this investment for our limited partners, and we are delighted to be receiving Meditrust stock in this transaction. Furthermore, with this transaction we believe we have provided Cobblestone a partner with the resources to achieve management's goal of becoming the leading owner/operator of golf courses in the United States."

Salomon Smith Barney, Inc. acted as financial adviser to Meditrust, and Donaldson, Lufkin & Jenrette Securities Corporation acted as financial adviser to Cobblestone.

The Meditrust Companies, a paired share real estate investment trust and the nation's largest health care real-estate investment trust, with headquarters in Needham consists of Meditrust Corporation and Meditrust Operating Company. Meditrust has investments in over 500 health-care facilities in 41 states with 38 different operators and presently has a total market capitalization in excess of \$4.5 billion.

BRIEFS



ANDERSON HEADS SALES OF BUSH HOG'S GOLF COURSE MULCHING MOWER
SELMA, Ala. — Jimmy Anderson has been named national turf manager for Bush Hog's golf course products.



Jimmy Anderson

Anderson is responsible for product development of Bush Hog's Mulch Pro TDM-11 golf course mulching mower. Mounted one above the other, the Mulch Pro's blades turn in opposite directions at speeds over 15,000 feet per minute. The lower blade mows the grass and lifts the clippings into the cutting circle. The upper blade cuts the clippings into fragments that are so small they disappear between the blades of grass.

HUMPHREYS RETURNS TO SCOTTS SOD DIVISION

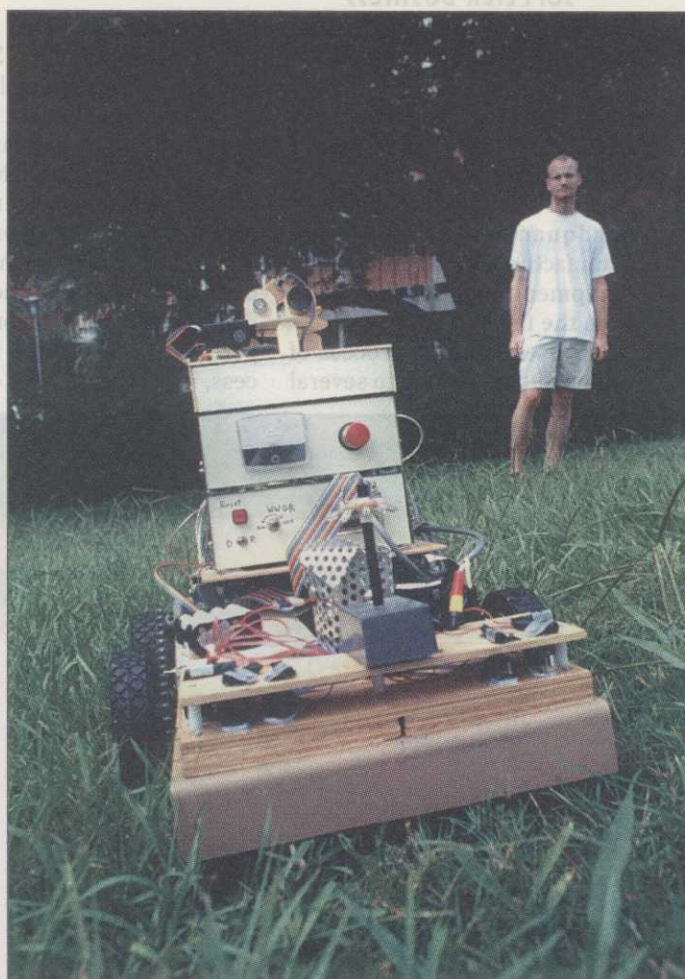
MARYSVILLE, Ohio — The Scotts Co. announced that Larry Humphreys has returned to the company as territory manager, sod grower sales. Humphreys, who has been in the sod industry for 23 years, worked at Scotts until 1995 when he left to join a competitive company. Less than three years later, he returned to team up with Jeff Cain, corporate sales manager, to provide Scotts' technical assistance and sales service to sod growers.

ZENECA PROFESSIONAL PRODUCTS NAMES NEW T&O SALES LEAD

WILMINGTON, Del.—Zeneca Professional Products has named Jerid Wendling as territory sales representative for western Florida. Wendling will be responsible for managing sales and distribution of turf and ornamental products, including Reward, Fusilade II, Heritage and Scimitar. Prior to joining Zeneca Professional Products, Wendling held the position of key territory representative for Ciba Crop Protection.

NEPTUNE ADDS PORTER

LANSDALE, PA — Neptune Chemical Pump Company, a manufacturer of metering pumps and water treatment equipment, has named Fred Porter as operations manager. Porter is responsible for manufacturing, engineering and facilities management. Previously, he had been with the Milton Roy Company for 16 years, holding positions of production superintendent and plant manager at the flow control division.



LawnNibbler technology could be coming to a maintenance shed near you.

LawnNibbler acquires taste for golf course turf

By FRED WRIGHT

GAINESVILLE, Fla. — A robot lawn mower called LawnNibbler, created at the University of Florida, may soon be pruning the tees and greens of the neighborhood golf course.

Designed by the university's Machine Intelligence Laboratory, the prototype can cut grass intelligently — avoiding dogs, kids, trees and golfers. It uses a radio wire buried at the perimeter of its work area and a navigation beacon system using sonar and infrared emitters and detectors that tell it where it is in its environment.

The LawnNibbler has four wheels, a chain drive, electric motor and lead acid battery and it works on the principals of a tank: It can turn on a dime — or a divot.

"We've done no engineering to date in terms of en-

durance," explains Keith Doty, director of the lab who designed the original model two years ago, but he estimates the LawnNibbler can run several hours before needing a recharge.

A graduate student, Kevin Hakala, added sensors and a guidance system last year.

The buried wire acts as an obstacle that the LawnNibbler cannot cross. Just 24 inches high, the LawnNibbler is just under 24 inches long and just over 12 inches wide. It weighs 35 pounds.

"The microprocessor control allows it to spin on itself, left, right, back, forward," Doty said. The navigation system uses a trilaterization process, like a Global Position System (GPS) using a satellite, from three poles placed to define the LawnNibbler's territory.

"The game plan is to have a robot dog house — the LawnNibbler would go to the

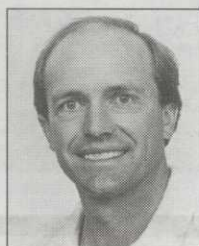
Continued on page 77

Pate dives into equip. distribution

By MICHAEL LEVANS

PENSACOLA, Fla. — Add turf maintenance equipment distribution to the list of Jerry Pate's golf business ventures.

Pate — a TV analyst for CBS Sports, golf course designer, golf course owner and operator, turfgrass grower and ex-PGA Tour player — has purchased Gulf Shores Turf Supply, a 17-year-old wholesale and retail distributor of Toro, Echo and Lawnboy products covering northwest Florida, south Alabama, western Tennessee, Arkansas, Louisiana and Mississippi.



Jerry Pate

Along with equipment sales, Pate said Jerry Pate Turf Supply will offer research services, design and specification of irrigation projects, equipment consulting and continuing education for turf maintenance professionals.

As Gulf Shores, the company reported more than \$25 million a year in sales and employed 90.

With all the other irons in the fire — including his Wausau Farms, a turf farm in Wausau, Fla., one of the exclusive growers of Floradwarf, a hybrid Bermudagrass — why the interest in turf equipment distribution?

"I've always had a love for turfgrass, agronomy and turfgrass management," said Pate. "It all ties together. I've been a customer of Gulf Shores for 20 years, it's a nice size business and its in the town where I live."

Continued on page 76

AgriBioTech to take Zajac, affiliates

LAS VEGAS — Dr. Johnny Thomas, chief executive officer of AgriBioTech, has announced that the company has signed four separate letters of intent to purchase Zajac Performance Seeds Inc. and its Oregon affiliate (Zajac), Ohio Seed Co. (Ohio Seed), Van Dyke Seed Co. Inc. (Van Dyke) and Las Vegas Fertilizer Co. Inc. (LVF).

The four companies have combined annual revenues of approximately \$46 million.

The effective dates for the purchases are Jan. 1 to March 1; consequently, the acquisitions should contribute approximately \$20 million of revenues to AgriBioTech's current fiscal year, ending June 30, 1998.

AgriBioTech is purchasing the four companies for approximately \$15 million in cash and 1,255,000 shares of AgriBioTech common stock with an aggregate value of \$14.6 million

Continued on page 77



NEW PRODUCT OF THE MONTH

ANAHEIM, Calif.— The Taylor-Dunn Manufacturing Co. has entered the outdoor market with the Roadmaster, a new gasoline-powered vehicle. Designated the model R6-80, the Roadmaster is made of 16-gauge Diamond Plate Steel and can carry as much as 1,000 pounds over rough, uneven surfaces. The Roadmaster was designed for situations requiring around-the-clock operation, precluding the use of electric-powered vehicles that need recharging several hours a day. Powered by a quiet, nine-horsepower engine, the Roadmaster has a range of up to 100 miles. The engine meets the strict, low-emissions standards of the California Air Resources Board. For more information, contact Taylor-Dunn at 310-393-0622.

Jake automates preventive maintenance

By MICHAEL LEVANS

RACINE, Wis. — In an effort to increase the lifespan of its leased turf equipment, the Jacobsen Division of Textron Inc. has contracted Trims Software International Inc. to produce an integrated maintenance software package to help Jake mechanics better organize, ex-

ecute and chronicle their overall maintenance routine.

Based on Trims' Grounds Management Software, a maintenance software package, the new equipment maintenance system is designed to provide preventive maintenance scheduling, maintenance records, spare parts inventory, an on-line illus-

trated parts catalog and electronic parts order processing.

The software also features an Internet link direct to Jacobsen headquarters, allowing the manufacturer to keep tabs on equipment maintenance data from the field.

Jacobsen is in the process of rolling out the system to several

of its contract service sites — sites that feature 18 to 36 holes under contract, a complete fleet of Jacobsen equipment and one or two on-site technicians.

"For years, Jacobsen has had a preventive maintenance management system based on paper forms that technicians had to fill out," said Tony Saiia, vice president of quality and customer support. "This automates the process, and if something changes

we can change it globally."

"This is a tool for the Jake mechanic," said Lee Bornstein, vice president of Phoenix-based Trims. "His computer will tell him when equipment is due for service, it will print out a checklist of things to be done on that service event and then generate work orders with all the relevant information on it."

When work is complete on a piece of equipment, inventory is updated and the system resets for the next maintenance event on that piece. In turn, the technician can keep tabs on the total cost of the parts, material and labor needed to maintain the equipment.

"We want to be able to allow the superintendent to focus on growing and maintaining turf," said Saiia. "We want to provide the equipment, but we also want to provide the trained technical support people to take care of the equipment."

The technician will periodically send collected data via the Internet to Jacobsen headquarters. Data will be consolidated in order to track how each piece of equipment is doing and how one location is doing compared to a national norm.

"Jacobsen can then identify areas where things need to be improved," added Bornstein. "Ultimately, it's going to give Jacobsen better resale of leased equipment."

Fairmount forms LLC with Boyd

CHARDON, Ohio — Fairmount Minerals, parent company of Best Sand Corp., a supplier of bunker, topdressing and greens construction sand to golf courses, has signed an agreement to form a limited liability corporation with New Wilmington, Pa.-based D.M. Boyd Co., a producer of topdressing and construction mixes for golf courses.

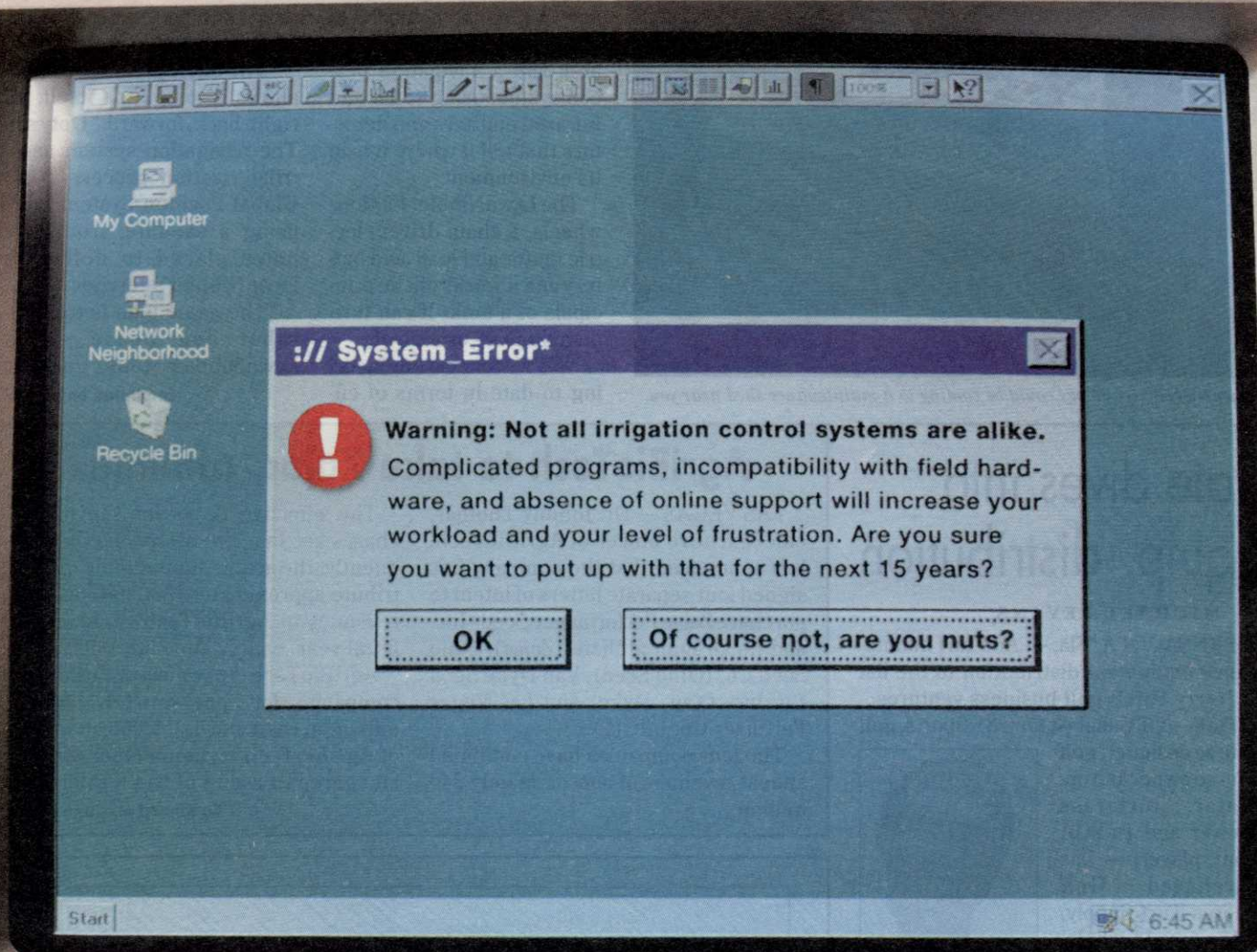
D.M. Boyd has been in business for over 50 years and supplies golf courses nationwide.

As part of the agreement with D.M. Boyd, Fairmount has started construction of a new mixing and blending facility. The company said the facility will be utilized for mixing and blending topdressing and construction mixes for the northern Ohio market.

"This partnership is going to help both companies increase distribution and expand our business on the national level," said Jeff Fallon, vice president of Fairmount.

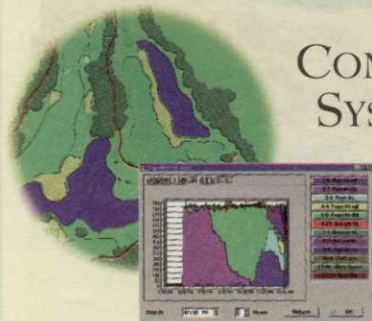
In addition to the turf and landscape market, Fairmount is a supplier to metal casters, glass manufactures, the oil and gas well stimulation industry and water filtration facilities.

GOLF COURSE NEWS



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TORO

IRRIGATION

CIRCLE #146/GCSAA #3741

Barenbrug solidifies Palaversich y Cia deal

Barenbrug, the Dutch breeder and producer of grass seeds, has acquired a majority interest in the Argentine seed company Palaversich y Cia. Initially Barenbrug obtains 60 percent of the shares. The remaining 40 percent will stay in the hands of the actual owners, the Palaversich brothers, until

August 2001 when they will also be acquired by Barenbrug.

According to the Barenbrug Group, the deal symbolizes a considerable strengthening of their position in South America. Furthermore, the company said the acquisition of the Argentine seed company fits very well in its strategy of a global presence in

the world's most important markets. After the takeover of Palaversich, Barenbrug now has subsidiary companies on five continents.

Palaversich will be part of Barenbrug Southern Hemisphere. This division of Barenbrug Holding is managed by Agriseeds Holdings Limited

based in New Zealand.

Barenbrug and Palaversich already had an agreement covering the joint improvement, testing and marketing of forage varieties for the Argentine market. Barenbrug, through its existing subsidiaries and affiliations, has a product range well suited to South American conditions. This includes improved va-

rieties of the most important species such as alfalfa, cocksfoot, tall fescue, rye grasses, brome and white clover.

The annual turnover of Palaversich is approximately 22 million Dutch guilders. The Barenbrug Group will trade approximately 60,000 tons of seed worldwide and is expected to have a turnover of about 350 million Dutch guilders.



Zeneca to acquire ISK agrochemicals businesses

MENTOR, Ohio — Zeneca Agrochemicals and Ishihara Sangyo Kaisha Ltd. (ISK) of Japan have inked an agreement whereby Zeneca will acquire ISK's worldwide chlorothalonil business through the acquisition of ISK Biosciences Corporation (ISKB), ISK's U.S.-based agrochemicals operation.

The value of the transaction is \$410 million.

According to Zeneca, the major component of this business is the fungicide chlorothalonil, which is marketed under the trademarks "Bravo" and "Daconil 2787" and is used in a wide range of crops and on turfgrass.

"From a turf standpoint this gives Zeneca an opportunity to fill all the voids in disease management," said Vern Hawkins, fungicide product manager for Zeneca Ag Products. "The Daconil products have a strong reputation from a dollar-spot standpoint, but they also bring a contact product into our portfolio. Daconil is not a small product, so it gives us some critical mass."

The transaction includes a number of smaller agrochemical products and ISK Biosciences' chlorothalonil-based coatings business, though not its KODIAK wood and wood preservatives businesses. It also includes a manufacturing facility at Greens Bayou near Houston, Texas.

The acquired business made an operating profit of \$43 million on sales of \$240 million in 1996.

UHS NAMES THURLOW HEAD OF WESTERN DIVISION

DENVER, Colorado — United Horticultural Supply (UHS) has announced that Mike Thurlow was named to head its Western Division. Thurlow comes to UHS after more than five years at The Scotts Company where he was senior vice president, ProTurf division. Before then, Thurlow was vice president of Scott's horticultural division. He spent more than 15 years prior to that time working for several food manufacturing companies.

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ProStar obtains new EPA labeling

MONTVALE, N.J. — AgrEvo has announced that its fungicide, ProStar 50 WP, recently obtained new labeling from the EPA for both preventative and curative suppression of fairy ring.

The disease, caused by the puffball mushroom, plagues putting greens by growing unnoticed within the soil, causing necrotic/hydrophobic rings, of-

ten leading to localized dry spot, spawning unsightly mushrooms.

As a result of the EPA approval, ProStar 50 WP is now labeled for three types of fairy ring treatment: preventative treatments on newly built or rebuilt putting greens; preventative treatments on existing putting greens with a history of fairy ring prior to periodic visible signs of rings;

and curative treatments at first signs of development (greening, death of turf, mushrooms) to suppress growth.

The EPA approval was supported by results of a 1994 University of Florida test conducted by pathologist Dr. Monica Elliott in which she concluded that ProStar 50 WP stopped mushroom production on a USGA specification research green.

Lofts presents annual royalty check

NEW BRUNSWICK, N.J. — Dr. Richard Hurley, executive vice president of Lofts Seed, recently acknowledged the company's commitment to turfgrass research at Rutgers University by presenting its annual royalty check.

The check, which totaled \$822,522.49, was presented to Dr. Reed Funk, Dr. Bill Meyer,

Dr. Dan Rossi and Bruce Clarke of Rutgers University and to members of the turfgrass research program. The Presentation took place at the Rutgers Horticultural Farm II.

"Our relationship with Rutgers has been so rewarding for both Lofts and the university turfgrass research program. Rutgers continues to be a leader in turfgrass development and Lofts Seed is glad to be part of that effort," said Hurley.

Lofts Seed also annually presents Rutgers with scholarships for turfgrass students from the Peter Selmer Loft Scholarship Fund which to date has provided funding for over 150 scholarships. This year, Lofts awarded a record number 28 scholarships.

AgrEvo awards turf scholarships

MONTVALE, N.J. — AgrEvo recently announced the winners of its annual Turf Scholarships.

Winners included: Anthony Palesano and Travis Outlaw of Oklahoma State University; Sean McDonough of Oregon State University; Dallas Smith of Texas A & M University; and Michael Fricault and Paul Fox of the University of Florida. Each received a \$500 scholarship to be used toward the study of turfgrass management.

According to George Raymond, AgrEvo green industry marketing manager, "In today's era of technology, we recognize the educational needs of future turfgrass managers, therefore, we have a viable interest in their professionalism."

Jerry Pate

Continued from page 73

Pate believes his passion and experience will trickle down to increased service and increased sales.

"I owned a 36-hole development [Tiger Point in Pensacola] for eight years," he said. "When you're on that side of the business you learn the needs of a golf operation. You learn the difference between good equipment and not-so-good equipment and you learn the difference between good service from a distributor and not-so-good service."

Meanwhile, Jerry Pate Golf Design currently has four projects under construction and several jobs pending. Pate recently joined forces with Tom Fazio on a second 18 holes at Dancing Rabbit Golf Club in Philadelphia, Miss. Dancing Rabbit is Pate's fourth design collaboration with Fazio.

GOLF COURSE NEWS



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CIRCLE #139/GCSAA BOOTH #1853-1855

AgriBioTech/Zajac

Continued from page 73

based on prices during the periods of negotiations, which was prior to the recent increases in the company's stock price.

Zajac specializes in providing proprietary turfgrass varieties to independent wholesale distributors under private label, similar to the way AgriBioTech's subsidiary, WL Research Inc., provides wholesale distribution of alfalfa varieties.

All three owners of Zajac, John and Ellen Zajac and Sandy Zajac Pepin, are continuing as employees of AgriBioTech with long-term contracts. The strong management team of Zajac, coupled with its Oregon production operations and strong distribution base, will be complementary to AgriBioTech's existing

turfgrass operations.

Ohio Seed is a distribution company with approximately 60 percent turfgrass seed and 40 percent forage seed, with sales primarily in Ohio and Michigan. Ohio Seed owners Kevin and Harry Keckley are signing long-term employment and consulting agreements, respectively, with AgriBioTech.

Van Dyke is a production company with a wholesale distribution base of a number of forage crops, such as red clover and crimson clover. These operations will complement AgriBioTech's current for-

age operations, providing the company with a good, reliable source of supply for these important forage crops. Terry Lewis and Ron Brandt are signing long-term employment contracts with AgriBioTech.

LVF specializes in the distribution of turfgrass seed and ancillary products to golf courses and lawn and garden products to home improvement centers, mass merchants and independent nurseries in Nevada, California, Utah, Idaho and Wyoming.

AgriBioTech said that this acquisition

will increase its access to golf courses and will give the company experienced management in lawn and garden products which may be expanded to other distribution territories of the company.

The company has completed 16 acquisitions since Jan. 1, 1995. Its current level of annualized net sales of approximately \$326 million, including the above four acquisitions and the previously announced pending acquisitions of Seed Corp. of America and Discount Farm Center Inc.



LawnNibbler

Continued from page 73

dog house and recharge itself whenever it needed to," explains Doty.

The prototype has been tested in conditions ideal for golf course care — wet grass up to six inches high, on a 12-degree slope, even over tree roots. No problems. The LawnNibbler uses a weed trimmer-like nylon cord to cut a six-inch swath with, not a blade.

With its electric battery, the LawnNibbler hums along at 1 foot per second.

Another goal Doty has for his creation is an ability for it to learn and become smarter in its ability to do its mechanical duty — possibly becoming able to mow an entire golf course without human supervision. "The sky's the limit once you have a computer on board and enough memory," Doty said. "These things will only get better and better."

Doty said the original concept was to have the LawnNibbler simply spit the cut grass back onto the lawn. "Future models could bag it up, but that creates a lot of difficulties — when is the bag full? How to empty it? That could double the cost of the mower."

Doty projects that the initial cost of producing working models of LawnNibbler would place the price at about \$2,000 per unit. "Once it catches on...a bare bones model might cost \$1,500. The enhancements I have in mind could maybe build that up to \$2,000 to \$3,000." The market originally conceived for the LawnNibbler was as a machine to prune the grass around Florida's orange groves.

Doty, who also has his own private robotics company, Mekatronix, to develop, build and retail robotic products, sees this technology as the next wave after personal computers.

"Computers are brains but there's no muscle. Robots add muscle to the brains," he said.

"I'm trying to stimulate the public's interest in autonomous mobile robots. What made the computer business was software. It will be the same thing for robotics — the applications."

Doty suggests that his research lab isn't the first place a robotic lawn mower has been conceived. "The CIA has an autonomous lawnmower," he says, required for sensitive locations where the fewer people hanging around, including yard maintenance workers, the better.

"I understand it's kind of a wooze," he said like a proud parent. "I've got a more manly robot."

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Potter emphasizes environmental sensitivity

By MARK LESLIE

Question: Who is the most prolific writer in the world of turfgrass entomology? Stumped?

The answer is Dr. Daniel A. Potter of the University of Kentucky.

And now Dr. Potter, who has dominated the world's technical journals in his field, has completed his first book, whose title I love because it emits that Turf Wars mentality.

It is called *Destructive Turfgrass Insects*

— *Biology, Diagnosis and Control*. And fans of Drs. James B. Beard and Toshikazu Tani's *Color Atlas of Turfgrass Diseases* will enjoy this 344-page treatise, which could be a companion piece.

Potter emphasizes environmentally sensitive management of the important insect and mite pests of turfgrasses in the United States and southern Canada, including conventional insecticides, alternative tactics and selective treatments for specific pests.

Hey, you got Bermudagrass mites chomping down your Bermuda? This will tell you how to control the ugly little creatures. Curious about the life cycle of the black turfgrass ateniens? Check out this timeline showing the two generations per year of this root-infesting pest. Name it and it is discussed here.

"Pests that Suck Juices and Discolor Leaves and Stems," "Root-Infesting Insect Pests," "Pests that Burrow in Stems or Damage Crowns," "Insects that Chew Leaves and Stems," "Biting and Stinging Pests," "Nuisance Pests and Innocuous Inverte-

brates" ... All the bad guys are discussed.

So, too, are the beneficial invertebrates — the predators, parasites and thatch busters of the world: lady beetles, rove beetles, green lacewings, ground and tiger beetles, scolid wasps, spiders and others.

(For curiosity seekers, the dog in the photo on page 221 illustrating the effects of dog urine on turf, is the same dog at Potter's side in a biography on the author. I love people who involve their pets in their work.)

Published by Ann Arbor Press in Chelsea, Mich., the book is selling for \$65.

For all your IPM info, who you gonna call?

By MARK LESLIE

In Massachusetts, people anxious for information on Integrated Pest Management (IPM) contact Drs. Patricia Vittum or Gail Schumman at the University of Massachusetts. In Florida, it's Dr. Monica Elliott at the University of Florida, and in Alabama it's Dr. Patricia Cobb at Auburn University.

These four women — entomologists Cobb and Vittum, and plant pathologists Elliott and Schumman — have taught seminars around the country on IPM for the Golf Course Superintendents Association of America. Now they have teamed up to write *IPM Handbook for Golf Courses*, combining what they have been teaching and what they have learned from innovative and progressive superintendents and other scientists.

From cultural practices to chemical, from the BioJect system to insect trapping, from insects to diseases, nematodes and weeds, the authors cover the gamut of topics encompassed in this practice called IPM, an art that is evolving even as you read this.

Here is a section on mapping significant weeds and thin turf areas. Here's another on calculating degree days and using various weather forecasting and modeling technologies, and one on scouting and monitoring.

A superintendent friend complained, "They use a lot of big words." Well, there's a glossary in the back and I've got an old *American College Dictionary* you can borrow. Nevertheless, he added: "It is a good reference book."

Other readers may be disappointed that, though the 264-page book is loaded with black-and-white photos, there are only eight pages of color shots for their "bugs-make-me-sick" library.

Black-and-white photos are not the best way to illustrate dollar spot, red thread, globe sedge, Bermudagrass decline, or take your pick. But they have to suffice here; and, regardless, the information surrounding them should help a lot of superintendents improve the efficiency of their IPM programs, or even urge those who don't practice IPM to jump aboard this fast-moving locomotive before they get left behind with a squadron of armyworms at their feet.

Published by Ann Arbor Press in Chelsea, Mich., the book is a hardcover, selling for \$54.95.

GOLF COURSE NEWS BOOKSHELF

The Confidential Guide to Golf Courses

By Tom Doak

Written in the inimitable style of *Golf Magazine's* golf course design editor, this book describes, uncovers and rates more than 1,000 courses worldwide that the author has visited and photographed.

With more than 180 four-color photographs, it might be the best collection of worldwide photos ever published. It starts with a "Gourmet's Choice" selection of 31 of Doak's personal favorites, each by a different designer, followed by brief reviews of courses from Pebble Beach, Calif., to Kebo Valley, Maine, and from St. Andrews, Scotland, to Joondalup in Western Australia.

\$45.00, 400 pages, hardcover.

Guide to Golf Course Irrigation System Design and Drainage

By Edward Pira

As a working reference or as a textbook, the *Guide to Golf Course Irrigation System Design and Drainage* covers every important aspect of the subject in an easy-to-understand format. It is perfect for the practicing turfgrass manager, superintendent, consultant, sales representative, and student. Used in numerous academic courses for years, this is the first commercially-available version of a perennial best-seller, and is completely revised with new exercises, practical examples, numerous new figures, and expanded sections covering a wide variety of irrigation system components. A hands-on manual, it guides

the reader through every phase of an irrigation program. Turfgrass managers and golf course superintendents will refer to this handy book often to plan effective irrigation systems, ensure appropriate capacity, easy installation, and practical operation and maintenance.

\$59.95, 400 pages, hardcover.

Color Atlas of Turfgrass Diseases on Golf Courses

By Dr. Toshikazu Tani

Contributing Author, Dr. James B. Beard

The *Color Atlas of Turfgrass Diseases on Golf Courses* presents more than 540 high-quality color photographs of all the major turfgrass diseases that occur on both warm-and cool-season grasses. It is international in scope. This book will likely become the standard color-guide to disease diagnosis and pathogen identification for golf course superintendents and turfgrass practitioners. No other book contains as many color photographs of this detail and quality. Helpful maps are included to assist in disease identification by providing geographical locations where each disease/pathogen is likely to occur.

A unique feature of this easy-to-use field guide is that it also provides color photos of step-by-step guidance on diagnostic techniques for laboratory analysis which can be used by practitioners.

\$79.95, Approx. 250 pages, hardcover.

The Course Beautiful

By A. W. Tillinghast

This is a fascinating collection of original articles and photographs on golf course design by one of the masters. A prolific writer, Tillinghast delves into his philosophies on golf course design and maintenance, and his thoughts on what makes a championship course. It is loaded with vintage photographs and original Tillie sketches of such of his creations as San Francisco, Winged Foot and Baltusrol golf clubs.

\$34.95, 120 pages, hardcover.

The Captain — George C. Thomas Jr. and His Golf Architecture

By Geoff Shackelford

The creator of Riviera and Los Angeles country clubs and author of the classic book, *Golf Course Architecture in America, Its Strategy and Construction*, George Thomas has deeply affected the golf industry even since his death in 1932. Thomas worked on single projects with Donald Ross and A.W. Tillinghast, learned from friends Hugh Wilson and George Crump, and designed more than two dozen courses on his own. At the same time he was recognized worldwide for his books about and breeding of roses, his first love. Call him brilliant, or enigmatic, but in his last years his work was on a book about Pacific game fish. Shackelford reveals the man behind the work.

\$35.00, 207 pages, hardcover, limited edition of 1,200 copies.

Human Resource Management for Golf Course Superintendents

By Robert Milligan and Tom Maloney

This practical guide provides basic management principles and techniques which view people as the most important asset in golf course management. Five basic management functions are detailed throughout the book, using everyday situations to illustrate the key points.

Designed to serve as a quick reference, or as a self-teaching guide, *Human Resource Management for Golf Course Superintendents* features numerous techniques and practical examples.

Every aspect of management is covered. Learn how to improve your planning abilities, build leadership and communication skills, maximize employee performance, select and train new employees, avoid the mistakes that cause low morale and poor performance, and conduct employee performance evaluations.

Use of the methods and principles presented in this book will ensure the effective management and operation of any golf facility.

\$34.95, 150 pages, hardcover.

Turfgrass Management Information Directory

By Dr. Keith Karnok

A 1,700-entry reference for turfgrass and green industry professionals, the *Turfgrass Management Information Directory* compiles the latest information and gives an at-your-fingertips list, complete with names, addresses and useful material you need every day.

The directory covers academic programs and key contacts, instructional resources including slide sets and videos, software and much more.

The section on related books provides a definitive guide to pertinent titles on diseases, weeds, insects, irrigation, pesticides and general information. Industry services such as diagnostic labs and soil-testing facilities are included.

A guide to green industry organizations gives addresses and contact names.

\$19.95, 115 pages, softcover.

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Ditch Witch introduces new downhole tool

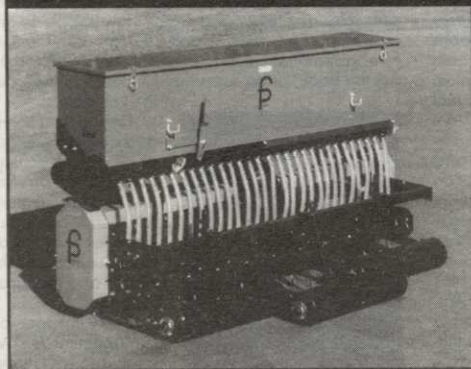
The new Ditch Witch Single Roller Cone Bit is an innovative downhole tool developed for horizontal directional boring that provides simultaneous cutting action and steering capability. This is achieved by mounting the roller cone tool at an angle, similar to the position of the flat surface of standard slant-nose tools.

The bit is effective in both dirt and rocky soil conditions and gives compact directional equipment the capability of working effectively in many types of rock formations. Single Roller Cone Bits are available for all Ditch Witch Jet Trac directional boring systems. For more information, contact Ditch Witch at (800) 654-6481.

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GreenBox Pin Marker gets the message across

Initially designed to show the current position of the pin, the GreenBox Pin Marker from GreenBox International opens a new can of worms for golf courses, from full hole details to club messages, tournament advertising to green sponsorship.

The Pin Marker is a display unit that stands approximately 22 inches high and can be positioned on or at the approach to the tee. The marker features straightforward graphics that can be understood at

a glance. Divided into two panels, the graphics are kept safe, clean and dry under shatterproof polycarbonate covers 0.2 inches (5mm) thick.

The lower panel is the larger of the two sections measuring 18x9 inches (w x h). In addition to the standard hole information such as yardages, par and stroke index, this panel incorporates a large graphic display of the green with a moveable magnetic marker to indicate pin position of the day.

The upper panel, ideal for displaying club messages, comes with eight standard notices such as, "Please rake bunkers after use" or "No carts on the tee."

For more information contact 212-745-0446.

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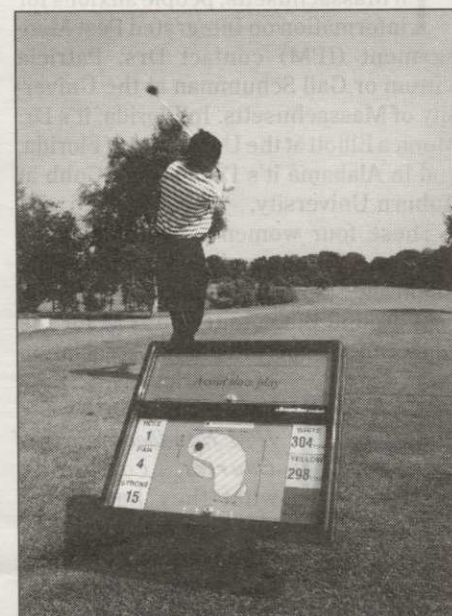
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The Pin Marker at the 1st tee.

Nelson expands wireless controller line

L.R. Nelson Corp. announces the expansion of its wireless controller line. The SoloRain family of battery powered solenoids and programmers introduced last season included the 8010 Series of programmable actuators, the 8030 Series remote programmable actuators and the 8070 console.

This season, Nelson has added the 8060 radio control actuator, 8050 multi-station actuators, 8071 programmer plus, and the 8081 radio programmer plus.

The 8050 Series PG actuator is a waterproof, battery operated, control module available in 1, 2, 4, or 6 zones. Accessories for the control module include a latching solenoid compatible with most popular valves, a hydraulic solenoid, waterproof battery, rain sensor and pump relay.

The multi-station actuator communicates via a secured, waterproof telephone plug connection to an 8070 Series control console. Using the 8060 PG multi-station radio adapter, any 8050 Series PG multi-station actuator can be retrofitted for use with an 8081 radio programmer plus for even faster, more flexible programming with radio communication.

For more information, contact Nelson at 309-690-2200.

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CIRCLE #163

NEW PRODUCTS

Olson ready with MVA-100 & AGV-100

A new 1" angle/globe valve from Olson Irrigation complements the company's MVA-100 Multi-Valve Assembly line of irrigation valves. The new AGV-100 single valve provides the user with many of the features included in the MVA-100 such as flow control, a nylon-reinforced double-sealed diaphragm, manual internal and external bleed, and low flow operating capabilities.

The single valve's bonnet is identical to that used in the MVA-100. Valve maintenance is streamlined since the bonnet can be removed and replaced quickly by slightly loosening four screws, then rotating the bonnet 20 degrees and lifting it from the body. Replacement is just as simple.

Constructed of glass-filled nylon, the heavy-duty AGV is rated at 200 psi (14 bars). This normally-closed valve utilizes a 24-vac, 50/60 cycle solenoid with .4 amp inrush current and .22 holding current. The AGV is available in 1" NPT or 1" BSP.

For further information, contact Olson Irrigation at 619-562-3100.

CIRCLE #206



Olson's AGV-100 angle globe valve.

Vermeer introduces SC 752 stump cutter

Vermeer Manufacturing Co., the originator of the fist stump cutter, recently introduced a new mid-size 75 HP (56 kw) SC 752 stump cutter for high-tech, low-maintenance stump removal. Vermeer's exclusive beltless cutter wheel drive system provides operators the efficiency of a mechanical drive unit without engine side load. The beltless system eliminates the need to slide the engine to engage the cutter wheel drive; maintenance also is easier than on belt-drive systems.

The SC 752 stump cutter provides top industry cutting performance with one of the most significant advancements in stump cutting technology in years — Vermeer's exclusive Auto Sweep system. Auto Sweep maintains the rated engine speed of the stump cutter by automatically adjusting the feed rate of the cutter wheel. By maintaining rated engine speed, the operator is ensured the stump cutter will deliver maximum horsepower and high productivity.

For more information, contact Vermeer at 1-888-VERMEER.

CIRCLE #207

Howard Price cuts trimming time with its new 360Z

Howard Price Turf Equipment's new 72" 360Z is offered with either a 22HP or 25HP Kohler engine. It features higher productivity with the larger deck but still has excellent flotation provided by six anti-scalp rollers with micro-adjustment settings to match the ever-changing conditions you encounter. The trimming capabilities are greatly improved over small units because the deck reaches under shrubs and evergreens to reduce costly trimming. For more information, contact Howard Price at 314-532-7000.

CIRCLE #203



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CIRCLE #208

Wilbur-Ellis announces new seed inoculant

Wilbur-Ellis Company's Bio-Trek biological fungicide system has been formulated as a seed treatment to begin control of fungal disease at planting. The EPA-approved Bio-Trek HB has been proven effective in control of root diseases in turf and ornamentals.

The active ingredient is a beneficial fungus, *Trichoderma harzianum* strain T-22 (KRL-AG2). When applied as an inoculant to seeds, Bio-Trek HB protects roots against *Pythium*, *Rhizoctonia* and *Fusarium*. For more information, contact Wilbur-Ellis at 209-442-1220.

CIRCLE #209

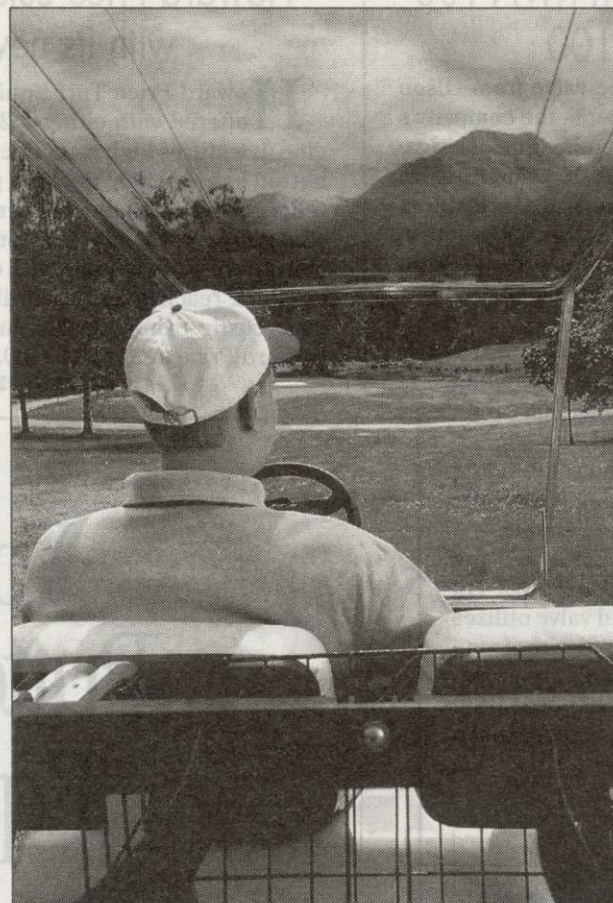
Hustler adds ShortCut to mower family

The Hustler ShortCut family of mowers from Excel Industries, Inc. features an innovative new zero-turn steering system — Hustler Bar Steering (HBar Steering). This unique steering concept resembles motorcycle steering, with a simple forward twist to drive forward and a backward twist for reverse. All controls

for forward, reverse, speed, turns, and braking are controlled by the Hustler Bar. HBar Steering is extremely easy to learn and operate so the learning curve has been reduced to mere minutes.

For more information, contact Excel at 800-395-4757.

CIRCLE #210



Sky-Vu offers new view

Polymer Innovations Corporation has developed and commercialized the Sky-Vu golf cart top. The transparent top allows players an unobstructed view of a golf course's natural beauty without sacrificing UV protection from the sun.

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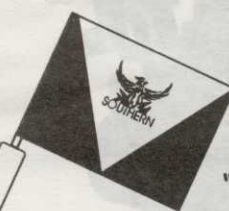
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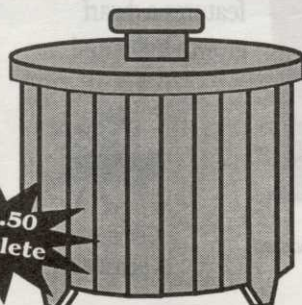
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CIRCLE #188

Freem: Golf in Asia

Continued from page 14

What will be the outcome of all this economic discord?

In the long run, there will be distinct benefits in numerous ways. In the short term — the next year or two — owners of existing courses will see increases in play as demand pressure continues to grow and the supply of new courses declines.

Elective travel outward from the various Asian countries will likely slow. Golfers will play local or in-country courses more and travel elsewhere for golf holidays less.

Want-to-be golf developers will be giving more consideration to location, market demand and financial feasibility than was generally seen a few years ago. The oversupply situation in some areas caught the attention of the more astute developers well before the present economic turmoil hit.

Having market demand and meeting that demand is a key to success. There will be some reapportionment of use of facilities as in-country demand continues to grow, if more slowly, and where excessive numbers of courses, such as in Southern China and around Kuala Lumpur, caused over supply.

Reductions in membership joining fees, together with oversupply, will help absorb new players. New players also will be fewer in the near term as economic uncertainty regarding employment will discourage some from considering golf as a sport and social activity.

In addition, recent currency devaluations certainly will raise the cost of obtaining that new set of clubs, or even purchasing the first set, particularly if the clubs are imported. Golf balls too, are much dearer now than they were a few months ago.

For those with extra funds, a selective purchase of a few club memberships could pay off very well in several years time, as demand for memberships returns and the slow down in creating new courses increases demand to play upon a reduced number of courses. The location of the course, and the quality of the facilities on offer, will influence the desirable memberships to purchase. The speculative frenzy to purchase memberships of the late 1980's and early 1990's should be a thing of the past.

Those with courses in play now must sit through the turmoil. In some locations, play will decrease. Where the membership has been purchased already and some years ago, play will become more active. The market sales value of the membership will be down, but monthly subscriptions will, in many cases, still be paid promptly since the option to play elsewhere has been reduced.

Daily-fee public courses will experience higher volumes of play as the economic readjustment shock wears off.

Where housing sales are depending upon golf to raise the market price, buyers able to meet that price will be less common. Overbuilding of golf residential communities can be offset or even benefit, as the number of new and competing projects will diminish.

If the property developer has enough money and the desire to take some risk, completing a golf project over the next two years or so could produce an attrac-

Continued on page 86

Golf Course Classifieds

To reserve space in this section, call 207-846-0600 ext. 230

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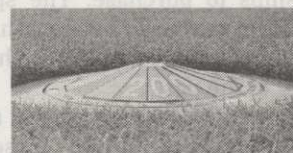
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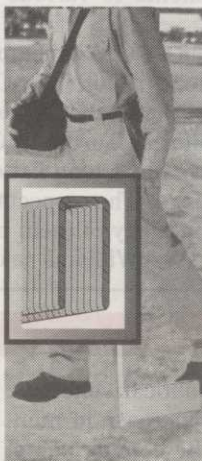
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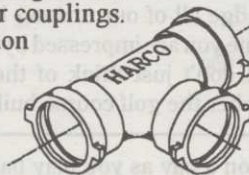
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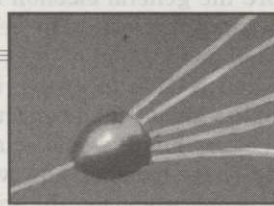
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Hurdzan on builders

Continued from page 42

No architect would disagree with me when I say that a great builder can make your work look outstandingly good, and a poor contractor can butcher the greatest design in the world. Some builders have taken bad golf course plans and made enough field adjustments to fashion a good golf course, only to have the designer get all the credit.

These are good times for golf course builders, for many courses are being built. However, not so long ago when the country was facing high inflation, the interest rates and rising wages made it difficult to make a profit, or even stay in business. This affected every golfer who appreciates a fine golf course. Each time we lost one of these artisans, the evolution of course design was set back for we lost the subtleties of interpretation so necessary to produce a great golf course.



An analogy would be if a gifted composer wrote an imaginative and inspired piece of music, but if the only musicians around to play it were a street corner band, you can imagine the result. This is humorous perhaps, but the same results might be expected if you gave a terrific golf course plan to a road builder.

Thank goodness our country's economy has improved and golf course building is at an all-time high rate. Now the problem is trying to find contractors or train crews in the subtleties of course construction. Provided the industry is successful, which it seems to be, the best golf courses ever are yet to come. Better designs and better construction, supported by better maintenance, guarantee great golf.

Now, I am not so naive as to think that human nature will change and we will acknowledge all of our unsung heroes. But next time you are impressed by a great golf course, don't just think of the designer. Remember the golf course builder.

UK lottery

Continued from page 42

struggle to justify expenditure on golf course construction.

Once more, the perceived image of golf is causing problems. "Golf has the wrong image, it is seen as being exclusive, elitist and discriminatory. If we are to provide for a wider base of golfers we must overcome this," said the BIGCA spokesperson.

Another way forward is for existing private clubs to open its doors to the general

public on a pay as you play basis with no discrimination against non-members.

Prime Minister Tony Blair made clear before the general election in May that he wanted the lottery to be run in the spirit of public good.

If golf is able to evolve into a truly "people's game" then convergence with the Lottery Funds would be all the more likely. At the moment, however, an awful lot of people would like the opportunity to play golf but the funds are not forthcoming to allow them to do so.

MacCurrach honored

Continued from page 46

GCSAA Foundation, is open to undergraduate turf students. Each applicant is judged on academic excellence, appropriate career preparation and potential to make an outstanding professional contribution. Applications are distributed in December and January to all colleges and universities that offer degrees in turfgrass management. Applications are also available on the GCSAA Web site (www.gcsaa.org). The application deadline is June 1, with the judging process to be completed by July 15.

Internationally recognized for his expertise in the turf management field, MacCurrach began his career as golf course superintendent at Valley Coun-

try Club in Warwick, R.I., in 1962. In 1972, he became the 45th person to receive the title of Certified Golf Course Superintendent from the GCSAA. MacCurrach became the PGA Tour's first agronomist in 1974, then was named senior agronomist in 1988. In 1994, he received the GCSAA's Distinguished Service Award.

"Allan's contributions to the PGA Tour specifically, and the turfgrass industry in general, were invaluable," PGA Tour Commissioner Tim Finchem said. "As senior agronomist, he played a leading role in establishing the standard of excellence for course conditioning at Tour events. The scholarship is an appropriate way of honoring Allan's years of dedication to the PGA Tour and the Golf Course Superintendents Association of America."

Mastroleo wins Distinguished Service

Continued from page 46

manage Fox Hills Golf Course in 1959. Eleven years later, he became superintendent at Hillcrest Country Club, where he has been for nearly 30 years.

"Dave Mastroleo is the epitome of what golf course superintendents are all about," said Bruce R. Williams, certified golf course superintendent at Los Angeles Country Club and GCSAA immediate past president. "He has spent a long career giving and sharing while asking for nothing in return. Dave is a shining example of the spirit of volunteerism, with over 40 years of contributing his time and talents to various GCSAA chapters and allied turfgrass organizations."

Mastroleo has been a GCSAA member since 1954, and is a member and past director and president of both the California Golf Course Superintendents Association (GCSA) and the GCSA of Southern California. He also is past president of the California Turfgrass Council.

"As a mentor, Dave has a long list of successful superintendents who benefited from this tutelage. The respect that those former trainees have for Dave is immeasurable, and many of them pinpoint Dave Mastroleo as the primary factor for their success," Williams said.

GUEST COMMENTARY: OVERVIEW OF THE ASIAN ECONOMIC CRISIS

Fream: Golf in Asia

Continued from page 83

five return on investment.

Since it takes two years or longer to plan, build and open a golf course, having inventory on stream as the local economy revives and pent-up economic demand expands, puts upward pressure on membership and greens-fee prices.

Daily-fee courses can manage current situations by greens fee adjustments and smart marketing of existing facilities. As player demand expands again, and it surely will, daily-fee operators or semi-private clubs with excess capacity, can attract new players. As demand increases again, there will be upward pressure on greens fees. For the in-place existing operator, this pressure of increased play and higher greens fees will clearly add to the profit margin. Membership values will increase as player demand increases.

Tourism golf will be a beneficiary as the various Asian economies recover. Tourism is here to stay. It is the single largest industry in the world. A couple of years of staying "home for the holiday" will surely rekindle the desire to play elsewhere when the confidence in the income stream and local economy has returned.

Existing resort courses or those now in construction that are open as the tourist demand returns, will benefit.

Since Southeast Asia has many of the world's most attractive seaside-sunshine

locations, tourist arrivals from elsewhere, primarily North America and Europe, will see business now and in the future. There are some bargains at hand where recent currency devaluations have made local prices more attractive. Smartly managed tourist resort courses can see direct benefit from increased international tourist travel.

Regional tourism will also benefit as Japan finally gets their economy back in equilibrium. Traveling Japanese golfers, because they cannot afford to play golf at home, constitute a considerable percentage of the 15 million or so Japanese players and the approximately 5,000 driving ranges that continue to produce more players. In the future, the Japanese golfer will be even more important. Cost factors, politics and environmental issues will prevent Japan from ever again building huge numbers of courses as happened in the 1980's. This means ever more Japanese will be seeking out other locations to play their golf. Korea, Guam, Saipan and the Philippines can be the earliest beneficiaries. China also can accommodate the Japanese golfer conveniently.

The Chinese are observers, not avid participants in the current Chinese golf market. Expatriate and speculative buyers drove much of the recent Chinese market demand. A large number of new courses across China is unlikely due to limited land availability, water availability problems, population pressures and

other economic and political concerns. Chinese travelers will increase in number geometrically in the coming years. Golfers will be among those travelers.

Existing and new courses around the Pacific Basin will benefit from the Japanese and Chinese tourist golfer. Korea and Taiwan can benefit most easily. The Philippines can certainly gain tourism golf visitors from China, Japan, Korea and elsewhere. More tourist quality destinations for eager golfers must be provided, however.

Those who can develop new courses in China in the next few years will clearly benefit, so long as the site selected for the new course is a solid one in a good location with adequate market analysis and with experienced planning and design. Excessive development costs are the last thing a smart golf developer will want. The correct location is vital. Mediocre design and construction results will not be financially successful.

If it has become apparent in viewing the overall Asian golf market for more than 25 years, that these recent and ongoing economic readjustments will have considerable benefit, in spite of near-term hardship. The desire to play golf will overcome financial concerns.

Overbuilding of courses using ill-sited locations, grandiose design schemes and

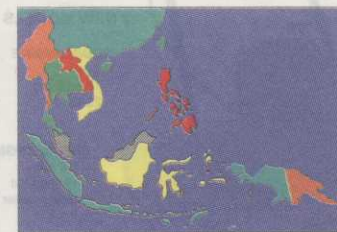
eccentric clubhouse goals, will cause bankruptcy and distress for some. Overly expensive courses built more at the whim and ego of a signature player, or optimistic owner, rather than clearly focused on financial reality, will decline.

If future golf courses are master planned and designed in logical locations, with a clear understanding of the specific market target, with reasonable construction costs, with modest, yet comfortable, functional clubhouse facilities, golf

can be offered that will accommodate the vast majority of present and future players.

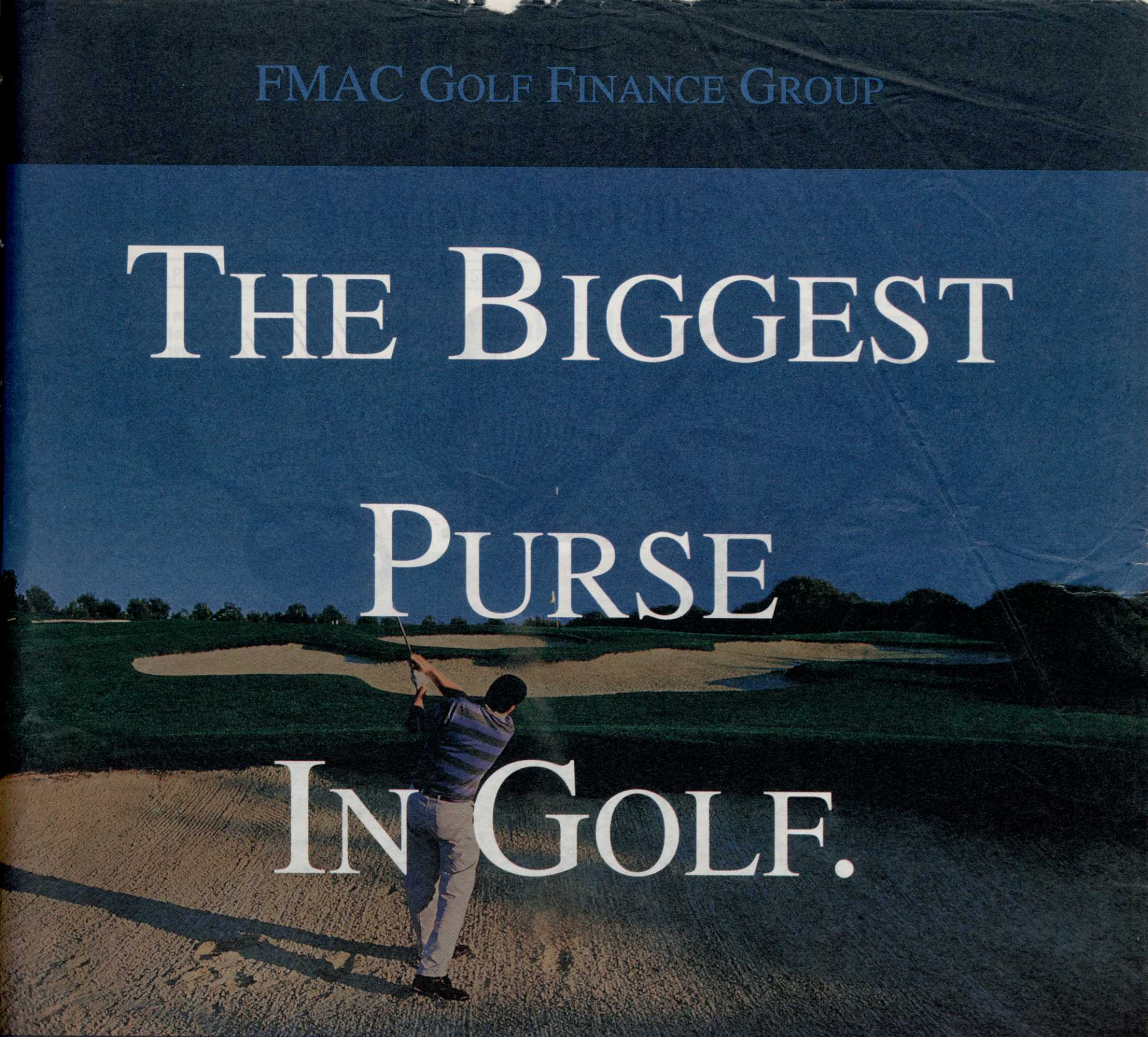
It must be recognized that Asia is diverse in very many ways. The effects of the current economic turmoil will impact each country differently while the timing of the impact, the duration of the downturn as well as the severity, will vary and may rotate. The emergence from adjustment and correction actions will surely vary. Politics and strength of conviction on the part of the various national leaders will have direct bearing on the timing and rate of recovery.

The ongoing dip in golf play and golf development activity will be viewed in the new millennium as but a pothole in an otherwise profitable and expanding industry. There will be more than 60 million golfers around the world by 2001. That is a major market to target.



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