THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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#### **Public Golf Forum**

The industry's annual conference focusing on publicaccess golf scheduled for Chicago in October ...... 3

#### **Consolidation Games**

Management firms continue to grow nationwide. See our company chart and special section ........... 43-52



**NEW GRASS IN THE WILDERNESS** 

Assistant superintendent Charlie Riger spreads out PF-11 sprigs on a green at Wilderness Country Club. PF-11 is one of two Bermudagrasses that superintendent Paul Frank has discovered on the Florida course. See Super Focus on page 14.

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## Stressed Out!

Superintendents and their turf living too close to the edge, say researchers

By MARK LESLIE

MONTREAL — Declaring that "pre-stress conditioning" will be the new buzz word in turfgrass management, Dr. Joseph DiPaola told Canadian superintendents here they should develop long-term agronomic plans for their golf courses.

Speaking at the Canadian Golf Superintendents Association's International Turfgrass Conference and Trade Show, DiPaola said: "Our job is very simply to grow tomorrow's turf today. We have to be in a position of putting plants in place for next month, for next summer, well in advance of stress...

"The heads-up is that we are going to be hearing more about pre-stress conditioning... We don't have all the answers right now. But we've got better answers today than we had five or 10 years ago. We can

Continued on page 24



HIGH-PROFILE DEBUT After considerable ballyhoo, The Sanctuary — the first solo project from architect Jim Engh opens next month in Castle Rock, Colo. Engh spoke with GCN about the project, his career and design philosophies. See page 31.

## GolfSouth finds partner and funding source in ClubLink

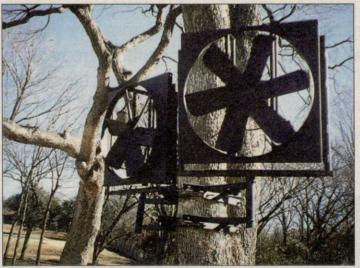
GREENVILLE, S.C.—To compete for today's course operations contracts, it takes more than for-profit management credentials. It takes deep pockets.

The pockets at GolfSouth LLC just got deeper following its alliance with Canada's only publicly owned golf course company, ClubLink. ClubLink and the founders of GolfSouth - N. Barton Tuck, Jr. and Derrell E. Hunter - have agreed the Toronto-based firm will initially fund certain capital for GolfSouth through loans. The pact also gives ClubLink an option to acquire the shares held by Tuck and Hunter in exchange for ClubLink shares.

For ClubLink, which operates six private clubs in Ontario, the alliance means a toehold in the U.S. market. For GolfSouth, it means the ability to compete with the increasing number of management companies which boast built-in funding sources. Among those firms hellbent on acquisition are Santa Monica, Calif.-based Continued on page 52

#### **BIG FANS OF** ATMOSPHERIC CIRCULATION New fan technology continues to

improve its effectiveness and utility. See stories, page 13.



#### Course taking shape atop Montana Superfund site

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

The former copper mine closed more than 90 years ago, but left behind a legacy of arsenic over its 250 acres. Turning it from a moonscape-like wasteland into a safe golf course

Continued on page 34



#### **PGA Tour, Deere** ink 3-tiered deal

MOLINE, Ill — In a deal that impacts

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

The nine-year partnership - comprising three consecutive 3-year leases - was announced at an April 2 news conference at Deere's world headquar-

Other golf industry corporations have associated themselves with professional tour events, including The Scott Company's sponsorship of The Tradition,

Continued on page 55



PennTrio No. 17, Apple Tree GC, Yakima, WA



Penncross No. 14, Coeur D'Alene Resort, Coeur D'Alene, ID

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#### IN BRIEF

SWAINTON, N.J. - The Royal Oakes Golf Course, set to open here in late April, has changed its name. The new name is Sand Barrens Golf Club at Royal Oakes. The 18-hole course, owned by Malcolm and Edson Robertson, was designed by Dr. Michael Hurdzan and Dana Fry of Hurdzan Fry Design Group of Columbus, Ohio. The course is set on 25 acres of sandy scrub pine. Sand is so prevalent at the site that none had to be imported for the course's bunkers, but only uncovered to form natural bunkers. Initial operations will take place from a temporary clubhouse facility.

MEXICO, Mo. - The Arthur Hills Golf Course has begun construction on a nine-hole addition that will eventually create a full 18-hole layout. The addition, which is being built by Mid-America Golf Construction, is part of a five-year program which will produce an expanded and improved 18-hole course. The new nine holes were designed by Larry Flatt of Flatt Golf Services. The original nine, built in 1954, will also undergo reconstruction as part of the plan. The new 18hole course will measure 6,185 yards from the championship tees, with water coming into play on three of the nine new holes.



While many touring pros have teamed with golf course architects, not many have marketed their partnerships as inventively as Nick Price and Steve Smyers. This bag-cum-billboard was recently spotted at the King Hassan II Trophy in Rabat, Morocco.

### 1997 Public Golf Forum to focus on potential

AKBROOK, Ill. - The latest round of new course figures add more fuel to the public-access golf fire. Eighty-eight percent of new course openings in 1996 were public-access facilities, according to the National Golf Foundation. About 86 percent of the 850 courses under construction and 83 percent of those in planning carry the municipal, daily-fee or resort label. Little wonder the public golf blaze is expected to continue burning bright into the next century.

Obviously there is enormous sales potential in publicaccess golf and the Golf Course News-sponsored Public Golf Forum is an excellent way to tap that potential

The national business conference and exposition for superintendents, owners, managers and directors of publicaccess golf facilities is scheduled for Oct. 26-28 at Oakbrook Hills Hotel and Resort here in the heart of the fastestgrowing region for public golf, the American Midwest.

"Buyers at the exposition will be looking for everything from aerators to utility vehicles," noted Golf Course News Publisher Charles von Brecht. "This is the best opportunity available to meet face-to-face with qualified buyers from throughout the country, just in time for the 1998 buying season."

Buyers will be attracted to Public Golf Forum by the exposition as well as the top-flight educational conference.

'Past speakers have included professional golfers Arnold Palmer and Peter Jacobsen, ClubCorp founder Robert Dedman, course architects Pete Dye and Robert Trent Jones Jr. and a host of marketing, development, management and

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#### Pebble Beach may be available for the right price

MONTEREY, Calif. - The legendary Pebble Beach golf resort may be up for sale.

The Japanese lender who controls Pebble Beach has held negotiations to sell the famous California seaside golf resort to an American development group for at least \$500 million, according to the Los Angeles Times.

Sources told the Times that high-level negotiations have taken place in Tokyo between Sumitomo Bank and American developers regarding the property.

Lone Cypress Co., named after the landmark tree on the Monterey Peninsula's famed 17 Mile Drive, is the investor partnership that owns Pebble Beach, probably the most famous golf course in America that is also open to the public.

Lone Cypress is owned by Taiheiyo Club Inc., which operates several prominent courses in Japan, and Sumitomo Credit Services Co., one of Japan's biggest issuers of Visa cards. Sumitomo Bank, which has stakes in both companies, financed the 1992 package deal that included Pebble Beach golf course and lodge, three nearby golf courses and the Inn at Spanish Bay.

Japanese golf tycoon Minoru Isutani lost about \$350 million when he sold Pebble beach to the Lone Cypress group in 1992. Isutani had paid a reported \$850 million when he bought the resort from a partnership headed by oil man Marvin Davis.

The current owners are in the

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midst of ambitious development plans to obtain approval for 350 single-family homes and an 18hole course on land they own near Pebble Beach. Those plans, in the works for years, have run into strong opposition from local homeowner and environmental groups.

Buyer interest in Pebble Beach always has run high. Several venture capital funds, former owners and the real estate developers reportedly have shown interest in the landmark.

One buyer mentioned is KSL Recreation Corp., an affiliate of Kohlberg Kravis Roberts & Co., the New-York-based leverage buyout specialist, sources said. Colony Capital Inc. of Los Angeles, a real estate company, has also been mentioned as a buyer.

#### Colorado pair to restore Pueblo course

PUEBLO, Colo. - The new owners of the Pueblo West Golf Course plan to renovate the course to its original condition.

Stacey Hart, the head golf professional at Los Verdes Country Club in Denver, and Randy Burross, a longtime member of the golf industry, recently bought the par-72 course from Joy Management, Inc.

Burross said improvements on greens and fairways and an upgrading of the watering system will start almost immediately.

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## Miller named TPC's top superintendent

LAS VEGAS - The Tournament Players Club at Summerlin, managed by head superintendent Collier Miller, has been named the TPC's 1996 Operation of the Year for the second time in the past three years.

"Collier is a very professional, thorough manager with excel-

lent agronomic and communication skills," said TPC Director of Golf Course Maintenance Operations Cal Roth. "Communication is very important between TPC headquarters here [Ponte Vedra Beach, Fla.] and the individual courses. Summerlin's staff respects Collier's leadership abilities. He has displayed solid management and financial skills."

Miller, 36, is a California Polytechnic State University graduate who managed three courses in the Palm Springs, Calif., area during an 11-year hitch with the Sunrise Co. He joined TPC at Summerlin in 1994 and won the Operation of the Year in his first season there.

The award is based on a criteria that includes daily course conditioning, agronomic practices, tournament conditioning, employee management, budget management and customer satisfaction.

"Collier has always rated high," Roth said. "You need to attain at



least a 3.5 on a 4-point scale to be considered for Operation of the Year. Collier's always been in the running."

Miller also received the TPCs Landscape

"Collier has 40 acres

of landscaped areas on the course, everything from large areas of native grass to acacia plantings,' Roth said. "He has another 6 1/2 acres around the clubhouse, giving him a total of more than 200 acres to care for. The facility is beautiful. And the equipment he uses to maintain it, much of which is 6 years old, looks brand new.'

Other TPC awards handed out during the recent Golf Course Superintendents Association of America International Conference and Show in Las Vegas included:

- · Gold Level Award for attaining at least a 3.5 on the TPC's 4point scale — Summerlin/Miller, TPC of Michigan/Mike Giuffre, TPC at Sawgrass/Fred Klauk.
- Most Improved Operation -TPC at Prestancia/Tim Perez.
- · Safety Awards for achieving a record of one accident for every 10,000-plus man-hours - TPC at Avenel/Paul Corder, TPC of Michigan/Giuffre, TPC at River Highlands/Tom DeGrandi, TPC at Sawgrass/Klauk, Golf Club of Jacksonville/Jim Dyer, TPC at Southwind/Jerry Ducker.

"We are looking forward to another good year in 1997," Roth said. On the board for this year are the moving of the Honda Classic to the new TPC at Heron Bay, which opened in 1996; the TPC at the Canyons, which opened last fall, hosting the Las Vegas Senior Classic in April; in Atlanta, the TPC at Sugarloaf's clubhouse opening in April, followed by the course opening and BellSouth Classic tournament in May; grow-in of the TPC at Jasna Polana in Princeton, N.J., and groundbreaking of the new Myrtle Beach TPC, both of which are scheduled to open in 1998.

#### SEATTLE CITY COURSE EXECUTIVE **RESIGNS POST**

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SEATTLE - The chief executive officer of Municipal Golf of Seattle, a non-profit organization that has operated the city's three courses the past 19 months, has resigned. Chris Redo, 44, resigned following complaints he alienated golfers, employees, golf associations and vendors. Redo had been appointed the first head of the Municipal Golf of Seattle organization in June 1995. Redo supporters said several improvements have been made under his tenure. Those supporters said friction was inevitable because some groups of golfers enjoyed certain playing and price privileges at the course before MGS took over that no longer exist.



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#### Rocky Mt. mechanics hope to start college program

By PETER BLAIS

GOLDEN, Colo. — In response to a severe shortage of qualified equipment managers, Greater Denver technical schools are trying to develop a golf course mechanics program.

Roger Poole, dean of Warren Technical College here, has discussed the possibility of developing a multi-school program with Pickens Technical College in Aurora and other area vocational schools that could lead to a certificate program in golf course equipment management.

Poole said he hopes to meet this spring with officials from area schools that have faculty capable of teaching diesel, small engine, hydraulic and turf classes, and might be interested in developing a golf course equipment managers' training curriculum.

If there is sufficient interest, the schools would seek an advisory committee consisting of superintendents and managers in related fields that could employ graduates of any new program. The advisory committee would tell the schools what they should teach.

The state department of education would have to approve any new program, Poole said. That approval, he added, will take time, although the schools could begin offering course work in those areas before formal approval was granted.

"Finding qualified equipment managers is a real problem in this area," said Fox Hollow Golf Course equipment manager Fred Peck, founder and immediate past president of the 100-member Rocky Mountain Golf Equipment Managers Association.

"The demands superintendents are making on their equipment managers are much tougher today than they were just a few years ago. They want someone who can do more than just fix equipment. They want someone who can keep accurate records, purchase new equipment, train operators, participate in budget preparation, and keep track of all the equipment at the course. They want someone they can basically turn the equipment operation over to and not worry about it."

The Rocky Mountain Golf Course Superintendents Association has been very supportive of the mechanic group's efforts to start an equipment managers' program at a local school, Peck said.

"Golf courses have an abundance of equipment they don't use any more or just use on an occasional basis. They'd be more than willing to lend or donate to such a program," Peck said.

Asked why more students don't consider golf course equipment manager careers, Peck said: "Nobody knows about it. If you asked seniors at the local high school about jobs on a golf course, the only ones they could

probably tell you about would be

golf pro and superintendent. We

need to get the word out that you

can make \$35,000 or more as an equipment manager.

"And there's more prestige to the position than there used to be. It's halfway between a blue collar and white collar job. I'm in charge of \$750,000 worth of equipment here and considered part of the superintendent's management team. "

#### Houston layout to open in Oct.

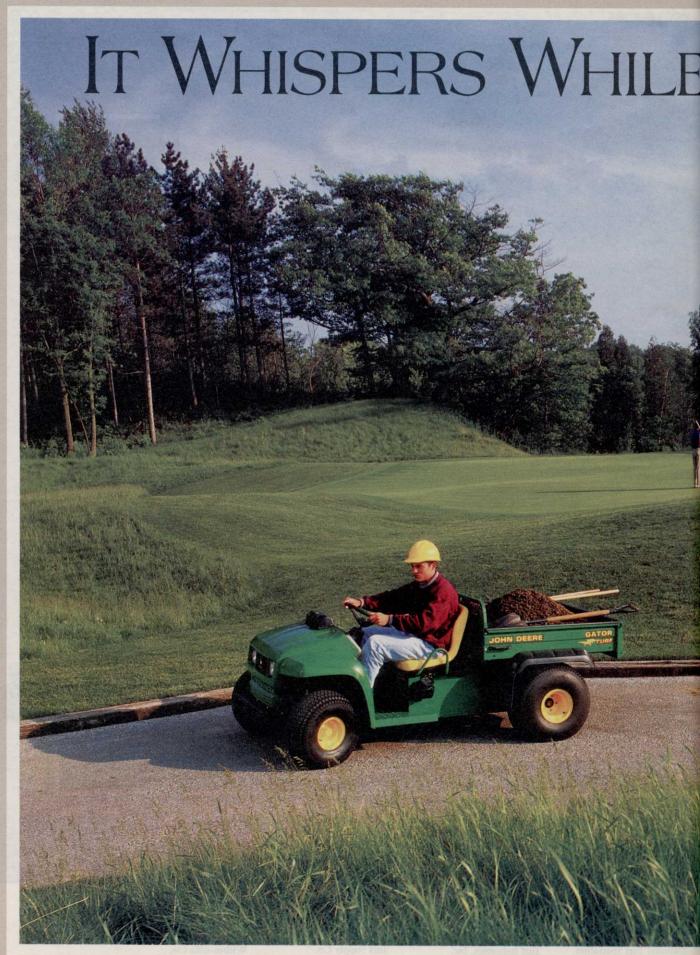
HOUSTON — The new 18-hole course under construction at the Cypresswood Golf Club is expected to be open for play by October. Golf course architect Keith Foster designed the new layout, which will be the third 18-hole course at Cypresswood, making it

one of the few 54-hole facilities in the area.

The new Foster-designed 18 will be more upscale than the

The new Foster-designed 18 will be more upscale than the existing Cypress and Creek courses.

"There will be a few more amenities on this course, along with a separate clubhouse and driving range. It's going to be first-class," Cypresswood head pro Kelly Walker told the *Houston Chronicle*.



Photographed at Blackwolf Run, Kohler, Wis.



AS VEGAS — Golfers at Sun City Summerlin's three golf courses often remark on the gently sloping fairways, and their ability to keep an errant tee shop in play. However, this winter's rains underscored an equally important element to the courses' design — the ability to channel damaging storm water away from homes.

## Desert floods bedevil Las Vegas courses

Because of the master-planned community's proximity to the Spring Mountains, the occasional southern Nevada storm poses a potential water hazard. The desert floor's inability to absorb water exacerbates the problem.

Anticipating the potential for flooding, Del Webb Corp. land

development staff and golf course architecture firm Casper Nash and Associates worked to create a natural runoff system.

"We design them as golf courses, green belts, open space, and to convey storm water," said Dick Mastin, vice president of land development for Del Webb. "They all carry water. That's typi-

cal of all the golf courses in Sun City Summerlin and Sun City MacDonald Ranch."

According to Mastin, all of the community's courses are designed with flood control in mind.

"We have to create drop structures to control the velocity of the water and redirect it," he said. "Summerlin was more of a challenge in that respect than Sun City MacDonald Ranch, because there generally were no natural constricting features we could utilize."

Instead, engineers and golf course architects created water channels using Sun City Summerlin's golf course, which wind throughout the active adult community. In addition to capturing water flowing through its property, Del Webb's water-control system benefits its Summerlin neighbors as well, Mastin said.

"We also pick up some off-site flows and transmit them through the project," he said. It's all part of our master drainage plan. The flows from this project wind up in the Cheyenne Channel."

As Mastin explained, designing a golf course involves a variety of elements.

"We worked with Casper Nash and Associates to create the footprint for all the courses," he explained. "There's a lot that goes into a course. It has to work with the lot layouts so it's an efficient use of land, but at the same time, we have to work within the parameters of the golf course's needs."

Creating a course which satisfies the needs of golfers while addressing aesthetic, water control, and land use issues requires a great deal of coordination and planning, Mastin said. "You have to think about all the elements at the same time," he remarked.

## AGCC awarded GC of Okla. pact

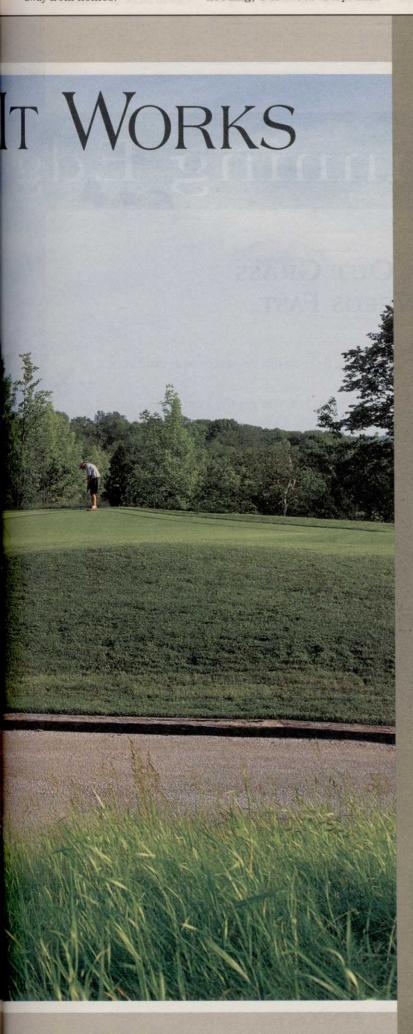
BROKEN ARROW, Okla. — American Golf Country Clubs (AGCC), a division of American Golf Corp., has been awarded a long-term management contract for The Golf Club of Oklahoma.

David G. Price, American Golf Corp. founder and president, said, "With total respect for what is already in place at The Golf Club of Oklahoma, AGCC will deliver the same superior service associated with a club of this level."

The centerpiece of The Golf Club of Oklahoma is the secluded, 18-hole championship course designed by Tom Fazio. The course is filled with stately stands of oak trees and large lakes and streams.

Fazio returned in 1996 for an extensive remodeling and renovation of the facility that now has a 15-acre practice facility complete with a 2-acre short-game practice area and a four-bay indoor teaching facility.

The 28,000-square-foot clubhouse features a men's locker room complete with library, fireplace and men's grill with fulltime service staff on hand. Three cottages are also available.



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## McNitt, Wetzel earn Watson fellowships

LAS VEGAS — Andrew S. McNitt, a Ph.D. candidate in the Department of Agronomy at Penn State, and Henry C. Wetzel, III, a Ph.D. candidate in the Department of Plant Pathology at Kansas State University, received Watson Fellowships here at the 1997 Golf Course Superintendents Association of America (GCSAA) International Golf Course Conference and Show.

The Watson Fellowship program is sponsored by The Toro Co. and is administered by the GCSAA Scholarship and Research Foundation. The Fellowships are named to honor Dr. James R. Watson.

The goal of the Watson Fellowship program is to identify and recognize outstanding postgraduates who will be the leading industry educators and researchers of tomorrow. Applicants are judged on academic excellence, peer recommendations, communication skills, commitment to a career as an instructor and/or scien-

## Supers handle Fla. water rules

FORT MYERS, Fla. — New water-use restrictions by the South Florida Water Management District caused by near-drought conditions could cause headaches for superintendents.

In the first phase of restrictions, golf courses can water greens and tees only at night while fairways can be watered from midnight to 8 a.m. Front nines can be watered Mondays, Wednesdays and Saturdays, back nines on Tuesdays, Thursdays and Sundays.

Paul Zile, superintendent at San Carlos Golf Club, told the News-Press of Fort Myers the restrictions will pose problems.

"It's starting to get warmer, and the winds are starting to blow," he said. "And we're on 5 feet of sandy soil, so we can hardly get enough water anyway."

#### WEISKOPF, CRENSHAW DESIGN MICHIGAN COURSES

GRAYLING, Mich. - Tom Weiskopf and Ben Crenshaw are set to design two separate 18hole courses for a private residential golf community here. Forest Dunes is proposed for land in South Branch Township in Crawford County. The centerpiece would be two distinct 18hole championship courses the "White Tail" course designed by Weiskopf and the "Wild Turcourse designed by Crenshaw. The developer, a real estate firm from Scottsdale, Ariz... would like to start construction sometime this summer.

tist, accomplishments in research and education, and potential to contribute significantly to the industry.

Watson fellows receive a substantial scholarship and an expense-paid trip to accept the award at the GCSAA International Golf Course Conference and Show.

McNitt received a bachelor of

science degree in horticulture from Penn State in 1983. After service as a county agent in Philadelphia for seven years, he returned to Penn State in 1991 to begin graduate study in the Department of Agronomy. He received his master's degree in 1994. In 1992, he began working as a project associate in the

turfgrass project and continues in that position under the direction of Dr. Peter Landschoot. His Ph.D. research deals with physical soil conditions and playing surface characteristics of athletic field root-zone systems.

Wetzel is a graduate of Penn State as well, where he received a bachelor of science in agronomy in 1992. He was awarded a Master's in agronomy from the University of Maryland in 1994. Prior to beginning his Ph.D. studies at Kansas State University in the fall of 1995, he was a product development manager for Ciba Turf & Ornamental Division. His research deals with the assessment of the genetic diversity of fungal species that cause spring dead spot, and the colonization of Bermudagrass roots by these species to incite the disease.

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use with confidence on trimming and edging anywhere on your course. Since it binds quickly to the soil, REWARD doesn't leave biologically active soil residue, making it ideal for edging around trees, shrubs, flower beds and other ornamental plantings. Or apply it along cart paths, around sprinkler heads or other areas where translocating herbicides, such as Roundup, just aren't desirable.





#### Delays force Jones to withdraw from Pennsylvania project

BEDFORD, Pa. — Architect Rees Jones has withdrawn himself from the renovation of the historic but rundown Bedford Springs Hotel golf course, saying that delays in the project have made it impossible for him to continue in 1997.

Developers are reportedly talking with Ault, Clark & Associates of Washington, D.C, and William Love Associates of College Park, Md., to get proposals for renovations of a golf course that was designed, at least in part, by Donald Ross.

Jones had planned to work on the Bedford Springs project in 1996. But various delays have pushed the work into 1997, and possibly later. Jones said he has other commitments.

The Dauphin County General Authority that is overseeing the renovation project had hoped to have at least part of the course open by this fall. It's not clear whether that is still possible.

#### Ore. course to open this summer

ALOHA, Ore. — The \$20 million, 36-hole Reserve Vineyards and Golf Course is set to open this summer with one 18-hole layout to open in August and the second about a month later.

The courses were designed by Robert Cupp and John Fought.

Reserve Vineyards is owned by D.S. Parklane Development, a

Korean construction firm and managed by OB Sports.

Reserve Vineyards covers about 247 acres, with as many as 20 acres being used for the vineyards and winery. A Washington County winery will manage the vineyards. It's possible a hotel and resort amenities may be added later.

The PGA has approached OB Sports Management about staging a men's professional tournament there. And Nike Inc. has reportedly spoken to OB about hosting Nike's World Master Games in 1998.

## Conn. city inks operational deal

NEW HAVEN, Conn. — With the city reportedly losing \$100,000 a year at the Alling Municipal Golf Course, officials are planning to contract with National Fairways to manage the 146-acre course.

This marks the first time in city history a private firm will operate and maintain the course, pro shop and restaurant.

National Fairways has agreed to invest between \$600,000 and \$900,000 into course improvements within the first two years of the 10-year agreement.

Some regulars at Alling, particularly senior golfers, have spoken against turning the course over to a private firms. They said they fear that a private firm will raise playing rates that will be difficult for golfers with lower incomes to afford.

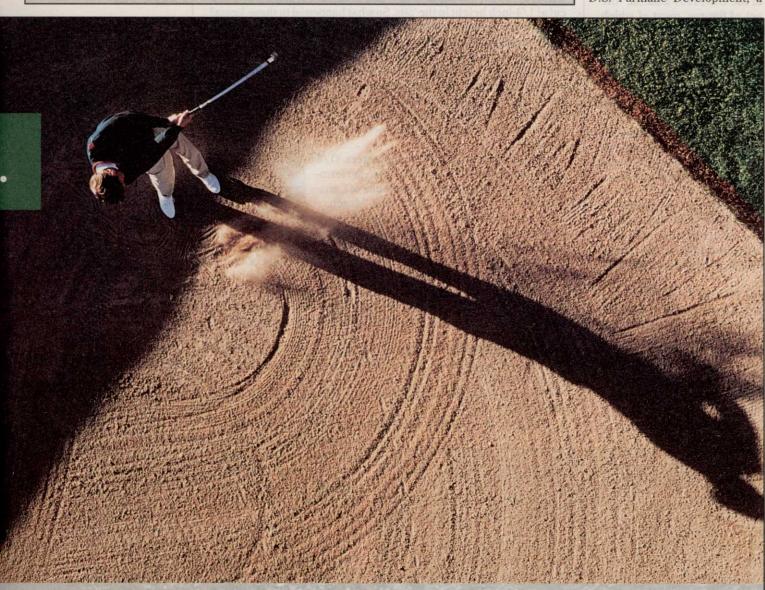
#### Corrections

A story on the Ransomes Greensplex 160 in the March issue listed an incorrect address and telephone number for Ransomes. Ransomes' address is PO Box 82409, Lincoln, Neb. 68501; telephone 800-228-4444.

Because of an editing error, the phone number for O.B. Sports was omitted from February's listing of management companies. The company can be reached at 503-678-4330 [for an updated version of the chart, see pages 50-51].

Due to an editing error, a line was deleted from the March 1997 story, "Brickyard's Stuart beats *poa annua* invasion." Superintendent Jeff Stuart uses Banol fungicide to control pythium, not brown patch. Stuart said he uses ProStar for brown patch control.

In the January GCN article on father-and-son design teams, the story should have read that Mark Puddicombe, not Grant, is the father of young Trent. Grant is Mark's brother and Trent's uncle.



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## Stats tell the tale: Courses built where they are needed most

Hal Phillips, editor

ur friends at the National Golf Foun dation have closed the book, as it were, on the 1996 development year (which is sort of like the geophysical year to

(which is sort of like the geophysical year, minus the long division). In its report, "Golf Facilities in the U.S., 1997 Edition," the NGF has compiled an interesting set of figures, most of which bode well for the golf course industry.

While the report shows that 442 facilities of various shapes and sizes opened for business during 1996, the number of nine-hole projects — many of them expansions — transforms the 442 figure into 319.5 18-hole equivalents. By means of comparison, in 1995 when a record 468 courses came on line, it translated into 336 18-hole equivalents.

The NGF report says 174 or 40 percent of the 442 openings last year were nine-hole additions. Tracking data shows that approximately one-third of those courses built over the past five years have been additions to existing facilities and 85 percent of these expansions were nine-holers.

What does all this mean? Well, to me it indicates the number of pie-in-the-sky development types — the guys who "have always dreamed of building a golf course" — is smaller than we once thought. It means the "developers" of these additions are experienced golf industry veterans, i.e. owners of facilities doing well enough to expand.

This information also meshes well with the NGF's assertion (*GCN*February 1997) that courses are being built where demand is greatest. It follows that, if existing courses are expanding, they are increasing supply to meet evidently distended demand.

If we take this assertion to its logical conclusion, the huge numbers of golf courses now under construction — 850, according to the NGF — should prompt no fears of oversupply. At some point, if course construction continues at the current pace, there will be a glut of golf facilities here in the U.S. of A. However, I maintain that as long as existing owners see the need to expand

— and 33 percent of the 850 courses under construction are additions then supply has not yet exceeded demand.

Keep an eye on those expansions. When they drop, the current boom cycle has run its course.

Two more tidbits from the NGF report, which can be obtained by calling 1-800-733-6006:

• Just how prevalent is the high-end, upscale daily-fee model? This is commonly acknowledged to be the flavor of the decade, but things may be changing. The NGF followed up with the owners/ operators of the 135 standalone facilities (as opposed to the expansions) that opened during 1996. A mere 25 percent of the 105 respondents said their weekend green fees are above the average for similar courses in their respective markets. The other 75 percent claim they come in below the average. Hmmm... Either they're lying or developers are finally beginning to identify market niches all along the price spectrum.

> Public-access contin-Continued on page 12

## Don't chuck out invention ... yet

ust as "necessity is the mother of invention," so it stands that "timing is everything." Confused? Check out these two forinstances:

1) Twelve years ago a Mr. Forrester in Australia invented the greens roller. But he couldn't sell it. There was no use for it. Today, with more high-sand root zones, greens don't compact, so rolling them becomes a (growingly acceptable) option.

2) Back in the 1950s bentgrasses were developed that performed well only when cut at extremely (for then) low heights of 1/8 inch. If not cut low they became "puffy" and scalped. Yet grass was being cut at 1/4-inch height in the '50s. So what happened to those bents? "They were thrown out," recalled Dr. James Beard.

My, times have changed.

But now's the '90s. Just as drive-ins have gone the way of blackand-white films, so have 7-foot green speeds and 1/4-inch-high

putting greens gone the way of featheries. So we see the rise of greens rollers and the new Penn G-series and A-series bentgrasses that, like those grasses from the '50s, need to be cut ultra-low.

"At cutting heights at 3.2 millimeters (1/8 inch), suddenly they [As and Gs] are performing very well," Beard told an audience of Canadian superintendents in Montreal in March.

(Not to allow this to be a promo for these grasses, Beard added: "Are the new Penn-series bentgrasses for everyone? Probably not. You have to mow them tight. Their density and vigor will mean all kinds of thatch problems... There is a learning curve on their culture. They have density that dictates different vertical cutting, different top-dressing regimes and different approaches in terms of nutrition.)

The moral of the story? Don't toss out those old inventions!

What about rollers? On greens with high-sand root zones and that are not Penn As or Bs, we have a couple of comments for superintendents:

• You can mow the grass higher and roll it to keep up the ball speed.

• When you compare lower mowing versus rolling, "lower

mowing results in weakened turfgrass, shallow rooting, more moss and algae problems and the controls that are required for that," according to Beard.

...

Dr. Frank Rossi, assistant professor at Cornell University, said: "In the United States, IPM has become a political football, where people automatically assume you primarily are using biological control and that you do not use pesticides. Inside the industry, a lot of people think IPM costs more to do. You might spend more money in particular places like labor, but you also might spend less on pesticides.

Rossi was speaking at the Canadian International Turfgrass Conference and Show in Montreal.

This mystery number from Chris Hartwiger, agronomist with the USGA Green Section's Southeast Region: 2,059,200.

What is it? The average number of spike marks made by 200 golfers during an 18hole round of golf.

Questions, anyone?

Continued on page 12



THE NEWSPAPER FOR THE GOLF COURSE INDUST

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## Horton joins GCN Advisory Board

YARMOUTH, Maine — Ted Horton, vice president of resource management for Pebble Beach Co. in Pebble Beach, Calif., has joined the Golf Course News Editorial Advisory Board.

"We're thrilled to have Ted aboard," said GCN Publisher Charles von Brecht. "It's important for us to be able to call upon his expansive knowledge of golf — not just in turf but in administration. His wisdom and integrity are acknowledged throughout the industry.

"We had a strong board. He makes it stronger."

Horton joins Brent Wadsworth of Wadsworth Golf Construction Co., architect Dr. Michael Hurdzan and superintendents Raymond Davies, Kevin Downing, Tim Hiers, Patty Knaggs and Kevin Ross on the board.

A certified golf course superintendent and former country club general manager, Horton joined Pebble Beach Co. in 1993. He has been



Ted Horton

presented a Citation of Performance by the U.S. Golf Association (USGA) and Golf Course Superintendents Association of America (GCSAA), the Sherwood A. Moore Distinguished Service Award for Professionalism by the Metropolitan Golf Course Superintendents Association (Met GCSA) and the GCSAA's Leo Feser Award for best magazine article of the year.

He held every officer position with Met GCSA.

The Montreal native was the superintendent for

12 years at 36-hole Winged Foot Golf Club in Mamaroneck, N.Y., where he prepared the course for three U.S. Open tournaments. He moved to 45-hole Westchester Country Club in Rye, N.Y., where he hosted 12 PGA Tour events, and was director of sports and grounds. He then took a post as vice president of agronomy for The Fairways Group from 1991 to 1992.

Horton has taught numerous courses for the GCSAA and written articles for various publications. He holds degrees in agricultural biology from McGill University in Montreal, turfgrass management from the University of Massachusetts and club management from Manhattanville College.

He has consulted for various facilities, including Dar Es Salam Golf Course in Rabat, Morocco, Waterville (Ireland) Golf Club, Royal Gems Golf Club in Bangkok, Thailand, and Yao Golf Club in Kaohsiung, Taiwan. By PETER ELZI & ANDREW BUSH

he idea of designing a golf course within a bud get might seem foreign to individuals involved in golf course development or management. But with a growing interest in development of standalone daily-fee courses, today's golf developers are beginning to approach construction with the level of sophistication of other real-estate products.

The essence of our approach makes three primary assumptions. First, it's possible to anticipate the performance of a to-bebuilt golf course in a way that allows you to estimate annual income and revenues, knowing that potential income stream allows you to determine the capital investment the facility can support.

Andrew Bush is a principal of Redstone Development Services which provides design and construction management services to the golf course industry. Elzi is a principal of THK Associates which provides feasibility and consulting services to the golf course industry. Both firms are based in Denver, Colo.

FIRST OF TWO PARTS

#### More sophisticated developers keeping a closer eye on construction budgets

Second, the construction cost is estimable prior to construction. Unit costs for earth moving, tee and green construction, irrigation systems and other variables are available and can be used to prepare a detailed budget prior to design.

Third, the same way a structural architect designs to a budget when preparing plans for a building, a golf course architect should design a budget when preparing plans.

This process begins with preparation of a feasibility analysis that compares the demand within an existing market to the existing supply. From this, a 10year operating pro forma estimates the number of rounds that can be captured annually and the average daily green fee. By calculating the total operating income over 10 years and assuming a sale at that point, it is possible to estimate the present value of the income stream or maximum construction budget for the course based upon a desired annual rate of return.

#### ESTABLISH DEMAND

To establish the unmet golf demand in a market, it's necessary to profile the key indicators that impact the sup-

ply and demand for golf and related products in the area. This is done through an in-depth socioeconomic investigation and evaluation of the area's economic base.

Patronage, with the exception of resort facilities, comes mostly from permanent residents of the primary trade area. Support may come from residents of a secondary trade area: hotel, motel and resort guests, "day trippers" and house guests.

All of these submarkets must be quantified, profiled and protected to estimate current and future demands for golf by year. by month and day of the week.



COMPARE TO SUPPLY

Existing area courses must be inventoried and analyzed by location, number of holes, course rating. quality of play and maintenance, fees, capacity of play, management type, etc. Other pro-

posed courses should be factored into the supply analysis and evaluated for each of the above issues as well as the timing and probability of the development actually coming on line.

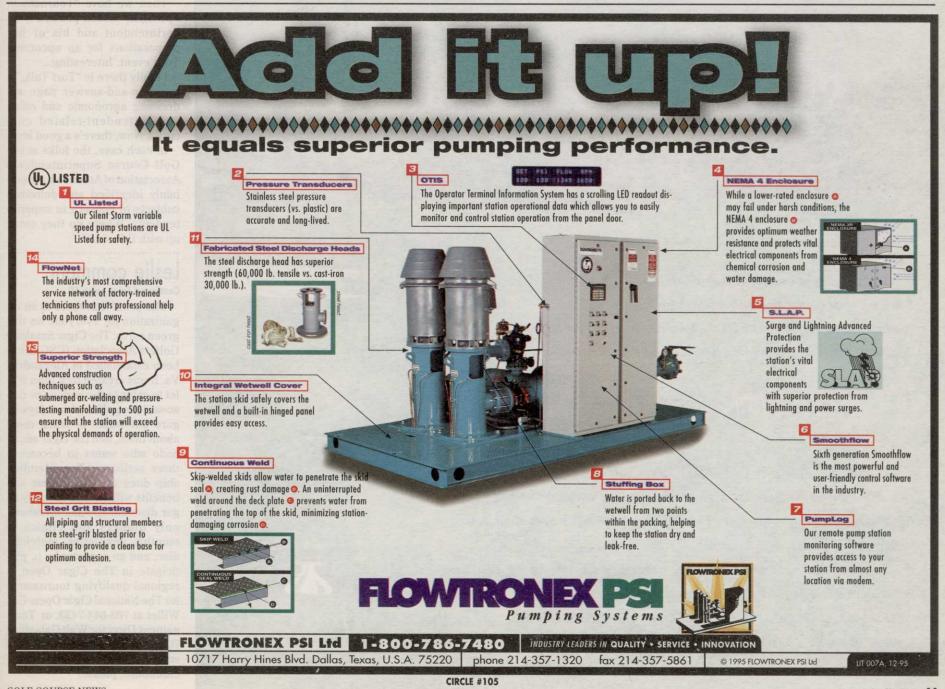
Golf supply/demand is typically presented in 18-hole equivalents and compared to capacity calculations dependent on the type of course and the climactic conditions of the region. Dailyfee courses accommodate the most play and can achieve annual 18-hole equivalents of 45,000 to 50,000. In the northern regions, though, play will average approximately 70 percent of daily volumes, with semi-private courses at 65 percent and private courses at 25 percent.

#### PREPARE OPERATING PRO FORMA

The feasibility process includes preparing a proforma and an operating income model that compares the annual revenues and expenses over 10 years, resulting in the projection of net operating income for each year.

With an operating income of \$534,058 in the fourth year, and a desired rate of return of 15 percent, the amount of revenue available for construction costs would total \$5,270,000. This number is determined by calculating the current value of the 10-year income stream, depreciation for tax purposes, and the appreciation of the facility over time.

Once you've determined a total budget, you can begin the design process. It's important to point out, however, that the golf course does not have to be built to the total value, which can be capitalized if this amount exceeds what is necessary to compete in the marketplace. It does, however, suggest that building a golf course in excess of this amount is not likely to be a sound, stand-alone investment.





#### **Phillips comment**

Continued from page 12

ues to dominate the marketplace. A full 382 or 88 percent of last year's 442 openings were dailyfee, municipal or resort. When will the public at-large begin to acknowledge that golf can't possibly be so snotty a pursuit when 70 percent of the nation's courses are open to anyone? Unfortunately, while the call for more

entry-level facilities has grown in volume since 1991, the industry hasn't responded. Last year, only 21 executive courses and 20 par-3s were counted among the 442 openings. As a percentage of openings, this number has remained flat for five years.

...

Just returned from Munich where more than 1,000 delegates and 100 exhibitors gathered for Fairway'97, probably the best golf industry show in Europe.

While most of the attendees were German, or traveled to Munich from nearby Switzerland, Austria and The Czech Republic, the Fairway show has a good chance to grow. Why? Because it's centrally located — where it can potentially draw attendees from France, Italy, the Low Countries, and the surprisingly busy Central European region. Further, the show is ex-

tremely well administered.

Most important to the success of Fairway is the German market itself, which continues to grow despite heavy opposition from environmentalists, who've persuaded the government to implement restrictive wetlands and earth-moving restrictions (see story page xx). However, there are some 500 courses operating in Germany, with roughly 40 coming on line each

year. Not knock-your-socks-off growth, but solid for Europe.

Another good sign: My informal but fairly extensive poll of European and British experts confirms what we've expected for some time - namely, that American maintenance practices are slowly creeping into the mainstream Over There. As more courses are constructed in Europe, competition among clubs has increased and conditioning has emerged as a key differentiator. The British Open may always be played on the decidedly off-color fairways of Birkdale and Muirfield, where membership waiting lists will never shrink. However, the less prestigious facilities - those that must compete for members and green fees - can no longer afford the complacency.

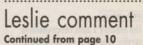
From the "Sincerest Form of Flattery Department":

Couldn't help but notice some of the changes Golf Course Management chose to implement as part of its recent redesign. Let's see, first we have the "Front Nine" — a news section, located in the first few pages, featuring brief articles on happenings in the golf course industry. Hmmm...

Then we have "Tournament Spotlight," which profiles a superintendent and his or her preparations for an upcoming Tour event. Interesting...

Finally there is "Turf Talk," a question-and-answer page addressing agronomic and other superintendent-related concerns. Now, there's a good idea.

In each case, the folks at the Golf Course Superintendents Association of America have certainly identified and delivered subjects of concern to superintendents. Where do they come up with this stuff?



The proof that there is an organization for everyone on this green earth: The Cigar Smoking Golfers Association (CSGA) has been established in Alexandria, Va. It was created by a John Willet to cater to the serious or notso-serious golfer who enjoys cigars but wants to learn more about them, and the cigar aficionado who wants to become a more serious golfer. Membership dues are \$35 a year and benefits will include monthly cigar discount special, membersonly dinners and clinics, a monthly newsletter, merchandise, and an opportunity to participate in The Cigar Open, a regional qualifying tournament for The National Cigar Open. Call Willet at 703-644-7433, or Tournament Director Walt Galanty at 703-549-9500... but put out those smelly things before entering the clubhouse, please.





#### BRIEFS



#### **GOVERNOR APPOINTS CLARK**

GREEN VALLEY, Ariz. - Mark K. Clark, head superintendent of Green Valley Country Club here, has been appointed by Arizona Gov. Fife



Symington to the Structural Pest Control Commission. Clark is the first person from the "green industry" to hold such a position. His appointment is for three years, and

will require monthly meetings which involve travel and a great deal of case study for each meeting. It is a voluntary position.

#### ...... PHILLY GCS ELECT GUSTAITIS

PHILADELPHIA — The Philadelphia Association of Golf Course Superintendents has elected Anthony Gustaitis president. Vice President is Joseph Owsik, while Donald R. Brown, CGCS, is treasurer; Henry C. Wetzel, Jr. secretary; and Steve Carpenter sergeant at arms.

#### PAIUTE RESORT HIRES LOPEZ

LAS VEGAS — William "Willie" Lopez is the new superintendent here at the Las Vegas Paiute Golf Resort, according to Carl von Hake, general manager. Lopez, formerly the assistant superintendent, takes charge of 40 employees and two 18-hole championship courses - Snow and Sun Mountain. He graduated from the Turf Management Program at the College of the Desert in Palm Desert, Calif. Von Hake said Lopez has filled the vacancy left by Jim Sprankle, who has assumed a similar post in Indonesia.

#### ..... PENN STATE RESEARCH GETS \$130K

STATE COLLEGE, Pa. - The Pennsylvania Turfgrass Council has allocated \$130,000 to the Pennsylvania State University for the 1996-97 fiscal



year. The grants, totalling more than \$1 million, have been donated to Penn State by the council over the past nine

years. The Pennsylvania Turfgrass Council has a membership of more than 1,200, comprising golf course superintendents, lawn care owners/operators, landscapers, grounds managers, industrial representatives, and many others in the turf industry.

CANADIAN CONFERENCE

## Rossi: As knowledge expands, so will IPM

ONTREAL — Predicting that pest-management careers loom in the future of the turfgrass industry, Dr. Frank Rossi said Integrated Pest Management (IPM) will become more effective as the base of knowledge widens.

Speaking at the Canadian International Turfgrass Conference and Show here, Rossi told superintendents: "As we get more people in turf and the

superintendent gets more and more educated, the jobs are going to be more competitive and you're going to need more trained staff. You'll have lifetime assistants, people who spend a career as pest-management experts on golf courses."

The move in that direction will correlate with knowledge, said the New York State Extension turfgrass specialist and Cornell University assistant

"To me," he said, "IPM is just a matter of making decisions based on what you know - not on how much [pesticide] you have in the shop. We want you to make knowledge-based, not product-based, decisions... We have to know more about the biological system we are managing. This means the plants as well as the pests."

IPM, Rossi said, "is about options. How many options do I have to deal with this

Continued on page 26

#### **USGA** funds research on floating green

COEUR D'ALENE, Idaho — The U.S. Golf Association (USGA) Green Section will award Washington State University (WSU) a \$24,000 funding grant to study the run-off water used to irrigate the floating green here at the Coeur D'Alene Resort.

A multi-million-dollar, state-of-the-art water-collection system exists underneath the floating green. It collects all rain and irrigation water into huge tanks and prevents any of the water - not to mention any other products used to maintain the floating green - from escaping into Lake Coeur D'Alene.

The water is then pumped back on shore where it's disposed of along with other golf course runoff. In their continuing efforts to make golf courses more environmentally-friendly, WSU and the USGA will study this water and the products it contains.

In 1996, Washington State Golf Asso-

Continued on page 30



PROVING GROUND

Hercules Country Club in Wilmington, Del., has been a testing area for fall-applied preemergence herbicides for crabgrass control by Sam Snyder, director of facilities and grounds. This shows the signature 15th hole of the 27-hole facility. See story, page 28

## Danneberger details research into bent and rye

Karl Danneberger is an associate professor of Turfgrass Science at Ohio State University. He coordinates and teaches undergraduate turfgrass science, and conducts research in turf management and physiology. His studies have included plant growth regulator use, green speed studies, alternative spike use, control of moss, and high temperature stress work. At present, he is concentrating on the three research areas discussed in the following article.

Golf Course News: Could you discuss your research involving creeping bentgrass and perennial ryegrass cultivar identification?

Karl Danneberger: Golf course superintendents choose specific cultivars to fill specific needs. Superintendents base their selection on information listed in

seed catalogs, and National Turfgrass Evalu-



ation Program (NTEP) reports. These two entities report cultivar's resistance to disease. insects, levels of endophyte, performance under stress, color, texture and growth habit.

Understandably, when superintendents purchase a lot of seed of a particular cultivar they expect it to perform similar to

Continued on page 27

#### COOLING THE CANOPY

#### Technology advances fans

By TERRY BUCHEN

DALLAS - Growing bentgrass greens, in the transition zone or warm-season climates. is difficult at best, but has been made easier with the advent of greens fans installed at a superintendent's discretion.

"Since we have installed our fans, we have seen the quality go from fair/mediocre to excellent summer greens," said Mark Price, greens and Continued on page 16



New way found to bring fan relief to turf.

#### An easy breeze is quite enough

MONTREAL - Knowing air, soil and canopy temperatures - and taking measures to control them - are crucial to keeping turfgrass alive, according to Dr. Joseph DiPaola.

Well-known for his research in turf-growth regulation, water stress and cold hardiness, DiPaola told Canadian superintendents: "The entire system of turfgrass stresses is largely

Continued on page 16



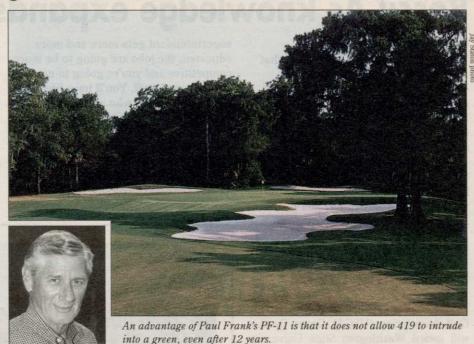
## Frank's Bermudagrasses beat the odds — heat, drought, intrusion...

By GORDON WITTEVEEN

APLES, Fla. — It quickly becomes obvious that Paul Frank is a man of the earth. His weathered tan indicates a long-time association with the land, the plants and the wildlife. It all started when, as a youngster, he helped his father with the farm chores and, in the process, developed a love for nature. The Franks raised cattle on their Florida homestead and, through hard work, prospered.

In the early 1970s, father and son decided to turn the farm into a golf course. With the help of architect Arthur Hills, they created Wilderness Golf Club and Paul Frank became the first and only superintendent. A quarter century later, it is hard to imagine that this golf course was once a farm. The holes seem to have been carved from a tropical forest, and the ponds appear to be natural extensions of the nearby Everglades. God made it so, but with a lot of help from Frank.

A tour with Frank of his golf course proves he is no ordinary superintendent. We stop frequently and get down on our hands and knees to inspect the grass. On a particular green, Frank gets out his long, pointed jack knife and pries into the soil, carefully lifting a



stolon of Bermudagrass turf.

"See," he said, "look how vigorous it is," pointing at the sprouting grass plant and the tiny leaf blades growing at every node.

Twelve years ago, during a particularly bad time for any kind of grass to survive, Frank noted a patch of green grass on his 11th green. It stood out

because the rest of the green was in poor condition. He took a few sprigs from this patch and planted them in a flower pot in his office. Within eight weeks, the new grass had overgrown the flower pot.

Realizing he had found something new and unusual, Frank transplanted the contents of the pot to a 2-footsquare tray. The new grass quickly filled in the tray, and from there it was only a small step to a plot in the nursery. Eventually, the



11th green was entirely converted to the new grass. And, since that time, five additional greens have been resprigged as well.

Frank baptized the new hybrid Bermuda, "PF-11" — the initials of its discoverer and the place of its birth, the 11th at Wilderness.

Several of the greens at Wilderness have become shaded by the growing trees that surround them. The PF-11 appears to stand up well to these conditions and its vigor is undeniable. It is such a strong grass that there is not 419 Bermudagrass intrusion into the PF-11 green that has been in place for more than 12 years. A golf ball rolls smoothly on the PF-11 greens, but then the other greens putt just as well.

We stop at yet another green and again inspect the grass. "Close your eyes," he said. "Now feel the grass, touch it, gently slide your fingers back and forth. Now, does that not feel like bentgrass?"

Continued on next page

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#### Paul Frank

Continued from previous page

By now I have become completely hypnotized by his voice and his overpowering personality. Quack grass would have felt like bent, so I readily agree with him. But when I get out of my trance, I can see for myself the fine-leafed Bermuda does indeed look like a light-colored bentgrass. Certain that he has discovered yet another turf variety, the new grass has been baptized PF-BB (Paul Frank-Bent Bermuda).

It would be easy to dismiss Frank's experiments and observation with grass as the machinations of an overzealous superintendent. But he is no ordinary superintendent. Frank lives in a bungalow on the property, along with 300 members in condominiums scattered throughout. He has a small plane at a nearby airport so he can inspect his ranch near Corkscrew Sanctuary.

He practically owns the course. The property is on a 99-year lease to the members, which is better than ownership, according to Frank. Whereas all 300 members at Wilderness live in condominium flats scattered throughout the property, Frank and his wife live in a bungalow with a Mercedes in the driveway.

Twice a month Frank attends directors' meetings at Barnett Bank. The question goes begging, why would a man so well blessed with the fruits of his labor be interested in sprigs of Bermuda turf? To say he loves grass does not seem adequate, but there is no other explanation.

Frank also loves the natural environment at Wilderness. Like many Florida superintendents, he is very knowledgeable about plant and animal life. He knows all the common names of most species, and, in many cases, the Latin names as well. Long before it became popular for golf courses to become associated with Audubon International, Frank practiced conservation. A dead tree in the middle of the 16th fairway has been a home to woodpeckers and a place for bald eagles to perch for more than 16

Frank enjoys a close relationship with Jay Staton, the golf professional at Wilderness. Staton never goes golfing without his Pentax camera, which is equipped with a 400 mm telescopic lens. The walls in the clubhouse are decorated with his photographs of the wildlife that inhabits the Wilderness preserve. There are pictures of bald eagles, limpkins, ospreys and even bobcats.

Like all south Florida superintendents, Frank yearly faces the question of whether to overseed Bermuda turf with cool-season

grasses, or to simply leave it alone and let the Northern golfers play on native turf. The problem is, when cool nights occur, the Bermuda turns off-color and golfers conclude there must be something wrong with the greens. The golfers at Wilderrespect their superintendent's knowledge and accept his decision not to overseed the greens nor the fairways. On the tees, Frank compromises and overseeds with poa trivialis.

At nearby Royal Poinciana, Gary Grigg follows the same regimen. The greens have all been resprigged with a new hybrid variety called Quality. The Bermuda greens provide a slick putting surface and tight lies on fairways.

Steve Durand, superintendent at Quail Creek, has overseeded greens, tees and fairways in accordance with his members' wishes. Quail Creek is a sea of green. It looks magnificent, but the overseeded greens tend to

be a little slower than their Bermuda cousins, and the raised lies on the beautifully groomed fairways make it possible for the older golfers to "get at the ball."

Tim Hiers, at Colliers Reserve in Naples, would like for his golfers to putt on Bermuda greens, but he is not satisfied with the quality of the present turf. Therefore, he is experimenting with Quality, and it looks promising on his practice

All supers agree that Northern grasses have a place on their tees, but most would prefer to play hybrid Bermuda fairways and greens if only their Northern golfers would let them.

And then there is Paul Frank at Wilderness. The man who discovered his very own grass and does not have enough of it to accommodate all 18 greens. His golfers are patient and willing to wait. The remaining seven greens will be sprigged with PF-11 in the summer of 1997.





## Cooling fans protect turf against the hidden killer, desiccation

Continued from page 13

driven by the energy load that is put on the turf and by temperature gradients that either pull too much water out, or drop or raise the temperature on the turf That's simplistic, but it is a good starting point for looking at stresses. One of the stresses which is a hidden killer -is des-

iccation. And it is driven by the difference between the air and soil temperature."

A 15-degree difference between soil and air temperature, he said, moves more water out of the turf than the turf can put back in. "To add to that problem," DiPaola said, "if you have soil that is at 50 degrees (F) and it moves down to 40 degrees (10 to minus-5 Celcius) you have a turf that has doubled its difficulty in delivering water from the soil to the shoot. If you bump that soil temperature up by 15 degrees you are in a position to draw water out more quickly. You have to ask yourself the question, then: 'Do I know what my soil temperatures are?'Because if you know the soil and air temperatures you know if you are in a desiccation mode.

While a person might not feel uncomfortable at 60 degrees (F) (12-15 C), the turf plant could be, according to how much water is being drafted out of it.

And in the case of heat stress. a superintendent needs to know the soil temperature.

"The canopy temperature of the turf is considerably higher than the air temperature," he said. "The simple solution to getting canopy and air temperature the same is using fans. A slight (3- to 4-mph) breeze will drop the canopy temperature to that of the air temperature.'

New fans give

supers power

grounds superintendent at The Northwood Club, "We are going

to install fans on two additional greens real soon, in addition to

the four greens that currently have either two or three fans, depending on the size and shape of each respective green." "Our fans are 48-inch, beltdriven exhaust fans with 2 1/2horsepower (single-phase residential) electric motors. manufactured by Dayton and distributed by Graingers. They blow from 28,000 to 32,000 cubic feet per minute (CFM), and are extremely quiet because they operate at low RPM's on a reostat. "Because of their large size

and CFM output capability, they

do not have to have occillation, are painted flat-black and are mounted mostly in trees or on traditional posts. The custommade tree mounting brackets were made locally and the fans are left mounted in the trees yearround. They are occasionally touched-up with flat black enamel; have three zerk fittings which are greased once a month during the warmer months; have

belt dressing put on occasionally if they become slick from

rainfall; and have a sign mounted

on one of them at each greens complex that they are 'immovable obstructions' regarding the

"Each fan complex has a time clock, mounted on a pedestal at the power source, which is usually set to turn the fans on between 4-5 A.M. and 7-8 P.M., depending on climatic conditions that we witness from our Maxi Weather Station and from observations on The Weather Channel. Last Fourth of July, we had to run our fans 24 hours a day because of extremely high hu-

midity, with night temperatures

in the 80s and 90s," Price ex-

that is the main reason we do not bring them inside during the

winter time, mainly for employee safety, to maintain their structural integrity and to help eliminate any future vibration. They hold up quite well in the ele-

"The fans are quite heavy and

rules of golf.

plained.

ments.

Continued from page 13

## You're Right To Remain Silent

The only electric-quiet bunker rake\*, now with ReGen and No-Runaway features



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The new answer to bunker maintenance No noise, no fluids, no air pollution, no interruption of play Now with a ReGen system that re-charges its batteries during transport - A No-Runaway system that limits downhill speed and drift when parked - And an ultra-quiet finish rake The quiet one - Sand Star E Plus\*



CIRCLE #109



## PPE display a significant reminder to employees

By TERRY BUCHEN

AS VEGAS - The 15 golf courses that comprise the Tournament Players Clubs (TPC) nationwide save thousands of dollars each year on insurance premiums by having employee-safety programs that are a model for other golf course maintenance operations to follow. The new TPC at The Canyons is a public-access course that has a state-of-the-art turf-care maintenance facility. Kim Wood is the golf course superintendent and Collier Miller is the southwestern director of the TPC golf course maintenance operations, and they are proud of their safety program.

"We have a Personal Protective Equipment (PPE) Display mounted on a bulletin board/peg board-type material, covered with cloth, which shows examples of everyday safety equipment, displayed in the employee lunchroom," said Miller. "The PPE display describes which

piece of maintenance equipment the safety equipment must be used for which acts as a very efficient 'reminder' to employ-

ees to wear and use these important pieces of safety protective equipment. The labels are made on a computer, then pasted onto the cloth," Miller added.

"Employee safety meetings are held once a week, all year long," he said. "We have 26 specific safety topics we discuss each year, such as how to protect yourself for safety; MSDS sheets; eye wash station; safety showers; different task safety agendas; employee training review. They are held prior to going to work out on the course. We have open discussion-type safety meetings that alternate with the 26 specific topics, such as what happened during the previous week; what near-miss accidents happened; potential hazardous conditions are addressed; Haz Com issues and concerns; backlifting of any object. We hold them briefly in the mornings prior to going out on the

course for work."

For two straight weeks each year, during the slow season, a 45-to 60-minute "Safety Right-to-Know" safety meeting is held for one day each week, discussing Right-to-Know; Haz Com and other issues, and each employee signs off that they have attended and understand the safety training. Theses two meetings, because of their length, are held in the afternoon.

"Our insurance inspectors and underwriters call the TPC safety programs a model in the industry," Miller said, "causing substantial savings to the TPC operational budget and the safety program is well accepted and much appreciated by our employ-



Personal Protective Equipment (PPE) shows an employee by example at TPC at The Canyons in Las Vegas.

#### PTC re-elects Grote as a director

Barry Grote, first vice president of the Pennsylvania Turfgrass Council (PTC), has been re-elected as a PTC director. Grote has been business representative for The Scotts Co. of Marysville, Ohio for 20 years. He services the Western Pennsylvania area for Scotts. He was

a golf course superintendent for five years after he graduated from the two-year course in turfgrass management at Penn State in 1971. He serves on the board of the Greater Pittsburgh GCSA and is a member of the Mountain and Valley and Northwestern Pennsylvania GCSA's.

#### Penn's Hamilton named Innovator of the Year

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NEWPORT, R.I. — George Hamilton has earned the Innovator of the Year Award for developing PennMulch, a revolutionary seed establishment mulch now being used in the turfgrass industry. PennMulch, manufactured from recycled materials, replaces straw or hydromulch, includes a starter fertilizer, is easy to apply, and improves seed establishment over traditional methods.

Hamilton received the award during the 51st annual meeting of the Northeastern Weed Science Society, held here in January. The award is sponsored by AgrEvo, a company of Hoechst-Noram. This award is to encourage the reporting and recognition in weed science including extension, teaching and research.

Hamilton has been involved in Penn State's turf program since 1982. He was hired as a research technologist after completing a bachelor's degree in agronomy at Penn State. He previously won the Innovator Award in 1994 for developing a granular fertilizer/herbicide calibration unit called the PennPro Collector.



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greens within 3 to 4 inches by varying the ground speed of your triplex greensmower. The result is smooth, true and consistent putting greens. The TRUE-SURFACE<sup>(R)</sup> Vibratory Greens Rolling System is the only system that can pro-

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CIRCLE #110



# Chicagoland AGCS exclusively for superintendents and education

By TERRY BUCHEN

CHICAGO — The Midwest Golf Course Superintendent Association (GCSA) has been the main chapter for the Chicago area since local chapters have been in existence. However, back in 1968, a mini-revolution took place when a small group of North Shore superintendents — who wanted to learn more from their association and from their peers — formed the Chicagoland Association of Golf Course Superintendents (AGCS).

"We formed Chicagoland AGCS with the belief to openly share knowledge, ideas and opinions with the mutual trust of fellowship and to continually strive for self-improvement and advancement of our profession," explained Julius D. Albaugh, superintendent at Westmoreland Country Club and the only active charter member in the area. "Simply put, only golf course superintendents can be members of our association."

The Chicagoland AGCS normally meets in the afternoon on the fourth Tuesday, from November through March. From April through October, it meets for evening dinner, usually at a super's club. Twenty or more of the 75 members routinely attend.

"Unless specified in writing, coat and ties are required at each meeting," Albaugh said, adding that the \$1 fine for improper dress has never been collected.

At meetings, two topics are the subject of separate round-table discussions. The subjects are determined by the education chairman. Every superintendent has a chance to actively participate, explained Les B. Rutan, Chicagoland AGCS president and superintendent at Beverly Country Club.

"If over 25 attend, we can't get around the table for every superintendent to participate," Rutan continued. "So the education chairman picks five to 10 superintendents, at random, to participate on both topics for the month. We have guest speakers, from time to time, if we feel there is an important topic that a nonmember can contribute to."

Each January, the association plans a tour of three turf care centers in the north, west and southern areas of the city. This is also attended by superintendents' employees, such as assistants and mechanics.

The December Christmas Party meeting traditionally has the largest attendance, as the U.S. Golf Association regional agronomist presents his "Year in Review." The November meeting traditionally features The Forum, the association's annual "special" education program in a seminar format.

"Guests — such as green chairmen, course officials and assistants — normally attend,"

Rutan said. "Every two years, we have a budget comparison, usually held in October, where superintendents put their budgets on the table where they are openly shared

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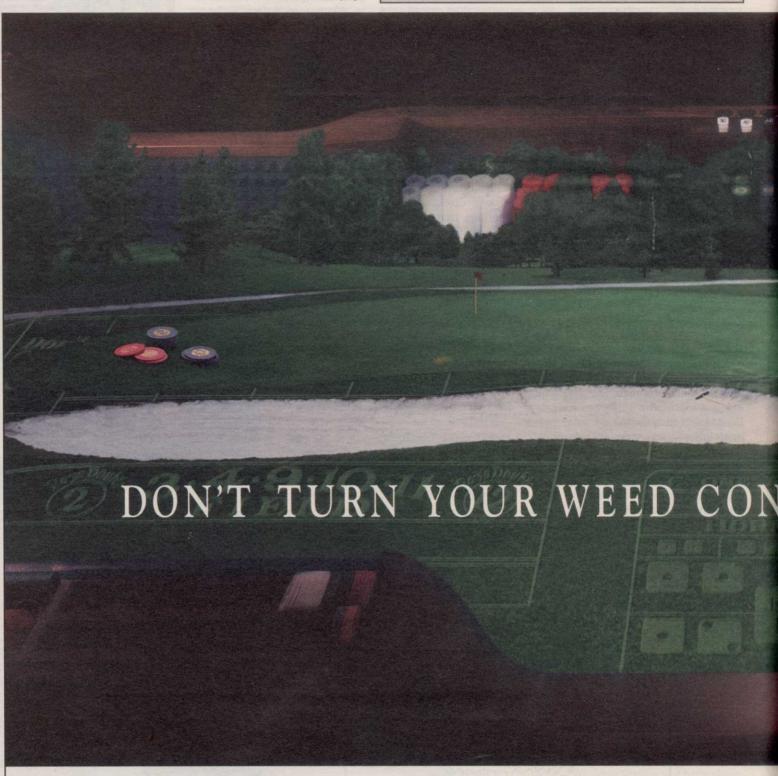
SAVVY SUPERINTENDENT

#### THE CHICAGOLAND AGCS CREED

We, the members of the Chicagoland Association of Golf Course Superintendents, believe the unity of an association depends on the professionalism of members therein. Our goal is to create the ultimate environment for the game of golf.

We pledge to openly share our knowledge, ideas, and opinions with the mutual trust of fellowship and to continually strive for self-improvement and advancement of our profession. We shall strive to adhere to our bylaws and see that the purpose is understood and respected.

We will uphold the proud heritage of our profession with dignity.



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## Lewis leaves Portland CC to start company

FALMOUTH, Maine — Pat Lewis, superintendent for eight years at Portland Country Club (CC) here, has left to form a consulting firm and undertake other business opportunities.

Lewis, who was succeeded by long-time assistant J.B. Christie, has joined brother Peter in creating Lewis Broth-

ers Lawn & Turf Consulting Services, located at 170 U.S. Route 1, Suite 200, Falmouth.

Peter, a superintendent for 14 years at Country Club of Farmington (Conn.), came to Maine as superintendent at Westerly Winds in Westbrook a year ago. He will remain there.

Lewis Brothers will specialize

in soil samples, consult with homeowners, lay out turf fertility programs, calibrate spreaders and other duties — "basically teaching the homeowner," Pat said.

Pat will also remain affiliated in some way as an agronomic consultant with Portland CC.

Christie, who holds a degree in communications and has stud-

ied turfgrass management at University of Massachusetts' Stockbridge Schoolin the winter, has worked at the Portland CC for 10 summers. Eight WHERE THE Years ago he was

promoted to second assistant, and six years ago took over as first assistant.

ORONO, Maine - Blayr

Crowley has left Penobscot Valley Country Club here to join Sawtelle Brothers, a supplier to the golf course industry. Crowley

will be the Sawtelle representative in Vermont.

QUANTICO, Md. - Billy Casper Golf Management, Inc. (BCGM) has named Charles T. Sheridan superintendent here at Green Hill Yacht & Country Club. BCGM was selected in December to provide complete turnkey management services to Green Hill. Sheridan is the former assistant golf course superintendent at Shinnecock Hills Golf Club, where he participated in the regrassing of the course and an extensive irrigation upgrade in preparation for the 1995 U.S. Open. Sheridan also held the position of links superintendent at Waterville Golf Links in County Kerry, Ireland.

VERO BEACH, Fla.— Michael Rowe has been named superintendent here at Sandridge Golf Club, a club managed by Lakeland, Florida-based International Golf Management, Inc. (IGM).

Rowe is responsible for complete maintenance of Sandridge's two 18-hole courses — the 7,000-yard Dunes and the 6,300-yard Lakes. He supervises a staff of 23 and reports directly to Jim Wells, IGM's central Florida regional manager.

#### Chicagoland

Continued from previous page

with the other members. About 95 percent put their names of their budgets, and five percent remain confidential because of course rules. Also included in this comprehensive meeting are superintendents' fringe benefit and salary comparisons.

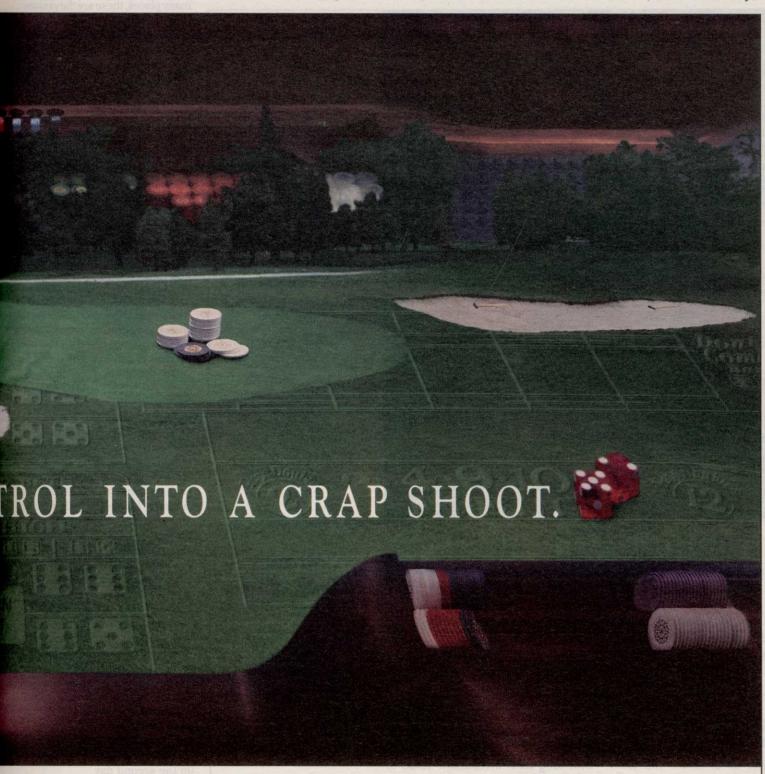
"Guests are not allowed at the budget meetings," Rutan said.

Assistants or course officials can be guests, except during the budget meeting.

One member reads the entire "creed" at the beginning of each and every meeting (retired superintendents are members, as well). The block of votes goes entirely with the Midwest GCSA.

The Verdure Newsletter comes out monthly, announcing future meetings. It also includes a unique section on "news around town". No meeting is held in February because of the national conference. Dues are \$55.

"We are, and have always been, a close-knit group, basing our existence on education, by sharing occupational secrets, by discussing ideas privately as superintendents," Albaugh said.



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## Learning curve the major bump in green speed

By MARK LESLIE

MONTREAL — Operating in the fast lane of green speed, the turfgrass industry is still on the learning curve and with no finish line in sight, according to Dr. James Beard.

The former Texas A&M professor told an audience of superintendents here at the Canadian International Turfgrass Conference and Show: "It's a day and age of golfers demanding fast greens. You can agree all you want about a higher height of cut, but I think the golfer will still demand fast greens. It's here to stay."

Beard explained changes in grass cultivars and cultural practices, especially top dressing and increased rolling, that will help superintendents cope with the higher speeds,

"Green speed differs from cultivar to cultivar," he said. "You cannot assume that higher density equals faster speeds. Highdensity greens may, in fact, be slower than certain of the lower-density greens, depending on

what cultural practices are used."

Saying there is "a tremendous difference in bentgrasses," including biomass, Beard said that for the first time researchers are able to get actual density counts. It reflects heat tolerance and the grass's ability to be grown more easily.

"You're going to be more suc-

CANADIAN CONFERENCE

cessful growing greens with dense root systems," he said.

New grasses, able to be cut at 3.2 millimeters (1/8-inch), "suddenly are performing very well," he said. "Times have changed. At many places, these are the grasses that will be used in the future."

Speaking of the Penn-series bentgrasses, Beard said: "There is a learning curve on their culture. They have density that dictates different vertical cutting, top-dressing regimes and approaches in terms of nutrition. But high-density types are very impressive, very promising. They will help solve a lot of the problems on those golf courses where extraor-dinarily low mowing heights are demanded by the membership."

Meanwhile, research has illustrated that superintendents should consider rolling their greens as opposed to further lowering mowing heights.

"Lower mowing," Beard said, "results in weakened turfgrass, shallow rooting, more moss and algae problems and the controls that are required for that."

On the other hand, today's greens with high-sand root zones don't compact, so the option of rolling involves minimal negatives. And, Beard said, superintendents can also cut the grass higher and roll it.

He cited ball-roll studies done on a putting green of mature creeping bentgrass with normal mat and no thatch, on well-drained greens and high-sand root zones. It was a fast green. Pre-rolling distance, according to Stimpmeter readings, ranged from 9.3 to 10.7 feet.

The findings included:

• A single rolling in early morning consistently increased the distance 10 percent. Double-rolling raised it 11 percent. Three-roller units raised the distance 17 percent and four rollers increased it 20 percent.

• Speed gained by rolling with a single roller drops 5 percent by mid-afternoon. But it comes back up the second day.

• Generally, turf-rolling benefits lasted two to three days. "So we're looking at rolling twice or three times per week," Beard said.

• North Carolina State University rolled seven times a week and found that any rolling beyond three times a week they started to see thinning and loss of turf.

 It's best to roll immediately after mowing. Rolling beforehand provides very little effect.

• Operating speed of the roller does not influence distance in ball roll.

 Long-term rolling studies at Continued on next page

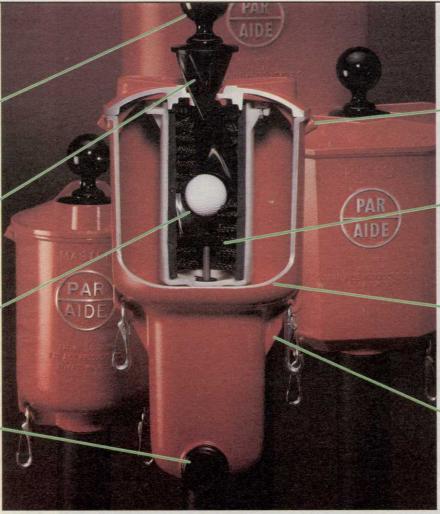
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By MARK LESLIE

ONTREAL — Declaring that a large gap exists between scientific evidence and the perception of danger, Dr. Harry Baikowitz said the media, governments and environmental groups are scaring the public and taking its money to correct "problems" that don't exist.

Speaking at the Canadian International Turfgrass Conference and Show here, Baikowitz addressed the myths and realities of environmental concerns, saying, "Some myths die hard." They die hard, he said, because the media manipulates them and environmentalists perpetuate them.

Listing a barrage of "myths" from the alar scare to the claims that cranberries and cellular phones cause cancer, Baikowitz added, "Blaming ozone depletion and global warming on CFCs and humans is a leap that has no basis in scientific fact."

"There is more truth," he said, "to Woody Allen's statement: 'Help stamp out pollution. Eat a pigeon.'

Baikowitz, whose doctorate is in chemistry, cited the existence of a "fear coefficient" in which the more common the chemical that is being discussed, the higher the fear.

False claims, he said, are also being made against golf courses.

While pesticides are described as "toxic," "dangerous," "groundwater pollutants," Baikowitz said: "We've done a lot of studies on the retention of all forms of pesticides, especially fungicides,

#### Beard on speed

Continued from previous page

Michigan State University found more than 50-percent control of brown patch and several other disease organisms on plots that are rolled.

- Rolling provides a decided visual improvement in surface smoothness for ball roll.
- How much higher cutting height does rolling allow? Certainly 1/32 of an inch and, in some cases, 1/16 inch, depending on leaf-growth rate, Beard said.

"Certainly rolling is back in vogue," he said, "and with minimal problems — if you don't do it more than three times a week and if you do it on properly constructed high sand-based greens. It will be with us a long time."

While rolling is one of the oldest techniques in turf, Beard said: "Yet we are just starting to learn about it... A lot of changes are happening. They have implications not just on the choice of a cultivar, or rolling practices, but the total cultural management program that is allied with that. We have a lot to learn about how they will be best used."

## Science today: Myth & theory vs. fact

in water and soil, and our data certainly does not support that there are any kinds of residuals that would contaminate underground waterways of golf courses. And these [courses] have been around for at least 40 years."

The government defines "dangerous" as a substance that

causes a substantial increase in mortality, he said. "If a pesticide can add one cancer in 1 million people, it is considered a carcinogen. Yet one of three people get cancer in their lifetime."

Turfgrass diseases are treated with fungicides, he said, and they represent 1.6 percent of total pesticide use in North America.

They have the lowest toxicity to humans.

"Nature generates toxins that are at least 10,000 times more toxic than any manmade chemical, and we're exposed to them every day," Baikowitz said.

The "real data" that exists, he said, "does not support the hysteria and finger-pointing we're



exposed to day to day."

Yet, he added, superintendents must be armed with facts in order to answer concerns or false claims from golfers and others.

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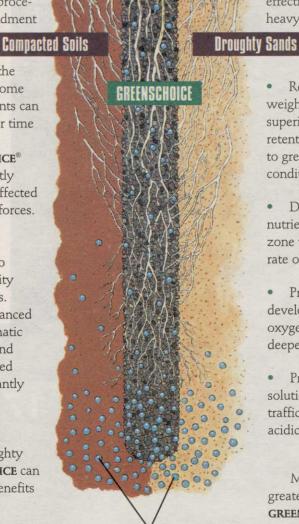
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WINTER COVERS

#### Improving The Combat Zone

By MARK LESLIE

MONTREAL — It's The Combat Zone: Chinook winds, open winters, long-standing ice, heavy shade... all enhanced when a golf course's turfgrass is cold-sensitive poa annua. Winter in the North, superintendents here agreed, is a time when they can do little except pray they made the correct decisions in the fall.

Greens covers — some solid, some "breathable" — are becoming more a staple of winter protection, and three superintendents shared their techniques in using them during the Canadian International Turfgrass Conference & Show here in March.

While many superintendents, especially those whose courses are predominantly bentgrass, do not use greens covers at all, that is not the case with Dean Morrison, Blake Palmer and Hugh Kirkpatrick.

Kirkpatrick's 65-year-old Westmount Golf & Country Club in Kitchener, Ontario, has "a tremendous amount of shade" and is mostly poa annua. "We trust our bentgrass but not our poa," said Morrison, whose Calgary (Alberta) Golf & Country Club faces "a lot of Chinooks, open winters and related problems, especially desiccation." And Palmer sees very little snow and a lot of rain and freezing rain at Rockwood Park Golf Course in St. John, New Brunswick.

Greens covers or tarpaulins are integral for all three - regardless of the cost. As Morrison said: "It's not cheap, but how do you put a price on dead greens? It's the bread and butter on your table

On the other hand, few superintendents can afford to cover all 18 greens. In addition to the covers themselves Morrison's cost per green were \$120 for straw, \$240 for labor, \$90 to dispose of the straw and \$50 for miscellaneous items.

Strong believers in the ability of bentgrass to survive winters, Morrison, Palmer Kirkpatrick cover only greens they feel may be in jeopardy of winter injury.

The payoff can be a golf course with turf that survives the winter and that opens quicker in the spring. Palmer, a past president of the Canadian and Atlantic golf superintendents associations, said: "In 1973 we only had nine holes and May 15 was our target



opening date. Last year, with 18 holes, we opened April 23 and we wouldn't be able to do that without covers."

Meanwhile, cultural practices also enhance winter survival.

"It's very important to 'harden off the turfgrass going into the winter," said Kirkpatrick, 1996 Canadian Superintendent of the Year. "Don't let it go into the winter lush.'

aerating late in the fall and leaving the cores, which he feels help desiccation and heat up the snow to melt it in the spring.

Since greens covers create good conditions for disease, especially snow mold, fungicide applications are important before the covers are laid down. Palmer said application rates must be cut far back on turf that will be under cover.

ing straw on greens in favor of covers because the straw drew water out of the grass.

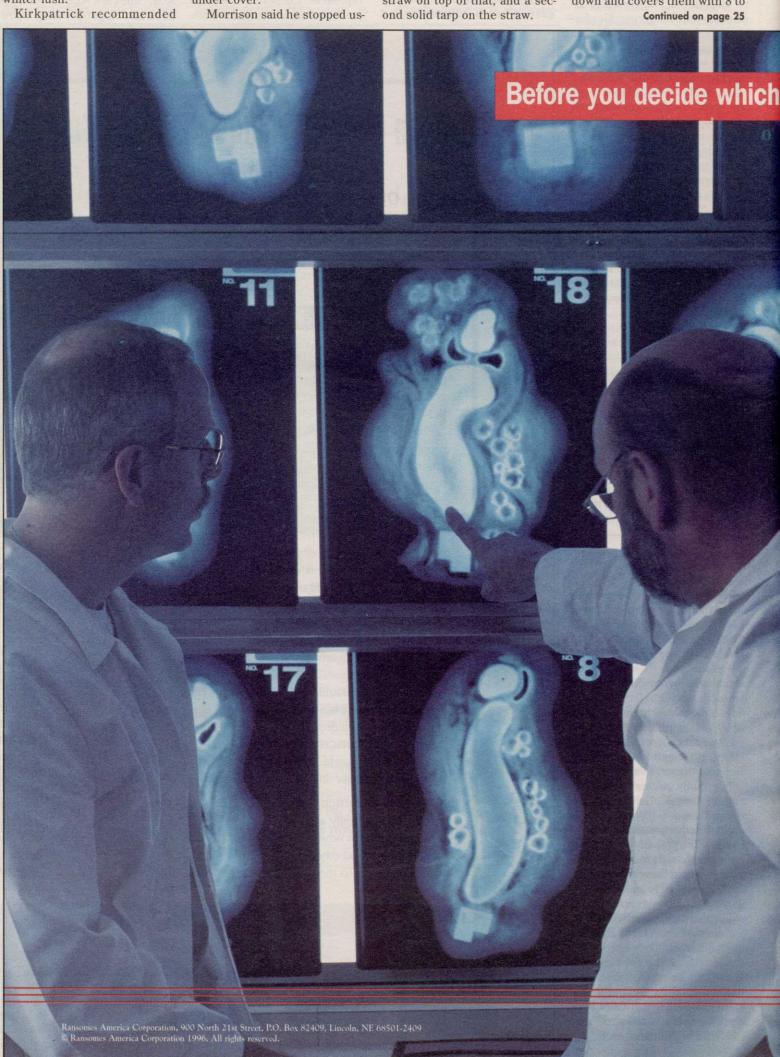
Palmer also suggested applying 5 to 5-1/2 pounds of potassium per green.

Morrison uses the breathable Evergreen covers on his bentgrass greens. On his poa annua greens he lays down a solid tarp, then 8 to 10 inches of straw on top of that, and a sec-

A tarp will last three years on the top and another three years on the bottom, he said.

Morrison added that if water gets under the covers, they will fail. So battening down the covers and ensuring they do not leak are crucial.

When using Evergreen covers, he said he puts a lot of branches on them to hold them down and covers them with 8 to





RESEARCH UPDATE

## Organism discovered that fights gray snow mold

MONTREAL — Researchers at the University of Guelph have discovered an organism that suppresses development of gray snow mold, according to Teri Yamada, national director of the Royal Canadian Golf Association (RCGA) Green Section.

Updating Canadian superintendents on research at universities funded by the Canadian Turfgrass Research Foundation, Yamada said studies have found that some isolates of Typhula phacorrhiz, a naturally occurring fungus found on corn debris, control gray snow mold as well

as or better than a control application of Daconil 2787 @ 2g a.i./ m2. And on those plots where *T*. phacorrhiza was applied along with the causal agents for gray snow mold, the turf remained clear of the disease the following year as well.

"This is very exciting,"

Yamada said. "But it's also a bit disconcerting to us as a funding agency. Ultimately, we would like to see a biocontrol developed and commercially produced for you. We have a couple of hoops to go through. We have to check risk analysis... We also have to find a way to deliver that



biocontrol onto the green.

"And, if you only have to use it once, we may have problems finding a company that will sell

University of Guelph scientists are working on the possibility of pelletizing T. phacorrhiza.

Storage is another factor. "They have been able to store Typhula phacorrhiza for up to 16 weeks," Yamada said. "But the organism is no longer viable after that period unless stored at minus-15 degrees Celsius.'

Gray snow mold in Canada is usually caused by one of two organisms - Typhula incarnata or Typhula ishikariensis. It was discovered that T. phacorrhiza, when put in contact with the other two organisms, actually suppresses development of gray snow mold symptoms.

During the winter of 1994-95, Prof. Tom Hsiang inoculated field plots with 46 isolates of T. phacorrhiza. Some of those isolates equaled or bettered the control given by Daconil. The best 30 isolates and 16 new ones were used for the second round of testing in winter 1995-96. The 1994-95 plots were not reinoculated with T. phacorrhiza to test for residual effect. Several plots staved clear of snow mold despite the causal agents being reapplied.

Yamada is also excited about a "star wars"-type project at University of Guelph, where scientists are working on using micro-projectile bombardment to "shoot" antioxidant-producing genes into bentgrass cells.

The overall project has Guelph researchers investigating genetic transformation of creeping bentgrass to enhance environmental stress tolerance. The project, which they hope to expand into ryegrass, is exploring three techniques - one using an agri-bacterium to take genes into the cells; another using electrical current; and the third employing micro-projectile bombardment.

The bombardment "has been successful with alfalfa," Yamada

She explained that in plant cells, as in humans, there are oxygen-free radicals, which can be toxic. Antioxidants detoxify those oxygen-free radicals.

Dr. Steve Bowley has been able to introduct a gene into alfalfa that detoxifies some of the free radicals in the plant. Plants with this gene tend to be more tolerant of such stresses as drought, high and low tempera-

Continued on page 29

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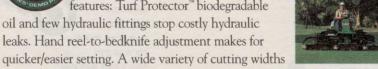




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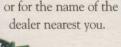
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#### Stressed

Continued from page 1

change how turf grows by what we do, and change its food reserves and rooting depths to get it in a better position to win.'

A former North Carolina State University professor who is now a senior technical support specialist for a turf-product manufacturer, DiPaola said superintendents must keep the balance in favor of new shoot growth.

Saying that "to minimize stress impact we have to maximize escape, avoidance or tolerance," DiPaola said cultural practices have a strong impact on both avoidance and tolerance.

"Avoidance is one aspect we haven't spent much time thinking about and it's one that is directly impacted by some of our cultural practices," he said. "For example, if turf has a rhizome system, it is protected in the soil during times of drought, or heat or cold much more than if it doesn't have that rhizome, or if our cultural practices restricted the depth of that rhizome system. In this part of the world the use of greens covers is an example of the avoidance approach."

More knowledge about the interaction of cultural practices such as fertility, plant-growth regulators, irrigation, drainage, coring and cutting heights will help superintendents meet their goals.

The concept of pre-stress conditioning of turf was fiddled with in the 1980s," DiPaola said. "We're not there yet. But things have happened that allow us to not only individually study and use some of these parameters, but to begin to look at their interaction more closely, so that the agronomic plan can tie two, three or four cultural practices together to put the turf in a position to win. If we are going to grow tomorrow's grass today, we've got to use today to put the turf in a position to win when the stress hits.'

"If what we do will build food reserve for the plant, or build the plant's root system, it's going to enhance its positioning to win once the stress conditions develop," he said. "The bigger a root system, the better. It will delay a lot of stress—heat stress, drought stress, cold stress, desiccation, shade, on and on and

Superintendents, he said, need a turf management philosophy and a plan that can actually be quantified

Working under budget, per-



sonnel or time constraints, superintendents have decided, consciously or not, at what level they will manage their turf, he said. "You establish that plateau, and as long as you're on it, you

are meeting your goals," DiPaola said. "But you move left or right on the plateau based on the options you employ. If you decide you will have various pieces of equipment, you will put your la-

bor force on in May as opposed

Everyone should know why you are doing things a certain way. You're trying to avoid the risk and maximize the benefits.'

- Dr. Joseph DiPaola

to April, you will walk-mow as opposed to triplex mow, etc., you begin to make moves" toward lower- or higher-end maintenance."

In terms of turfgrass stress management, he said, the real challenge is that every operation brings a set of risks and of benefits. "That's a good negotiating stance - for you with your crew and with your directors and greens committee," he said.

He suggested superintendents list the things they expect to gain and risk by a certain practice. For instance, coring can cause better rooting and air exchange, or a change in soil temperature for the good. On the other hand, it's a drying process.

"Everyone should know why you are doing things a certain way," DiPaola said. "You're trying to avoid the risk and maxi-

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TYPICAL

ABOUT

TWO

Continued on next page

A CERTAIN DAREDEVIL SOARED 15 SECONDS OVER SNAKE RIVER CANYON BEFORE PARACHUTING TO SAFETY 600 FEET BELOW

THE AVERAGE BASKETBALL PLAYER IS AIRBORNE A FRACTION OF A SECOND DURING A SLAM DUNK.

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#### Optimize, DiPaola urges supers

Continued from previous page

mize the benefits. That's helpful [to know] for those you are working for and those who are working with you to get the job done."

Calling superintendents to implement a turfgrass agronomic plan, he said: "We need the long-range look, and the interactive look, that we haven't quite put together in turf management.

Such a plan, he said, identifies the turf areas of the course and the goals for each. "This is novel for some folks," DiPaola said. "What is it that you're trying to do with the greens, tees, roughs and fairways, and are you getting there? In this agronomic plan we have fixed constraints: schedules for major tournaments, club policies about when certain cultural practices can be done, and contractual constraints particularly for resort facilities where they're promising people that certain things won't happen while they're playing golf."

The goals will vary with each turf area.

Optimizing course conditions. he said, is not a good goal "unless you can measure your success." Maximizing the uniformity of greens and minimizing local dry spots, for instance, can be measured. So, also, can soilinfiltration rates, crown health, standard density Stimpmeter speeds.

Contingency plans should also be established for cases when the winter is twice as cold as normal, or the summer is twice as hot, or the irrigation system goes down.



"Keep the plan useful," he said. "Refer to it regularly. Adjust to your successes and failures. Particularly keep good records of what you can't figure out. And measure the progress toward vour goals.

"Let your employees know they helped you get there. And let the management of the club know that you've made the difference."

#### Winter covers

Continued from page 22

10 inches of straw.

'We use flax straw because there's no seed. It also won't blow away like wheats or barleys will," Morrison said.

Using large rolls of straw instead of bales, his crews can bed down a green in about four hours, he said. The covers are nailed down every two feet and tires are used as anchors.

Palmer uses wood-shaving mats and Astrofoam on top of the covers instead of straw. A 6foot-wide, 300-foot-long roll of Astrofoam costs \$125. The package costs 74 cents a square foot, he said. He complained, however, that the Astrofoam "tears easily and is difficult to put down.

In the spring the timing of removal of the covers is crucial, the three agreed. Thus they monitor the green temperatures. Palmer suggested putting the covers back onto the greens at night until mowing begins.

Morrison uses a Toro with a blade to clean off the greens, while Palmer's crews use leaf blowers.

Morrison's crews also Verti-Drain the greens around May 10-12, an action which he said "gains us about 12 days."

On the negative side, Palmer said: "I am disappointed that most times the covers seem to split at the seams. I feel if manufacturers could use a heavier material and, if possible, without seams, they could make a better product.'

Kirkpatrick added that breathable covers "didn't do much for us against crown hydration."

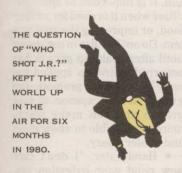
Morrison said his experience shows that 6 inches of snow will give the same insulating factor as two tarps and straw.

With the heavy snow of this past winter, he said, "I may have wasted my money.'

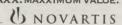
On the other hand, if there had been no snow and he had not covered his greens, the results could be deadly.

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#### IPM know-how

Continued from page 13

particular pest problem? If I'm only thinking about it when I get the pest, my options are narrow...

"But if I'm thinking about options when I'm putting the site in, choosing my root zone grass and micro-environment, adapting that situation for good grassgrowing techniques, I have a lot of options."

Regularly observing the turf, the superintendent detects and identifies pest infestations, then decides the economic significance of the pest — for instance, how much turf will a grub eat and how much money will be lost. Based on this decision, the superintendent chooses a method of action and later evaluates the control.

"Many people don't feel like they are doing IPM until they get a pest," Rossi said. "I think that is a problem of terminology. Everything you do sets the plant up to be more, less or not injured by that pest."

Mowing, watering, fertilization and other practices, he said, "can have a huge impact on our pest management because it may help us avoid a pest problem."

Rossi passed on these IPM-related comments:

- Remove trees.
- Under high-stress situa-

tions, and to avoid problems like pythium root rot, override the safety switch on the HydroJect machine, poking a hole through the soil profile and blowing a wider hole. The force of the water pushes the turf down instead of lifting it up. "If you're moving water through the soil profile," he said, "you might solve a disease problem. This is IPM and it has nothing to do with waiting for the pest to appear."

• Choose a grass that fits the club's quality expectations and the type of use. This is getting to be a more critical decision with the newer cultivars of bentgrass in particular, he said.

• In seeding bentgrasses, lower the rate to 1/2 pound per 1,000 square feet and use Apron fungicide-treated seed since Apron enhances survival. Tests using seeding rates of 1/2, 1, 2 and 4 pounds per 1,000 square feet found that as the seeding rate is increased, the percent germination decreases. "A majority of these seedlings come up but are killed off by pythium, or are simply out-competed and die off," he said.

• Higher-cut turf typically resists weed infestation. "We know if you have a deeper and denser root system, it can tolerate higher levels of grub infestation," he said. Rutgers University research found that a higher cut means less summer patch, for instance.

"Shortening the cutting height narrows your margin of error," Rossi said. "Any opportunity you have — whether it's vertical mowing, rolling or choosing upright bentgrasses — if you're under high-speed requirements ... you really have to think about this."

• Focus fertility on late-season. It is important to apply fertilizer when it is used for storing food, or improving the root system. Do not fertilize in the spring until after peak top growth has occurred. Nitrogen applied too early in the season promotes top growth at the expense of root growth and can make plants more susceptible to snow mold and winter injury.

and winter injury.

• Hand-water. "I don't care how good your irrigation system is, an important part of IPM, particularly from a disease perspective, is hand-watering," he said. "Not putting on the water for 5 minutes everywhere when you've got a high spot that may need more water, or a low spot that needs less water. We generally don't have disease problems where things are dry...

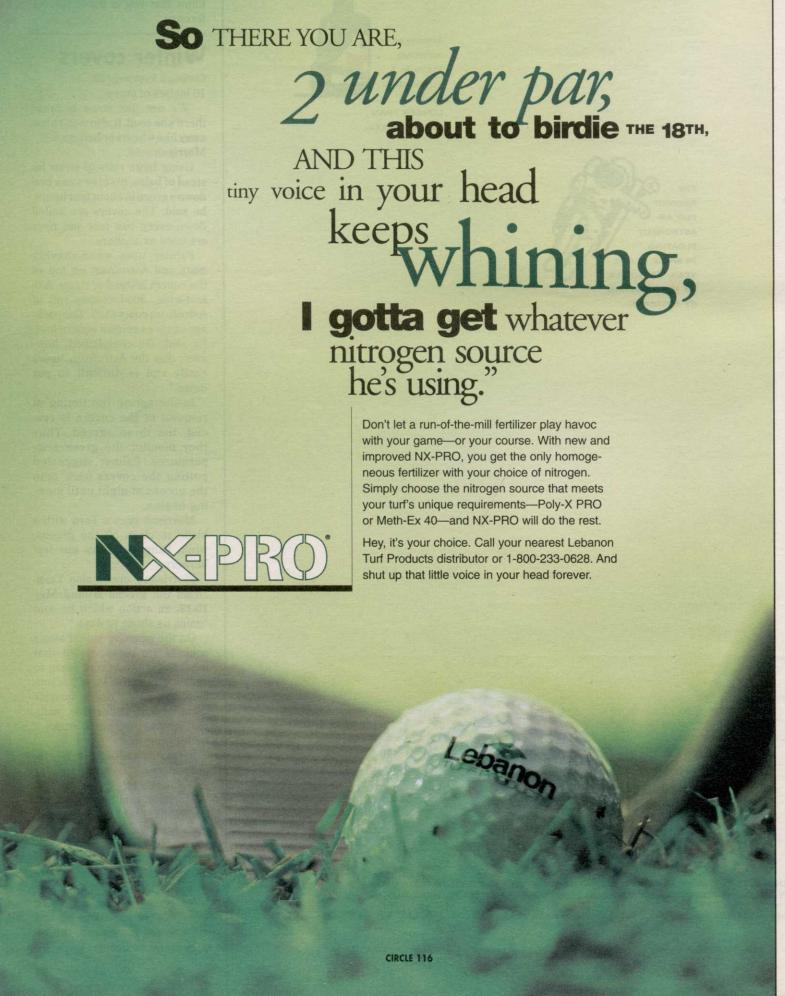
"I'd rather spend my time and give my crew the responsibilities of good hand-watering rather than riding the sprayer spotspraying."

 Passive overseeding of poa annua. At heavy seeding, core aerate and then fertilize. Allow the poa to send out seedheads and overseed itself.

• Preventive fungicides are important to fight poa annua's prevalent root pathogen problems. Use light, frequent irrigation — 1/10th of an inch every day. Also, collect clippings during the growing season so that clumps are not left on the ground to accumulate heat, since annual bluegrass is very heat-intolerant.

 Keep track of growing degree days to know the thermal units, or heat load, the plants are responding to instead of manag-

Continued on next page





## Danneberger Continued from page 13

NTEP reports. In other words, they expect a bag of seed they buy to be genetically identical to the seed used in tests.

Some method of cultivar identification is needed to ensure that managers get the cultivar they have selected. In the past, few methods were available for the identification of turfgrass cultivars. Most morphological attributes are affected by the environment. Many characteristics are not apparent until plants have reached a maturity. This makes cultivar identification based on seed lots difficult.

Recently, however, molecular methods have shown promise in identifying cultivars. We have been successful in using random amplified polymorphic DNA (RAPDD) techniques for the iden-

#### IPM know-how

Continued from previous page

ing turf based on the calendar.

- Use the Envirocaster and pest-prediction models.
- Scout for grubs. Eighty percent of all insecticide applications made on turf in New York State are either ineffective or not needed, according to a Cornell turfgrass pathologist.
- Calibrate spray equipment.
   A University of Nebraska study a number of years ago on 53 golf courses found that 83 percent misapplied pesticides.
- Choose a fungicide based on its potential for runoff, or leaching.
- Know the soils, the properties of the pesticides and fertilizers. Adjust applications based on weather, how much you put down and when you put it down, and make sure you're applying the right amount of water.
- Communicate. Take a lesson from superintendent John Gurke of Aurora (Ill.) Country Club, who puts out a board at the 1st tee each day telling golfers the day's maintenance schedule.

"Noticeably absent from the program," said Rossi, "is pests. You'd better have set up those plants to be as healthy as they can be before you get a pest.

"We're looking at pest levels that reduce the visual quality below an acceptable level. What's acceptable? It's very much dependent on how much the area gets used, how you maintain it, and what the golfers think."

In regard to that, he cited a national survey that found golfers are most bothered by ballmarks. Second are unlevel or bumpy tees. The complaints of not enough drinking water, the bunkers and rough height are all more despised than dead grass.

"Yet, we act as though [dead grass] is the number-one answer," Rossi said, conceding, "Certainly if it dies it becomes the number-one answer."

tification of creeping bentgrass and perennial ryegrass cultivars.

GCN: What has your work on the use of creeping bentgrass blends shown?

KD: The use of blends, two or more cultivars of the same turfgrass species planted together, is a common practice on golf courses to broaden the genetic basis of the turfgrass species. Lately, the concept of blending creeping bentgrass cultivars has increased in popularity.

The purpose of our work was to evaluate the performance of a blend as affected by disease pressure to see if blending was a significant benefit to turfgrass managers. We established plots of 50:50 blend of Penncross and Crenshaw creeping bentgrasses.

Dollar spot was allowed to develop to various levels within the blends. After two years, disease did not have an effect on the com-

position of the blend, but one cultivar predominated, possibly due to it's aggressiveness. These results suggest that turf managers should consult the regional NTEP studies prior to selecting cultivars.

GCN: What has your work shown on the effect of temporal shade on bentgrass?

**KD**: Shade is generally believed to be detrimental to turfgrass growth. Creeping bentgrass is a relatively shade-tolerant species, but declines rapidly when exposed to low-light conditions and short mowing heights.

Afew researchers believe creeping bentgrass exposed to morning shade declines more rapidly than plants exposed to afternoon shade. We're testing this hypothesis. An understanding of shade and its temporal effects provides a basis for effective decisions concerning tree removal and adjustments in management practices.



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## Business not as usual with Snyder at Hercules CC

By TROY BLEWETT

WILMINGTON, Del. - Bad weather, turf disease, weeds and insects are not the biggest risks for golf course superintendents, said Sam Snyder, director of facilities and grounds here for the Hercules Country Club. Snyder, a 20year superintendent, said being too conservative or sticking with a business-as-usual mentality is the biggest risk of all.

'Superintendents need to look for new ideas and take chances that can improve their course, their image in the community and their image with club members," he said. "The challenge is to put equal emphasis on our agronomic skills and on others like communicating."

For Snyder, this challenge has meant trying new techniques and taking a greater role in communicating with the public.

Even though all 27 holes at Hercules CC are playable yearround, Snyder and his 11 fulltime employees are busiest in spring. So, when he started reading and hearing about the success of fall-applied pre-emergence herbicides for crabgrass control, he decided to try it.

"We were spraying 150 acres for broadleaf weeds in the fall and then applying our pre-emergence herbicide over the same area in the spring," Snyder said. "It just didn't make sense to spray that big an area and then go out and do it again during your busiest time of year.

We were using Barricade preemergence herbicide in the spring and getting season-long control of broadleaf weeds and crabgrass, so it was logical to combine it with our broadleaf control program and try a fall application."

Snyder applied the pre-emergence herbicide at just over one pound per acre and achieved excellent results. "In a year with heavy rain, we didn't have any problems with crabgrass," he reported. "And we greatly decreased broadleaf competition on the course.'

According to Snyder, there are other benefits to a fall application of pre-emergence herbicide. "The soil in this area is generally firmer in the fall than in the spring," he said. "You don't need to worry about the sprayer churning up mud and making ruts in the course.'

Additionally, course traffic is highest in spring and summer so there's a smaller window of opportunity for spraying than there is in the fall. By going with a fall application, Snyder benefits by balancing his crew's work and spending less time on the course

during the peak spring season.

Snyder said trying new agronomic ideas is critical, but real success comes from thinking "big picture" about your job. He believes dealing with the public will become an even larger part of a golf course superintendent's job.

"If superintendents are afraid to speak out on issues that affect them and their courses. it will only hurt the industry," he stressed.

"It's very important to have open discussions with your club's management or board, its members, and the public at large," Snyder said, adding that super-



intendents don't do their jobs in a vacuum. "Your decisions impact other groups and their decisions affect you."

For instance, Snyder is negotiating with the Delaware Department of Transportation (DOT) which

plans to widen the road to Hercules CC. The DOT's plan will affect the contour of the course by removing a group of large trees. He is working with DOT officials to keep the impact to the course minimal.

In another case, board members were discussing construction of a pond at the base of a hill to catch chemical run-off. Members thought this idea was

Continued on next page

# Changing the Course.

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control with HERITAGE, a completely new fungicide with a novel mode of action. HERITAGE will give your golf course round-theclock protection against devastating diseases. With its powerful combination of preventative and curative activity and its high level of effectiveness against 18 of the toughest turf diseases, HERITAGE will make an outstanding difference in the quality and health of your turfgrass.

ow, golf course superintendents can

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> HERITAGE has a novel mode of action which is different than any other fungicide now on the market. It has both preventative and curative activity and is absorbed into the leaf blades and stems



as well as taken up by the roots. This ensures that your golf course is protected from the devastating effects of turfgrass diseases.

HERITAGE is the only fungicide available that controls both brown patch and Pythium, as well as take-all patch, summer patch, anthracnose and snow mold - an unprecedented advantage for the turf professional's disease program. HERITAGE is also effective against certain fungicide-resistant pathogens, making it an extremely useful tool in resistance management strategies.

Troy Blewett is a writer based in Milwaukee.



#### Hercules CC

Continued from previous page a good one.

"I wrote a two-page letter to all of our members explaining that run-off is the result of negligence," Snyder said. "I explained to them that we properly apply the products used on the course and, therefore, run-off is not a problem for us." Snyder credits the low water solubility of pre-emergence herbicide, which kept the product from moving, even on slopes and hillsides.

 $Sny der communicates \ regularly \ with \ members.$ 

He writes a column for the course newsletter on maintenance that includes a lawn-care tip, and puts weekly notices on a bulletin board

"Following the winter of 1994, we lost 30 acres of fairway grass to ice damage," he said. "I used the bulletin board to explain to our golfers how we were going to re-establish the grass. This let them know what we were doing and how their cooperation and patience would help."

According to Snyder, taking a chance and winning, gives more courage to try something new the next time. You have also improved your golf course and your career.

#### Zebra mussels, other topics due

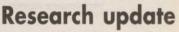
BURLINGTON, Vt. - Terry Bastian of Waterflowers, a North Reading, Mass., ecological design firm that consults on Northeast courses, is speaking at the 2nd annual Northeast Conference on Nonindigenous Aquatic Species here.

The spread of zebra mussels, hydrilla, water chestnut and similar vegetation is a concern of

scientists, environmentalists and superintendents as they struggle with keeping their water features alive and beautiful.

Bastian's lecture, "Loosing Loostrife by Fire" details his work with fire management at the Sagamore Spring Golf Course in Lynnfield, Mass. The goal was to burn the wetland and keep it in a sedge meadow stage of succession, killing the speckled alder, poison sumac and white pine bushes that restricted air flow to the 15th green, exasperating fungal problems. The burn worked and the green responded very well, being the healthiest green the next season.

"What I had hoped to do was lessen the fungicide and pesticide use with a practice that was used here until the 1970s. What was a pleasant surprise was that this technique severely affected the exotic purple loostrife population that was squeezing out the native plants," Bastian said.



Continued from page 23

tures. He wants to introduce that gene into bentgrass and possibly ryegrass.

Last year was the first year of the three-year study.

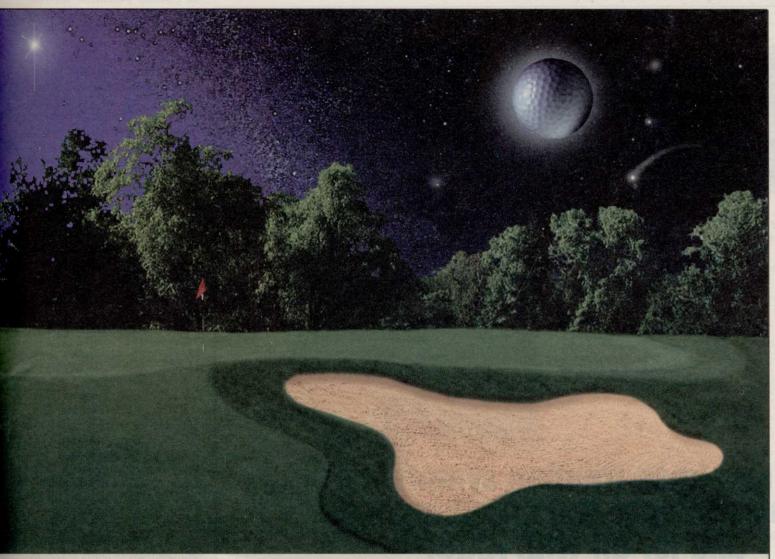
In other research:

· At the Laval University, PhD student Julie Dionne and Dr. Yves Desjardins have studied winter covers, finding that -10 degrees Celsius is "the critical minimum temperature where poa annua starts to sustain damage," Yamada said. "If you are in a very severe low-temperature climate and do not have any insulating covers, be it snow or other, you are in danger of sustaining damage just from low temperature."

· At Olds College researchers saw the trend for poa annua to deharden faster in the spring than bentgrass, explaining why it is more susceptible to earlyspring damage.

· At the University of Manitoba scientists are investigating use of native species of perennial grasses and their potential use on golf courses and other settings as low-maintenance turf. They are establishing plots of buffalograss, sideoats grama, inland desert salt grass, tufted hair grass, Canada bluegrass, prairie junegrass, fowl bluegrass, alkalai and other nontraditional types of grasses. This year they will cut them at 7/10, 1-1/2 and 2-1/2 inches to see if they can be used on golf course roughs in very low-maintenance areas without irrigation.

"They will also be selecting for drought-tolerance as well as salt-tolerance," Yamada said.



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## BIGGA steps up environmental programs

By TREVOR LEDGER

HARROGATE, England — The continued effort to improve the environmental image of golf course construction and maintenance received a boost here at January's BTME '97, the annual trade show and conference sponsored by the British and International Golf Greenkeepers As-

sociation (BIGGA)

"The BIGGA Golf Environment Competition in association with Amazone and Rhone Poulenc Amenity" is open to every course in the United Kingdom that honors environmental achievement. This is the third year the competition has been held but the first time that Rhone Poulenc Amenity has put its name to it.

Further environmental efforts include BIGGA's release of a new video, "Golf Course Ecology," which complements the book, "A Practical Guide to the Ecological Management of the Golf Course."

As the industry grows, environmental opposition to golf development is sure to become more strident. Strengthening the environmental competition and release of the video highlight golf's need to be seen as "green."

"Yes, we do need to let people know what we are doing," said BIGGA Press Officer Scott MacCallum. "Both the video and the book are designed to be accessible to everyone, not just greenkeepers and managers but the whole golf club."

General public consumption is not the immediate aim, yet BIGGA is aware that the wider its influence, the better for the game.

Matt Phillips of Friends of the Earth was prepared to give it a cautious welcome, but also to fire shots over bows regarding the activities of golf courses.

Phillips conceded there is a positive side to golf in that Sites of Special Scientific Interest (SSSI) are able to flourish on some of them, largely in uncut rough. This concession, however, was a minor one.

"Internationally, golf course construction is having a devastating impact on the environment," said Phillips. "Micronesian rain forests that have evolved over millenia are being carved out to make way for golf courses."

"Whilst we are pleased that the boom in golf course planning applications seems to have slowed down," he said, "the damage to the environment on established courses continues on a large scale."

## Floating green is being studied

Continued from page 13

ciation (WSGA) began earmarking 50 cents from each individual member's annual dues for regional turfgrass research, to be administered by the Northwest Turfgrass Association (NTA).

This resulted in a total contribution of approximately \$44,000 in 1996. According to the Western Director of the USGA Green Section, Larry Gilhuly, WSU was chosen from 15 applicants to receive this grant, in large part due to the WSGA's contribution.

"It is the USGA's policy to fund research projects which have significant support from state and regional golf associations before all others," Gilhuly said. "The WSGA's contribution was a primary factor the USGA considered in awarding this grant to WSU. Without it, the grant may not have been made. This is an exciting example of how the WSGA's contribution is being put to good use and will result in long-term benefits for all Northwest golfers and our golf courses."

Along with WSU, Coeur D'Alene Resort superintendent John Anderson will be involved in overseeing the research. Anderson, formerly of the Oregon Golf Club in West Linn, Ore., has received national recognition for his efforts in using and promoting environmentally friendly maintenance practices.

The USGA has indicated it will possibly extend funding into 1998 and 1999.

1330 2



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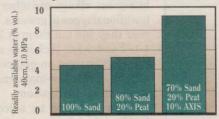


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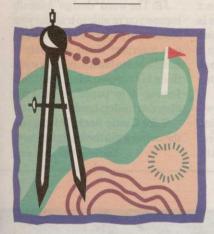


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#### **BRIEFS**



#### THOMPSON READIES SECOND AT GOLDEN PEBBLE BEACH

DALIAN, China - Developers of Golden Pebble Beach will add a second course and other resort amenities to its seaside community here. Dalian Hua Feng Enterprises Group, Inc., managed by Liu Shulan and Ren Yun Liang, have again selected HRC Consultants Inc. Architects and Engineers of Arcadia, Calif., and golf course designer Peter Thompson of Thompson Planning Group, San Rafael, Calif., to complete the 600-acre resort development in this northern China city. Thompson said that Golden Pebble Beach's second 18 holes will be an inland course, more suited to the middle and higher handicap golfers.

#### LOS ANGELES CC COMPLETES WORK

.....

LOS ANGELES - The North Course at The Los Angeles Country Club opened at the end of February following a major restoration by architect John F. Harbottle III. Restoration on the South Course began in mid-

#### CONTRACTORS INSTALL RANDALL

LITTLETON, Colo. - Rick Randall, founder of Randall & Blake, Inc. (RBI), has been installed as a national director of the Associate General Contractors of America (AGC). The AGC addresses issues such as legislation, safety, and training for contractors in the United States. The AGC also works closely with government agencies such as the Department of Transportation to create a partnership between contractors and the infrastructure engineers. Randall's parent company houses four companies: RBI, RBI Golf, RBI Maintenance and Contra Costa Landscaping, Inc. RBI has offices in Texas, Utah, California and Colorado.

#### ..... TREADWELL APPOINTS PARKS

SOUTHGATE, Mich. - Treadwell Golf Associates, a golf course design, construction, and management company, has appointed Jeffrey R. Parks as vice president of agronomy and Michael E. Hopson as vice president of operations. This new management team, which includes Todd Johnson, PGA golf professional and director of golf, will oversee all operations for Treadwell Golf Associates, located at 19301 Northline Rd., Southgate, Mich. 48195; 313-287-2060.

### PGA, Norman team with new TPC in Atlanta

By MARK LESLIE

ATLANTA — TPC at Sugarloaf, Greg Norman's first design for the PGA, will open here May 5, just in time to host the week's activities for the BellSouth Atlantic Classic

Built by the PGA Tour in conjunction with Crescent Resources, Inc., the facility features a major homesite component as well as golf, tennis and swimming. A huge clubhouse opened in April, and the recreation center is housed in and around the original show barn used during the era when the property was home to Tennessee walking horses owned by Rollins College patriarch Wayne Rollins.

Future plans call for a Norman-designed par-3 nine-hole layout as well.

Winding over very hilly and wooded terrain, and with three creeks meandering through the property, TPC at Sugarloaf will challenge golfers with tight fairways - tree-lined alleys requiring "a lot of great shot-making capabilities," according to one PGA offi-

TPC at Sugarloaf provided the opportunity to try Greg Norman Turf's new

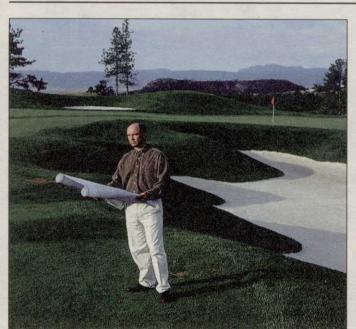


The new Greg Norman-designed TPC at Sugarloaf boasts a mix of terrain and trees.

GN1 Bermudagrass on the fairways, according to Cal Roth, PGA Tour director of golf course maintenance operations. Zoysiagrass roughs will add diversity and color to the track and the greens will be

There have been a number of new, big golf course communities built in Atlanta over the last few years,' said Roth. "But the growth seems to be there. We're selling lots and homes very quickly. We started selling memberships four months ago and have 175 members already.'

The TPC Network now numbers 15 in the United States, and under construction is the Gary Player-designed TPC at Jasna Polana in Princeton, N.J.



## **Engh gaining exposure**

Jim Engh broke into design with Ken Dye and Joe Finger, before joining Dick Nugent's firm. From there he went to England as senior designer for Cotton Pennink & Associates. Because the owner of CP&A, A.H. Buckley, soon became president of International Management Group's

(IMG) recreational development unit, Engh became involved, as well — designing European courses in the name of IMG clients like Bernhard Langer. Returning to the states in 1991, he founded Global Golf Design in Castle Rock, Colo. His first solo design on U.S. soil, the Sanctuary, opens May 1. Last month he broke ground on a municipal course for the city of Castle Rock.

Golf Course News: Your experience at IMG was broad but fairly anonymous. How do you view your tenure there, in retrospect?

Jim Engh: Because I spent a good deal of time in Europe, when I came back to the States, a lot of people didn't exactly know who I was. So that wasn't very good... But I tell ya', it was

Continued on page 32

## Despite obstacles, market in Germany improving

By MARK LESLIE

ERLIN, Germany -Despite the financial drain of German unification and the stiff opposition of a strong environmental lobby, golf course development in this country since the turn of the decade has soared.

While the number of golfers has increased 120 percent. from 124,209 in 1989 to 272,830 in 1996, developers have built 214 golf courses, according to the German Golf Federation. That is an increase of 73 percent, or more than 10 percent a year, over the 293 courses the federation reported in 1989.

"Meticulous but steady" describes the growth. Cabell Robinson, a golf course architect headquartered in Marbella, Spain, said the former West Germany has been pumping \$75 billion to \$100 billion a year into the former East Germany, diverting funds that might have been spent on other investments (like tourism and golf courses). Meanwhile, strong environmental groups make it "very difficult to get planning permission to do anything in what was West Germany," and earth-moving is

often highly restricted on what is allowed, said Robinson.

It can take several years to get a proposal through the approval process to the groundbreaking stage.

"Germany and the UK are probably the two most difficult areas to receive environmental approvals," said Jeremy Slessor of European Golf Design, which helped design the Nick Faldo course at Sporting Club Berlin and has other projects underway in Germany. "It can be a long process. Four years is not unusual to obtain permits. Whether a project is completed depends on the determination of the developer. Many just give up because of the time and money it takes. But those who stay with it usually get their permits.'

Indeed, the golf industry's growth seems to defy its ob-

Although agreeing "It's pretty hard to get things built in Germany," architect Kyle Phillips of Robert Trent Jones II International said the firm has designed one course that will open this summer 20 minutes southwest of Berlin and is planning another in Frankfurt.

Continued on page 38



## Q&A: Engh

Continued from page 31

the opportunity of a lifetime. I was able to design high-profile projects around the world at a fairly young age. It would've taken me 20 years to get that type of experience.

GCN: Do you have a favorite IMG project?

JE: We did a little one in Austria on 129 very flat acres with two power lines going through it and a high water table. But we were able to create something pretty special: Dachstein Tauern Golf & Country Club. That might not have been the best course that I've done, but the site was very challenging.

GCN: Whose name is officially attached to Dachstein?

JE: That's a Langer.

GCN: You've worked with some bigwigs at IMG and now the Sanctuary. Do you consider yourself especially tactful or able to handle what must be pretty big egos?

JE: I'd say my experience in Europe was a great lesson not only in dealing with some of the premier golfers or celebrities, but in dealing with people generally. When I first went over there, I had the ugly American thing going — walking out onto a site and saying I know how to build a golf course. But I got over that. Our way isn't better, just different.

GCN: Give me an example of what you mean.

JE: Well, they just don't have the tools we have here. In Austria, for instance, they just didn't have any small dozers. I wasn't happy about it, but it was okay. For bunkers we used trackhoes and grade-alls instead, and it actually had benefits in terms of compaction.

GCN: The Sanctuary is one of the most anticipated courses to open in some time, yet it's your first solo project in the U.S. How did you swing that?

JE: I just got to know [Remax Real Estate founder] Dave Liniger, the owner. We're both members at Castle Pines [Country Club]. He didn't even tell me he was considering this project. But we had talked a lot about design. He ended up talking to other people in the design business and came back to me. When it comes to cost, there were no limitations on this project. He could've had anyone he wanted, and fortunately he chose me.

GCN: So when did he actually pop the question?

JE: He drove me out to the site and stopped on top of where the first tee is today. He told me he was looking at this site for a horse ranch. Then he said, "Do you think a golf course would work here?" And I said, "Yeah, I

think I could swing it." Since then, my heart hasn't slowed down

GCN: You've worked a great deal at altitude. Is there more to designing at altitude than merely making the holes 10 percent longer?

JE: From a design point of view, when you're working in mountainous areas, you often have tee shots coming from elevated tees. So your landing areas have to be wider. If you're 10 yards off line on a flat site, that's 10 yards. But if you're elevated, the ball falls and falls; that 10 yards takes the ball much farther off line... But elevations also allow more vision from the tee and present more options to the golfer. When you're up above the fairway, you can present two or three options the golfer can really see. If the site were flat, you could present the same options

but the golfer couldn't see them.

Also, when it comes to bunker style, when you look down on a bunker, your vision into them is much better. So bunkers don't have to be quite as large. On a flatter site, you may have to flash the bunkers up to get the same feel.

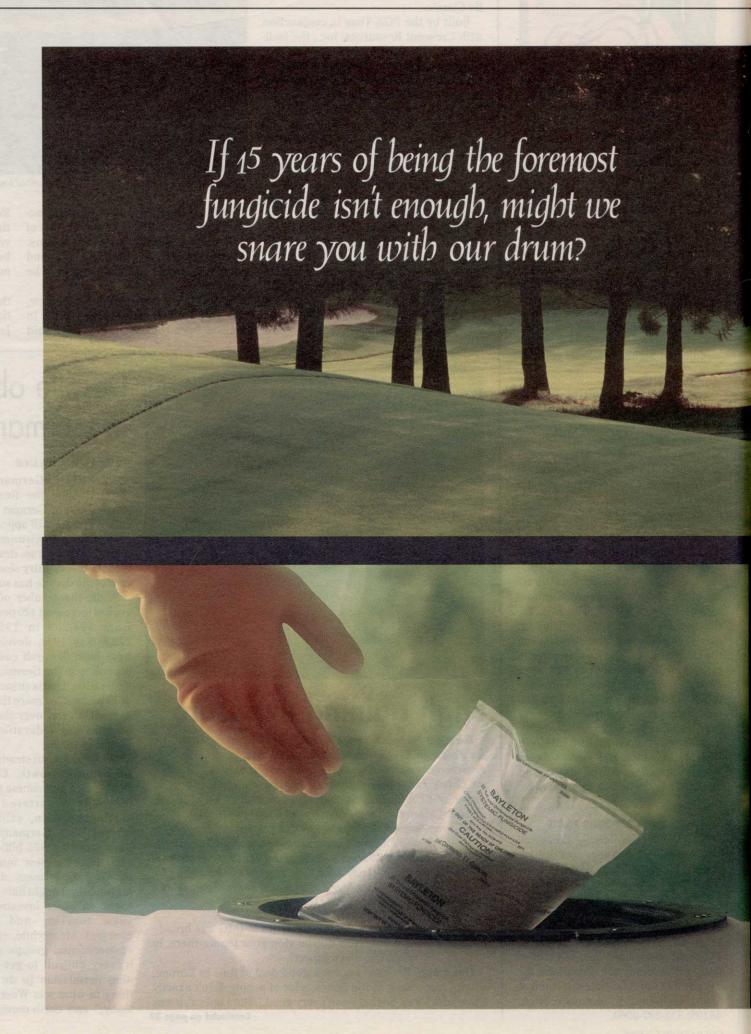
GCN: You're an acknowledged stickler for documenting your designs in advance. Give an example of that detail. And

what is it about documentation that is particularly valuable?

JE: The word "design" basically means you're able to transfer your ideas onto paper so someone else can interpret them, not only to build it but to bid it. Creating something in your own mind, then transferring it to paper so someone else can understand.

Take Castle Rock: If I can take the contours in their original form,

Continued on next page





#### Sarazen chosen for Donald Ross Award

TORONTO—Gene Sarazen, a golfing ambassador for more than 80 years, has been selected to receive the 1997 Donald Ross Award, given annually by the American Society of Golf Course Architects.

The Ross Award will be presented to Sarazen on Friday, May 16, here at St. George's Golf and Country Club during the society's annual meeting. Each year the honor is conferred upon a person who has significantly contributed to the game of golf, and in particular, the profession of golf course architecture

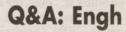
"As the golf industry enjoys a time of unprecedented popu-

larity, it is fitting that we honor Gene Sarazen, whose rise from the caddie ranks to become one of the game's best players is truly inspiring," said Denis Griffiths, president of the society. "His record as a professional golfer is matched only by his undying commitment to the game

of golf through 10 decades."

He played and won the first Shell's Wonderful World of Golf match in January 1962 at St. Andrews and hosted the show that featured the best international players vying on the world's greatest golf courses. Sarazen helped explain to the public on this popular television show why a golf course was exceptional, noting the architect's expertise in creating the finest in golf experiences.

"The Squire," as many writers came to call him, was born in New York in 1902. He was just 20 years old when he edged Bobby Jones to win the 1922 U.S. Open. Later that year his win at the PGA Championship stirred the country, as reports of his rise from humble roots helped to popularize the game and instilled pride among millions of Italian Americans.



Continued from previous page

put the concepts that I have onto paper, then we can get exact quantities on excavations, piping, grassing, etc. Then we know the contractor is going to bid this thing according to these documents. In doing so, they'll be able to do it efficiently and the project won't cost as much money.

The counter to that argument is, you can't get small detail onto these drawings. But I contend that you can. We can build maybe 95 percent to design documents. Over a 200-acre site, that's pretty good.

GCN: You're a fairly accomplished player. You've been a scratch, right?

JE: Yes, but right now I'm a 2.5.

GCN: How much does that help or hurt you as an architect?

JE: That's a good question. I don't know that it helps that much. I think what it does is allow you to see all different spectrums of the game. As a reasonably good player, you play with other good players and see how they play. The trick is making sure you understand how everyone else plays: the women, the seniors, the disabled.

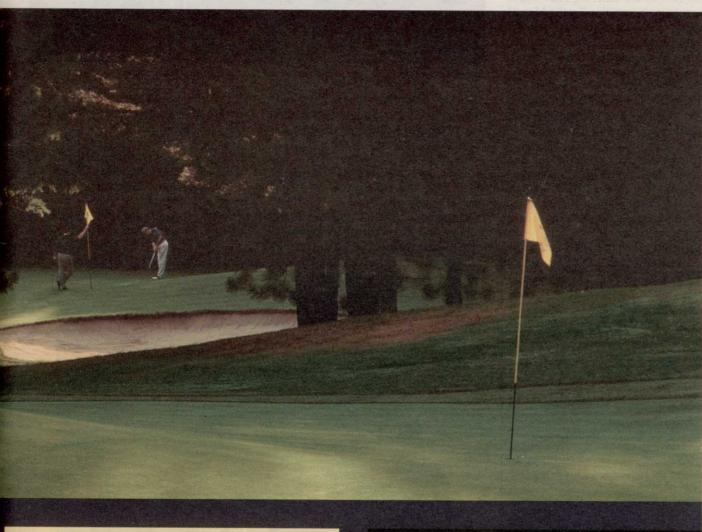
GCN: Are you more concerned with this because you're designing a municipal course?

JE: Maybe. I have been thinking about it a lot of late. We're really very close to being able to design a course that is accessible for everyone.

GCN: Is there a design style you enjoy playing but haven't yet been able to work in?

JE: When I was in Europe, [IMG] did a project that I believe is now open — the new course at Portmarnock [opened near Dublin in 1995]. Construction hadn't begun when I left, but I did the detail work there. That was a fun thing trying to route a course through the dunes. I would like to try my hand at another links design.

But the Sanctuary was a fun routing project, too. It was a struggle not to over-design the course because the site was so spectacular. That's typical design babble but in this case it's really true. The site was so great, I just tried to use the golf course as the accent.



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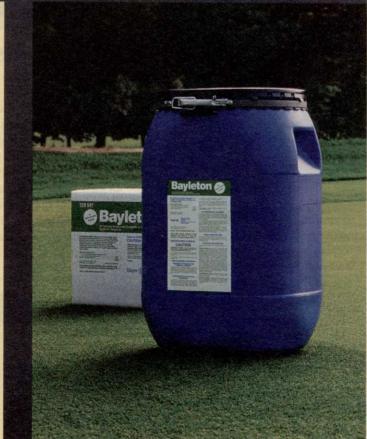
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## Metamorphosis: Nicklaus, Roe turn Superfund site into course

Continued from page 1

presented immense technical and engineering problems - problems tangled in a web of legal hassles, extraordinary safety procedures and a sense of (as Roe said) "doing something for the children."

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

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

"There are 100-year-old pictures that show not one blade of grass was growing on that 200 acres," said Kirk Welsh, director of field operations for North America for Nicklaus Design

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

Twenty-one holes of bentgrass tees and greens, fescue-bent fairways and fine fescue roughs are entering final stages of grow-in in preparation for the May 21 opening and Nicklaus' personal inaugural round sometime in July.

When grass started turning green people were driving off the road," said Sandy Stash, general manager for the Montana Division of Atlantic Richfield Co. (ARCO). ARCO bought the old mine from Anaconda Minerals Co. in 1977 and closed it down in 1980. Later, the federal government formed the Superfund and mandated that companies clean up toxic sites around the country. ARCO, not Anaconda Minerals, was stuck with the costs.

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

Faced with a \$60 million cleanup bill,



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

ARCO sought a better way out. Grabbing hold of an off-the-cuff suggestion of a golf course from the then-county manager, the company began several years of negotiations with the federal EPA. The struggle, she said, was convincing the state, EPA and Department of Justice that this was a good idea.

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

ARCO spent about \$15 million building

Old Works. It will be turned over to the County of Deer Lodge and operated by the local golf authority board.

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

Some parts of the work took twice as long as normal - two weeks instead of

Continued on next page

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#### Old Works

Continued from previous page

one to build a green, for instance. The course was shaped, lined,

capped and reshaped, and finally seeded or sodded.

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

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

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

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

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

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

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

"Thomas Turf Labs tested it out beautifully," Soller confirmed, "and it gives the course a really unique appearance.'

A number of waste bunkers (called "low-maintenance bunkers" on this Superfund site) give the course aesthetic flash as well.

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

"The idea," Nicklaus said, "was to put up signs at each hole to give a brief history for people to understand what's there... the historic period, how it was used, what it was used for, for people to read as they go. It's like a museum."

The result is a Nicklaus design that sits halfway between Glacier and Yellowstone national parks,

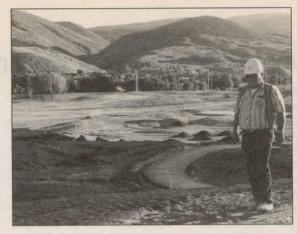
with a \$20 green fee.

The project, Nicklaus said, will lead to many jobs, plus income from hotels, restaurants and other businesses. And it saves ARCO \$15 million to \$20 million over the option of the Superfund cleanup.

"We have been very, very vocal," said ARCO's Stash, "that it has been a benefit to the community as well as saved us money over what the government could

"This was massive," Chip Roe said. "We're real proud of it. It's something our kids could look at. That's a reason we did it. You're making a mark. You tried to help the environment. That's what's nice about a golf course and this one in particular.

"Tom's real proud. It was a dream of a lifetime. I said, 'We should quit. We did the biggest and the best.'



Golf course builder Tom Roe stands at a teebox overlooking a portion of the former Anaconda Mining Co. property, which is now Old Works Golf

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## Huntley goes Scottish with Continental Ranch

MARANA, Ariz. - Construction is underway on The Links at Continental Ranch Golf Club, a new Scottish-style course being built as the focal point of Southwest Value Partners' 1,800-acre master-plans community northwest of Tucson.

Designed by Brian Huntley, the 6,950-yard, par-72 layout will be unique among Arizona courses in that it will closely

mirror the traditional links style of Scottish courses.

"We wanted to create something that would give our players a golf experience they can't get anywhere else in Arizona," said David Dolgen, managing director of Southwest Value Part-

The course will be managed by Pacific Golf Management L.L.C., an Arizona-based golf

company whose principals were involved in the development of the Raven Golf Club at Sabino Springs in Tucson.

The Links at Continental Ranch will feature wide, undulating fairways accented by tall stands of native grasses like Hilaria Belangeri and Purple Three-Awn, generous green complexes and forbidding pot bunkers.



Hale Irwin, second from right, looks over the site for the new Grand Southern Golf Course, under construction in Tunica, Miss. With Irwin are, from left, Bryce Swanson of Hale Irwin Golf Services, Russell Durbin of Landscapes Unlimited (the builder), and Stan Gentry of Irwin Golf

## Grand Casinos, Irwin team up

TUNICA, Miss. - Grand Casinos, Inc. is correlating golf with casinos - and involving Jack Nicklaus and Hale Irwin in two major developments.

Irwin is designing one of two courses here associated with Grand Casino Tunica, while Nicklaus is designing one of two courses at a project in Gulfport for Grand Casino Gulfport and Grand Casino Biloxi.

Work has begun on Irwin's Grand Southern Golf Course and the 18-hole track is expected to open next March because it will be sodded. "Lots of water, contours and sand" describes the design.

Laid out over gentle, rolling hills and with half the holes bordering lakes, the course will measure 7,000 yards. Landmarks will be an island green and a 600vard hole. Each hole will be themed with different flowers or trees.

Part of a \$27 million project, it will be a private facility for hotel and casino guests

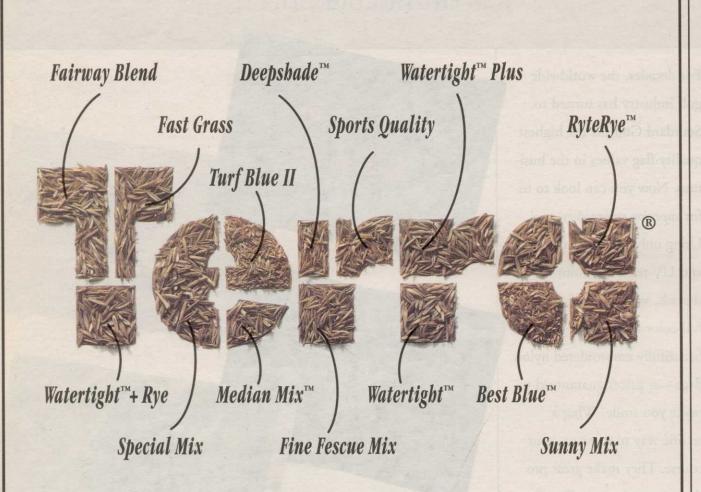
No date is set for the start of construction of the Nicklaus design. But it will be 18 holes and accessible to guests of the Grand Casinos. It is part of a project encompassing 1,750 acres.

#### **Belfair building** second course

BEAUFORT, S.C. - The developers of Belfair are breaking ground on their second golf course. As with the original Belfair course, Tom Fazio is designing this latest addition to the 1,100-acre private club community located here, five miles west of the Hilton Head Island Bridge.

The East Course at Belfair will be a par-71 layout measuring approximately 6,850 yards from the championship tees. Construction of the East Course began in January, with plans calling for nine holes to be completed this year and opened for play in the spring of 1998.

"We're really a year ahead of schedule," said J. David Everett, a principal in the Belfair development. "Originally, we had planned to start construction of the second course in early 1998. But we've decided to go ahead with nine holes now because of the accelerated real estate activity we've experienced."



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By MARK LESLIE

RAYETTEVILLE, N.C.—
The Methodist College men's and women's golf teams, dominant forces in Division III college competition for several years, will have a full 18-hole course to play this fall.

A new nine holes, to be incorporated as the 4th through 12th holes, are under construction, with a late-May or early-

### Methodist College teams to get full 18

June sprigging of turfgrass planned.

"We hope for limited play in the fall," said course architect Ross Forbes, who moved his Forbes Design Group offices here to concentrate on the project. have claimed several Division III titles in the 1990s, while the women have won national championships in the combined Divisions II and III competition. The school has a strong PGA program, with more than 200 students.

mixture. We're at the end of the sand hills, so we have touches of Pinehurst; and we have rolling land, so we also have touches of New England.

"It's got a lot of natural character as opposed to some other Fayetteville courses which tend to be pretty flat. A couple of deep ravines run through the site. The design plays off those natural features, moving as little earth as possible."

Methodist College Golf Club will measure 6,240 yards and play to par 70.

Forbes Design Group's new offices are located at 3771 Ramsey St., Suite 109-350, Fayetteville, N.C. 28311; tel. 910-488-4549.

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CIRCLE #125

### Trio forms GreenScape

ANN ARBOR, Mich. — Golf course designer Harry Bowers has teamed with architect Bill Farrand and landscape architect Leigh Thurston to form GreenScape Design, a new comprehensive golf course planning firm based here.

The company advertises GreenScape Design as a "readymade team of professionals," capitalizing on the fact that most golf projects require the combined efforts of two or more firms to supply the necessary skills—course architecture, landscape design, and clubhouse and support building architecture.

Bowers is an accomplished golf architect. "I'm a classic course designer," said Bowers, who started in the profession working for Robert Trent Jones, Sr. "But I don't try to force any philosophy on the client or the site. I like to let the land's natural features guide the design."

Bowers has worked with some challenging sites, especially in Michigan, such as The Rock (the aptly-named course on Drummond Island), the urban Inkster Valley course and Pierce Lake Golf Course in the farmlands near Ann Arbor. "City and county commissions are realizing that if they provide quality golf facilities, they can generate enough revenue to help fund the rest of their recreation projects," said Bowers.

Bowers' new partners are also strong in public projects. Thurston's landscape experience includes the restoration of the Michigan State Capitol grounds in Lansing and Ann Arbor's Parker Mill Park, which won a statewide design award in 1996. She and Bowers share credit for the City of Novi Recreation and Golf Course master plan, the project that introduced Thurston, Bowers and Farrand to one another a little over a year ago.

Architect of the original clubhouse at Travis Pointe Country Club outside Ann Arbor, Farrand enjoyed national recognition last year in Better Homes & Gardens for a residential renovation that earned the magazine's "Better by Design" award.

GOLF COURSE NEWS





### German development pushing through obstacles

Continued from page 31

The major construction obstacle is a regulation that limits any earthmoving on fairways to one meter up or down. Earth can be moved around greens, tees and bunkers, "but they basically don't want you to change the landscape," said Robinson.

Nevertheless, developers are turning some of the landscape into golf courses.

• RTJ II South Course is part of the private 36-hole Golf und Country Club Seddiner See. The developer, v.Bismarck Grundstucksgesellschaft M.B.H. & Co., opened the North Course, designed by Rainer Preissmann of Deutsche Golf Consult, last

· Hosel Golf Club in Dusseldorf, designed by Brit Simon Gidman, was built in 1996 and will open this year. It is an 18-hole private members course developed by DHC Bradford Ltd.

· Deutsche Golf Consult is designing four new courses and adding nine holes at two other 18-hole facilities - all of which it reportedly expects will open this year. The new tracks are the nine-hole Golf Club Michaelsberg in Cleebronn, 18hole Golf Club Wutzschleife in

Hillstett and Golf Club Noitzscher Helde in Leipzig, and the 27-hole Golf Club Gleidingen in Laatzen/Hannover. The ninehole additions are at Golf Club Heilbronn-Hohenlohe Heilbronn and Golf Club Oschberghof in Donaueschingen.

· European Golf Design, a joint venture design company of the PGA European Tour and International Management Group, is planning three separate 18hole courses in association with Golf Projekt Management GmbH in the Frankfurt area, as well as a 72-hole project near Berlin, with teaching academy and practice holes. The Berlin project will be developed in conjunction with three hotels and 500 houses and apartments

· von Hagge Design has a contract with a group of people to design a course in Frankfurt. The group has found a new property for the project, following a public outcry against the original site

Phillips described RTJ II's South Course as "a great golf course - a home run all the way around."

Golf und Country Club Seddiner See has housing, but it's only adjacent to three of the 36 holes

And designers were allowed the latitude to be able to create some lakes and streams "that take on a natural look," Phillips said. "It was a flat site and we sculpted the dirt into nice flowing lines that blend into the surrounds.'

The RTJ II project in Frankcalled Romerbrunnen, has opened a practice facility but is awaiting funding for the rest of the course, Phillips said. The developer, Hu.M, Golfplatz Grundstucksu.Berwaltungs-GmbH, will sell some form of memberships, "as they all do here," he said. Eighteen holes, it will play to a par 72 over 6,400 meters.

The doubling of golfers over the last seven years bodes well for these and other developments under consideration.

"Germany," said European Golf Design's Slessor, "is where France was 10 years ago in terms of the explosion in golf interest. But while projects dried up quickly in France, I don't think that will happen in Germany. There was never a solid base of players in France. People started playing, but their interest died off. It was really a fad.

"In Germany you have a solid base of players. You may be able to afford the \$5,000, \$10,000, or \$20,000 fee to join a course. But they won't let you play until you can pass a written and playing test and get your playing license.

While German consolidation

Continued on next page



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AKELAND, Fla. — Steve Smyers has been named Architect of the Year for 1996 by iGOLF, an internet online golf site. This second annual award was given to recognize golf's most outstanding golf course architect of the year.

At 43, Smyers follows 1995 recipient Rees Jones.

"It's become clear," said Brad Klein, architectural writer for iGOLF, "that Smyers is skilled at translating classical design themes into a modern idiom in a way that allows daily-fee golfers as well as private club members



Steve Smyers

a chance to experience traditional shot-making. He's technically h i g h l y skilled and has seen an awful lot of

the old courses — and that shows."

Klein cites three Smyers designs that have received "the kind of notice that assures Smyers will be a force to be reckoned with as a champion of traditionalist golf design" — Wolf Run in Indianapolis, Southern Dunes outside Orlando, Fla., and Chart Hills in Kent, England, which was recognized recently by Following the Fairways as the No.1 inland course in the British Isles — ahead of such famed courses as Sunningdale, Wentworth and Gleneagles' King and Monarch courses.

Recently, Smyers was also honored with an environmental

### Flint, Mich., signs up Childs

SYLVAN LAKE, Mich. — The city of Flint has awarded Don Childs Associates the contract for master planning and design services for its four municipal golf courses.

This relationship is designed to address improvements in playability, enhancement of maintenance procedures and overall course maintainability, liability concerns from current design standards, and improved shot values and the quality of the golfing experience.

### Germany

Continued from previous page

hasn't helped the economy and "fewer speculative projects have gotten off the ground lately," Slessor said, "solid projects with good studies can find financing."

And Robinson added that although the environmental movement remains powerful, "Like in the States, they are coming to grips with the fact golf is not all bad."

### iGOLF chooses Steve Smyers as its 1996 Architect of the Year

design excellence award for his work on an 18-hole Tampa, Fla. project for the founders of Outback Steakhouse. The award presented by the Southwest Florida Water Management District is given for resource regu-

lation, design excellence and superior cooperation and innovation demonstrated during the permitting of the Tampa project currently under construction.

Smyers' design on the Tampa site minimized the acreage of turf

grasses requiring intense maintenance and thus requires a decreased water supply. Instead, native grasses are used which not only require less maintenance, but also provide wildlife corridors and habitat areas while bringing contrast, definition and strategy to the golf holes.

"This type of positive and innovative approach to economic development and water resources management," said Deputy Executive Director Richard McLean, "represents a model for public and private interaction and can yield results that are beneficial to all concerned."

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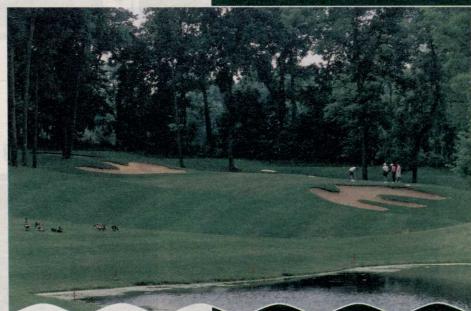
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### Dasher leaves Hills, goes solo

By MARK LESLIE

WINTER PARK, Fla. - His background encompasses 16 years and more than 40 golf course projects as a lead designer for Arthur Hills & Associates. His territory is "any point that's a nonstop airline flight from

The 225-yard 12th hole at city of Port Orange, Fla.'s Golf Club at Cypress Head, shows the elegant shapes designed by Mike Dasher while with Arthur Orlando." His philosophy is to build a golf course "that works with the land."

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

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

"I didn't get analytical. It just seemed like a good time. Art and I separated on a very amicable basis. He has some good young guys on staff and I think they will be able to pick up the slack.'

Dasher has been Hills' lead designer in the Southeast for years, getting "a lot of exposure to a lot of great work," he said.

He will continue involvement in certain Hills & Associates projects that are under way. Besides those, he has signed to do

his first solo design — a course that will be announced soon in the Orlando area.

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



to stay a one-man show."

In his designs, Dasher said, "my goal is to create a routing that works with the topography... And I have always felt strongly about routing to create a course that's walkable.

Speed of play is also important in his designs, Dasher said. That is one reason he places tees close to greens and designs those greens on the small side. Small greens speed up play and "make more interesting targets," he said.

He invests major interest in bunker style. "We've been doing the same basic bunkers - low-lying, flat-floor sand bunkers," he said. "I like those because of the feedback from clients, how well they hold up and are easy to maintain.

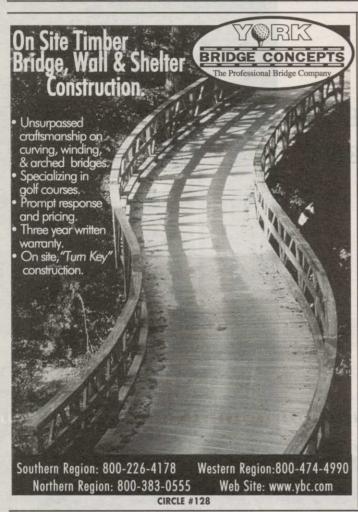
"Certain sites might call out for a more Mackenzie-style - abrupt, jagged Cypress Point-type bunkering. But on most sites the flat-floor features are more appealing and do a better job staving put."

He takes a cue from Donald Ross, who wrote that golfers shouldn't complain about bunker locations because "it is every golfer's duty to avoid them."

"I like, somewhere on the golf course, to throw in quirky things that make you wonder about them," Dasher said. "Like 'Why is that bunker there?' "

Among his favorite designs, Dasher said, are the municipal Cypress Head in Port Orange and Seville Golf Club in Brooksville.

'I spent a lot of time on Cypress Head," he said. "It gave the city something that works for them. It's got large greens because of a lot of play, but most greens are segmented into smaller targets. If you get on the wrong side of those greens you're not done yet. They can maintain it to high standards and yet it's very challenging."





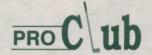
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### Tidewater's Tomlinson would repeat 'dream'

ORTH MYRTLE BEACH, S.C. - "It would probably sound good to say it was always my dream to design a golf course," said Ken Tomlinson, the tax attorney turned course architect and designer of Tidewater Golf Club & Plantation, the North Myrtle Beach layout that GOLF and Golf Digest magazines voted the best new public course of the year in 1990.

"But that wasn't the reason I designed the course. I did it because it had to be done and it just made sense for me to do it. Tidewater was a business investment.

We had a beautiful piece of land and knew a course would do well there. I was the designer, builder and construction superintendent because that was the only way the project would work financially.

Ken Tomlinson? Tidewater G&CC? 1990? Sound vaguely familiar? It should.

Tomlinson burst on the golf architecture scene with Tidewater seven years ago. The former tax attorney's only other design effort before that was Musgrove Mill in Clinton, which Tomlinson designed in 1987 with assistance from Arnold Palmer's design firm. Tidewater's success led golf writers to draw comparisons between Tomlinson and other famous amateur architects like George Crump (Pine Valley) and Jack Neville (Pebble Beach), both of whom enjoyed great success their first time out of the design blocks.

But since opening Tidewater, Tomlinson's name has disappeared from the golf design landscape.

The economy was pretty bad back in the early 1990s," Tomlinson recalled," and I've spent most of my time since then on the real estate surrounding Tidewater. I probably should have been building a course a year to cash in on my name recognition. But I had other responsibilities to take care of first."

Those responsibilities involved Tidewater's business side, which is the part of the golf industry Tomlinson, a self-described "numbers guy," truly loves.

"Any project has to make economic sense," he said. "I couldn't just design a course, move down the road with my architect's fee and not worry about whether a course survived financially. I like being part of the business decision whether to build a course or not.'

Now that roughly half of Tidewater's 1,000 lots have been sold, Tomlinson is ready to re-enter the architectural waters.

"We'll start a golf course in the Myrtle Beach area either this year or by next spring at the latest," Tomlinson said. "But there isn't a lot of great land for a golf course still available around here.'

By great land, Tomlinson means waterfront parcels with rolling topography requiring little earth moving. "Most of the remaining sites here are flat," he said, "with few ocean or marshland views. I have 20 sites I could build on tomorrow, but no great sites. If I moved a lot of dirt on a flat site and built an artificial-looking course, I wouldn't take any joy from that.'

His success at Tidewater has given him confidence in not only his own design skills, but also the ability of contractors with little or no golf course construction experience to build a superior product.

"There is a mystique about experienced architects and shapers," said Tomlinson, who worked at Tidewater with contractors and bulldozer operators who had never built a golf course. "I'm sure golf course architects and shapers sincerely believe what they are saying [about the importance of experience.

"I worked with amateur shapers at Tidewater. I trained them, explained to them what I wanted and we got a great course."

Tomlinson does believe an experienced superintendent is critical to a course's success. Tomlinson consulted with longtime Pine Valley superintendent Ed Stangler when he designed Musgrove Mill



Continued on page 41 Ken Tomlinson could be in demand as a golf course architect.



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CIRCLE #131



### Spin doctoring course design philosophy

As marketing unfriendly as it is to say your course is "hard" or, worse yet "easy," the kiss of death may be to label it "average"—the implication being that anybody could play it and have a reasonably good time doing so. Yawn...

But that's exactly what course

owners want. To pay off the massive investments they've made in building these properties, they must attract every kind of golfer good, bad and the great majority flailing away somewhere in the middle.

So, in an attempt to spice up their rhetoric and earn their paychecks, architects and public relations firms have come up with a number of semantic variations that basically say a course can be hard for the good golfer, easy for the bad, and a good time for just about anybody.

While we appreciate their literary efforts, as word-pinching editors we sorely want to boil these majestic, 50-word descriptions down to "Everybody will like this course."

Someday.

In the meantime, here are some of the more imaginative course-for-one-and-all write-ups we've picked up along the way:

· Apress release on Bealsville, Md.'s Four Streams National Golf Club, a Nick Price/Steve Smyers design scheduled to open in spring 1998: "The Price/ Smyers Design Group plans the golf course to challenge the shotmaking strategy of the single-digit handicapper, and to be non-intimidating to the mid- and high-handicapper."

· Another release on Chantilly, Va.'s Fred Couples/Gene Batesdesigned Westfield Golf Club scheduled to open in early summer 1998: "It will be fun and accessible for new golfers, yet provide terrific challenging options for the more-experienced golfer."

· Architect Jack Swayze on partner Steve Elkington's first complete golf course design, Mt. Arayat Golf Course, an 18-hole private country club in Arayat, The Philippines: "It will tax the strong player and be friendly to the novice."

· From a newspaper clipping describing Jack Nicklaus-designed Vermont National outside Burlington, scheduled to open in 1998: "The course is expected to appeal to both serious golfers and more casual weekend strollers."

· According to the developer, an Arnold Palmer-designed course to be built in India, "will be designed to provide a challenge to good golfers, without being intimidating as well as fun for beginners.'

· This from British architect Jonathan Gaunt regarding his new Redlibbets course in Sevenoaks, Kent, England: "It is a private course 6,700 yards long which poses a challenge to experienced golfers but accommodates those of lesser ability - if they are fast learners!"

· "It is our goal," said J. David Everett, a principal in the Belfair development near Hilton Head Island, S.C., where a Tom Fazio course opened last year and another 18 is under construction, "and it's certainly Fazio's goal, to make the East Course equal to, if not better than, the first course. From the championship tees, it will be a difficult course. We believe that, for good players, a great course needs to present a certain degree of difficulty. But, like the West Course, this course will be very playable from the middle and forward tees. Creating that balance between difficulty and playability is not easy."

Certainly not.

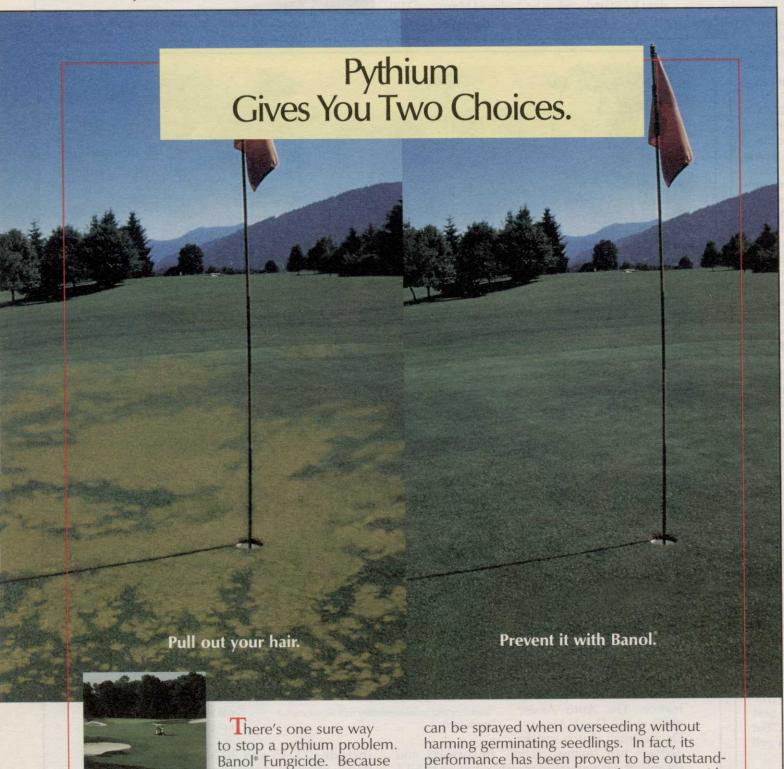
### **Tomlinson**

Continued from page 41

and hired Will Holroyd, who has been head superintendent since the course opened.

Steve Long was superintendent at a course Tomlinson belonged to in Columbia. Long was one of Tomlinson's first hires when construction began at Tidewater, where Long has been head superintendent for eight years.

"Superintendents are the main guys," Tomlinson said. "I've always had the greatest respect for them.'



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### BRIEFS



TROON PROMOTES PAIR

SCOTTSDALE, Ariz. — Scott Heideman has been named director of



Scott Heideman

manager at Talking Stick Golf Club, located on the Salt River Pima-Maricopa Indian Community near here. Talking Stick is Troon Golf's new-

golf and facility

est Arizona golf project and features 36 holes of Bill Coore/Ben Crenshaw-



lack Elliott

designed golf that will open Nov. 1. Jack Elliott has been named director of golf and facility manager for Troon North Golf Club. Elliott most recently served in the same

capacity for Legend Trail Golf Club in Scottsdale, another Troon Golf facility.

### NGCOA ELECTS BOARD

TARPON SPRINGS, Fla. - The National Golf Course Owners Association recently elected its board of directors for 1997 at its 15th annual conference here. Three new board members were Ray Finch III of Emerald Dunes in West Palm Beach, Fla., Frank Romano of Scenic View Country Club in Slinger, Wis., and Mike Protos of Chestnut Hill Country Club in Darien, N.Y. Re-elected president was Cliff Rampy of Treeline Golf Club, Inc., in Tomball, Texas, and Dan Clark of Willow Creek Golf Course in Des Moines, Iowa, as vice-president. Other officers re-elected were Bill Stine, Kissimmee (Fla.) Bay Golf Club, Kissimmee, Fla., secretary, and Jerry Hollingsworth, Singing Hills Golf Club, El Cajon, Calif., treasurer.

### NO. CALIF TRACK NAMES MANAGER

BURLINGAME, Calif. — Tom Sullivan has been named operations manager here at Crystal Springs Golf Course. He will oversee golf operations and food & beverage services, while working with course superintendent Raymond Davies to "supervise the physical rejuvenation of Crystal Springs and establish a first-class operation across the board," Sullivan said. CourseCo, a Northern California-based management and development firm, operates Crystal Springs and four other courses.

# Legacy seeks to keep owner involved in management

By J. BARRY MOTHES

ELLINGTON, Fla. —
Originally, Steven Braley
thought he wanted to start a
golf management company for the
newest phase of a successful golf
industry career that has spanned more
than 20 years.

He quickly decided, however, that that idea was too simplistic and restricting. Braley - who worked for Landmark Land Co. for nearly 20 years alongside some of the most active, visionary and successful golf management executives and became vice president himself — did want to manage golf courses. But he wanted to do it in a way that directly involved owners and operators in a hands-on, give-and-take, learning relationship. And so, the Legacy Golf Group, a golf management consulting firm offering everything from nuts-and-bolts, day-today management plans and construction supervision to clubhouse and golf course business plans and financial evaluations, was born.

"We're not a typical management company," Braley said. "We're an alternative to the stereotypical managment-type company. I'm not really pursuing long-term managment contracts, that's not what I set out do do. My services diminish the longer I'm involved with a project and the more the owner becomes comfortable and understands the business."

Braley, who is also a former professional golfer, launched the Legacy Golf Group in 1994. His first project was the Virginia Oaks golf course outside Manassas, Va., which opened in the spring of 1995.

"I got a call one day from P.B. Dye and Brian Bowles and they were looking for professional managment

Continued on page 49



The Oasis Golf Club (above) recently signed OB Sports to manage the 45-hole complex.

### OB Sports strengthens itself in Vegas

MESQUITE, Nevada — OB Sports' recent agreement to manage the 45-hole Oasis Golf Club has solidified the Portland, Ore.-based firm's position as one of the leading, if not the leading management company, in the Las Vegas market.

WSR Inc., the parent company for Si Redd's Oasis Resort Hotel and Casino and the Mesquite Vistas planned residential community, selected OB to manage the project's golf operations. OB Sports already owns and manages two upscale public golf properties, The Legacy and Angel Park in Las Vegas with several similar properties on the West Coast.

The Oasis Golf Club has received national attention for its Arnold Palmer-designed course, which was named in the top five new resort courses in 1995 by *Golf Digest* magazine. The Oasis Resort has 1,000 hotel rooms and a 300-room golf village, which OB plans to use to help promote stay-and-play golf programs.

"We felt their [OB Sports] expertise in high-end, resort-style operations and their extensive network in Las Vegas made them a perfect fit for our management needs," said WSR Inc. President Alan Green.

OB named Van Batchelder project manager for The Oasis. For the past nine years, Batchelder served as director of golf for Los Callaberos Golf Club in Wickenburg, Ariz.

"We view The Oasis as a very prestigious project deserving of a golf professional familiar with the Southwest market, and one who will produce the premium level of services and conditions desired by The Oasis and OB Sports," said OB Vice President of Southwest Operations Phil Green.

Green and Bob Marshall were recently named to their vice president of operations posts. Marshall will oversee the development and operations of all Pacific Northwest facilities while Green will assume a parallel role for all properties in the Southwest.

Marshall was an original co-founder of OB Sports along with current president Orrin Vincent (Orrin and Bob = OB), and has managed all operations for Teton Pines Golf Club in Jackson, Wyo., for the past 11 years.

"Bob and I remained best friends even though he stayed with Teton Pines under the new ownership," remarked Vincent. "Now that we have two operations in Portland, and are

Continued on page 47



MANAGEMENT FIRMS LISTED

LinksCorp, a golf course acquisition and management company based in Northfield, Ill., recently opened The Country Club of Arkansas, a daily-fee layout in Little Rock, Ark., and one of the courses found in our updated list of management company-operated facilities on pages 50-51.

### Intrawest Co. takes golf to new heights

By PETER BLAIS

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

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

The British Columbia-based "mountain resort company" as it likes to be called, plans to open a Doug Carrick-designed 18 at Panorama ski resort in

Continued on page 46



#### By VINCE ALFONSO

A couple of months ago, I told you about the most fantastic salesman I have ever met — except for my Dad, Vince Sr., of course. His name is Tom Tomacello. In that article, I told you how Tom made customers feel acknowledged, valued and appreciated. Well, today you get some details from "The Fundamentals of Salespersonship and Marketing

### Time for a refresher course in salesmanship

101" with Tom Tomacello.

"First and foremost, you never, I repeat, never say 'May I help you?' to a customer."

"Why?" I asked.

"It's simple," Tom replied,
"They can say no! Then what do
you do?"

Tom handled it this way. He always introduced himself and

then complimented the customer either about their hair, tan, eye color, beard, shirt, slacks, skirt, shoes, hat, etc.

He would walk out from behind the counter (something unheard of in golf shops of the 1970s), extend his hand and flash his broad smile. The greeting would go something like this:

"Hi, I'm Tom Tomacello. I don't believe we've met."

The customer always gladly shook Tom's hand and always gave their name to Tom in return. He would repeat their name, obviously seeking their approval of his pronunciation, and often times, he would ask for the spelling. Immediately fol-

lowing the "Name Game" Tom would compliment them.

Now, don't get the wrong idea. Tom never came off like some bogus "flim-flam" man. His compliments were genuine and insightful and, of course, different for each customer.

Lesson No. 1: People love to be acknowledged. They love to hear their name. They love to hear nice things said about them. Don't you?

Tom might say something as simple as, "I love that shirt! What brand is it? Is it new?"

The customer was always glad to take the compliment and answer Tom's questions. This would immediately kick off a conversation about golf shirts or apparel in general and, before long, the customer was buying a shirt. Frequently, the customer bought more than one, especially after Tom had announced his instant 10 percent-off sale on any second shirt and his 20-percent off sales on any third shirt purchased at the same time.

Lesson No. 2: You see, as the customer talks, you learn what motivates them to buy. They tell you whether they like buying sale merchandise, new arrivals, 100-percent cotton, soft collars, etc. Therefore, you are able to guide them to the appropriate place in your shop to meet their needs

When someone asked for a sleeve of golf balls, Tom would always present them with a dozen at a special price. When I asked him why he did this, he said, "The only reason you don't sell more dozens is the simple fact that you never ask your customer to buy that way. You have got to 'Suggestive Sell' your dozens at competitive prices. That way, your customers will never have to go to a discount store again. Think about it. Why would they do that, if they could buy them at virtually the same price at the first tee?'

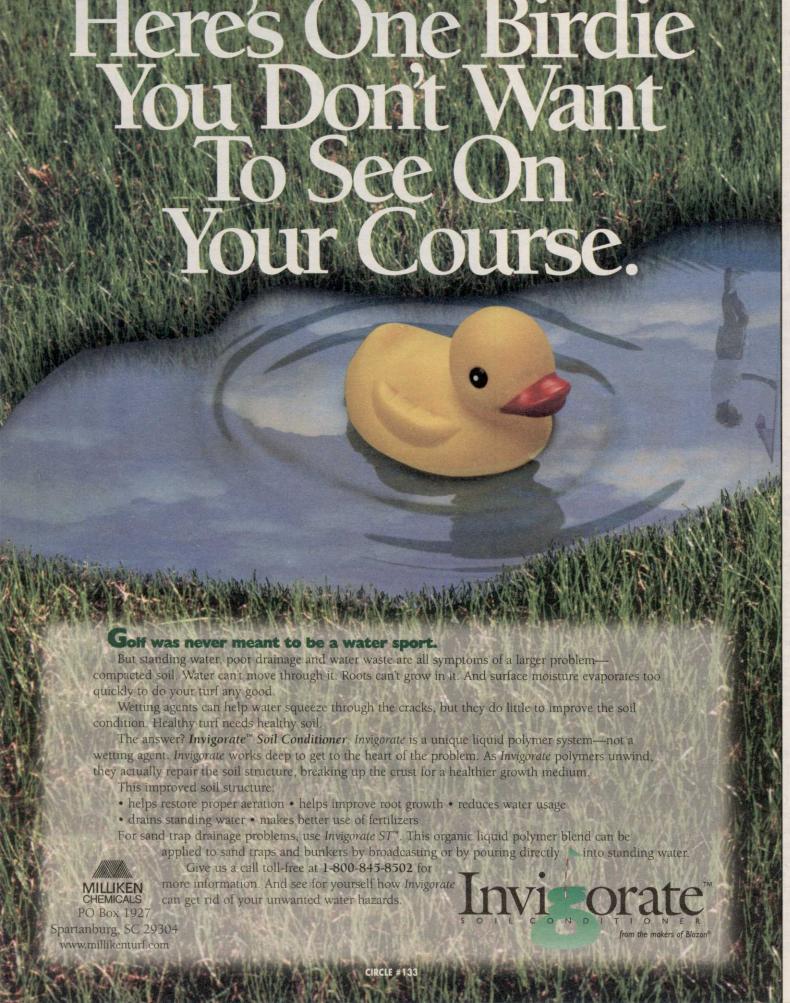
Lesson No. 3: The golfer has to come to the first tee via our golf shops not via the discount store.

In my earlier article I told you Tom was my Pro-Shu salesman. Shoes were definitely his specialty. This guy could spot worn spikes, cracked leather, bunions and tight-fitting shoes a mile away. He would say, "If we can fit 'em , we can sell 'em."

He advocated few styles but deep size runs. And he always offered 20-percent off on a second pair exactly the same as the first pair. He would explain, "You

Continued on next page

Vince Alfonso Jr. is a 40-year golf industry veteran, president of Alfonso Creative Enterprises Inc., and owner of Kimberling Golf Course near Branson, Mo. He can be reached at 417-739-4370.





### Changing demographics lead owners to redesign restroom facilities

very golfer who has desperately needed a restroom while on the course will appreciate Bill McGrath's 50th birthday gift to his wife, Mary Ann.

Bill commissioned the construction of a brand new, fully equipped bathroom situated near the 10th hole at Evanston Golf Club, a private club in Skokie, Ill. Bill decided on the unique gift after hearing his wife complain about the lack of restroom facilities on the venerable club's back nine.

The tudor style, skylighted building includes separate facilities for male and female members, all of whom are welcome to share in Mary Ann's birthday present.

Although unusual, Bill's gift selection calls attention to an increased need for restroom facilities at golf courses throughout the United States. The demand is being fueled by two incontrovertible demographic indicators.

John Steele is a writer with O'Connor Communications Inc., a Northbrook, Ill., public relations firm that represents Service Sanitation Inc.

One is the tremendous increase in the number of women taking up golf. According to the National Golf Foundation, 21 percent of all golfers are women and represent 38 percent of all new golfers. Understandably, a quick trip to the bushes won't do. The growing percentage of women golfers calls for a greater presence of clean, conveniently located restrooms that provide basic amenities such as sinks with running water, mirrors and proper lighting.

The other factor is that Baby Boomers, who are the fastest-growing segment of the golfing public, are, well, getting older. Invariably, one symptom of aging is that nature tends to call more frequently. According to the U.S. Bureau of Census, by the year 2000, 47 percent of the U.S. population will be 45 or older.

The rapidly shifting demographics have had an impact on Indian Lakes Resort, located in Bloomingdale, Ill. The posh resort offers additional amenities, such as restrooms, to satisfy its changing clientele. Gene Thompson, Indian Lakes superintendent, perceived the need for additional facilities as far

back as 1989.

"The majority of our business is corporate outings. Over the past decade, I've seen a dramatic increase of women executives participating in these activities," said Thompson.

During the season, Thompson leases 14 portable restrooms which are dispersed throughout the resort in areas that include both courses, picnic areas, and softball and volleyball fields. Thompson also places several of the units near a large outdoor tent which hosts special events and corporate outings.

"When most people hear 'portable restrooms' they tend to visualize those cramped plastic monoliths that are often found in construction sites," Thompson notes.

"In fact, the restrooms available today are a far cry from the portable potties of the past."

Rich Vegter, vice president of Service Sanitation, Inc., of Gary, Ind., concurs with Thompson. Service Sanitation leases and services portable restrooms to courses throughout the Midwest, including Indian Lakes.

"The portable restrooms have

improved in quality substantially over the years," said Vegter, adding, "Today's units are designed to be more modern and visually less obtrusive, with interior amenities that you would expect to find in someone's home.

The Signature Series units that Service Sanitation provides Indian Lakes boast a modern design with 20 percent more interior space, flushing tanks, sinks with running water, and paper towel and soap dispensers. The unit also includes a mirror, natural translucent lighting and even a coat

Thompson finds that leasing restroom facilities is preferable to constructing permanent sites. "With the Midwestern climate, it doesn't make economic sense to incur the high cost of building permanent restrooms that are only in use for six or seven months out of the year," he said.

Service Sanitation is one of the restroom providers that maintains the washrooms on a regular basis, which saves time and labor.

"The facilities must be kept clean at all times and be serviced regularly," Thompson stated. "The public perception is that portable washrooms are dirty, so we want to be certain that we overcome that misconception."

Vegter advises that, when soliciting bids from companies providing portable restrooms, course superintendents should take the time to inspect the units. He recommends they consider the quality of service as well as the unit cost when soliciting bids.

Vegter's company offers a diverse line of restrooms ranging from the Signature Series all the way up to the Mirage, a mobile trailer that features marble sinks, air conditioning and heat, flushing toilets, large mirrors and stereo music. It is excellent for outdoor parties and events.

### Salesmanship

Continued from previous page

like 'em, they fit, you'll get more than twice the wear out of two pairs by wearing them alternately. And, besides all that, you're saving money.'

They usually bought two pairs of golf

Lesson No. 4: Hire Tom Tomacello or his clone!

To some people, categorizing these simple lessons as 21st century salespersonship and marketing would be inappropriate. But, to fail to identify these lessons for what they are - fundamental tenets of good salespersonship and marketing - would be equally inappropriate.

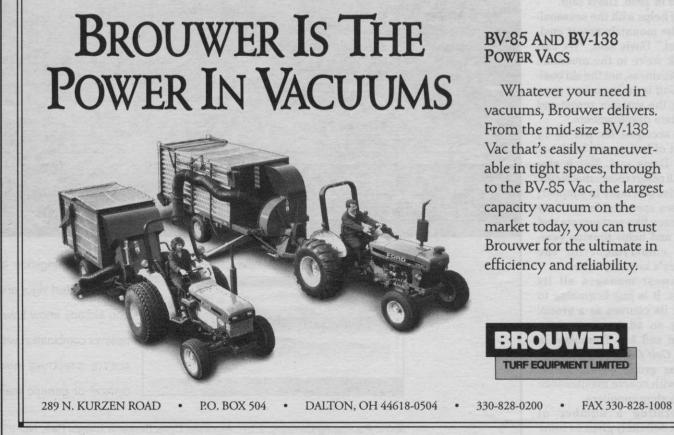
The fundamentals of grip, stance and posture are the bedrocks of the game of golf. Try to play the game well without them. You just can't do it.

Sales and marketing are no different. That's why I'm sure you enjoyed taking our refresher course, "The Fundamentals of Salespersonship and Marketing

#### ACKERMAN NAMED GOLF DIRECTOR AT OHIO'S QUAIL HOLLOW

PAINESVILLE, Ohio - Danny Ackerman has been named Quail Hollow Resort & Country Club's director of golf. Ackerman will direct operations for Quail Hollow's Devlin/von Hagge Course and the newly-opened Weiskopf/Morrish Course. Prior to coming to Quail Hollow, Ackerman served 12 years with the Pinehurst Resort & Country Club in North Carolina.

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### MANAGEMENT

### Golf said to lag behind in management innovation

By ANDREW CORNESKY

Despite the need to prepare for the new customer by becoming more flexible and responsive to change, managers of many golf and country clubs still live in the past. They resist innovation. In fact, most industries adopt new management practices at least twice as fast as golf. Golfand country clubs are probably in the same position as our automobile industry in the 1950s: They believe they are the only supplier of the desired product, so they do not have to be so concerned about change.

In our travels we had the chance to study many golf clubs. We made a list of 77 Total Quality Management (TQM) items that have been adopted by our best industries, i.e., Ford Motor Co., Xerox, Proctor & Gamble, IBM, Apple, etc., and compared them to 136 golf and/or country clubs. For example, the list included:

- 1. Your facility has posted a clear mission statement for all to see.
- 2. Your facility has a quality

manual that encourages employee initiative, self-directed responsibility, quality teams, and continuous improvement.

3. Your standard operating procedure includes methods to communicate clearly and regularly the expectation that all processes and procedures exist to help all stakeholders (employees and customers) develop to their full potential.

4. The manager conducts research and gathers data to do systemic planning to anticipate problems associated with meeting the club's objectives and to correct the problems before they occur.

5. You compare your performance to the club's where the performance of employees is Continued on next page

Andrew Cornesky is vice president of research and development of Cornesky & Associates and a total quality management expert.

### Intrawest

Continued from page 43

British Columbia and a Cal Olsen layout at Mammoth Mountain, California by July of 1998.

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

Intrawest entered the golf business in 1995 with its purchase of West Virginia's Snowshoe ski resort and its Hawthorn Valley Golf Course. The Gary Player-designed layout was rated the second-best course in the state by *Golf Digest* magazine, Davis said.

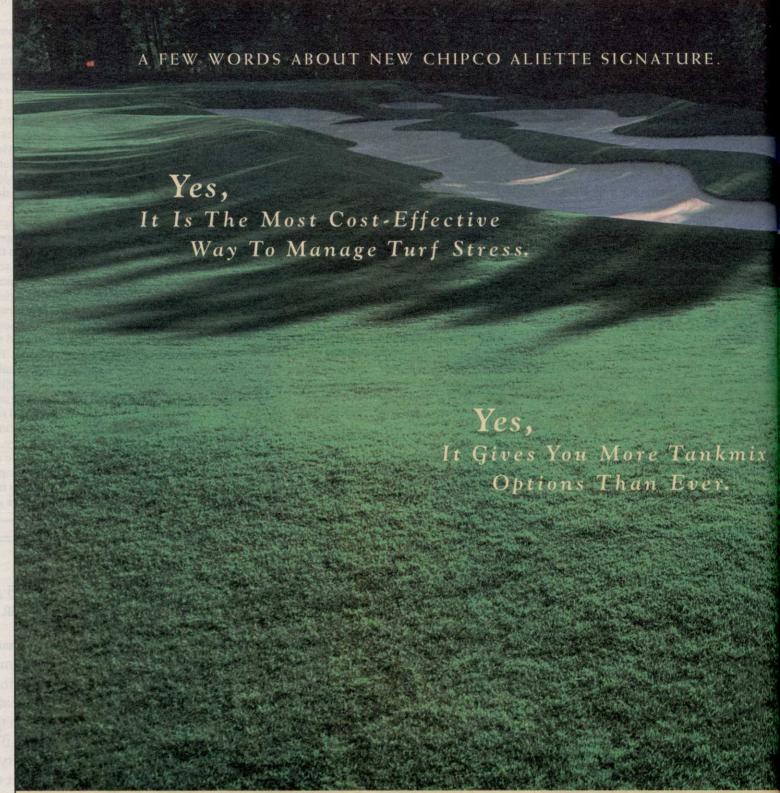
Last year Intrawest purchased Stratton Mountain in Vermont and opened Le Geant at Mt. Tremblant 90 minutes from Montreal. Stratton has a 27-hole, Geoffrey Cornish-designed course that is the former site of the LPGA McCall's Classic. Le Geant is a Tom McBride 18 that placed second among Golf Digest's best new Canadian courses in 1996, Davis said.

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

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

Intrawest manages all its courses. It is just beginning to market its courses as a group, placing an ad for Snowshoe, Stratton and Mt. Tremblant in April's *Golf Digest*. Davis is negotiating group buying agreements with course maintenance and pro shop suppliers.

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



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### Cornesky

Continued from previous page known to be superior.

In our study we did not or could not identify when a facility adopted one or more of the items, but probably should have. We don't contend that all 77 items are useful to all clubs. Even clubs that competed aggressively for members or customers were no better in adopting these TQM procedures than clubs that had virtually no competition. One might think the stress in clubs with declining memberships or small revenue reserves would induce innovation quicker. This was not true.

One might think innovations that required significant capital would be adopted more slowly than those that did not. Again, this was untrue. We could not find any correlation, but then again, our sample size is rather small.

One might think that clubs where either the managers had a higher education, or the members had a higher education, and/or both the manager and members had advanced degrees would be most likely to implement TQM procedures. Again, no correlation.

Why is the pace of innovation in golf so slow? Perhaps they are insulated from competitive pressures that would force them to stay on the cutting edge of good management in attempts to please the stakeholders. Each facility differs from all others. Some are more convenient for a certain group of stakeholders. Others have a more prestigious atmosphere and some degree of market power that enable them to resist the competition. They can draw from a larger market area. Some have their markets assured, so they are not particularly responsive to innovation.

It appears, therefore, that golf and country clubs are indeed insulated from many competitive pressures. But when either the supply of clubs begins to meet and exceed the demand - and this will happen within the next five years — or when the facility in an area begins to take a TQM approach like the Japanese automobile industry did in the 1960s, the playing field will be changed.

No longer will facility managers operate reactively. Their agendas will not be molded by who screams the loudest. Short-term problems will not be as important as the large picture.

A TV ad for an oil filter says, "Pay me now, or pay me later." I say, "Innovate and use TQM principles now, or suffer later.'

### **OB Sports**

Continued from page 43

pursuing several possibilities in Seattle and other prominent Western markets, we both knew it was the right time for him to rejoin the company.'

Green, who has managed OB's Angel Park Golf Club in Las Vegas for the past 18 months, is a former president of the Southwest Section PGA. In 1994, he was named the section's Golf Professional of the Year while serving as director of golf at Club Terravita in Scottsdale, Ariz.

In other OB Sports Golf Management news, Bill Campbell has

been named vice president of construction a n d agronomy, and Stacey Little has been promoted to di-



Phil Green

rector of merchandise.

Campbell was instrumental in the redesign and construction of Edgewood Tahoe along with Vincent back in the late 1970s and has worked in various capacities for OB Sports since that time. He also served as superintendent for Sahalee Country Club, host of next year's PGA Championship, from 1979-1988.

Little has coordinated the buying and golf shop presentation for The Legacy Golf Club since 1990 and now oversees the longterm direction and philosophy for all OB golf shops.

At John Fought Design, the golf course design division of OB Sports, Todd Schroeder has been hired as a design associate. Schroeder's background includes three years of experience with Wadsworth Golf Construction, where he supervised key areas of construction including Rush Creek Golf Club in Maple Grove, Minn., a course Fought co-designed along with Bob Cupp.

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### Superintendent to GM called natural move

By PETER BLAIS

In terms of expertise, superintendents are the most logical people to be the general manager at one or several golf courses, according to Scott Nissley, director of operations for three of Meadowbrook Golf Group's Chicagoland courses.

"The person who can provide a quality

regal Grown

golf course is a valuable individual," Nissley said. "The superintendent is the best-qualified person to do that."

But golf pros and food and beverage managers usually get the high-level jobs because, in their drive to provide perfect conditions, superintendents often forget the need to generate profits and maximize return on investment for the course owner while providing a "total recreational experience" for the golfer.

Nissley need only look at his own situation. At each of his three courses, the on-site leader (the equivalent of the course general manager) is the head pro. And yet, their boss (Nissley) is a long-time superintendent.

"It never occurred to me that I couldn't do this job," Nissley said. "I've had to admit there was a lot for me to learn, which isn't easy for someone in his 40s. But I've learned a lot about insurance, food and beverage, marketing, taking green fees and working with customers."

While growing up on the family farm in Lancaster, Pa., Nissley worked sum-

mers at nearby Indian Springs Golf Course, later renamed Four Seasons. Armed with a bachelor's degree and an industrial arts major from Millers-ville State College, he taught high school for a half year before golf lured him back to Four Seasons. He worked on the grounds crew and as assistant superintendent for two years before being the state of the seasons.

tendent for two years before being named head superintendent in 1976.

Nissley remained at Four Seasons through 1988, working for three different owners during that time and extensively upgrading the course. The Oakbrook (Ill.) Sports Core, operated by the Village of Oakbrook, hired him as director of golf to oversee Oakbrook Golf Course (GC).

"It never occurred to me to be something other than a superintendent," Nissley said. "I wanted to do more construction, be involved with more complex projects and be where things were happening. That's what brought me to the Chicagoland area. It was a way to get to where golf was king. Professionally, I just needed to leave Lancaster and this provided a lot of solutions."



cott Nissley

The year before Nissley's arrival, floods drowned nine holes of Oakbrook GC and neighboring Butler National, longtime home of the PGA's Western Open. Butler and Oakbrook combined their dry holes to make an 18-hole track for that year's Western. The village brought Nissley aboard to re-

store the flood-ravaged nine, oversee the maintenance contract with the private company then maintaining Oakbrook GC, and determine whether to continue the maintenance contract.

Nissley determined the village would be better off operating the course itself. He hired a crew, built a new maintenance facility, dug irrigation wells, installed cart paths, improved drainage and renovated landscaping in line with the original plans drafted by architect Roger Packard.

The DuPage County Airport Authority was planning a golf course and hired Nissley as a consultant in 1989 and as a full-time golf director in 1990. Nissley oversaw construction of Prairie Landing Golf Course, the Robert Trent Jones Jr.-designed layout that opened in 1994 and was named to *Golf Digest*'s Top 10 New Courses You Can Play in 1995.

Nissley became Prairie Landing's general manager in 1995, about the same time the airport authority signed a management consultant agreement with North American Golf (NAG). Meadowbrook purchased NAG in 1996 and named Nissley director of operations of three Chicagoland courses — Prairie Landing, Red Tail Golf Club and The Course at Aberdeen (set to open in June).

"One of the main things I'd like to do is try to alleviate the antagonism that exists between management companies and superintendents," Nissley said. "I want Meadowbrook to be a company that superintendents want to be a part of. A superintendent can be and have a part of the action here, something that's difficult at a one-owner course."

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### Owners' association enters on-line world

CHARLESTON, S.C. — The National Golf Course Owners Association recently introduced its home page on the Internet.

The Website, which can be found at http://www.ngcoa.com features information about the association's upcoming events and member services, including publications, conferences and trade shows, the Smart Buy Purchasing Program, and more. There are also selected articles from *Golf Business* magazine and a "user-friendly" membership application.

Plans include a listing of NGCOA member courses, a secure chat area or bulletin board, on-line surveys, and hyperlinks to home pages of member courses and Smart Buy suppliers. "These links will make it easier for owners and operators to navigate the web and get the greatest benefit for the least amount of time and effort," said Jim Bailey, NGCOA membership director.

One addition that is near completion is "learning-links" for determining insurance needs. The purpose is to help owners and operators learn about risk management and how to lower insurance costs.



### Legacy

Continued from page 43

help on a course in northern Virginia near Washington, D.C.," Braley said. "I came on as Virginia Oaks was 75 percent finished and helped them complete the course. I basically opened the golf course for them and ran it for two years."

Virginia Oaks has become a successful, semiprivate facility on Lake Manassas overlooking the Robert Trent Jones National, where the first two Presidents Cup comeptitions have been staged. Today, as he envisioned, Braley is involved "only on a consulting basis," checking in by telephone and visiting the course a few times a year when and if needed.

Since then, the Legacy portfolio has expanded around the south, up the Atlantic coast, into the Midwest, and into south Texas. Legacy was recently selected to manage two, 18-hole golf courses in Maryland's Eastern Shore market for the Ruark Family Trust. Rum Pointe Seaside Golf Links, near Ocean City, Md., is a new P.B. Dye and Pete Dye daily-fee design overlooking Assateague National Seashore Park with dramatic bay views. Rum Pointe will open to the public this month. Braley, who got involved about halfway through construction of the course, is now consulting on setting up the clubhouse and developing an overall business plan for Rum Pointe.

The other Ruark Family Trust-owned course that Legacy will serve as management consultant for is Nutters Crossing, a semiprivate course designed by Ault, Clark & Associates that opened in 1990.

"I find there's much less conflict between my organization and the owner than you often get with a typcial management arrangement," Braley said. "In my scenario, we're both on the same page."

Moving into the Midwest, Legacy is managing the construction of a new 18-hole public course for the city of El Reno, Okla., a western suburb of Oklahoma City. P.B. Dye and Bowles will design the \$4 million project. There are also hopes for a new project in south Texas.

Not all of Legacy's projects are from the ground up. Braley and Legacy were involved in the purchase and \$2 million renovation of the former Calussa Country Club in Miami into what is now known as the University Country Club, a semi-private layout that has become the official club for the University of Miami for social and alumni functions. The University Country Club, which GOLF COURSE NEWS

reopened last September, is also the home course for the University of Miami's golf team.

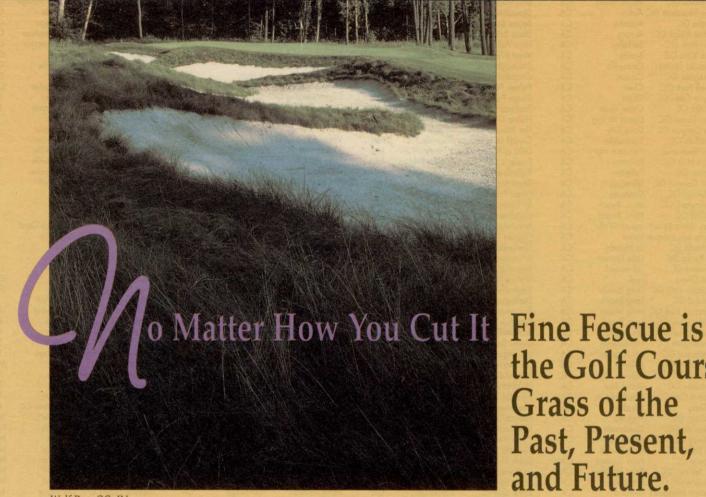
"I find most people are looking for long-term management situations that exclude input from the owner," Braley said. "I think there's an untapped market of people that want to be involved and are smart enough to know that they need some guidance to learn the business, but they enjoy golf and the golf business and they want to be involved."

Beyond day-to-day, week-toweek, or month-to-month management consulting, the Legacy Golf Group also offers what Braley calls "asset managment" services for absentee golf course owners, like banks and investment houses, who find themselves

owning a golf course, but may not neccessarily know much about the golf business. Legacy recently handled an evaluation and study of a semiprivate, 18-hole course in Princeton, N.J.

"I get the greatest pleasure helping people avoid the common mistakes in the business," said Braley. He mentioned quality hiring

procedures as an example of the kind of important, but often neglected, detail that can make a business successful. "You want to make sure your project employees are the right employees rather than maybe relying on an acquaintance. You should interview multiple people, ask the right questions. You want to get it done the correct way the first time."



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Management	comp	any pro	perties		American Golf Corp Silverhorn GC	. (cont.) San Antonio	TX	ClubCorp Diamante	Hot Springs	AR	ClubCorp (cont.) Las Colinas	Irving	TX
		nerican Golf Corp.			Sugar Creek CC Cottonwood Creek	Sugarland Waco	TX TX	Gainey Ranch GC	Scottsdale	AZ	Falcon Point Club at Falcon Point	Katy	TX TX
American ClubServ Rosedale G&CC Bradenton	Leon FL A	Crescent Oaks	Tarpon Springs	FL	Seven Springs GC	Chesapeake	VA	Bellflower Carmel Valley Ranc		CA	Kingwood CC	Kingwood	TX
Venice G&CC Venice  American Golf Corp.	no off	Binks Forest GC Brookstone CC	Wellington Acworth	FL GA	Ocean View Muni Reston Nat'l GC	Norfolk Reston	VA VA	Cathedral Canyon Desert Oasis	Cathedral City	CA	Kingwood Cove Cimarron CC	Kingwood Mission	TX TX
North Hills CC Sherwood	AR	Alfred Holmes GC	Atlanta	GA	Honey Bee GC	Virginia Beach	VA WA	Coto de Caza G&R	CCoto de Caza	CA	Mission Dorado	Odessa	TX
Desert Lakes Bullhead Cit Tatum Ranch GC Cave Creek		Bobby Jones GC North Fulton GC		GA GA	Gleneagle GC Lake Wilderness GC		WA	Crow Canyon CC Diamond Bar	Danville Diamond Bar	CA	Gleneagles Forest Creek	Plano Round Rock	TX TX
Kokopelli Resort Gilbert Glen Lakes GC Glendale	AZ AZ	Goshen Plantation River's Edge GC	· · ·	GA GA	Capitol City GC Bear Creek CC	Olympia Woodinville	WA WA	Eagle Crest Eureka	Escondido Eureka	CA	Fair Oaks Ranch Northern Hills CC	San Antonio San Antonio	TX TX
Legend Arrowhead Glendale	AZ	Bacon Park GC	Savannah	GA	<b>Arnold Palmer Golf</b>	Management		Paradise Valley	Fairfield	CA	Timarron CC	Southlake	TX
Canoa Hills GC Green Valle London Bridge GC Lake Havass		The Plantation GC Fresh Meadow	Boise Hillside	ID IL	Cotton Creek GC Dakota Dunes CC	Gulf Shores Gulf Shores	AL AL	Rancho Solano Airways	Fairfield Fresno	CA	Barton Creek Lakeso Willow Creek GC	Spring	TX
Superstition Spgs Mesa Williams GC Mesa	AZ AZ	Ruffled Fearthers GC Mission Hills CC	Lemont Northbrook	IL IL	Victoria GC Strawberry Farms	Carson Orange County	CA CA	Golden Era Tayman Park	Gilman Ht Spgs Healdsburg	CA	Wildflower G&CC Columbia Lakes	Temple West Columbia	TX TX
El Caro CC Phoenix	AZ	Dub's Dread GC	Kansas City	KN	Tahquitz Ćreek	Palm Springs	CA	Braemar CC	Los Angeles	CA	Columbia Lakes CC	West Columbia	TX
Villa de Paz GC Phoenix Ancala CC Scottsdale	AZ AZ	Highlands Club Deer Creek GC	Hutchinson Overland Park	KS KS	Whittier Narrows Presidio GC	Rosemead San Francisco	CA	Porter Valley CC Desert Falls CC	Northridge Palm Springs	CA	Greenbrier CC Stonehenge G&CC	Chesapeake Chesterfied Co.	VA VA
Continental GC Scottsdale	AZ	Tallgrass CC	Witchita	KS	Tower Ridge	Avon Stratford	CT	Indian Wells CC	Palm Springs	CA	The Homestead Robert Trent Jones	Hot Springs Lake Manassas	VA VA
Jess Ranch GC Apple Valle Aptos Seascape GC Aptos	y CA CA	Briarwood GC Shenandoah CC	Baton Rouge Baton Rouge	LA LA	Oronoque CC Silverthorn CC	Brooksville	FL	Mission Hills CC Canyon Crest CC	Rancho Mirage Riverside	CA	River Creek G&CC	Leesburg	VA
Arcadia GC Arcadia Heather Ridge CC Aurora	CA CA	Bayou Barriere GC Stone Bridge CC	Belle Chase Gretna	LA LA	Bay Hill Club MetroWest CC	Orlando Orlando	FL FL	Stoneridge CC Harding Park	San Diego San Francisco	CA	River Creek G&CC ClubLink	Leesburg	VA
Tilden Park GC Berkeley	CA	Hunt Valley GC	Hunt Valley	MD	Spencer T. Olin GC	Alton	IL IRE	Lincoln Park	San Francisco	CA	Heron Point GC		ONT
Chula Vista GC Bonita Camarillo Springs Camarillo	CA CA	West Winds GC Dunmaglas GC	New Market Charlevoix	MD	Kildare Hotel & CC Crofton CC	Crofton	MD	Upland Hills Spring Valley Lake	Upland Victorville	CA	King Valley GC Lake Joseph Club	Lake Joseph	ONT
Dominguez GC Carson Bidwell Park GC Chico	CA CA	Chandler Park GC Palmer Park GC	Detroit Detroit	MI	Brierwood CC Minisceongo GC	Buffalo Pomona	NY	Shadowridge CC Fox Acres CC	Vista Red Feather	CA	Greystone GC Cherry Downs		ONT
Canyon Oaks CC Chico	CA	Rouge Park GC	Detroit	MI	Eagles Landing GC	Sevierville	TN	Tower Ridge CC	Simsbury	CT	Emerald Hills G&CC	C Stouffville	ONT
EastLake CC Chula Vista Desert Dunes GC Desert Ht Sp		Rackham GC Hilltop GC	Huntington Wds Plymouth	MI	University Ridge GC Arvida Company	Madison	WI	Porky Oliver Errol CC	Wilmington Apopka	DE FL	Cobblestone Golf G Red Mountain Ranch		AZ
Dove Canyon CC Dove City Escondido CC Escondido	CA CA	The Woodlands Crystal Lake GC	Wayne Lakeville	MN	Broken Sound Weston Hills CC	Boca Raton Ft. Lauderdale	FL FL	Clearwater Countryside CC	Clearwater Clearwater	FL FL	Ahwatukee Lakes Ahwautkee CC	Phoenix Phoenix	AZ AZ
Baker Memorial Fountain VII	y CA	Links at Northfork	Ramsey 1	MN	Jacksonville CC	Jacksonville	FL	Haile Plantation	Gainesville	FL	The Foothills GC	Phoenix	AZ
Coyote Hills GC Fullerton Fullerton GC Fullerton	CA CA	Fowler's Mill GC Columbia CC		MO MO	River Hill Club Cullasaja Club	Tampa Highlands	FL NC	Orange Park CC Queens Harbor	Jacksonville Jacksonville	FL FL	Eagle Crest GC Vineyard Escondido	Escondido Escondido	CA
Scholl Canyon GC Glendale	CA	Royal Meadows GC	Kansas City 1	MO	Billy Casper Golf Me Back Creek GC		DE	Inverrary CC	Lauderhill	FL	El Camino CC	Oceanside Rancho Santa Fe	CA CA
Knollwood GC Granada Meadowlark GC Hunt. Beach	CA CA	Forest Park GC St. Peters GC		MO MO		Mount Airy	MD	Kendell . Eagle Creek CC	Miami Naples	FL FL	Morgan Run Balboa Park GC	San Diego	CA
Sea Cliff CC Hunt. Beach Indian Wells Resort Indian Well		Carolina Shores GC Revolution Park GC		NC NC	Chantilly Manor CC Longview GC	Rising Sun Timonium	MD	Silver Springs Ballenisles	Ocala Palm Bch Gard	FL FL	Carmel Mt. Ranch Redhawk GC	San Diego Temecula	CA
Rancho San Joaquin Irvine	CA	Charles T. Myers GO	CCharlotte	NC	Greystone GC	Whitehall	MD	Monarch CC	Palm City	FL	Saticoy Regional	Ventura	CA
La Mirada GC La Mirada Lake Forest GC Lake Forrest	CA CA	Pawtuckett GC Renaissance Park		NC NC	Diamond Ridge GC Kennebec Heights	Woodlawn	MD	Hunter's Green CC Tampa Palms G&C	Tampa C Tampa	FL FL	Hills of Lakeway Live Oak GC	Austin Austin	TX TX
Lakewood CC Lakewood Micke Grove Lodi	CA CA	Reynolds Park GC Skyline Woods CC		NC NE	River Landing CC Cranbury GC	Wallace Cranbury	NC NJ	La Cita CC Northwood CC	Titusville Atlanta	FL GA	Yaupon GC Woodcrest CC	Austin Grand Prairie	TX TX
El Dorado Park GC Long Beach	CA	Brigantine Golf Links		NJ	Indian Echo CC	Port Allegany	PA	River North CC	Macon	GA	Stonebridge CC	McKinney	TX
Heartwell GC Long Beach Recreation Park GC Long Beach	CA CA	Darlington Center Rancocas GC	Mahwah Willingboro	N	Centennial GC Ridgeview CC	Oak Ridge Centreville	TN VA	Sabal Trace Knollwood CC	North Port South Bend	IL	The Ranch CC Pecan Grove Plant.	McKinney Richmond	TX TX
Skylinks Muni GC Long Beach	CA.	Paradise Hills CC	Albuquerque I	NM	Somerset GC Stoneleigh GC	Locust Grove Round Hill	VA VA	Crestview CC	Wichita	KS	Sweetwater CC Trophy Club	Sugarland Trophy Club	TX TX
Chester Washington Los Angeles Mountaingate CC Los Angeles		Tanoan CC Desert Rose GC		NN NV	Bridgeport CC	Bridgeport	WV	Willowbend CC Belle Terre CC	Wichita La Place	KS LA	Brandermill CC	Midlothian	VA
Westchester GC Los Angeles Summitpoint GC Milpitas	CA CA	Las Vegas GC Las Vegas Hilton CC		NV	Brassie Golf Corp. Panama CC	Panama City	FL	Southern Trace CC Ipswich CC	Shreveport Ipswich	LA MA	Colorado Golf Mane Eagles Nest GC	agement Silverthorne	СО
Casta Del Sol GC Mission Vej	o CA	Painted Desert GC	Las Vegas	NV	Wentworth GC	Tarpon Springs	FL	Schuss Mountain	Bellaire	MI	Continental Golf Co	rp.	
Morro Bay GC Morro Bay National City GC National Ci	CA ity CA	WildHorse CC Emerald River GC		NV	North Port National VIIg at Sands Point		MO	Shanty Creek Oak Pointe	Bellaire Brighton	MI	Continental GC The Albert Lea GC	Coral Springs Albert Lea	FL
The Oaks Nicolaus	CA CA	Clearview Park GC	Bayside Queens	NY NY	Riviera CC BriLyn Inc.	Dublin	ОН	Brighton Providence CC	Oak Pointe CC Charlotte	MI	Pine Meadows Buffalo Run GC	Brainerd Buffalo Run	MN
Oceanside GC Oceanside	CA	Pelham/Split Rock Van Cortlandt GC		NY	Traditions GC	Burlington	KY	Raintree CC	Charlotte	NC	Prestwick GC	St. Paul	MN
Monterey CC Palm Desert Palm Valley CC Palm Desert		Dyker Beach GC Randalls Island GC	The state of the s	NY	Walden Ponds Shaker Run GC	Indian Springs Lebanon	OH	Treyburn Pinehurst	Durham Pinehurst	NC NC	Eagle Crek GC Big Creek GC	Willmar Memphis	MN
Mesquite ĆC Palm Spring	gs CA	South Shore GC	State Island	NY	Blackhawk GC	Pflugerville	TX	Pinehurst #7	Pinehurst	NC	Corcoran-Jennison	Hospitality Co.	
Palm Springs CC Palm Spring Brookside GC Pasadena	gs CA CA	La Tourette Park GC Silver Lake GC		NY NY	Spanish Hills G&CC		CA	Pinewild Pinewild CC	Pinehurst Pinehurst	NC NC	Ocean Edge Resort Olde Scotland Links		MA
Mountain Meadows Pomona Mission Gary Player Rncho Mira	CA ge CA	Royal Oak CC Oakhurst CC		OH	Steele Canyon LPGA International	San Diego Daytona Beach,	CA FL	Canyon Gate CC Firestone	Las Vegas Akron	NV	Glen Ellen CC Widow's Walk GC	Millis	MA MA
Mission Pete Dye Rncho Mira	ge CA	Brandywine CC	Maumee '	ОН	PGA Nat'l Resort	Palm Bch Gard.	FL	Cooks Creek	Ashville	OH	CourseCo Inc.		
Los Verdes GC Rancho Pale Tierra Oaks CC Redding	os CA	Heatherwoode GC Collins Park GC		OH	Elkhorn GC WestWinds G&CC	Sun Valley Newmarket	MD	Quail Hollow Silver Lake CC	Concord	OH	Crystal Springs GC Deep Cliff GC	Cupertino Cupertino	CA
Paradise Knolls GC Riverside	CA CA	Detwiler GC Ottawa Park GC		OH	Rocky Gap GC Puerto del Rey	Rocky Gap Park San Juan	MD PR	Beckett Ridge CC	West Cheser Afton	OH OK	Riverside GC Mather GC	Fresno Sacramento	CA
Franklin Canyon GC Rodeo GC Mountain Shadows Rohnert Par		Meadowbrook CC	Broken Arrow	OK	Carefree Resorts			Shangri-La Greens	Oklahoma City	OK	Mallard Lake GC	Yuba City	CA
Bartley Cavanaugh Sacramento Maloney/Land GC Sacramento		The Trails Silverhorn GC		OK OK	The Boulders Resort Lodge at Ventana	Carefree	AZ AZ	The Greens CC Indian Springs CC	The Greens CC Tulsa	OK OK	Crown Golf Propert Longbow GC	hies Mesa	AZ
Shandin Hills GC San Bernad	lino CA	Corvallis CC	Corvallis	OR	Carmel Valley Ranc	hCarmel	CA	Middletown	Longhorne	PA	Wildfire GC	Scottsdale	AZ
San Bruno Center San Bruno Mission Trails GC San Diego	CA CA	Creekside GC Oregon GC	Salem West Linn	OR OR	Carolinas Golf Grou	Cary	NC	Cobbs Creek FDR	Philadelphia Philadelphia	PA PA	Ojai Valley Inn Empire Lakes	Ojai Rancho C'mnga	CA CA
Tecolote Canyon San Diego San Dimas Canyon San Dimas	CA CA	Gen. Washington Hickory Heights GC	Audubon	PA PA	The Neuse GC Currituck GC	Clayton Corrolla	NC NC	John F. Byrne Juniata	Philadelphia Philadelphia	PA PA	Tijeras Creek Tustin Ranch GC	Rancho S. Marg Tustin	CA
Santa Clara G&T Santa Clara	CA	Golden Oaks GC	Fleetwood	PA	Devil's Ridge GC	Holly Springs	NC	U.S. Sports	Philadelphia	PA	River Valley Ranch	Carbondale	CO
Simi Hills GC Simi Valley Wood Ranch GC Simi Valley		Hershey CC Hershey CC South	Hershey Hershey	PA PA	Nags Head GL Oak Valley GC	Outer Banks Winston-Salem	NC NC	Walnut Lane Treesdale G&CC	Philadelphia Pittsburgh	PA PA	Snowmass Lodge Bardmoor GC	Snowmass VIIg Largo	CO
Wood Ranch GC Simi Valley		Hershey Hotel GC	Hershey	PA PA	CCA Group Cypress Lakes	Sydney	Aust	Woodside Plant. Bloody Point Club	Aiken Daufuskie Isl.	SC SC	The Bayou Club Stonebridge CC	Largo Aurora	FL
Lomas Santa Fe CC Solano Bea	ch CA	Spring Creek GC Links O'Tryon GC	Hershey Campobello	SC	Macau G&CC	Macau	Chin	Pebble Creek CC	Greenville	SC	Settler's Hill GC	Batavia	IL
Lomas Santa Fe ExecSolano Bea Lake Tahoe GC S. Lake Tah		Shipyard Resort Port Royal Resort	Hilton Head Hilton Head	SC SC	Emeralda G&CC Gading Padang	Jakarta Jakarta	Indo Indo	CC of Hilton Head Indigo Run	Hilton Head Hilton Head	SC SC	Heather Ridge GC Glenwoodie GC	Cumee Glenwoodie	IL II
ThornCreek GC Thornton	CA	Links at Stono Ferry	Hollywood	SC	Imperial Club Golf	Jakarta	Indo	Hilton Head	Hilton Head	SC	Highland Park CC	Highland Park	IL
Sunset Hills CC Thousand C Upland Hills GC Upland	Daks CA CA	River Oaks Plant. Forrest Crossing GC	Myrtle Beach Franklin	SC TN	Guangzhou Luhu Sand River GC		Japan Japan	Snee Farm CC Three Ridges GC	Mt. Pleasant Knoxville	SC	Broken Arrow GC Westgate GC	Lockport Palos Heights	IL
Vista Valencia GC Valencia Yorba Linda GC Yorba Linda	CA CA	Maxwell Muni GC Bryan GC	Abilene	TX TX	Palm Resort G&CC Mimosa G&CC	Johore Baru Angeles City	Mal Phil	Shady Valley GC Barton Creek	Arlington Austin	TX TX	South Mountain GC Rivers Bend G&CC		UT VA
Eagle GC Broomfield	СО	Indian Creek GC	Bryan Carrollton	TX	Vietnam G&CC	HC Minh City	Viet	Lost Creek CC	Austin	TX	The Hamptons GC	Hampton	VA
Applewood GC Golden Arrowhead GC Littleton	CO	Riverchase GC Idlewild CC	Coppell	TX TX	Classic Golf Group Hamptons GC	Auburndale	FL	Westwood CC Oakmont CC	Bellaire Corinth	TX TX	Highland Spgs GC Blackhawk GC	Richmond Janesville	VA WI
Pinery CC Parker	CO	Diamond Oaks CC	Fort Worth	TX	Classic Golf Manag	ement		Padre Isles CC	Corpus Christi	TX	Riverside GC	Janesville	WI
Goodwin GC Hartford Keney GC Hartford	CT	Woodhaven CC Z Boaz GC	Fort Worth Ft. Worth	TX TX	Turnbull Bay Sugar Creek	Daytona Bch Dekalb County	FL GA	Brookhaven CC Canyon Creek CC	Dallas Dallas	TX TX	New Berlin Hills GO Del Webb Corp.	New Berlin	WI
Blue Mountain GC Berkshire Cams Hall Estate GCHampshire	ENG ENG	Oakridge CC Berry Creek CC	Garland Georgetown	TX TX	City Club Marietta Heritage Hills	Marietta Powder Springs	GA GA	Hackberry Creek C Scotty's Golf Park	CDallas Dallas	TX TX	Sun City Grand Sun City West	Phoenix Phoenix	AZ AZ
Mill Green GC Hertfordshir	re ENG	Great Southwest GC	Grand Prairie	TX	Club Consultants In	c		Walnut Creek CC	Fort Worth	TX	Sun City Tucson	Tucson	AZ
GC Orpington Kent Cray Valley/Ruxley Kent	ENG ENG	Riverside GC Bear Creek	Grand Prairie Houston	TX TX	Tapatio Springs The Quarry	Boerne San Antonio	TX TX	Plantation Stonebriar	Frisco Frisco	TX TX	Sun City Palm Dese Sun City Roseville	rtPalm Springs Roseville	CA
Cotgrave Place Nottingham	ENG	World Houston GC	Houston	TX	Club Resorts			Fossil Creek GC	Ft. Worth	TX	Sun City MacDonal	d Las Vegas	NV
Milford GC Surrey Pyrford GC Surrey	ENG ENG	Lake Houston GC Walden/Lk Houston	Huffman Humble	TX TX	Ocean Reef Club Shanty Creek	Key Largo Bellaire	FL	April Sound CC Atascocita CC	Houston Houston	TX TX	Sun City Summerlin Sun City Hilton Hea		NV SC
Celebration GC Celebration Arrowhead GC Davie		Twin Wells GC Willow Fork CC	Irving Katy	TX TX	Fairwoods-on-Seven Pinehurst Resort	Pinehurst Pinehurst	NC NC	Bay Oaks CC Braeburn	Houston Houston	TX TX	Sun City G'town  Destination Hotels	Georgetown	TX
Kendale Lakes Miami	FL	Sugar Ridge GC	Lawrenceburg	TX	Quail Hollow Resor	t Concord	ОН	Clear Creek	Houston	TX	Inverness Hotel	Englewood	CO
Lely Resort Naples Summerfield Cross. Riverview	FL FL	Mesquite GC Bentwater CC	Mesquite Montgomery	TX	Shangri-La Resort Barton Creek	Grand Lake Austin	OK TX	Clear Lake Deerwood GC	Houston Houston	TX TX	Harborside Inn Oak Brook Hills	Palm Coast Oak Brook	FL
Killearn CC & Inn Tallahassee Sabal Palm GC Tamarac		Southwyck GC Pecan Valley GC	Pearland San Antonio	TX TX	Columbia Lakes The Homestead	West Columbia Hot Springs	TX VA	Hearthstone CC Quail Valley CC	Houston Houston	TX TX	Sunriver Resort Wild Dunes	Sunriver Isle of Palms	OR SC
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	Services Tucson	AZ	Int
Edwin B. Raskin Co. Bluegrass Y&CC	Hendersonville	TN	
Country Hills GC	Hendersonville	TN	
Ravenwood CC Evergreen Alliance (	Hermitage	TN	
Stanford Univ. GC		CA	
Mira Vista GC	Denver	CO	
Appletree GC Coal Creek GC	Fountain Louisville	CO	
Canterberry GC	Parker	CO	
Amana Colonies GC Shoreline Links GC		IA IA	
Bos Landen GC	Pella	IA	
Ironhorse GC	Leawood	KS	
Giants Ridge GC Northlinks GC	Biwabik	MN	
Quarry Oaks GC	North Mankato Lincoln	NE	
Champions Club	Omaha	NE	
Knolls GC Pacific Springs GC	Omaha Omaha	NE NE	
	Franklin	N	
Crystal Springs GC	Hamburg	N	
Riverside GC Cross Timbers GC	Austin Azle	TX	
Emerald Springs GC		TX	
Painted Dunes GC	El Paso	TX	
Lago Vista GC Lake Park GC	Lago Vista Lewisville	TX	
Iron Horse GC	North Richland	TX	
Sammons Park GC	Temple	TX	
Weeks Park GC Foothills Golf Develo		TX	Jei
Red Tail	Los Angeles	CA	
Fore Star Golf	Inc Annalas	CA	
Hollywood Park GC Picacho Hills CC		CA	Jo
Links/Sierra Blanca	Ruidoso	NM	
	Silver City	NM OR	v
Hound Hollow GC Meadowbrook GC		TX	Ke
Franklin Golf Prope	rties		
Deer Creek GC Carolina Club		FL FL	
Golf Course Manage		10	
Azusa Greens CC	Azusa	CA	
Golf Resources Inc. Bridlewood GC	Flower Mound	TX	
Golf Services Group			
	Bay City	TX	
Waterwood Nat'l Golfmark Corp.	Huntsville	TX	
Sepulveda GC	Los Angeles	CA	
Lost Creek GC	Ft. Worth	TX	
Elm Grove GC Los Rios CC	Lubbock Plano	TX	
Ridgeview GC	Plano	TX	KS
The Shores CC Woodlake CC	Rockwall San Antonio	TX	
GolfSouth	Sull Allionio	11	
The Links GC	Hudson	FL	200
Sandpiper GC CC of Mt. Dora	Mt. Dora	FL	KS
Ekana GC	Oviedo	FL	
Perdido Bay GC	Pensacola	FL	
Southland GC University Club	Stone Mtn Baton Rouge	GA	
River Downs GC	Finksburg	MD	
Wedgewood GC	100	MS	
Beacon Ridge Forest Creek GC	Pinehurst Pinehurst	NC	
Wake Forest	Raleigh	NC	
Northgreen CC		NC .	
Princeton Mdows Greenville GC	Greenville	NJ SC	
The Ridges	Johnson City	TN	
	Fairfax Co.	VA	
Pleasant Valley		VA	
Lee's Hill GC South Riding GC	Fredericksburg Loudoun Co.	VA	
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	The Hideaway	lanagement (co .Ft. Myers	nr.) FL
	Bella Vista G&YC	Howey-In-The-Hills	FL
	Kissimmee GC Poinciana G&R	Kissimmee Kissimmee	FL
	Leisure Lakes GC	Lake Placid	FL
	Highland Fairways	Lakeland	FL FL
	Admiral Lehigh N. Mirror Lakes GC	Lehigh Acres Lehigh Acres	FL
	Habitat at Valkaria	Melbourne	FL
	Aquarina GC Spessard Holand	Melbourne Bch Melbourne Bch	FL FL
	The Savannahs	Merritt Island	FL
	Palatka GC	Palatka	FL
	Cypress/Palm Aire Oaks/Palm Aire	Pompano Beach	FL FL
	Palms Palm Aire	Pompano Beach	FL
	Pines Palm Aire Sabals Palm Aire	Pompano Beach	FL FL
	The Savanna Club	Port St. Lucie	FL
	Barefoot Bay	Sebastian	FL
	Tarpon Springs GC Lakes at Sandridge	Tarpon Springs Vero Beach	FL
	Viera East GC	Viera	FL
	Golfview G&R Hideaway GC	Ft. Myers Ft. Myers	FL FL
	SunAir CC	Haines City	FL
	Leisure Lakes GC	Lake Placid	FL
	Adm. Lehigh Resort Palatka GC	Lehigh Acres Palatka	FL FL
	Palm Aire Resort Spo	Pompano Beach	FL
le	Sandridge GC msek Golf	Vero Beach	FL
-	Cog Hill CC	Lemont	IL
	Pine Meadow GC	Mundelin W. Chicago	IL
Je	St. Andrews CC ohn Jacobs Group	W. Chicago	,IL
	San Ignacio GC	Green Valley	AZ
	Painted Mountain Hillcrest GC	Mesa Sun City West	AZ AZ
K	emper Sports Man		74
	Hidden Valley GC	Riverside	CA
	Chicago Park Dist. Kemper Lakes GC	Chicago Long Grove	IL
	Royal Melbourne GC	Clong Grove	IL
	Vernon Hills GC	Vernon Hills	IL KS
	Falcon Ridge GC Timbers at Troy	Lenexa Howard County	MD
	Holly Hills CC	ljamsville	MD
	Marlton GC Mound GC	Prince Geo Co. Miamisburg	MD
	PipeStone GC	Miamisburg	OH
	Carolina Springs Crowfield G&CC	Fountain Inn	SC
	Patriots Points CC	Goose Creek Mt. Pleasant	SC
	PineForest CC	Sumerville	SC
K	GC of West Virginia	Waverly	WV
-	LaQuinta Resort	Palm Springs	CA
	PGA West	Palm Springs	CA
	Doral Resort & Spa Lake Lanier Resort	Miami Lake Lanier	FL
K	SL Fairways		
	Indigo Lakes GC Tiger Point G&CC	Daytona Beach Gulf Breeze	FL FL
	Club at Hidden Crk	Navarre	FL
	Scenic Hills CC	Pensacola Plant City	FL FL
	Walden Lake G&CC Shalimar Pointe	Shalimar	FL
	Pebble Creek	Tampa	FL
	Welington CC Tantallon CC	Wellington Ft. Washington	FL
	Patuxent Greens CC	Laurel	MD
	Marlborough CC	Upper Marlboro	MD
	Monroe Valley GC Memphis Oaks GC	Jonestown Memphis	PA
	Birkdale Golf & CC	Chesterfield	VA
	Montclair CC	Dumfries Newport News	VA
	Kiln Creek G&CC Prince William GC	Newport News Nokesvile	VA VA
	Countryside GC	Roanoke	VA
	Broad Bay CC Mequon CC	Virginia Beach Mequon	VA
	Willow Run GC	Pewaukee	WI
	Lake Windsor GC	Windsor	WI
LC	indmark Golf Co. Palm Springs Classic	Palm Springs	CA
	Las Vegas Paiute	Las Vegas	NV
Li	Trapper's Turn GC ncoln/Brooks-Bain	Wisconsin Dells	WI
Ī	Battle Creek GC	Broken Arrow	OK
	Carswell GC	Ft. Worth	TX
LI	nksCorp Glenlakes GC	Gulf Shores	AL
	Mountain Ranch GC	Little Rock	AR
	CC of Arkansas	Maumelle Pages Springs	AR CO
	Pagosa Springs GC Eastwood GC	Pagosa Springs Orlando	FL
	Alpharetta CC	Alpharetta	GA
	Tamarack GC Oak Harbor GC	Chicago Sidell	IL LA
	Rockwood GC	Kansas City	MO
	Mississippi Nat'l GC	Biloxi	MS
	Castlewoods CC Taberna CC	Jackson New Bern	MS
	Sapphire Mtn. GC	Sapphire	NC
	Rickenbacker GC	Columbus	OH
	Stonehenge GC Nashboro Village	Knoxville Nashville	IN
	Temple Hills CC	Nashville	TN
	Thorntree CC	Desoto Glan Ellan	TX
	The Crossings GC arriott Golf Management	Glen Ellen gement	VA
M	dillon oon mand		

ternational Golf A			Marriott Golf Management (cont.)  Mountain Shadows Scottsdale	AZ-
The Hideaway Bella Vista G&YC	Ft. Myers Howey-In-The-Hills	FL FL	Castle Harbour Hamilton	Ber.
Kissimmee GC	Kissimmee	FL	Chardonnay Club Napa	CA
Poinciana G&R Leisure Lakes GC	Kissimmee Lake Placid	FL FL	Desert Springs Palm Desert Rancho Las Palmas Rancho Mirage	CA
Highland Fairways	Lakeland	FL	Marco Island GC Marco Island	FL
Admiral Lehigh N. Mirror Lakes GC	Lehigh Acres Lehigh Acres	FL FL	Grande Vista Orlando Orlando World Cen. Orlando	FL FL
Habitat at Valkaria	Melbourne	FL	Lincolnshire Resort Lincolnshire	IL
Aquarina GC	Melbourne Bch	FL	Griffin Gate Lexington	KY
Spessard Holand The Savannahs	Melbourne Bch Merritt Island	FL FL	Tan-Tar-A Lake Ozarks Seaview Resort Absecon	NJ
Palatka GC	Palatka	FL	Wind Watch Long Island	NY
Cypress/Palm Aire Oaks/Palm Aire	Pompano Beach	FL FL	Toftrees State College Shiloh Falls Pickwick Dam	PA
Palms Palm Aire	Pompano Beach	FL	Marshall's Golf Course Manageme	
Pines Palm Aire Sabals Palm Aire	Pompano Beach	FL FL	Canyon Lake CC Canyon Lake Kingwood Place GC Kingwood	TX TX
The Savanna Club	Port St. Lucie	FL	Martty Golf Management Inc.	IA
Barefoot Bay	Sebastian	FL	Deerfoot CC Birmingham	AL
Tarpon Springs GC Lakes at Sandridge	Tarpon Springs Vero Beach	FL FL	Pine Tree CC Birmingham Lakewood CC New Orleans	AL LA
Viera East GC	Viera	FL	Mallard Pointe John Kile St Pk	MS
Golfview G&R	Ft. Myers	FL FL	Duncan Park GC Natchez  Quail Hollow P. Quin St Pk	MS MS
Hideaway GC SunAir CC	Ft. Myers Haines City	FL	Saddle Creek GC Lewisburg	TN
Leisure Lakes GC	Lake Placid	FL	Masters Golf Corp.	-
Adm. Lehigh Resort Palatka GC	Lehigh Acres Palatka	FL FL	Rotonda G&CC Ft. Myers Monarch Leesburg	FL FL
Palm Aire Resort Sp	aPompano Beach	FL	Marco Shores Marco Island	FL
Sandridge GC	Vero Beach	FL	Orangetree ValenciaNaples Rosemont CC Orlando	FL FL
emsek Golf Cog Hill CC	Lemont	IL	Oak Hills GC Spring Hill	FL
Pine Meadow GC	Mundelin	IL	St. Augustine Shores St. Augustine	FL
St. Andrews CC ohn Jacobs Group	W. Chicago	,IL	Whispering Oaks Tampa Matrix Hospitality Corp.	FL
San Ignacio GC	Green Valley	AZ	Forsgate CC Jamesburg	NJ
Painted Mountain	Mesa	AZ	Ashbourne CC Cheltenham Commonwealth Nat'l Horsham	PA PA
Hillcrest GC emper Sports Man	Sun City West	AZ	MDJ Management Co.	IA
Hidden Valley GC	Riverside	CA	Birch Hills GC Brea	CA
Chicago Park Dist. Kemper Lakes GC	Chicago Long Grove	IL	Imperial GC Brea Alta Vista CC Placentia	CA
Royal Melbourne Go		IL	Meadowbrook Golf Group	071
Vernon Hills GC	Vernon Hills	IL	Sycamore Canyon Arvin	CA
Falcon Ridge GC Timbers at Troy	Lenexa Howard County	KS MD	Auburn Valley CC Auburn Plumis Pines GC Blairsdon	CA
Holly Hills CC	ljamsville	MD	Brighton Crest CC Friant	CA
Marlton GC Mound GC	Prince Geo Co. Miamisburg	MD	Lemoore Muni Lemoore Woodhaven CC Palm Desert	CA
PipeStone GC	Miamisburg	ОН	Meadowbrook Trails Poway	CA
Carolina Springs	Fountain Inn	SC	Rancho Murietta CC Ran. Murietta	CA
Crowfield G&CC Patriots Points CC	Goose Creek Mt. Pleasant	SC	Glendale Lakes GC Glendale Hgts RedTail GC Lakewood Vllg	CA
PineForest CC	Sumerville	SC	Prairie Landing GC West Chicago	IL
GC of West Virginio	a Waverly	WV	Worth Muni Worth Blackthorn GC South Bend	IL
LaQuinta Resort	Palm Springs	CA	Aberdeen GC Valparaiso	IN
PGA West Doral Resort & Spa	Palm Springs	CA	TBD East Lansing Hawk Ridge GC Lake St. Louis	MI
Lake Lanier Resort	Miami Lake Lanier	FL GA	Hawk Ridge GC Lake St. Louis Emerson GC Emerson	N
SL Fairways		-	Pascack GC Rivervale	N
Indigo Lakes GC Tiger Point G&CC	Daytona Beach Gulf Breeze	FL FL	St. Lawrence GC Canton Rossford Muni Rossford	OH
Club at Hidden Crk	Navarre	FL	Thunder Hill GC S. Madison	ОН
Scenic Hills CC Walden Lake G&CC	Pensacola Plant City	FL FL	Shield Crest GC Klamath Falls National Fairways Inc.	OR
Shalimar Pointe	Shalimar	FL	Fairchild Wheeler Bridgeport	CT
Pebble Creek	Tampa	FL	Hidden Hills CC Jacksonville	FL
Welington CC Tantallon CC	Wellington Ft. Washington	FL	Hibiscus GC Naples Oak Brdg Sawgrass Ponte Vedra	FL FL
Patuxent Greens CC	Laurel	MD	Port Charlotte GC Port Charlotte	FL
Marlborough CC	Upper Marlboro	MD	Rolling Green GC Sarasota Sarasota GC Sarasota	FL FL
Monroe Valley GC Memphis Oaks GC	Jonestown Memphis	TN	Sunrise GC Sarasota	FL
Birkdale Golf & CC	Chesterfield	VA	Tides CC Seminole	FL
Montclair CC Kiln Creek G&CC	Dumfries Newport News	VA VA	St. Augustine Shores St. Augustine Hudson Nat'l GC Croton-on-Hdsn	FL NY
Prince William GC	Nokesvile	VA	Lindhbrook GC Hopkinton	RI
Countryside GC	Roanoke	VA	New England Golf Corp.	RI
Broad Bay CC Mequon CC	Virginia Beach Mequon	VA WI	Pequot GC Stonington	CT
Willow Run GC	Pewaukee	WI	Pinecrest GC Holliston	MA
Lake Windsor GC andmark Golf Co.	Windsor	WI	Pine Meadows GC Lexington Lost Brook GC Norwood	MA MA
Palm Springs Classi		CA	Nitto America Co. Ltd.	
Las Vegas Paiute	Las Vegas	NV WI	Calabasas G&CC Calabasas Park El Rancho Verde CC Rialto	CA
Trapper's Turn GC incoln/Brooks-Bair	Wisconsin Dells	AAI	Peacock Gap G&CC San Rafael	CA
Battle Creek GC	Broken Arrow	OK	Mikaha Valley CC Walanae	CA
Carswell GC inksCorp	Ft. Worth	TX	Silversword GC Maui  O.B. Sports	HI
Glenlakes GC	Gulf Shores	AL	The Gallery Tucson	AZ
Mountain Ranch GC		AR	Stevinson Ranch Modest	CA
CC of Arkansas Pagosa Springs GC	Maumelle Pagosa Springs	AR CO	Angel Park Las Vegas The Legacy Las Vegas	NV
Eastwood GC	Orlando	FL	The Oasis Mesquite	NV
Alpharetta CC Tamarack GC	Alpharetta Chicago	GA	Langdon Farms Portland Reserve Vineyards Portland	OR OR
Oak Harbor GC	Sidell	LA	Washington Nat'l Seattle	WA
Rockwood GC	Kansas City	MO	Paloma Golf Group	NU
Mississippi Nat'l GO Castlewoods CC	Jackson	MS MS	Minebrook GC Hackettstown Fox Valley CC Lancaster	NY
Taberna CC	New Bern	NC	Tan Tara CC N. Tonawanda	NY
Sapphire Mtn. GC Rickenbacker GC	Sapphire Columbus	NC	Emerald Valley GC Creswell Geneva Nat'l GC Lake Geneva	OR WI
Stonehenge GC	Knoxville	TN	Professional Golf Management	
Nashboro Village	Nashville Nashville	TN	Legends Club/Tenn. Franklin	TN
Temple Hills CC Thorntree CC	Nashville Desoto	TN	Grand Geneva Lake Geneva Resort Management of America	WI
The Crossings GC	Glen Ellen	VA	Stone Creek GC Paradise Valley	AZ
Narriott Golf Mana Grand Hotel	gement Mobile	AL	Chaparral Pines Payson ASU Karsten GC Tempe	AZ AZ
Camelback Inn	Scottsdale	AZ	Riverside Golf Management Co.	
Kierland GC	Scottsdale	AZ	Champions Club Jacksonville	FL

Riverside Golf Mana	agement Co. (c	ont.)	Troon Golf (cont.)		
Champions Club	Stuart	FL	The GC at Vistoso	Tucson	AZ
Champions Club	Alphareta	GA	Castle Pines North	Castle Pines	CO
Champions Club	Dacula	GA	Primm Valley GC	Las Vegas	NV
Champions Club	Snellville	GA	St. James of Reno	Reno	NV
Walker/Clemson	Clemson	SC	U.S. Golf Communiti	es Inc.	
Signature Golf Inter	national		Cutter Sound G&YC	Marin Counnty	FL
Starr Pass GC	Tucson	AZ	Monastery GC	Orange City	FL
Harbor Hills CC	Orlando	FL	Montverde CC	Orlando	FL
Oak Tree CC	Edmond	OK	Wedgefield G&CC	Orlando	FL
Southwest Golf	stage office	ange -	Pinehurst Plantation	Pinehurst	NC
- Mesa Del Sol	Yuma	AZ	NorthShore CC	Portland	TX
GC of Illinois	Algonquin	11	Western Golf Proper	rties Inc.	37 17
Eaglebrook CC	Geneva	11	Verde Valley Ranch		AZ
Blackhawk GC	St. Charles	TT IL	Eagle Mountain GC		AZ
Paradise Hills GC	Albuquerque	NM	Desert Mountain	Scottsdale	AZ
Desert Pines GC	Las Vegas	NV	The CC at DC Ranch		AZ
SunCor Developmen			Heritage Highlands	Tucson	AZ
SunRidge Canyon	Fountain Hills	AZ	Bougenvilla GC	Del Mar	CA
Wigwam Resort	Goodyear	AZ	Oak Creek GC	Irvine	CA
Palm Valley GC	Litchfield Park	AZ	Oak Creek GC	Irvine	CA
Sedona Golf Resort	Sedona	AZ	Pelican Hill GC	Newport Coast	CA
Real Del Mar	Tijuana	Mex.	Hermitage Palms	Palm Springs	CA
The Legends Group			Metro Air Park	Sacramento	CA
Marsh Harbour	Calabash	NC	Serrano CC	Sacramento	CA
Oyster Bay	Sunset Beach	NC	Rancho San Marcos		CA
The Legends	Myrtle Beach	SC	Falcon's Fire GC	Kissimmee	FL
Heritage Club	Pawley's Island	SC	Lost Key Plantation	Pensacola	FL
Legends/New Kent	Williamsburg	VA	Indian River CC	Vero Beach	FL
Legends/Stonehouse		VA	Harborside Int'l GC	Chicago	IL
Troon Golf	3		Rainbow Hills CC	Jakarta	Ind.
Legend Trail GC	Scottsdale	AZ	Las Companas	Santa Fe	NM
Talking Stick GC	Scottsdale	AZ	Red Hawk GC	Sparks	NV
Troon North GC	Scottsdale	AZ	Wild Wing Plant.	Myrtle Beach	SC
LaPaloma CC	Tucson	AZ	and training	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Management firms and	telephone nos.
American ClubServ	214-392-7378
American Golf Corp.	310-315-4200
Arnold Palmer Golf Management Co.	407-876-6700
Arvida Co.	561-479-1100
Billy Casper Golf Management	703-761-1444
Brassie Golf Corp.	813-621-4653
BriLyn Inc.	513-821-1990
Buena Vista Hospitality Group Carefree Resorts	813-221-7535
Carolinas Golf Group	602-953-6400 919-571-8091
CCA Group	011 852 735 7295
Classic Golf Group	941-299-0900
Classic Golf Management	770-528-0799
Club Consultants Inc.	210-828-8100
Club Resorts	214-243-6191
ClubCorp	214-243-6191
ClubLink	905-841-3730
Cobblestone Golf Group	619-794-2602
Colorado Golf Management Inc.	970-468-0681
Continental Golf	612-929-3255
Corcoran-Jennison Hospitality Co.	508-896-8666
CourseCo Inc.	707-763-0335
Crown Golf Properties	847-832-1800
Del Webb Corp.	602-808-8000
Destination Hotels & Resorts	303-799-3830
Duke Management Services Edwin B. Raskin Co.	520-762-9358 615-373-9400
Evergreen Alliance Golf Ltd.	214-915-3673
Foothills Golf Development	818-637-7734
Fore Star Golf	806-762-3673
Franklin Golf Properties	954-429-0006
Golf Course Management Inc.	818-969-1727
Golf Resources Inc.	214-831-9200
Golf Services Group	713-955-6263
Golfmark	214-424-4546
GolfSouth	864-255-4653
Greenlinks	615-373-3200
Heritage Golf Management	317-580-2655
Hyatt Hotels Corp.	787-796-1234
In Celebration of Golf Management	602-951-4444
International Golf Group International Golf Management	203-259-7272 941-667-1317
Jemsek Golf	630-257-5872
John Jacobs Group	602-991-8587
Kemper Sports Management	847-291-9666
KSL Fairways	703-330-5300
KSL Recreation	619-564-1088
Landmark Golf Co.	619-776-6688
Lincoln/Brooks-Baine	817-870-2423
LinksCorp	847-441-1010
Marriott Golf	407-850-0077
Marshall's Golf Course Management	713-579-1725
Martty Golf Management Inc.	504-769-1616
Masters Golf Corp.	407-841-4800
Matrix Hospitality	908-521-2900
MDJ Management	714-528-1185
Meadowbrook Golf Group National Fairways Inc.	310-274-6688 203-371-1200
New England Golf Corp.	617-326-5717
Nitto America Co. Ltd.	310-477-5111
O.B. Sports	503-678-4330
Paloma Golf Group	619-793-1980
Professional Golf Management	404-233-4487
Resort Management of America	602-953-6553
Riverside Golf Management Co.	904-356-1000
Signature Golf International	904-753-7000
Southwest Golf	702-736-2222
SunCor Development Co.	602-285-6800
The Legends Group	803-236-9318
Troon Golf Management	602-585-7360
U.S. Golf Communities Inc.	407-245-7557
Western Golf Properties	602-483-8914
	April 1997



### GolfSouth/ClubLink

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

"ClubLink was looking for a platform and an existing portfolio and management team," explained Hunter, the president and chief operating officer at GolfSouth. "We were looking for deeper, more reliable funding sources.

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

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

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

Through its wholly owned subsidiaries — GolfSouth Management, Inc., GolfSouth Capital, Inc. and GolfSouth Clubs LLC — Greenville-based GolfSouth con-

trols or manages 23 golf course projects: eight which remain in development, 13 existing operations in which the company has an ownership stake, and two it manages for outside ownership. The properties, most of them high-end daily-fee/semi-private, are clustered in three general areas: The Richmond, Va./Baltimore corridor, the Southeast and Central Florida [for a complete list of GolfSouth holdings, see chart on pages 50-51].

Hunter acknowledges the golf industry remains rife with poorly managed facilities ripe for operations assistance — many of them available at bargain-basement prices. Yet GolfSouth has also displayed the willingness to build its own facilities.

"It's a market-by-market consideration, whether you should be building or acquiring," said Hunter. "We'd like to have our holdings in clusters. I have to say, with a couple of exceptions, we haven't been able to accomplish that.

"We have three courses in the Richmond-Baltimore corridor. We always look at acquisition first, but there is a course shortage there; plus, the quality of what can be purchased there isn't what it could be. So we've done most of our building in that region. It's part of our fill-in-the-blanks strategy."

In Virginia, GolfSouth has two projects in planning (Cypress Creek Golfers' Club in Smithfield, and Pleasant Valley Golfers' Club in Fairfax County) and two more under construction: South Riding Golfers' Club in Loudon County and Chesdin Landing Golfers' Club in Richmond. Overseeing these projects is Noel Tuck, Barton's son and GolfSouth's vice president of construction.

Other key members of the GolfSouth management team are Dr. Joel Barber, vice president of agronomy (formerly head agronomist for Golf Enterprises); Marc Brady, group manager for GolfSouth's Mid-Atlantic holdings; Don MacLaren, group manager for Central Florida; and Phil Wiggins, vice president and group manager for the remaining courses.

Other team members include Ron Hakala, vice president of sales and marketing; Controller Dean Doolittle; Tom McKay, vice president of Mid-Atlantic Development; and Betti Wright, director of merchandising.

"We feel like we've built a very strong management team" said Hunter. "What we're trying to do is apply sound business concepts to this business: pro-active marketing, focused marketing, common-sense but progressive business management practices — incentive programs, networking, resource management. Ultimately, we'd like to take advantage of the synergies that result from having groups of courses.

GOLF COURSE NEWS



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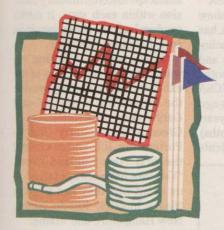
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### **BRIEFS**



#### KANGAROO GAINS MARKETING CHIEF

COLUMBUS, N.C. - Kangaroo Motorcaddies has named Thomas Curtin as its new sales/marketing manager. Curtin has moved from Atlanta where he worked in marketing and sales for a national distributor of camping and hiking equipment. Curtin has assumed the role of national sales manager, and will be working on various marketing efforts, including the design and promotion of the Kangarooweb site (www.kangaroogolf.com).

#### **KELLY NAMED MID-ATLANTIC PRES**

COLLEGEVILLE, Pa. - Joseph A. Kelly Ir, has been named president of Mid-Atlantic Equipment Corp., a leading East Coast distributor of golf cars



Joseph Kelly Jr.

and industrial utility vehicles, specializing in E-Z-GO and Yamaha products. Former President John Clough will become chairman of the board. Headquartered in sub-

urban Philadelphia, Mid-Atlantic Equipment has additional facilities in Gaithersburg, Md., Stuart, Fla., and Richmond, Va.

#### HERMAN TO LEAD HANCOR

FINDLAY, Ohio - Dail Herman has been named Hancor Inc.'s new presi-



dent. Herman was most recently chairman, president and CEO of AutoStyle Plastics, Inc., of Grand Rapids, Mich. Prior to joining AutoStyle, he spent 16 years

with the General Electric Company serving several divisions.

### SOSTRAM PRODUCT EARNS EPA NOD

ATLANTA, Ga. - Echo 720 Turf and Ornamental Chlorothalonil Fungicide, a product of Sostram Corp., has received final Environmental Protection Agency (EPA) registration and approval for the state of California. This broad spectrum contact fungicide provides excellent disease control on a vast variety of turfgrass and ornamental plantings. For more information, write Sostram Corp. at 70 Mansell Ct., Suite 230, Roswell, Ga. 30076.

### Alternative spike industry getting complicated

By HAL PHILLIPS

ORLANDO - Add another high-profile facility to the list of those that have banned metal spikes. While you're at it, add to the alternative-spike universe an-

other manufacturer, a strategic alliance and a lawsuit.

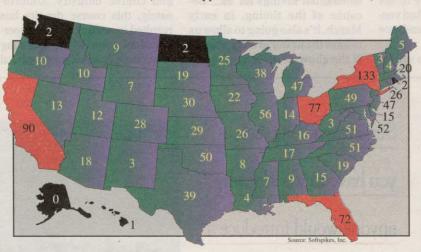
Philadelphia-based EPP, Inc. introduced its "Green Keeper" line of plastic cleats here at the PGA Merchandise Show in January and at the Golf Course Superintendents Association of America (GCSAA) show in February. According to EPP Vice President for Sales and Marketing Matt Spinelli, Green Keepers are designed to last up to 40 rounds. They also feature a self-locking thread

design, reducing the possibility of the cleat backing out.

"We designed this cleat especially for the avid golfer faced with pressure from

many courses to preserve putting surfaces by wearing spikeless cleats," said Spinelli.

Across town from the PGA Merchandise Show, Grand Cypress Resort - one



The map above shows how manay courses have banned metal spikes in each state.

of the busiest course facilities in Florida - illustrated the pressure to which Spinelli referred. Grand Cypress banned metal spikes beginning March 15. For the time being, staff members will replace guests' spikes at no charge.

More than 1,300 courses nationwide have banned metal spikes from their premises (see chart). Grand Cypress is the

72nd course to make the move in Florida. New York leads the nation with 133 spikeless facilities.

"Because of the quality levels we try to maintain at the resort, our heights of cut on the putting surfaces are very low," said Tom Alex, director of golf maintenance at Grand Cypress. "That cut with conventional golf shoes promotes spike marks. Going to spikeless shoes, we anticipate smoother put-

ting surfaces that will allow for more consistent putting."

There was a time, not long ago, when Continued on page 56

### Burning ban could put bluegrass growers out of business

By BOB SPIWAK

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

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

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

According to Linda Clovis, executive director of the Intermountain Grass Growers Association, the ban was instituted by then DOE Director Mary Riveland. Clovis maintains that when Washington Gov. Mike Lowry announced he would not seek re-election, Riveland arbitrarily imposed the ban, eliminating public notice and the normal public-hearing procedure. "She

Continued on page 57

### New England combines small shows into one

By HAL PHILLIPS

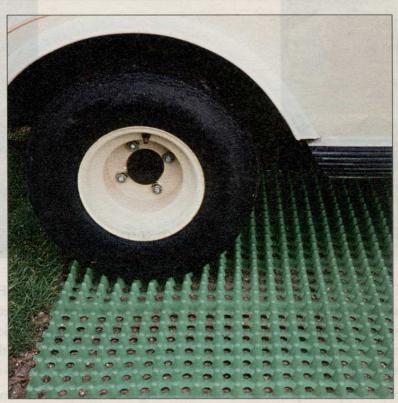
PROVIDENCE, R.I. — Industry firms that privately complain about an overabundance of trade shows, take heart: seven New England superintendent organizations have pooled their resources and pared the number of annual Northeast turf exhibitions by three.

The newly formed New England Turf Foundation - comprised of superintendent groups representing all six New England states, plus the New England Sports Turf Association and Mass Association of Lawn Care Applicators — will sponsor the New England Regional Turfgrass Conference and Trade Show here at the Rhode Island Convention Center, attached to the Westin Hotel, March 3-6, 1998.

This effort has, in theory, given New England superintendents more research fundraising clout while providing exhibitors access to more buyers in a single location.

"We all realized that we were splintering the market," said Richard DiRico, superintendent at Brae Burn Country Club in Newton, Mass., and president of the

Continued on page 54



#### **NEW PRODUCT OF THE MONTH**

Livonia, Mich.-based G&A Products has introduced Kormat Root Protection, designed for turf areas around cart paths. With the Kormat system, car weight is supported by the Kormat matrix, preventing soil compaction. Kormat is easy to install, cost effective, and aesthetically pleasing. For more information, contact Kormat at 810-363-8905. For more new products see pages 58-59.



### **New England**

Continued from page 53

New England Golf Course Superintendents Association (NEGCSA). "We all have the same goals: Raise money for research. This gives us better bang for our buck. With one show, we're not competing for speakers. And vendors obviously love the attendance we can offer."

"We're certainly glad to see it,"

said John Ferry, vice president of commercial sales at Turf Products, Inc., a full-service Toro distributor located in Enfield, Conn.

"I think the show will bring everybody together and be the biggest ever. In years past, there were four shows. It will mean substantial savings for us... Because of the timing, in early March, it's also going to allow us to have the newer prototype units at the show — those prototypes that are usually introduced at the national show in February.'

"It's positive all the way around," Ferry added. "We were surprised at how easy it all came together."

With its high concentration of golf courses, New England has always been fertile ground for the golf course industry. Unfortunately, this course density has resulted in several distinct superintendent associations operating in a relatively small geographical area. Each New England state has its own superintendents organization; then there's the NEGCSA.

The upshot was a trade show extravaganza: The NEGCSA has sponsored the annual Massachusetts Turfgrass Conference and Show, which featured 205 booths in 1997. The Rhode Island GCSA launched a show three years ago and drew 258 booths last year. The New Hampshire (70 booths) and Maine (50) superintendents

also host their own smaller shows.

While this strong regional show landscape fostered industry cohesion within each state, it meant vendors had four obligations in an area that didn't need four.

"We've always felt that we wanted to take better care of the exhibitors, because they provide the income for research," said Gary Sykes, superintendent at Green Valley Country Club in Portsmouth, R.I., and co-chair of the first New England event. "Vendors have always talked to us about why they had to go to Massachusetts, Rhode Island, New Hampshire and Maine.

"We considered that for a few years, but it's a big step. Eventually we decided regionalization was the way to go. It first came to the table three years ago, but I'm sure individual associations have probably mulled it over for years.'

According to Sykes, the various association presidents met many times between Spring 1994 and January 1996, when several key exhibitors were also consulted on the idea of a New England show. It was decided the launch would come in 1998.

Next March, organizers of the England Regional Turfgrass Conference and Trade Show expect between 250-300 booths, two and a half days of education, 12 hours of trade show time, and perhaps a 1-day GCSAA seminar, Sykes said.

The 1998 event will be managed by David Rosenberg of Newport, R.I.-based Marketing and Events, Inc. Rosenberg is the man responsible for the Rhode Island show, which has shown remarkable growth in three short years.

"David's done a great job and we voted to keep him on to maintain some continuity," Sykes explained. "Our dreams are to secure funding for turf research and education in the region. We think there's a need for more funding. We have two of the best research and education facilities in the industry with URI [the University of Rhode Island in Kingston] and UMass [the University of Massachusetts at Stockbridge]. But we've seen these programs starting to slide.

"I've been concerned personally, as a graduate of URI, to see state funding cut. Positions are not being filled at UMass. We all know about the problems funding NTEP [the National Turf Evaluation Program]. What's the future for these programs?

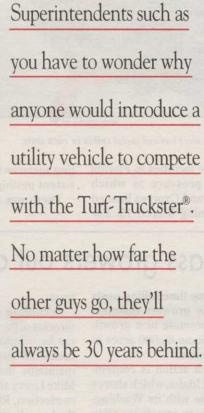
"If we lost Dr. Noel Jackson [of URI] and he wasn't replaced, the industry would really take a hit.

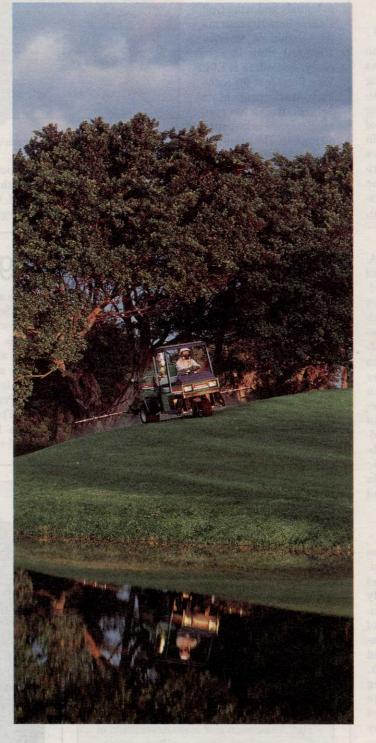
'We think there's a need for turf education programs to help people do their job better. We don't know for sure how big of a niche there is, but how many people from New England go to the national show? It's not 100 percent. So we think we can fill a huge need."



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### Deere/PGA

Continued from page 1

a Senior PGA Tour stop. However, the Deere deal goes several steps further. Indeed, it's one of the longest sponsorship agreement ever entered into by the PGA Tour.

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

Most important to Deere's Golf & Turf Products Division is the maintenance component, which makes the Moline, Ill.-based company the official course equipment supplier to the PGA Tour's 15 owned and operated courses. Lease financing will be provided by John Deere Credit.

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

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

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

"The switch has been a tough part of the transition," said Roth, "from a company we've done business with for a long time, to a new company. They (Deere) have high-quality people and I'm looking forward to working with them. The equipment part of the transaction is a positive aspect. It's a very exciting and significant proposal for both of us."

"It's important to realize," Peterson said, "that this isn't merely a deal for John Deere Golf & Turf. The specific turf equipment aspect is important, but this is a complete corporate commitment. It's Deere agricul-GOLF COURSE NEWS

tural. It's Deere industrial. It's Deere financial services. It's Deere health care. It's a unique situation that probably wouldn't have happened if we didn't have a PGA Tour event so close to our corporate headquarters."

Come 1999, the Tour event will take place even closer to head-quarters — 2 miles, to be precise. The new TPC course, called the TPC at Deere Run, will be located

on land once owned by the Hewitt family, direct descendants of company founder John Deere. The site overlooks the Rock River.

Three-time Quad City champion D.A. Weibring and his firm, Dallas-based Golf Resources, Inc., will design the course. Ground will be broken this spring, using Deere equipment.

"It's going to be instant championship golf," said Maury Miller of Golf Resources. Golf Resources has worked closely with the Tour design staff in creating the 7,030-yard layout. The front nine will play through rolling pastureland dotted with giant mature oak trees, according to Miller, while the back will wind along bluffs overlooking the river and down to the river. The closing four holes have been set up in the same area overlooking the river. Tournament golfers

will be able to see their opponents playing adjacent holes and hear the roar of the galleries.

"It's as dynamic a site as you're going to find in this area," said Miller. "Anytime you get near a river in the Midwest, the topography gets more dramatic. It's one of those mature sites, with mature trees, some of it right on the banks of the Rock River. It's like

Continued on page 60

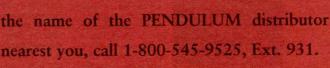
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### King names new national sales manager, sales associate

ST. CHARLES, Mo. - In a move aimed at doubling employment during 1997, King Safety Products has announced the appointments of Henry Witz as national sales manager of its retail division, and Katy King as sales associate.

Witz will lead King's expansion in the DIY market with safety sealed wire connectors, ergonomic tools, cable ties and wire lubricants. Witz was sales manager at Feit Electric Company, national sales manager at Caltherm, Inc., and field sales manager at Klein Tools.

With the introduction of two new lines of twist-on wire connectors in 1996, King began to broaden its line to move closer to its goal of a "one-stop shopping" source of electrical items and related tools and supplies.

In other King news, King named Douglas D. Hemphill general manager.

### Alternative spikes

Continued from page 53

the alternative-spike market was dominated by Bethesda, Md.-based Softspikes, Inc. Yet, competitors have materialized en masse. Indeed, EPP isn't the only manufacturer to enter the market this year.

Marlboro, Mass.-based MacNeill Engineering Worldwide - a veteran of the golfspike business - also rolled out its alternative-spike models at the winter trade shows. Hoping to capitalize on the long-standing popularity of its Champ metal spike, MacNeill has unveiled the Champ Tred-Lite, complete with metal screw component. The Tred-Lite also features a metal flange, allowing replacement tools to grip metal instead of rubber or plastic.

With 65 years in the spike business, MacNeill enjoys longstanding relationships with many golf shoe manufacturers. The firm added another this winter: MacNeill will supply cleats to the new spikeless golf shoe from Etonic, which has recently embarked on an advertising campaign extolling the virtues of spikeless golf shoes.

Shoe manufacturers will soon play a pivotal role in the meting out of alternative-spike products. As spikeless shoes proliferate, players who have established footwear preferences will invariably be exposed to the spikes favored by various shoe companies.

Trisport, for example, a trading division of the British BI Group Ltd., supplies its Turf Mate plastic golf cleats to Foot-

The competition among shoe companies has always been fierce. And it appears the tensions have spilled over into the world of plastic cleats.

In late February, Softspikes filed a patent infringement lawsuit against Trisport. The Maryland firm is seeking an injunction against further infringement of its British patent (No. 2,266,223) and damages.

"It is critical to Softspikes, Inc. that we aggressively protect our intellectual property, as it is the lifeblood of our company," said Jon Hyman, chief executive officer of Softspikes, in a prepared statement. "We have made a significant investment in research and development to bring our cleats to the market. We also have made a considerable investment in obtaining patent protection covering our products. Therefore, we will aggressively protect our technology and our competitive position."

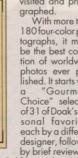
According to David Collins, chairman of Trisport, his firm has not yet been served with any proceedings. In a statement, Collins said Trisport is aware of the Softspikes patent and will "vigorously" pursue its revocation.

"Trisport will not allow a competitor to restrict Trisport's legitimate use of its own products and will take all action necessary to protect its advantage in the market," said Collins. "And in any case, the British patent obviously does not cover our activities in the U.S.A."

### GOLF COURSE NEWS BOOKSHELF

### The Confidential Guide to Golf Courses

By Tom Doak
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golf course design editor, this book describes, uncovers and rates more than 1,000 courses worldwide that the author has visited and photographed.



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With more than
180 four-color pho-tographs, it might be the best collec-tion of worldwide photos ever pub-lished. It starts with a "Gourmet's Choice" selection of 31 of Doak's per-sonal favorites,

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sonal 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.

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Edward Pira a wide variety of irrigation system components. A handson 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 approto plan effective irrigation systems, ensure appro-priate capacity, easy installation, and practical

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### Color Atlas of Turfgrass Diseases on Golf Courses By Dr. Toshikazu Tani Contributing Author, Dr. James B. Beard

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his creations as San Francisco, Winged Foot and
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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 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.

reveals the man behind the work. \$35.00, 207 pages, hardcover, limited edition of 1,200 copies.

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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.

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### Field burning

Continued from page 53

knew she'd be out of a job," said Clovis, "and rushed this [ban] through. In my opinion it circumvented due process."

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

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

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

Washington State University and University of Idaho, along with Jacklin, are examining other means. One is close-clipping the grass, then vacuuming the residue. "We need more basic research," said Allert. "What genes we need to change, for instance. But there is a costly time lag—a year before we get the crop out, another year to see the results."

Asked about the effect the ban will have on bluegrass prices, Allert said Washington bluegrass is not going to be the way it was. It can be grown in Idaho, but it is just a matter of time until there is a curtailment there as well, he said.

Clovis agreed and said that although no legislative action is pending, a group of environmentalists plans a different strategy: suing individual growers when they burn their fields.

For now, with only Washington being affected, Clovis believes smaller growers, some of whom may have fields of 20 or so acres, will get out of the business.

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

Patricia Hoffman heads a citizens group in the Spokane area called Save Our Summers (SOS). Founded in 1995, the group's primary concern is with health. "We founded the organization in response to 30-odd years of grass burning with no concessions GOLF COURSE NEWS

[from the growers]," she said. "In 1963 there were only about 16,000 acres being burned in the region, including Idaho. And now the acreage burned is around 100,000."

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

courses."

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

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

Bluegrass industry spokespeople regard the conflict as an emotional issue blown out of proportion as a health concern. Countering this, the DOE and SOS feel there is enough evidence to support their con-

tentions that the smoke is indeed harmful to human lungs, especially those of persons with respiratory problems. The groundswell of opposition to field burning is growing and it appears that the only solution will be new cultivars whose viability will not require the annual summer fires.

That, or replacement of bluegrass with another kind of turf.

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Seed Research of Oregon set out to find the Best 18 Bentgrass Greens in North America, planted exclusively to our own varieties of creeping bentgrasses—Providence (SR 1019), SR 1020, or the Dominant Blend. A winner was selected from each of the five regions and out of those five our judges chose...

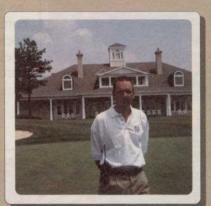
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### Natural citrus-based degreaser now available

Environmental Chemicals & Lubricants, a leading manufacturer of industrial lubricants has recently unveiled Orange It Degreaser. This natural citrus, water-based degreaser will break down the toughest oils, including No. 6 oil, as well as tar and asphalt from virtually any surface.

This multi-purpose cleaner can be used through hot or cold pressure washers and will not attack painted surfaces. Orange It is economical because of its high dilution rate with water and, when used straight, will not irritate the skin.

Orange It is biodegradable, non-flammable, non-corrosive, and contains no petroleum distillates. For more information, contact Dennis Daley, Environmental Chemicals & Lubricants at 414 Bell Fork Road, Jacksonville, N.C. 28541, or telephone 800-375-1560.

CIRCLE #301

### Eagle rinsate pad keeps golf courses in regulatory compliance

Eagle Container Corp. has made available its innovative Rinsate Pad system to address strict regulations imposed on containment of chemicallytainted water — often the result of washing equipment

Golf courses using the traditional reinforced, poured concrete rinsate pads are faced with having to monitor their fixed concrete rinsate pads and dikes. The inevitable cracking and general degradation can put operations in a non-compliance situation. To make matters worse, when the old fixed concrete pad needs replacing, the concrete and materials removed are considered hazardous waste and have to be dealt with appropriately

Eagle Container has designed a mobile, super-strong Rinsate Pad using heavy-gauge steel and stainless steel components, with user-friendly options like elevated recycle chemical storage tank package, leveling pads, and on-and-off ramps for easy equipment access. Further, Eagle offers Rinsate Pads housed in a drive-through unit, as well as a combination drive-through Rinsate Pad and high-security, self-contained, movable chemical storage unit.

Eagle Container Corp. also has the ability to custom-design. For more information, contact Doug Martin at 309-274-5273.

CIRCLE #302

### Ramp makes courses accessible for disabled

The Surfacing Products Division of Carlisle Tire & Wheel Company offers a ramp accessory for its Playguard resilient paving system to meet the Americans with Disabilities Act's mandatory accessibility standards.

The Playguard ramp, featuring a 1-in-12 slope, measures 24-by-24 inches and provides transition from 1/4-inch to 2 1/4 inches.

Playguard, unlike loose-fill resilient surfacing that presents maneuverability difficulties for the physically challenged, provides a firm, permanent, tractive and accessible surface. This maintenance-free surface has been used nationwide to bring playgrounds into conformance with ADA.

Playguard, which comes in 21/4-inch and 3 1/4-inch, meets shock-absorbing standards established by the U.S. Consumer Product Safety Commission and American Society for Testing and Materials for playground surfaces.

Playguard and its accessories can be installed over asphalt, concrete or natural surfaces, above or below grade with a variety of installation methods.

The resilient paving system is made with an exclusive formulation of high-grade rubber from reclaimed tire tread.

For more information, contact John Yaw, at Carlisle Tire & Wheel Co., PO Box 99, Carlisle, Penn. 17013; telephone 800-851-4746.

CIRCLE #303

GOLF COURSE NEWS



HERBICIDE

### Golf Course Classifieds

To reserve space in this section, call Diana Costello-Lee, 207-846-0600

#### **HELP WANTED**

#### **GOLF COURSE CONSTRUCTION**

Shapers, finishers and laborers needed. Must be willing to travel (Midwest & East Coast). Experience necessary. Mail or fax resume to: Quality Golf Inc. Att: Ron Stambaugh 13001 N. Old 3C Rd., Sunbury OH 43074. Fax (614)965-2956.

#### WANTED

Shapers and project superintendents needed for golf course construction in Southeast. Fax resume to: 904-477-5231.

#### **GOLF COURSE CONSTRUCTION**

Shapers/Supervisors needed. Experience with heavy earth moving equipment. Willing to travel (IL,IA,WI areas). Long term employment with benefits. Fax resume: 309-833-4993.

#### **SHAPERS WANTED**

Golf Course Construction Shapers Needed. Must be willing to travel. Fax resume and date available to 616-547-7009.

#### WADSWORTH GOLF CONSTRUCTION

Experienced grading and irrigation supervisors and shapers needed. Send resume to 200 Forest Lakes Bl., Oldsmar, FL 34677. Fax 813-854-2404.

#### SUPERINTENDENT/SHAPER

Golf Course contractor with operations nationwide seeking Shapers/Superintendents. Salary and benefits are competitive. Send resume to: Ryan Incorporated Central, Attn: Karla Simpson, P.O. Box 206, Janesville, WI 53547. Or fax resume to 608-754-2293. Equal Opportunity Employer.

#### **GOLF COURSE CONSTRUCTION**

Equipment operators needed. Well est. company with long-term work load needs individuals with talent operating all types of const. equip. Please forward resume to: Cypress Consulting LLC, 9 Union Sq., Suite 256, Southbury, CT. 06488. Fax: 203-262-8675.

#### JOB SEEKERS

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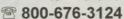


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### PBI/Gordon product controls algae, diseases

PBI/Gordon Corp.'s new QuikStop Fungicide/Algaecide provides turf and ornamental managers with a handy and effective tool for controlling algae and many disease problems. A water-soluble formulation of quarternary amines, QuikStop kills algae and many disease organisms on contact without causing phytotoxicity in turfgrasses and ornamental plants.

In addition to removal and control of algae in turf, including algal mats or crusts on golf greens and tees, QuikStop may also be used to supplement the turf manager's regular fungicide program. It provides crisis situation contact and temporary control of dollar spot, fusarium blight, leaf spot, brown patch, fading out, pythium blight, rust, fairy rings and toadstools.

In ornamental applications, it can help control leaf spot, powdery mildew, rusts, stemgall, phyllosticta blight, Anthracnose, stem rot, canker rot, crown rot and root rot. Bulbs, cuttings, seeds and seedlings may also be protected from fungal losses if they are treated with QuikStop.

For more information on QuikStop, call 1-800-821-7925.

CIRCLE #304

### TeamPro prevents spread of various weeds

DowElanco has launched a new product, Team Pro pre-emergence herbicide.

While consistently preventing crabgrass, goosegrass and other grassy weeds, Team Pro also provides control of broadleaf weeds, such as spurge and oxalis.

Team Pro, available in fertilizer, allows for excellent coverage and performance at 4 pounds per 1000 square feet, yet remains gentle on turf and safe for nearby ornamentals. In addition, it's non-staining and can be used on cool- or warm-season turfgrass.

Team Pro contains two active ingredients - benefit (tradename Balan preemergence herbicide) and trifluralin (tradename Treflan preemergence herbicide). This team of proven ingredients provides long-lasting control and has been successfully preventing weeds for years.

For more information about new Team Pro, call the DowElanco Customer Information Center at 800-352-6776.

CIRCLE #305

### New hose threadings

LASCO Fluid Distribution Products has added hose threaded fittings to its irrigation product offering. LASCO now carries male and female garden hose thread adapter connections as well as swing riser fittings. Sizes range from 1/2-inch to 3/4-inch.

Uses for the fittings include:

- · Swing riser fittings may be used in the small to mid-sized irrigation systems where installers use "funny pipe" to connect from the lateral line to a lawn or shrub sprinkler head.
- · The male and female garden hose thread adapters are for use in drip irrigation, home sprinkler systems, and other residential irrigation applications.

If you have any questions or would like to receive samples and price sheets, please contact us at 800-776-2756.

CIRCLE #306



### April

14 - USGA Green Section Regional Seminar in Orlando, Fla. Contact 908-234-2300.

17 - USGA Green Section Regional Seminar in Orlando, Fla. Contact 908-

22 - USGA Green Section Regional Seminar in Nashville, Tenn. Contact 908-

30 - GCSAA Seminar on Turfgrass Ecology in San Diego. \*

#### May

1 — GCSAA Seminar on Turfgrass Stress Management in San Diego. \*

5-7 — 51st Annual Southeastern Turfgrass Conference in Tifton, Ga. Contact Dr. Wayne Hanna at 912-386-3360.

### July

29 — Midwest Regional Turf Field Day in West Lafayette, Ind. Contact Midwest Regional Turf Foundation at 317-494-8039.

#### September

4-5 — Southwest Horticultural Trade Show in Phoenix.

#### November

4-7 - Turf and Grounds Exposition in Syracuse, N.Y. Contact 800-873-8873.

1998

#### January

20-22 - Midwest Turf Expo in Indianapolis. Contact Bev Bratton at 765-494-8039

### February

19-23 - Club Managers Association of America World Conference in Las Vegas. Contact Tamara Tyrell at 703-739-9500.

\* For more information contact the GCSAA Education Office at 800-472-7878.

### Deere/PGA Tour

Continued from page 55

something out of a book."

The new TPC at Deere Run course is scheduled to be finished by fall 1998 and ready for play in 1999 to host the new 1999 John Deere Classic.

"For me, one of the exciting things about this project is, there will be a TPC right here in Moline, in the heart of the Midwest - open to the public," said Peterson. "The other neat thing about this project: We've held annual meetings each summer - we call them 'Feedback Days' - when superintendents come to Moline to evaluate equipment. A local course has been kind enough to make its course available in the past, but now we'll have a place to hold evaluation meetings, test equipment, etc."

Often scheduled opposite marquee events like the Ryder and Presidents cups, the Quad City Classic has existed in relative obscurity for 26 years. The Deere agreement - with its high-profile sponsorship and new tournament site should transform the event. The Quad City has also switched places with the Anheuser-Busch tournament Kingsmill, netting the Deere event a prime July spot following the Western Open.

### Golf Course Marketplace

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CIRCLE #152

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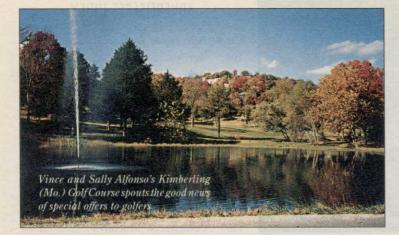


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### Kimberling Golf Course hits hot buttons in marketing to the public audience

By MARK LESLIE

Kimberling Golf Course here are taking advantage of the region's fame as the bass-fishing capital of the world and a

bastion of country-Western mu-

Vince and Sally Alfonso Jr., former co-owners of The Rail in Springfield, Ill., this year are creating perhaps the first-ever Fishing Scramble as well as "Down Home" 9-Hole Breakfast, Dinner and Supper scrambles where participants will pay one price and be treated to a meal, nine holes of golf with a cart, and "a lot of fun prizes on the course," said Vince.

Kimberling Golf Course, which the Alfonsos are touting as "the cutest little nine holes in Missouri," sits in the Ozarks on Tablerock Lake, 12 miles southwest of Branson, famous for its myriad clubs established by such music stars as Mel Tillis and Andy Williams. So when they bought the facility last October they decided to play on the area's strengths and "explore how to draw tourists," said Vince.

"It is an option to people going to the theaters," he said. "The scrambles will be the same price as the shows. I think it will be accepted well."

The Alfonsos will also draw on their course's strength — its length. Others might see the 2,300-yard, nine-hole track as too short. Alfonso, a PGA Class A teaching pro, says it is perfect

Breakfast, Dinner and Supper scrambles will be 'an option to people going to the theaters.'

- Vince Alfonso Jr.

for creation of a unique shortgame practice facility.

"We plan to develop our shortgame ('Is It Mind over Matter or What?') training schools," Alfonso said. "We think this lends itself beautifully to that.

"The course will provide lots of challenges. We have a full-service kitchen and large spaces for meeting and dining rooms, and a swimming pool. So a one-day school can provide breakfast, nine holes of golf, video analysis, and work on the short game.

"It will be different from traditional schools because it won't be a range environment. It will be a playing and training environment. Golfers will learn different techniques that I teach ... and get a clear picture of chipping. I think that's why it will work. The short game is well over half the game."

The Alfonsos have already experimented successfully with using the Cayman (or modified distance) golf ball on the course for parent-child events in which the parent uses the Cayman ball and the child a regulation ball.

"That is a great equalizer," Vince Alfonso said. "If a parent can hit the ball 220 yards off the tee, they hit the Cayman 130 to 140 yards. I think it chips and putts like a real ball."



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