

GOLF COURSE NEWS

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INSIDE

Midwest Still Booming

The North Central region once again leads the nation in development. How much is too much? 4-5

The Ascension of Alice

Read our Q&A with Alice Dye, who will take over as the ASGCA's first female president this month 39



COLLABORATIVE DEVELOPMENT

Jim Colbert (center) studies site plans in Kansas City with Baxter Spann (left) of Finger, Dye, Spann and Ron Fogler of the development firm, Colbert-Burns & McDonnell (CBM). For a story on CBM, see page 49.

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New Reality: Find funding or fall back

• Legends Group forms management REIT

By PETER BLAIS

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

firm that helped develop Golf Trust's original February stock offering.

"Golf Trust owns 10 courses at this time," said Christopher Haley, senior research analyst with Wheat First Butcher Singer. "It expects to acquire another \$55 million in 1997, \$110 million in 1998 and \$140 million in

1999. That should allow the REIT to more than triple the size of its portfolio."

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

Continued on page 55



Roger Behrstock

• Meadowbrook locates \$40 million partner in Apollo

By PETER BLAIS

BEVERLY HILLS, Calif. — Fast-growing Meadowbrook Golf Group has completed a \$40 million deal with Apollo Real Estate Advisors, a real-estate investment firm, that will allow Meadowbrook to expand its efforts to build, buy, lease and manage golf courses.

"If we do a good job with this first effort, Apollo has the ability to supply us with a great amount of money down the road," said Meadowbrook President Roger Behrstock. "We've really become their golf wing. This \$40 million will lead to \$100 million in actual transactions. We'll probably look at issuing a REIT (real estate investment trust) in a year or two."

The exact details have

Continued on page 57

Study: Golf has minimal impact on water table

By MARK LESLIE

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

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

Cohen said he was pleasantly surprised by the surface-water data, having

Continued on page 67



THE WATER'S EDGE

The peninsular 4th green at a new Palmer design — Legacy Golf Course in Sarasota, Fla. — illustrates the interdependence of water and golf. For a special report on the politics of water rights, see pages 35-38. For an update on the Legacy and other Palmer Golf Course Design projects, see page 50.

Developers delight in Costa Rican economics

By MARK LESLIE

FLAMINGO BEACH, Costa Rica — First it was fishing. Then surfing. And now, with the advent of its second and third courses, Costa Rica has joined the world of tourism.

Rancho Las Colinas opened nine holes in November and anticipates opening the second nine around Labor Day. The Robert Trent Jones II-designed Melia Conchal Golf Club intends to open the back nine holes in June. These are the first 18-hole courses built here in 23

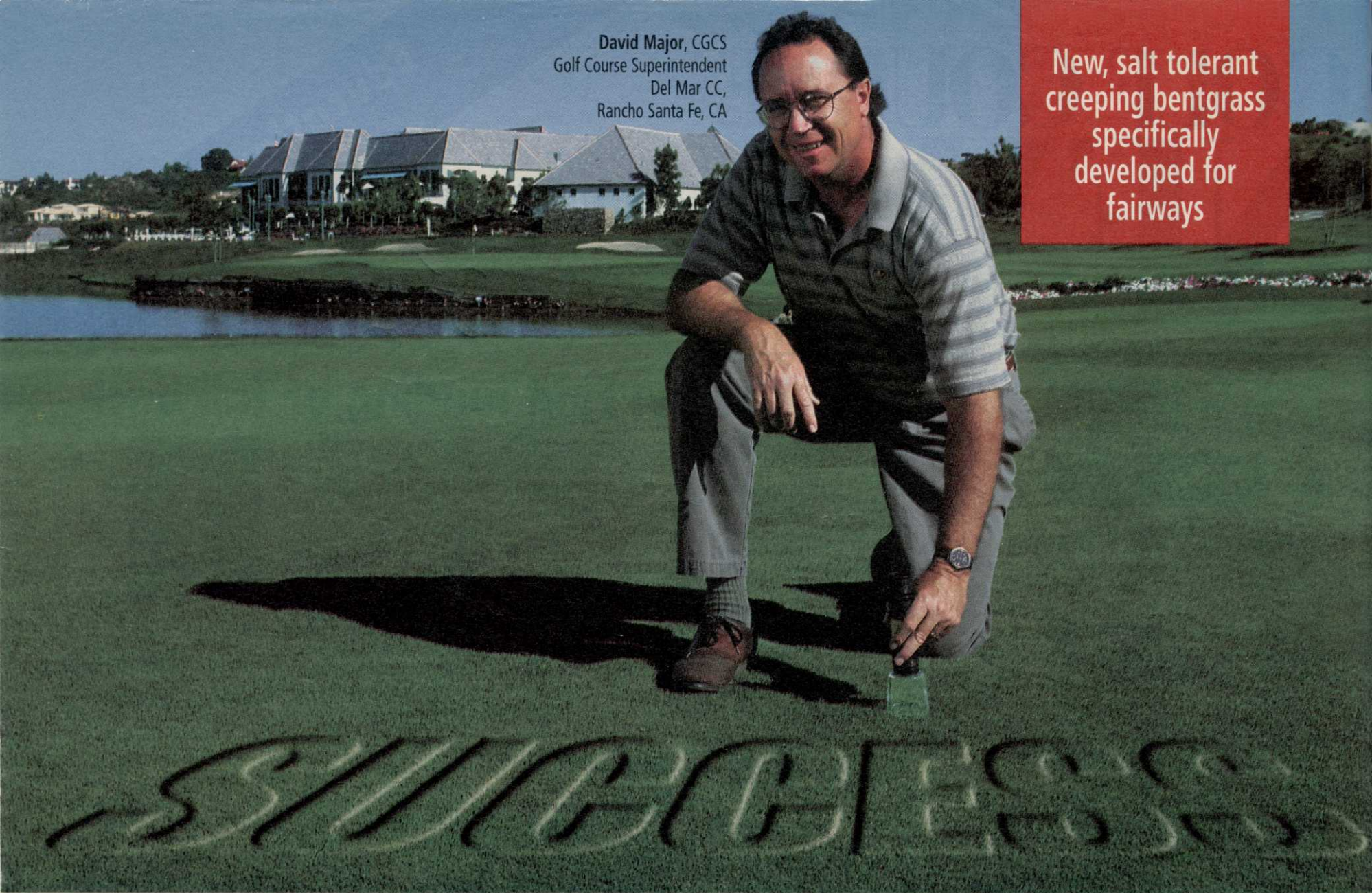
Continued on page 44



Ron Garl's course at Rancho las Colinas, located near Flamingo Beach, is one of several Costa Rican projects coming to fruition.

David Major, CGCS
Golf Course Superintendent
Del Mar CC,
Rancho Santa Fe, CA

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Ninth hole, Del Mar CC; Joe Lee, architect

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- David Major

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Expansion reveals ancient campsite

BRATTLEBORO, Vt. — The discovery of prehistoric tools on the site of a proposed nine-hole addition to Brattleboro Country Club may delay the club's expansion plans.

A search of the 122 acres where the course is expanding revealed prehistoric artifacts dating back to the Late Archaic Period between 2,000 and 3,000 BC, according to Douglas Mackey, an archaeologist with Hartgen Archaeological Associates of Troy, N.Y.

The club hired Mackey to conduct the site review.

Mackey indicated the artifacts and materials suggested that a portion of the site once served as a campsite for ancestors of the Abenaki tribe, one of the early tribes known to have occupied the region.

As a result of the discovery, the site is eligible for nomination to the National Register of Historic Places, a designation that could add a wrinkle to the project's review under Act 250, a state environmental law covering development.

Brattleboro Country Club officials are optimistic the addition can still go forward on time if proper steps are taken to protect the artifacts in the sub-soil layers. The nine-hole expansion is part of a \$3 million project that also includes a new clubhouse.

"Everything's copacetic," club

president Daniel Hannify told the *Brattleboro Reformer*. "We have to put down some netting and cap it (with soil). We are not going to build on top of it."

Mackey said he felt the club's chances to build were still very good because all the club intends to do, essentially, is plant grass.

Phoenix mayor working to save historical course

PHOENIX, Ariz. — Mayor Skip Rimsza has created an 11-member committee to look at ways to preserve the 18-hole Adobe golf course here at the Arizona Biltmore. The course is being threatened by the possibility of residential development on its fairways.

Under existing zoning, the Adobe course could be redeveloped into 110 residential lots. Committee members will represent various points of view,

including the city, area homeowners, the owner of the property and the Arizona Biltmore hotel. The committee is expected to present a plan for preserving the course by June 18.

Rimsza has already made it known that he wants to see the course preserved. The Adobe, one of two 18-hole courses at the Biltmore near downtown Phoenix, was built in 1932 and designed by William P. Bell.

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Ex-sewage plant out as site for displaced California course

SALINAS, Calif. — The ongoing saga surrounding creation of a golf course here to replace the soon-to-be shut down Sherwood Greens Golf Course has taken another twist.

If and when a replacement course is built, it won't be at the Salinas City Sewage Treatment Plant, as planned earlier. The City Council has voted to switch the intended site from the old sewage treatment plant to a more sylvan site in the city.

The new site, however, may mean delays in getting a new course built as the terms of a lease are worked out between the city and Monterey County, which owns the proposed new site. City officials hope to begin construction on a new replacement course as soon as possible to be ready for an April 1998 opening.

Sherwood Greens Golf Course will close in the spring of 1998 and converted into playing fields and parking area as part of a sports complex to be called the Rodeo-Sherwood Regional Recreation Area.



The boulder-strewn 14th hole at Giants Ridge Golf Club, a Jeff Brauer design in Biwabik, Minn.

Brauer project opens despite obstacles

By HAL PHILLIPS

BIWABIK, Minn. — Three years ago, a turf war between bickering governmental factions nearly scuttled an 18-hole course project here in the state's iron range region. But architect Jeff Brauer stuck to his environmental guns, patiently assuring opponents that a golf course would not tamper with the ecosystem.

Brauer's perseverance will pay off this

month when Giants Ridge Golf Club opens for play. The Arlington, Texas-based architect has made full use of a spectacular north woods setting, routing the course over and around natural boulder fields, wetlands and ancient pines. Designed with help from touring pro Lanny Wadkins, Giants Ridge stands to be Brauer's most high-profile project to date.

"Well, it's actually the lowest profile project we've done, in terms of mound-

ing," Brauer said. "We didn't have to manufacture much because the site is so special. I think because of the site, this is definitely my best work. But the best one is always the next one."

A former president of the American Society of Golf Course Architects, Brauer can list several acclaimed projects in his portfolio, among them Wild Wing Plantation near Myrtle Beach and TangleRidge Golf Club in Grand Prairie, Texas. Yet Brauer believes Giants Ridge should surpass them both.

The irony? The project nearly fell apart in 1994, when state and county environmental organizations disagreed on project approval. The Iron Range Resources and Rehabilitation Board (IRRRB), administered by St. Louis County, okayed the project while the state Department of Natural Resources (DNR) disagreed. Seems the DNR didn't think the county had the technical knowledge to decide one way or the other.

In response, the DNR asked for a full-blown Environmental Impact Study, the first ever requested for a golf project in Minnesota — indeed, the less stringent Environmental Assessment Worksheet had never been requested for a golf project in Minnesota.

After the state's Environmental Quality Board ruled in favor of St. Louis County, two citizens groups immediately filed suit to stop the project. The suit

Continued on page 12

WHAT YOU NEED IS A WAY TO STAND OUT.



IN BRIEF

CLARK, N.J. — Three Union County golf courses have joined the fast-growing list of facilities to ban metal spikes. Golfers here at Oak Ridge, Ash Brook in Scotch Plains and Galloping Hill in Kenilworth now require players to wear non-metal spikes alternatives on the courses. With newly restored greens at Ash Brook and Galloping Hill, the county decided to adopt a policy that is now shared by more than 1,200 private and public golf courses throughout the country.

♦ ♦ ♦

AMSTERDAM, N.Y. — Officials here at the 18-hole municipal Amsterdam Golf Course relied on volunteer community help this spring to clean up the course and prepare it for play. And they spiced it up with a creative incentive. Volunteers who chipped in to rake and pick up a winter's worth of leaves and fallen branches for at least three hours were given a free greens fee worth between \$14 and \$18. Similar volunteer cleanups have been held in the past, but this is the first year an incentive was offered to attract more participants. "It probably saved a week or so of work for three or four guys," said superintendent Richard Holmsby. "It was a big help for us."

Upper Midwest market growing unabated

Wolverine state leads nation in course openings four years running: How much is too much?

By PETER BLAIS

They are five of the coldest, wettest states in the country, not exactly ideal conditions for golf course development.

And yet, Michigan, Illinois, Ohio, Indiana and Wisconsin — which the National Golf Foundation (NGF) collectively refers to as the East North Central region — accounted for almost one-fourth [23 percent] of the 1996 new course openings, according to the NGF's most recent *Golf Facilities in the United States* report. Each state can be found in the NGF's Top 10 list of new course openings.

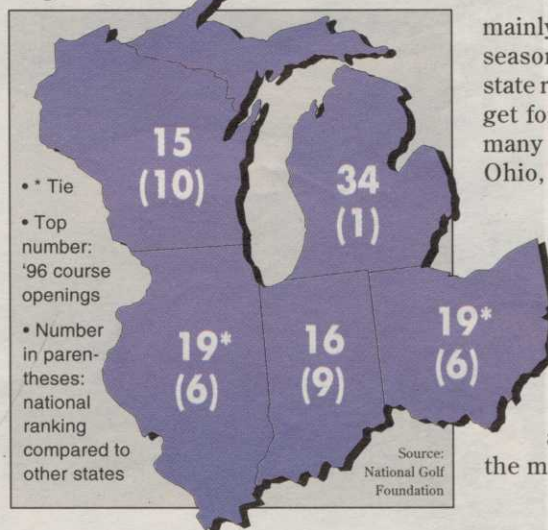
A source of pride? Yup.

A cause for worry? Ditto.

"There is concern about saturation of golf in Michigan," said John Dodge, president of the Michigan Golf Course Owners Association, whose state topped the chart for the fourth consecutive year with 34 openings in 1996. "We already have one of the highest participation rates in the country [17 percent], so bringing new golfers into the market is difficult compared to somewhere like Alabama [7 percent] where they have the demographic



The Gables Course at Lakewood Shores, a 1993 Kevin Aldridge design located in ... Oscoda, Mich.



potential to attract more people."

Two distinct golf markets exist in Michigan, urban golf in the southern cities and resort golf, mainly in the northern part of the state, Dodge said.

"Studies show there may be room for a few more courses in urban areas, like Detroit, because of the population," Dodge said. "There are an awful lot of courses opening up north, but it's

mainly a tourist area with a short golf season and no convenient air flights. The state recently doubled its promotion budget for golf, realizing we've been losing many of our best customer areas like Ohio, Minnesota, Illinois and Indiana to Southern resorts.

"Michigan is supposed to open something like 30 courses annually for the next three years. As owners, we have to do something to create more golfers to fill them."

Michigan's southern neighbors are generally more optimistic about the market for new courses.

Continued on page 70

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Bama mulls new Jones Trail stop

PRATTVILLE, Ala. — It appears this town is close to becoming another stop on the state's highly regarded Robert Trent Jones Golf Trail, a group of seven, daily-fee golf facilities designed across Alabama by Robert Trent Jones.

Deborah McGill, director of economic development at the Prattville Area Chamber of Commerce, told the *Montgomery (Ala.) Advertiser*, "We have met all obligations with the exception" of obtaining a lease for some property from the U.S. Army Corps of Engineers."

Several city and county commissions have signed on to the proposed \$22.5 million project.

David Bronner, chief executive of the Retirement Systems of Alabama, which manages the Robert Trent Jones courses, said leasing a large parcel of federal land along the Alabama River will be crucial to the project's viability. He said the wilderness setting and wetlands beauty are critical to the success of the envisioned 1,100-acre, 36-hole facility.

Prattville, which is just outside Montgomery with easy access to Interstate 65 and the Alabama River via riverboat, is seen as a well-positioned location for another Trail stop.

According to a multi-faceted arrangement between Prattville and several area county commissions, Prattville would be responsible for the land purchase while paying for an access road, water and sewage lines to the golf course.

The Retirement Systems of Alabama would be responsible for the debt of the golf course itself and the only entity to profit directly.

Dog solves goose problem — again

GARDNER, Mass. — Officials here at the Gardner Municipal Golf Course have contributed to a growing maintenance trend at Northeast golf courses—they've hired a border collie.

The city council recently approved using \$3,500 from golf course funds to buy, house and insure a one- to two-year-old, professionally trained dog to chase away Canada geese from the golf course.

The dog will live with golf professional Michael Egan, who will supervise the dog's seven- to 10-hour work day patrolling the course that is home to as many as 200 birds during the warm months. The geese migrate south in the winter and return in growing numbers each spring.

N.Y. town shows expanded patience

HAMBURG, N.Y. — The new back nine here at Hamburg Town Golf Course will not be ready for play until late summer or early fall. The new nine holes were seeded last autumn, but town and golf course officials are waiting several months before sub-

jecting the new grass to hundreds of golfers. "Dry conditions and warm temperatures would be a boost for this grass to mature," Superintendent Gary Nelson told *The Buffalo News*. "I really can't say when it will open. The weather is the biggest factor."

Soon: Not so soggy in Schenectady

SCHENECTADY, N.Y. — A \$215,000 project is underway to improve drainage here at the Schenectady Municipal Golf Course. The popular course has historically suffered from soggy, swamped holes in the spring and after heavy rains. Officials have usually been forced to close a hole or two and keep golf carts off the course for days.

At least seven holes are expected to improve dramatically with the improved drainage. A new holding pond behind the 11th tee is also being built as part of the project. Along with the drainage project, work will also start on a full system of paved cart paths. City officials are also planning \$200,000 in improvements to the clubhouse.



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Ticketmaster, Golden Bear consider partnership

PORTLAND, Ore. — Ticketmaster Group, Inc. and Jack Nicklaus' Golden Bear Golf, Inc. plan to found a company that will sell advance tee times at public golf courses.

According to *The Oregonian* of Portland, Ticketmaster is in the process of taking on a handful of small competitors offering similar services. The new company, called Ticketmaster Golf, will allow growing numbers of U.S. golfers to reserve tee times by telephone or through the Internet at courses that participate in the new

service. Ten thousand of the nation's 15,000-plus courses are open to the public.

No course has signed up to date, according to Ticketmaster, although some have reportedly expressed interest in the service.

A company called The Golf Network (TGN) has offered a similar service to Northwest golf course operators for more than a year. Dan Gorgol, TGN president, said the operation has sold its services to the Portland and Seattle city golf courses as well as to several area public and private courses.

Nicklaus to double dip in Williamsburg

WILLIAMSBURG, Va. — Williamsburg National Golf Club is preparing for construction of its second Jack Nicklaus-designed golf course.

"If we can finish on plan again this year, we are going to give the go ahead to Golden Bear Design on our second course in 1998," said Mike Sanders, president of Legacy Golf Manage-

ment, which owns and operates Williamsburg National and four other courses on the East Coast.

"Jim Lipe of Golden Bear Design completed the routing of the second course when our first course was constructed," continued Sanders. "I think we will begin revisiting those plans toward the end of 1997 and into the spring of 1998."

The Williamsburg Area Golf Association has been promoting golf packages and Sanders believes he can grow package rounds at his property to 8,000 this year, compared to 4,000 in 1996.

"At that point we should have the momentum to expand," Sanders added.

Lipe said the topography for the second course will offer a lot of wetland carries and natural hollows.

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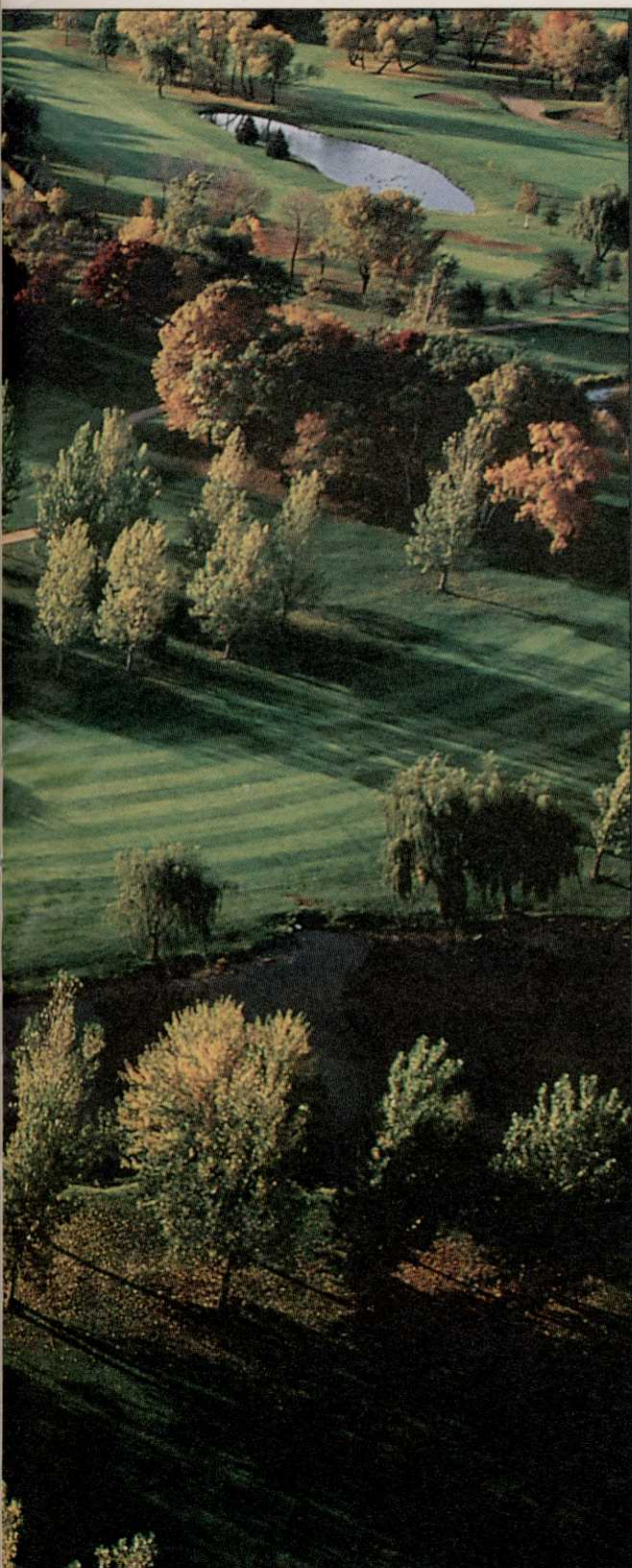
LAS VEGAS — In other Nicklaus Design news, the Nicklaus-designed SouthShore Golf Club at Lake Las Vegas Resort has opened for play. "I get a big charge out of playing these courses for the first time," said Nicklaus of his first signature course in Nevada. After not playing competitively in Las Vegas for more than 20 years, Nicklaus has indicated he will be present for the 1997 Wendy's Three-Tour Challenge in November here at SouthShore Golf Club.

Cincinnati tries to regain control of city courses?

CINCINNATI — The city may once again attempt to bring the recreation and parks departments, and its golf courses, under direct control of the city manager.

This effort follows a scandal in the city's golf program whereby professionals allegedly tampered with records, stole from the operation and conducted other improper business deals at the city's golf courses. The situation led to the firing of three golf pros and the pending resignation of Recreation Director Ron Chase. As a result, several city councilors have asked City Manager John Shirley to re-examine the issue of bringing both departments under the city manager's authority.

Meanwhile, the city's Recreation Commission revoked the new contracts of three golf professionals, reprimanded Chase for failure to adequately oversee the golf program, accepted Chase's resignation effective in September, and publicly apologized to the citizens of Cincinnati for the commission's own lack of oversight.



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Harvard Design seminar in June

CAMBRIDGE, Mass. — The Harvard University Graduate School of Design will offer next month its annual Golf Course Design and Development Institute, a group of six courses related to the planning and design of golf courses and resorts.

The course offerings: Golf Course Development: Rounds, Rates, Revenues, and the Importance of Designing to the Market (to be offered June 16-17), Golf Course Development: Design Foresight and Impacts of Cost and Operating Expense (offered June 18), Golf Course Environmental Considerations (June 19-20), Golf Course Design (June 23-24), Golf Clubhouse Design and Site Planning (June 25-26), and Golf/Residential Site Planning (June 27-28). These courses may be taken in any combination for tuition discounts.

Instructors include golf course designers Geoffrey S. Cornish and Robert M. Graves; architects Kenneth DeMay and Richard Diedrick; designers and environmentalists William Burbank and the course architect, Dr. Michael Hurdzan; golf development con-

sultant Barbara Hanley; landscape architect and planner David Howerton; attorney Robin Baker; developers John Grab, Tony Green and Jimbo Grisebaum; and course architect and former professional golfer David Esler.

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Clearing underway at S.C. development, minus architect

ROCK HILL, S.C. — The already active Rock Hill-area golf course market will soon have another player.

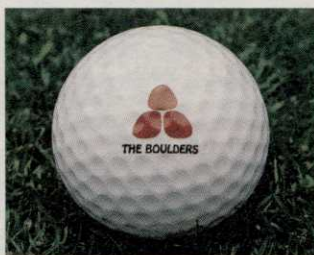
An 18-hole public golf course, tentatively named Plantation Hills, has scheduled a spring 1998 opening. Clearing has started for the golf course, which does not yet have a designer lined up. The course will be part of the \$9.5 million Eastview Acres golf and residential com-

munity being developed on 540 acres off S.C. 5 west of Rock Hill. Eastview Acres, developed by Joe Miktuk and his J.C.M. Corp., will feature 10 lakes, tennis courts, a swimming pool and hiking trails.

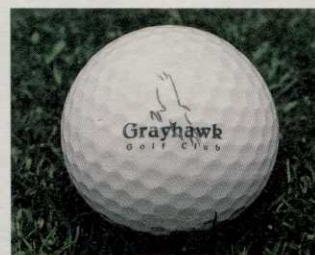
The Rock Hill area is currently home to the private, 18-hole Rock Hill Country Club, the 18-hole daily-fee Carolina Downs (opened in 1985), and the new 18-hole Waterford Golf Club.



Grand National
Auburn/Opelika, AL



The Boulders Resort
Carefree, AZ



Grayhawk Golf Club
Scottsdale, AZ



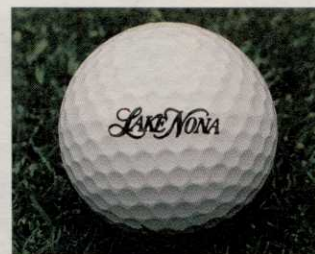
Four Seasons Resort Aviara
Carlsbad, CA



Keystone Ranch Golf Course
Keystone Resort, CO



Jupiter Hills Club
Jupiter, FL



Lake Nona Club
Orlando, FL



Pine Tree Golf Club
Boynton Beach, FL

Hurdzan makes news in desert

PALM DESERT, Calif. — The new Desert Willow Golf Resort North Course here features acres and acres of sand, a characteristic that course architect Michael Hurdzan said is just the way a desert course should be. Apparently, *Smithsonian* magazine agrees, as the North Course was one of several golf courses featured in a March 1997 article examining the trend toward more environmentally sound golf course design.

Hurdzan, who designed the course with PGA Tour player John Cook, told a crowd gathered for the recent grand opening at Desert Willow that natural is better, especially when it comes to landscaping and vegetation between and around the fairways, tees and greens.

"I think golf courses have become too plastic," Hurdzan said. "Our environmental awareness since the mid- to late-1980s has gotten better. The best golf is played on natural courses. So even though it is tough to have a natural golf course in the desert, let's do the best we can. Let's try to use less water and less fertilizer and less pesticides. Let's try to bring the native vegetation in."

Hurdzan and Cook are expected to break ground on a second 18-hole course at Desert Willow, the South Course, this summer. The South Course is expected to have more large trees, more grass and more lakes.

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Ground broken on Illinois muni

WORTH, Ill. — Construction is underway on the new \$2.9-million village of Worth municipal golf course.

Crown Golf Construction of Northbrook, Ill., is clearing and grubbing the site, which is located on 230 acres along the Cal-Sag Channel in the southwest suburban community. The layout was designed by Robbins &

Koch of Cary, N.C. Meadowbrook Golf, Inc. is serving as course consultant.

The 18-hole course, along with a driving range, is expected to be completed by late fall but won't open for plan until late 1998. Construction of a clubhouse and related facilities will be the second phase of the project.

Course expansion market booms in New York's Southern Tier

BINGHAMTON, N.Y. — Several addition and renovation projects at golf courses around New York State's "Southern Tier" have boosted the region's golf scene:

- The En-Joie Golf Club in Endicott, site of the PGA Tour's annual B.C. Open since 1973, is undergoing wholesale renovations in a two-stage project that is scheduled for completion in the spring of 1998.

- The Delhi College Golf Course opened this year as an 18-hole layout. Previously a nine-hole

course, Delhi last year completed construction of nine new holes which will be part of an ongoing turf management and golf course operations program for students at the college.

- The Belden Hill Golf Club near Harpursville is planning to open nine new holes in August which will make a full 18-hole course.

Another notable regional development is the establishment of a state-of-the-art junior golf training center at the two-year-old Links at Hiawatha Landing. The Links, which already has a highly-

regarded 18-hole championship course that hosted last year's New York State Men's Amateur Championship, is in the process of becoming "the hub of junior golf in the Northeast," according to J. D. Daniel, director of golf at The Links.

The three-hole junior training center — endorsed by the U.S. Golf Association and the National Association of Junior Golf as one of six regional centers — is scheduled to open at The Links in August.

June opening for Indiana's Noble Hawk GC

KENDALLVILLE, Ind. — With construction and seeding of the 18-hole layout complete, Noble Hawk Golf Links will open for public play here on June 13.

Noble Hawk is a daily-fee facility designed by Mark and Tim Dykstra, operating as Dykstra Design. The Dykstras have also retained an ownership interest in the project, which includes 78 half-acre home sites and a villa project. Tim Dykstra, who is also a Class A PGA Professional and a member of GCSAA, had earlier designed and built nine-hole additions to Lagrange Country Club of Lagrange, Ind., and Portland Country Club of Portland, Ind. At opening, Tim will be acting director of golf for the facility.

The course was constructed by Ryan, Inc. Central of Janesville, Wis. Ryan has constructed a number of outstanding public and private courses in the Midwest, including Harborside, an innovative 36-hole Dick Nugent design in south Chicago. Kerry D. Ohlwine (1990 B.S., Purdue University) has been named superintendent.

CORRECTION

An listing in the April 1997 issue of *GCN* incorrectly stated that the Brassie Golf Corp. was the operator of North Port National at Lake of Ozarks, Mo. Brassie ceased being manager in March 1996 when North Port National was purchased by Osage National Golf Club, L.L.C. and renamed Osage National Golf Club. Since March 1996, Osage National Golf Club has been and continues to be managed by the owners.



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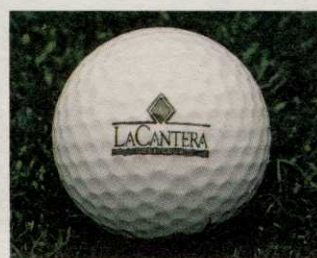
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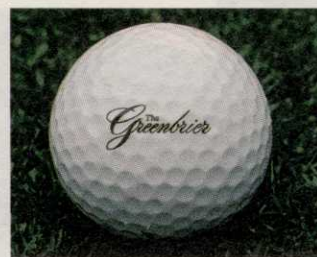
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Troubled Illinois project finds a new owner, ESM

FINDLAY, Ill. — ESM Development Corp. has purchased the financially troubled Eagle Creek resort here on Lake Shelbyville — which includes 138 lodging rooms and an 18-hole golf course — for \$2.5 million.

ESM Development, which has offices in Lincolnshire and Springfield, has pledged immediate improvements to the golf course as well as adding an outdoor swimming pool and increasing summer staffing levels. ESM also owns the Rend Lake resort in southern Illinois and manages

a variety of properties around the state.

The 400-acre Eagle Creek has had a rocky history going back to 1988 when developer Edgar Forrester built the resort using a combination of \$13.5 million in junk bonds and a \$3 million grant from the Build Illinois economic development program. Income and occupancy rates never lived up to projections after the resort opened in 1989, and it was forced into bankruptcy. Occupancy rates have averaged about 50 percent over the last two years but ESM said to expect improvement.

Cantigny to build 9-hole 'youth' course

WHEATON, Ill. — Cantigny Golf Club near Wheaton plans to build a nine-hole golf course especially for kids.

The course, with par-3 holes ranging from 50 to 150 yards, will be used to teach safety, golf etiquette and the rules of the game to young players between the ages of 8 and 15, according to Mike Nass, general manager

of Cantigny Golf, which runs a regulation-size 27-hole golf facility. Cantigny plans to build the "Youth Links" instructional course on 20 acres next to its regulation facility.

The course itself will feature sand bunkers, a water hazard and other conditions golfers experience on longer courses.

Some adult play will be allowed on the course. Youngsters will be allowed on the course alone once they have been certified through the club. Pending approvals, construction could start on the course this summer with a spring 1998 opening.

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Local consortium looks to upgrade Tenn. facility

LEBANON, Tenn. — Six Rutherford County businessmen have purchased the Indian Hills Golf Course and plan to turn the 18-hole daily-fee facility into a "top Middle Tennessee course." Indian Hills, opened in 1988, is located in the middle of one of the hottest growth areas in Murfreesboro.

The partners in the new Indian Hills L.L.C. are John Floyd, president of Ole South Properties, Inc.; Jack Holden, a retired president of Mid-South Bank and Trust; Jerry Benefield, chief executive officer of Nissan Motor Manufacturing Corp. USA; Bob Parks of Bob Parks Realty; Don Collins, owner of B&M Insulation; and Dave Normand, a former general manager and head professional at the Smyrna National Golf Course in Murfreesboro who will take on those same titles and responsibilities at Indian Hills.

Partner John Floyd told the *Lebanon Democrat*, "We are so excited about the prospect of turning Indian Hills into a top Middle Tennessee course, pro shop and restaurant. Anyone who has ever visited the facility knows the potential is there."

CLUB CAR NAMES NEW VP, SALES & MARKETING

AUGUSTA, Ga. — Club Car President and Chief Executive Officer A. Montague Miller has announced the promotion of Michael Harris to vice president, sales and marketing. Harris, an 18-year veteran of Club Car, most recently held the position of vice president, sales. In his new position, Harris will be responsible for all golf car, utility and transportation vehicle sales worldwide. In addition, he will assume responsibility for the Marketing Department and all support and promotional activities.

GOLF COURSE NEWS

Done deal: Utah course purchase paves the way for privatization

PARK CITY, Utah — Melrose Companies, a South Carolina-based development firm, has purchased the Park Meadows Golf Club here and will transform the site of Utah's Senior PGA Tour event into an exclusive country club.

Reports indicate Melrose already has 115 reservations for charter memberships costing \$32,500 each, according to *The Salt Lake Tribune*.

Park Meadows' contract with the Franklin Quest Championship event on the Senior Tour ends after this year's tournament in late July. But Melrose officials want to keep the event while also making several improvements on and off the golf course.

Melrose bought Park Meadows from Pundy Yokouchi, a Hawaii resident who purchased the course in 1991. The 14-year-old layout, designed by Jack Nicklaus, had been operated as an upscale, daily-fee, resort-style course.

The Park Meadows conversion — combined with the purchase and recent private conversion of the former Jeremy Ranch Golf Course — take away two of Utah's top-ranked courses from public players. However, the state still has an unusually high percentage of public courses, particularly among those opened in the last 35 years.

Colbert will design course at alma mater

MANHATTAN, Kan. — Kansas State University officials are planning a new multi-million dollar 18-hole championship golf course designed by PGA Senior Tour star Jim Colbert for 300 acres northwest of Manhattan. Colbert is a Kansas State alumni and former member of the golf team.

The proposed course would be called Colbert Hills and would be owned by an arm of the KSU Foundation, which was created to run the course. The course would be home to Kansas State's men's and women's golf teams and would be open to daily-fee and membership play.

In addition to the course, school officials are planning a driving range, clubhouse and, eventually, a six- to nine-hole teaching course. Proceeds from the course's operations would go to benefit the school's golf programs.

Kansas State officials would like to have the course ready for play in 1999, meaning construction on the estimated \$8.5 to \$10 million project would have to start by this fall.

Melrose's improvement plans include a members grill room, a health club with indoor pool, locker rooms and card rooms. On the golf course, the company plans to improve cart paths and bunkers, and institute mowing refinements to improve fairway definition.

Popular Hawaiian layout reopens following refurbishment

KANOEHE, Hawaii — The 34-year-old Bayview Golf Course, a Windward landmark for decades, has reopened for limited play as a renovated 18-hole, par-60 layout.

The refurbished course is part of several improvements and additions at Bayview, which opened in 1963 and has been one of the most popular and affordable places on Oahu to play golf — day and night, under the lights. The new

Bayview will offer a double-decker automated driving range, a 36-hole putting course, a clubhouse and an auxiliary clubhouse with meeting and banquet rooms.

A grand opening for the entire facility is scheduled for June.

The new Bayview will also be part of a multi-purpose recreational facility that will include soccer fields, an all-purpose field and park area.

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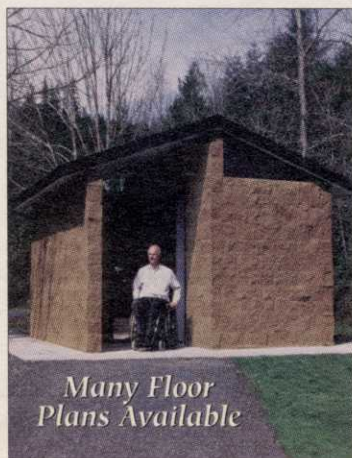
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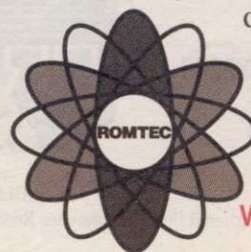
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Wash. town may be exposed to resort/golf development

ROSLYN, Wash. — The town made famous as the setting for the television show "Northern Exposure" is now considering a \$350 million destination resort with several 18-hole golf courses as its economic hope for the future.

The town of Roslyn has struggled since the canceling of the show after the 1995 season. Streets that were once lined with tour buses and tourists are now quiet and many small shops opened to take advantage of the economic boom have closed or scaled back their hours.

Now, Trendwest Resorts of Bellevue, Wash., is proposing a massive resort that it says will save the former coal and logging town that had a population of more than 5,000 during World War II but is now down to 895.

Trendwest is proposing 550 hotel rooms, 800 condominiums, more than 3,000 homes and "several golf courses." Trendwest has already built 19 smaller vacation resorts under the Worldmark Resort name in Washington, California, Nevada, Oregon, Hawaii and Mexico.

Redmond course to expand to 36

REDMOND, Wash. — In an expansion that will make it one of the largest golf facilities in the Pacific Northwest, the Willows Run Golf Course plans to build 18 new holes on 141 acres north of its existing course. Also in the works: A nine-hole pitch-and-putt training course on 24 acres to the south.

The course's owner, David

Evans and Associates, wants to finish the expansion, which will involve building new wetlands at the site, by fall 1998.

The only other 36-hole facility in the Seattle-Bellevue area is the under-construction facility at Newcastle, Wash., just south of Bellevue across Lake Washington from downtown Seattle.

The proposed pitch-and-putt course, along with Willow Run's current 24-station driving range and practice putting greens, will give Willows Run a thorough training facility. In addition to the expansion, Willows Run's owners plan to upgrade the existing 18-hole course to "championship level."

Brauer in Minn.

Continued from page 4

named some 120 environmental reasons to halt the project — many lifted directly from the DNR's motion for EIS.

Sherry Enzler, Minnesota's deputy attorney general at the time, summed up the situation: "It appears the DNR has been in close contact with the citizens group."

Eventually, the suit was thrown out. Indeed, further studies conducted by Rockwell, Md.-based Environmental & Turf Services (ETS) showed that Brauer and his team had already gone to extraordinary lengths to protect wetlands and preserve endangered species like the barren strawberry and marsh marigold.

"I have never worked on a project where the golf course architect has gone to such great lengths to prevent surface drainage," said ETS President Stuart Cohen at the time.

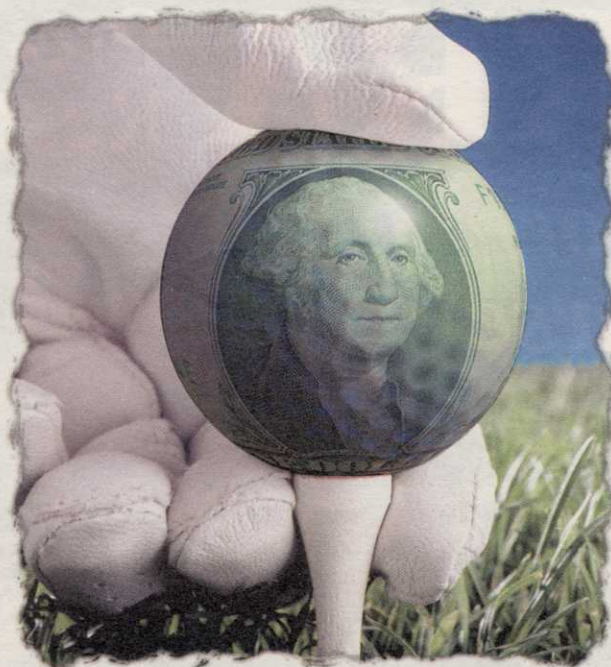
The IRRRB approved the project in early November 1994.

"Two full construction seasons later, here we are," said Brauer, weary from the process but well pleased with the results.

BRAUER/ELKINGTON CHRISTEN TIERRA SANTA

WESLACO, Texas — The new \$6 million, 18-hole Tierra Santa Golf Course designed by Jeff Brauer has opened for play here. The par-72 layout, which Brauer designed with consultation from PGA Tour player Steve Elkington, is part of a 370-acre single-family home residential community. The master-planned, walled community offers security-gated entrances, tennis courts, a community swimming pool and a private children's park. Tierra Santa, which is a daily-fee public course, will also have one of the finest practice facilities around, with a 23,000-square-foot practice green and a driving range with tees at both ends.

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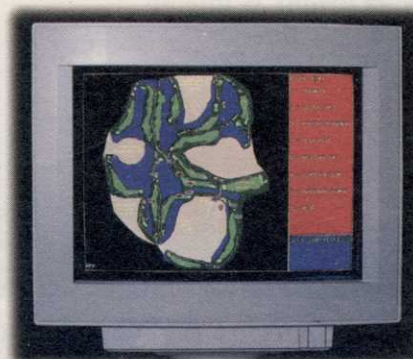


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CIRCLE #106

Still awaiting renovation, Ross course may reopen

BEDFORD, Pa. — Officials here at the Bedford Springs golf course are expected to open at least a portion of the historic but dormant layout this month.

"We're anxious to get the thing going," said Sidney Reese, executive director for the Dauphin County General Authority, which owns the golf course.

The original plans called for renovations of the Donald Ross-designed course to be finished last year, with a grand reopening this year. But those plans were scrapped when the Bedford County Developmental Authority failed to perform environmental remediation on the 169-acre property.

Course architect Rees Jones, retained to handle the redesign in 1996, has since left the project. Course officials are now studying proposals from two other golf course architects.

Touched-up Tallahassee nine to reopen this fall

TALLAHASSEE, Fla. — The city has closed the Jake Gaither Golf Course here for major renovations and redesign of the popular facility. The 41-year-old, nine-hole golf course will be closed for about six months, with a grand re-opening scheduled for late fall.

The renovated Jake Gaither Golf Course will feature enlarged greens built to United States Golf Association specifications, new tee areas accommodating a wide variety of golfers, and a new irrigation system. The planned improvements also include new cart paths, new Bermudagrass fairways and a new 7th hole lengthened to a par-4, making the nine-hole course a par-36 layout.

The redesign was handled by Burandt Golf Course Planning and Design of Salt Lake City, while the irrigation was designed by Gulf Coast Irrigation Consultants of Pensacola, Fla. Construction will be done by FourSome, Inc., of Vestal, N.Y.

Virginia Beach TPC may host Nike event

VIRGINIA BEACH, Va. — The planned TPC of Virginia Beach could be home to a Nike Tour event as early as spring 1999, according to *The Virginian-Pilot*.

When city officials announced plans to build the new Tournament Players Club here in the Lake Ridge section, they also announced the PGA Tour also has an option to host a Nike Tour event at the course.

Keith Tomlinson, vice president of development of golf course properties for the PGA Tour, told the *Virginian-Pilot*, "We think there's a good opportunity for a Nike Tour event there. Obviously, the PGA Tour has a long-standing relationship with The Michelob Championship [held annually at the Kingsmill Golf Club in Williamsburg] and would not do anything that would present a conflict."

If the PGA Tour exercised an option for a Nike event, the city would be asked to sponsor it for not less than five years. The Nike tournament would likely be held in the spring prior to Memorial Day. Beginning this year, The Michelob Championship will be held annually in the fall.

Plans now call for remediation and upgrades at Bedford Springs this spring and early summer, with a late spring opening for some of the golf course. It's also possible there will be a late-summer opening of more holes, but the course may also be closed for play to accommodate renovations.

The clubhouse will be redecorated this year at its present site. Plans eventually call for relocating the clubhouse from a flood plain to a higher elevation, where tennis courts were previously located.

Operator purchases another Pa. facility

SHOEMAKERSVILLE, Pa. — Reading, Pa. businessman James S. Froelich has purchased the Perry Golf Course for an undisclosed amount and plans to recondition the 150-acre, par-70 layout along Route 61 north of Shoemakersville.

Froelich, who also operates the May Apple Golf Links near Carlisle, Pa., which he bought in 1994, purchased the Perry layout from six owners who

had operated it over the past two decades. Many of the regular golfers at the Perry Golf Course are senior citizens and Froelich has pledged to keep green fees the same or lower while improving course conditions.

Froelich's plans for the Perry Golf Course include enlarging the tee areas, replacing carts, installing cart paths that will lengthen the playing season, and improving maintenance practices.



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Are sponsorships missing the mark?

When I arrived at Golf Course News in 1992, there were relatively few companies shelling out the major bucks to financially support golf industry events. Nowadays, you can't swing a dead cat without hitting a corporate sponsorship.

Witness Yamaha's backing of the 1997 Energizer Senior Tour Championship (story page 59). Of course, the pink rabbit people will maintain their "title" sponsorship while Yamaha will become the "sponsored by" sponsor, meaning TV guys will say, "Welcome to the Energizer Senior Tour Championship, sponsored by Yamaha Golf Cars."

In any case, Yamaha's move is no doubt an expensive one and follows hard on John Deere's April decision to sponsor/prop up/salvage the perennially ailing Quad City Classic — which followed not quite so hard on the heels of The Scott Company's determination to sponsor the Senior Tour's Tradition.

You can rest assured a battery of demographic whiz kids has guaranteed these corporations that this sort of exposure is the stuff of sales legend. Nonetheless, I believe central questions remain: Do these sponsorships actually help sales? Are superintendents or course owners actually swayed by these high-profile image grabs?

I'm not convinced.

There are several levels of sponsorships now at play on the

Continued on page 19



Hal Phillips,
editor

So, we've got a Tiger by the tail — let's just enjoy the ride

Not since Arnold Palmer jumped off the television screens to charm America and win an army of followers has a golfer burst onto the American scene with the impact of Tiger Woods. Just as Arnold awakened the masses to the slumbering game of golf so, apparently, has Tiger.

While surveys had reported that growth in number of golfers had flat-lined the last two years, look for a jump when the 1997 figures roll around. One anecdote that could be repeated nationwide following Woods' victory at the Masters:

"The amount of interest is amazing," said Del Ratcliffe of Ratcliffe Golf Services in Charlotte, N.C. "It's all anyone is talking about. The interest in the game of golf is at an all-time high. It might be bigger than when Arnold came out. There is a huge contingent of younger people enthralled with Tiger. But older adults are wanting to play golf, too. Tiger is already great for the industry."

People who before had shown absolutely no interest in golf, are now talking about how to get started, what they need to do, where to buy clubs, etc., Ratcliffe added.

The interest is broad-based, crossing the lines of skin color, age and income. Yes, the press is taking the racial angle here. But why not just let it happen ... As the revolution came with Arnold Palmer, let it happen with Tiger Woods, and leave the philosophy, the greater-good-to-mankind thing alone. The press and others seem to think this very young man must step forward and shoulder a Jack Robinson-like burden that shouldn't be demanded of anyone, let alone a 21-year-old.

Indeed, those race battles are a thing of the past, according to James Black. It was Black, not Tiger, who was the first black man to shoot 67 in a PGA event at age 21. Black, who heads up the Right Moves for Youths program for at-risk kids in Charlotte, N.C., fired a 67 at the L.A. Open in 1964 and was the first-day leader.

"I think what he [Tiger] is doing is more a positive thing for golf and being an ambassador of golf," Black said. "I don't think he has Jackie Robinson pressure. Those roads have been paved. All he has to do is step in and play."

It was John Shipman who was the first American black man to play in the U.S. Open in the North. That was in 1896 at Shinnecock. It was Black, who played the Tour throughout the '60s, who was the first black golfer to qualify for the U.S. Open in the South. That was in 1964 at Congressional, when Ken Venturi won it and Black received the medal as most improved player, following an 84 with a round of 72.

It was Raiff Botts, Pete Brown and Black who were the first black golfers allowed to use the locker room and snack shop facilities at a tournament course. That was in 1965 in New Orleans. Later it was Charlie Sifford who was the first black man to get a tournament player's card.



Mark Leslie,
managing editor

Continued on page 64

Letters

SPIKELESS ADDENDUM

To the editor:

I read with great interest the article by Hal Phillips in your April 1997 edition titled, "Alternative spike industry getting complicated." In particular, I reviewed the U.S. map you published purporting to show "how many courses have banned metal spikes in each state."

On the map you show 28 Colorado golf courses banning metal spikes. You are only off by a factor of four! During March 1997, the Colorado Golf Association contacted all the golf facilities in Colorado and asked what their policy would be for the 1997 season (we started posting scores for handicap purposes on March 13; thus our "season" has begun). There are 105 facilities (representing 114 regulation or executive-length courses) that told us their policy for this season is "spikeless" (67 public facilities, 29 private clubs, 5 resorts and 2 military installations) out of a total of 194 golf facilities in the state (representing 207 courses).

So far as I know, Colorado is one of the states leading the "spikeless" revolution, certainly in terms of the percentage of courses that have banned traditional spikes. Any way you add up the numbers, more than half of the courses in Colorado are spikeless for 1997!

Warren Simmons
Executive Director
Colorado Golf Association

Ed. — As was indicated in the April issue, the source which provided the number of spikeless courses nationwide was Soft-spikes, Inc. of Bethesda, Md.

ATTENTION READERS!

The mailing address here at Golf Course News has changed slightly. Letters and all manner of correspondence should be addressed to:

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Sleeping Bear reissues Thomas masterpiece

By MARK LESLIE

CHelsea, Mich. — He may have died 65 years ago, but my hat's still off to George C. Thomas Jr., and to Sleeping Bear Press, who had the grit and determination to pursue, and then reprint, the "original parts" of Thomas' famous 1927 classic, *Golf Architecture in America — Its Strategy and Construction*. From the dust jacket through the 342 pages of this gem of a replication is as like the original as possible. And it is worth the buying for anyone interested in golf and course design (see GCN Bookshelf on pages 54-55).

No doubt Thomas, a multimillionaire, subsidized this book.

BOOK REVIEW

Color plates, double-stamped front cover, high-gloss paper for perfect reproduction of more than 80 photographs and 60 sketches... it must have been a labor of love.

Here was a golf course design genius who, before writing this book, humbly pursued input from the other pioneers of his time — a stable that included Alister Mackenzie, Donald Ross, H. Chandler Egan, A.W. Tillinghast, Hugh Wilson, George Crump and William Bell.

"He dropped his ego and the book is a culmination of all the

other architects' thoughts, though it is Thomas' genius that makes it," said publisher Brian Lewis. "It clearly is the best golf course architecture book ever done and it is incredibly relevant today."

Here we have this master's feelings on the craft of course design. Here he shares his canny understanding of wind, water, grass, drainage, types of soil, seed-bed preparation, all of the factors in golf course design and construction we may think are only modern pieces of knowledge.

There are many jewels in this crown. Yet, with all the fascinating talk of smooth, fading lines and of flowing, graceful curves, etc., my favorite Thomas Tidbit is

Continued on page 68

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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Prognosticating construction budgets

By PETER ELZI & ANDREW BUSH

It has been our experience that golf course construction costs are dependent upon two primary factors: the market and the site. Site-related factors include vegetation cover, topography, hydrology and geologic issues.

Determining course quality in relation to the market factors is a more dynamic process that includes a variety of assumptions and decisions that relate directly to the feasibility analysis discussion covered in Part I of this series [GCN April '97]. The following discussion presents an outline of the approach we utilize to analyze these variables and prepare detailed budget estimates prior to golf course design.

Market Positioning Variables

Alternatively, the anticipated market niche for a golf course influences the cost of construction in a variety of ways. For example, a resort course competing in the Scottsdale market may average 6,800 square feet per green and 8,500-square-feet of teeing surface per hole. A daily-fee facility in the Midwest,



Andrew Bush

competing primarily with municipal courses, may average 5,500 square foot greens and only 5,500 square feet of teeing surface per hole. This alone can easily result in a \$250,000 cost difference between projects.

Irrigation systems are also based on geographic area and market niche. While some of these variations are often attributable to site features, the majority relate to coverage and the range of control for a given system. The result is that while a \$700,000, double-row irrigation system may be completely adequate for a mid-price daily fee project in the Midwest, it is not uncommon to spend \$1,300,000 to gain the coverage and control needed to compete in an arid resort market.

Bunkering and shaping, and width and length of cart paths are all additional variables that relate primarily to market positioning.

Site-Related Costs and Constants

Historically, the most significant site-related variable in course construction has been mass earthwork. While the recent move toward "minimalism" has somewhat curbed the excesses of site manipulation and mass grading seen in the 1980s, earthwork costs on a course can still vary from \$100,000 to \$1,000,000 or more.

Andrew Bush is a principal of Redstone Development Services which provides design and construction management services to the golf course industry. Peter 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.

Continued on page 16

Development Letter subscribers: They have seen it all before...

By PETER BLAIS

The latest National Golf Foundation *Golf Facilities in the United States* report [see story on page 5] and the reaction of those in the red-hot East North Central (Michigan, Wisconsin, Illinois, Indiana, Ohio) development market highlight the need to be fully armed with up-to-date information when it comes to the new course business.

For example, for the fourth straight year, Michigan led the nation in new course openings. In fact, Upper Midwest brethren Ohio, Indiana, Illinois and Wisconsin were all in the Top 10 when it came to new course openings in 1996.

Those numbers may surprise casual observers, who likely believe the development heat bathes the Sunbelt rather than the Snowbelt. But savvy golf industry veterans, like those who read the *Golf Course News Development Letter*, know better.

The *GCN Development Letter* reported on 14 approved and under-construction courses in Michigan during 1996 (this is not a listing of the total number of courses under construction), more than any other state and an early indication of the amount of openings set to take place in that golf-crazed state.

But the idea in business, and golf is no exception, is to stay ahead of the game. And this is where the *GCN Development Letter* can really help.

A look at the number of courses in the planning stages reported in the *GCN Development Letter* for the 14 months from January 1996 through February 1997 indicates the Upper Midwest is still hot, but that Illinois may be ready to displace Michigan as the region's development darling.

We reported on 30 Illinois projects in the planning stages —

Continued on page 65

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Bush comment

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Other components, such as clearing trees, accommodating drainage from off-site, and bedrock that may require blasting, can create significant site-related issues affecting construction cost. Most of these costs can be controlled during design, and they can all be estimated accurately prior

to construction.

Finally, a number of components related to golf course construction remain relatively constant regardless of the site. For example, stripping and replacing top soil, soil preparation and fairway drainage can usually be budgeted accurately, based upon the acreage to be disturbed.

Developing a Budget

Using the example we

presented last month in the feasibility analysis discussion, the green fee for the project was expected to average \$32 in the fourth year. An evaluation of the 10-year operating *pro forma* suggests the total cost of the golf course should not exceed \$5,270,000, including soft costs.

For this site, we have assumed an 18-hole golf course, a double-ended driving range and

a practice putting green, with a total of 95 turfed acres.

The preliminary budget for the constant components is:

Table 1 — Site "Constants" Budget:	
Golf Design & Engineering	\$395,000
Pre-development	\$61,500
Stripping/Replacing Soil	\$135,000
Grassing Preparation	\$100,000
Fairway Drainage	\$75,000
Sodding and Grassing	\$130,000
Subtotal	\$896,500

A review of site-related issues shows the project has 30 acres of trees to be cleared, less than one and a half acres of wetlands, and relatively few off-site drainage impacts. Given these circumstances, the preliminary budget for site-related components is:

Table 2 — Site-Related Variables Budget:	
Site Clearing and Grubbing	\$57,000
Wetlands	\$3,000
Off-Site Drainage	\$20,000
Roads and Utilities	\$95,000
Subtotal	\$175,000

Finally, the remaining golf course components are budgeted based upon the proposed market niche.

For this project, we determined that green size should be approximately 6,500 square feet per green and the teeing surface should be approximately 5,750 square feet per hole. Mass earthwork would be limited to 250,000 cubic yards, given the rolling nature of the terrain.

The irrigation system required to compete in the marketplace is more sophisticated than a standard double-row irrigation system yet substantially below the cost of what is needed to compete in a resort marketplace.

As a result, the budget for market-related variables is:

Table 3 — Market-Related Variables Budget:	
Mass Earthwork	\$275,000
Shaping	\$175,000
Irrigation System	\$850,000
Green Construction	\$310,500
Tee Construction	\$115,500
Cart Paths	\$288,000
Lakes and Water Features	\$50,000
Bunker Construction	\$142,500
Subtotal	\$2,206,500

The total budget for all three components of the golf course is \$3,278,000 and with the clubhouse and maintenance facility estimated at \$1,900,000 (including design) the total budget equals \$5,178,000, including soft costs.

This total is \$92,000 less than the maximum budget amount identified by the feasibility study to provide the return desired by the investors.

We use a more detailed version of the process outlined above on a daily basis to determine project budgets and to assist in evaluating the viability of daily-fee golf course projects in given markets. While the system is not fool-proof, it provides an excellent tool for refining project budgets and determining the maximum amount that should be spent on a given golf course facility.

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Pendimethalin

"I've got some
pretty broad shoulders.
The **future's**
on them."

Tony Gustaitis, CGCS

BRIEFS



STEELE NEW DEAN AT PENN STATE
COLLEGE STATION, Pa. — Pennsylvania State University will have a new dean of the College of Agricultural Sciences on July 1 — Dr. Robert D. Steele. Steele has been associate dean for research in the College of Agricultural and Life Sciences and executive director of the Wisconsin Agricultural Experiment Station at the University of Wisconsin-Madison. Nationally known for his research in nutritional sciences, Steele was responsible for the day-to-day operation of the research division at UW-Madison.



HEART OF AMERICA EXPANDS SEMINAR
Following the success of its initial event, The Heart of America Golf Course Superintendents Association intends to continue the Heart of America GCSA Golf and Turf Seminar. Scheduled some time in November, the seminar will either remain a two-day event or expand to three days and will include a trade show. HAGCSA newsletter Editor Jeffrey Elmer reported that many members feel education should be the focus of the organization, and the seminar program will be an ambitious one.

Degree-carrying 2nd assistants a trend of '90s

By J. BARRY MOTHES

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

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

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

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

The story for college and university turfgrass graduates hitting the pavement in 1997 seems to be much the same as in recent years — excellent opportunities at

Continued on page 27



Scott Martin, national coordinator of the Audubon Canada program, speaks to a visitor at Cranberry Resort Golf Course, the first golf course in the country to earn full Audubon accreditation.

Audubon advances with Canadian leader

By MARK LESLIE

COLLINGWOOD, Ontario, Canada — Audubon International (AI) has reached a milestone in its advancement around the globe with the addition here of a national coordinator of The Audubon Cooperative Sanctuary System of Canada.

When ecologist Scott Martin took charge of the fledgling organization in February it was, first, a learning exercise, and, second, a "test launching pad" for AI as it prepares to initiate organization in several other countries.

"We have been approached by entities in Portugal, Southeast Asia, Aus-

tria, Australia and France about setting up an operation there," said AI President Ron Dodson. "We felt we could not do justice in managing a global environmental program from [AI headquarters] Selkirk, N.Y. Canada is close enough that it can serve to teach us how best to spread Audubon programs on a global basis."

Martin, who has worked at parks throughout Ontario and holds degrees in natural sciences and outdoor recreation, parks and tourism from Lakehead University in Thunder Bay, said: "The response has been very good. We will

Continued on page 33

Photo by Russell C. Kirk



EAGLEBROOKE OUT FRONT WITH GN-1

GN-1 Bermudagrass, from Greg Norman Turf, covers all the tees and fairways at The Club of Eaglebrooke in Lakeland, Fla. — the first facility to use the grass on all 18 holes when it opened in late 1996. "We're excited to have been the first golf course in the nation using this unique new grass, and are elated to see the TPC at Sugarloaf course [in Atlanta] and now the new Atlanta Braves stadium following our example," said Don Randall, Eaglebrooke's general manager/director of golf. The course was designed by Ron Garl of Lakeland. This 18th green is guarded by water, sandtraps and rolling hills. The body of water in the foreground is 20-acre Lake Eaglebrooke, which comes into play on the 16th, 17th and 18th holes. Garl has also been busy in Costa Rica, among other places (see story page 1).

Q&A Christians presses on in Ulowa research efforts

Dr. Nick Christians of Iowa State University is an expert in developing naturally occurring herbicides for the turf industry. His major research has been on a byproduct of the corn wet-milling process, corn gluten meal (CGM), which has shown to be effective against 22 different weeds. Christians holds a bachelor's degree in forestry from Colorado State University and master's and doctorate degrees in agronomy from The Ohio State University.

Golf Course News: What's the latest news on CGM?

Nick Christians: The major development was the EPA's decision that CGM no longer had to be registered as a pesticide. That opened the door for us to bring on new marketers. The companies and product names that have signed on include Safe Earth Lawn & Gardens, Corn Gluten Meal Weed Control; Rohde's Services Inc., GreenSense; Floyd Rogers, WeedFREE; Manning Agricultural Center Inc., ProPac; Grain Processing Co., Corn Gluten Meal Herbicide; Blue Seal Feeds, Safe 'N Simple; Walt's Organic Fertilizer, Wonderful Weed & Feed; Hardesty Organic Supply, Suppressa; Winton Graf [TBD]. We should be announcing more in a few weeks.

GCN: How has the product been accepted in the golf industry?
NC: The primary market, so far, has been lawn care because of

Continued on page 28



Dr. Nick Christians

Compost proving its worth on fairways

GLENVIEW, Ill. — Less thatch, more earthworms and greener, denser fairways are giving a Chicagoland superintendent a great deal of encouragement in his efforts to use compost and other natural biological agents.

"I can see benefits from just one compost application on the fairways," said Dan Dinelli, superintendent here at North Shore Country Club. Indeed, he's looking at increasing the compost application frequency next year.

Compost also figures into a long-term study — sponsored by GreenCycle, Inc. — of the disease-suppressing effects of compost under real-world golf course conditions. Dr. Michael Cole of the University of Illinois has set up research plots on a fairway at North Shore to see if varying compost application rates offer disease-suppression benefits.

While this scientific study is too new to reach any conclusions, Dinelli is using compost elsewhere because he's seeing significant benefits other than disease suppression.

Simply by changing one piece of equipment and adding one step to normal core-aerating operations, Dinelli said his crews have been able to incorporate compost into the fairway soil and gain the benefits it produces.

"The compost reduced the thatch and increased the earthworm activity, judging from the concentration of castings on the surface," Dinelli explained. "The compost gave us a denser, greener stand of turf."

The veteran superintendent said there may be other benefits to composting, in addition to disease suppression. However, he will continue to use GreenCycle's recycled product regardless.

"It is not possible to fairly evaluate a product you apply just once during the growing season, and we only did one compost application," he said. "I can't think of any product, a fertilizer or pesticide or whatever, that you apply just once. I'd like to do the compost once a month and see what happens over the long term. But given those qualifications, with mild weather and just one application, we spent just 38 percent of our typical fungicide expenditure this year."

To help gauge compost's effects, he had crews leave it off some fairway sections, to allow for comparison. The benefits he has seen have encouraged him to plan for increased compost use on fairways next year.

Scientists are still trying to understand the exact mechanisms of this natural disease sup-

pression. A handful of biological fungicides have been labeled for the turf industry, but the amount still to be learned far exceeds today's current knowledge.

Dinelli, an advocate of the limited use of synthetic turf inputs, has found it's easy to add compost to the soil matrix without creating a surface layer that

might disrupt critical air and water flow through the root zone.

Dinelli uses GreenCycle-provided compost with a Canadian-built spreader that uses two screws in the bed, rather like a manure spreader. The GreenCycle compost is screened to remove contaminants and maintain consistent texture.



This core sample, taken before the area was treated with compost, shows considerable thatch buildup. Samples taken at six-month intervals will show whether treatment with compost reduces the thatch.

J a p a n



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ALBANY, N.Y. — Saying that solid waste reduction and recycling is connected to a rebuilding state economy, New York Gov. George E. Pataki has asked for applications for the 1997 Governor's Waste Reduction and Recycling Awards program.

"The amount of solid waste diverted from disposal through waste reduction and recycling in New York State is increasing as

New York citing solid-waste reducers with governor's awards program

we continue to rebuild New York's economy and improve its economic competitiveness," Pataki said. "These goals are connected."

Awards will be given in two categories: innovation and

achievement of excellence.

Applications, which will be accepted through June 18, are available from the Division of Solid & Hazardous Materials, Bureau of Waste Reduction & Recycling, New York State De-

partment of Environmental Conservation (DEC), Room 212, 50 Wolf Road, Albany, N.Y. 12233; or by contacting Kim Thurn at 518-457-8829.

Applicants will be judged by industry experts and DEC staff on

their reduction and recycling achievements, as well as their overall environmental record, the economic benefits of their overall programs, the extent of employee participation and benefits to the community and environment.

"Recycled waste is diverted from landfills and incinerators and put to economically productive use, creating new industries and jobs along the way," DEC Acting Commissioner John P. Cahill said.

Phillips comment

Continued from page 14

"course" side of the golf business.

There are tournament-style sponsorships like Yamaha's and Deere's. These can be effective for the folks at Deere because, of course, they make turf equipment. However, Deere also makes consumer products, so there's a [CAUTION: cheesy marketing word to follow] "synergy" there. Does this synergy exist for Scotts? Yes. Does it exist for Yamaha, maker of golf cars and... motorcycles? Hard to say.

Then there are testimonial-type sponsorships, whereby a manufacturer will pay a resort to become the official supplier of [insert product category here]. Ransomes has been particularly active in this area, signing up St. Andrews and Pebble Beach. Of course, superintendents at these courses aren't obligated to use Ransomes products wall to wall, but the manufacturer can use the [here comes another one] "branding" associated with the resort to promote its own products.

We can't forget the trade show-oriented sponsorship like those on display at the Golf Course Superintendents Association of America (GCSAA) show, where a manufacturer can sponsor just about anything — from the GCSAA Tournament (Toro) to Japanese and Spanish translation services (Ironite). In my mind, the effectiveness of this particular sponsorship relies heavily on the event. I know Toro, for example, creates mongo good will among superintendents with its tourney involvement. Can the same be said for American Cyanamid and Club Car, who team up to sponsor the Innovative Superintendent breakfasts? Hard to say.

When it comes to good will, I say it's hard to match the sponsorships that take place on the local chapter level, whereby companies pitch in to make possible all manner of activities: tournaments, conferences, research grants, newsletters, etc. Because chapters are usually small and organized through grass-roots efforts, manufacturers are able to make consistently positive, more personalized impressions with their sponsorships of chapter events.

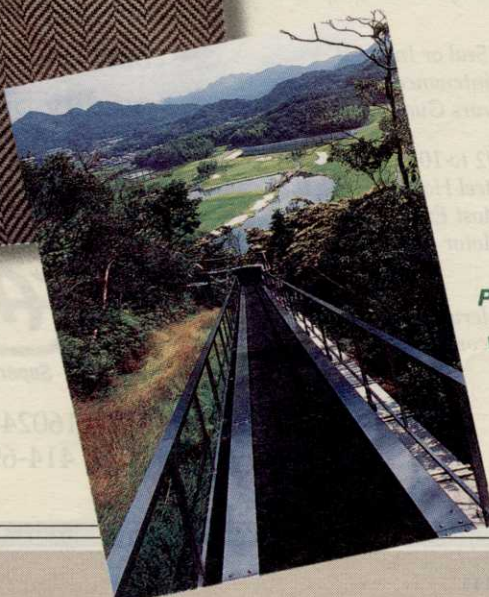
It's called getting bang — tangible bang — for your buck.

Over 1.7 million cubic meters of material were moved in the three years it took to construct the beautiful Tatsuno Classic Golf Club.



A popular Japanese children's song about dragonflies originated in the nearby city of Tatsuno — inspiring the golf club's logo.

Golfers who hit one off-line may have to choose between a penalty or a chance encounter with a bamboo viper.



Superintendent Hiroshi Eto maintains two separate bentgrass greens for each of Tatsuno's 18 holes, to help reduce stress during the summer.

Players who choose to walk get a periodic lift from escalators placed at some of the course's steepest locations.

Hausman shares a blueprint for irrigation success

By TERRY BUCHEN

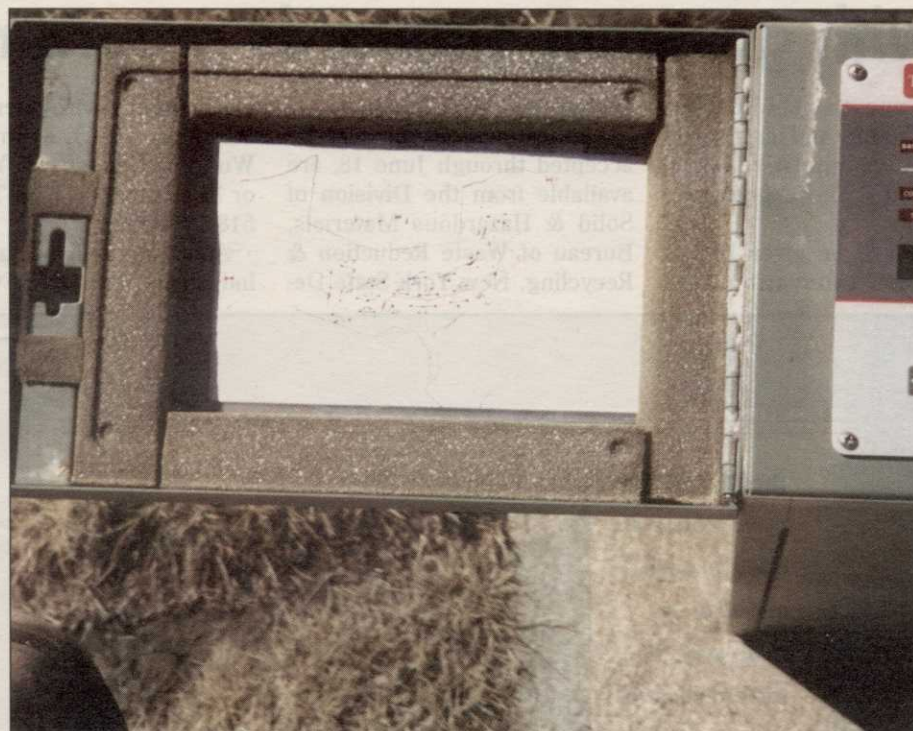
DAKOTA DUNES, S.D. — While Dakota Dunes Country Club superintendent Doug Hausman is happy with his master-controlled irrigation system, his addition to the satellite stations — as-built blueprints — further simplifies its operation.

"We are very pleased with our system, including the field satellites positioned all over the course," said the certified golf course superintendent. "We have individual head control on our greens and tee controllers, with two to three heads operating per station on our fairways and two to five heads per station on our roughs. Instead of having each station numbered in each of our field satellites, along with a vague description of which area each station waters, we drew our own as-built blueprints."

Hausman placed the blueprints in each field satellite, along with the station and satellite number, just like the irrigation designer had programmed the system initially.

The blueprints, he said, are "easy to read and interpret, making for fun and efficient use by any of our employees."

An alternative is to take a 100-scale as-built blueprint and cut it to fit the



As-built blueprint clearly identifies each station on a field satellite.

controller cover, if necessary by reducing the scale on a photocopier so it will fit the cover. Placing a clear adhesive laminated protective cover over the blueprint will protect it from

the elements for years.

During the Nike Dakota Dunes Open at the club, Hausman's crews shut off the electricity to the field satellites and




ON THE GREEN

Instead of having each station numbered in each of our field satellites, along with a vague description of which area each station waters, we drew our own as-built blueprints.'


— Doug Hausman

irrigation pumps to safeguard from a sprinkler coming on by accident during play.

"Every one of our field satellites has lightning rod protection along with surge protectors, to be on the safe side," Hausman said. "During the winter, we constantly check our field satellites for field mice that can severely damage our interior wiring and use a rat and mice deterrent."




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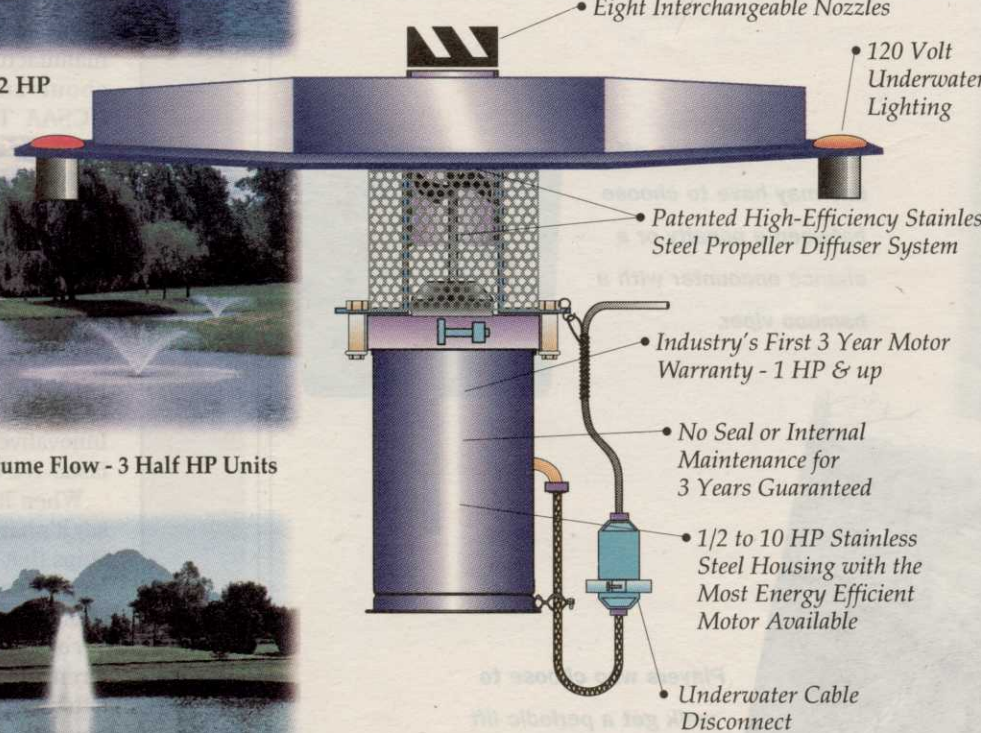
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UCal-Riverside traffic simulator bodes well for turfgrass research

RIVERSIDE, Calif. — The new putting green traffic simulator developed here at the University of California, Riverside (UCR) mimics the wear and tear caused by golfers' shoes, fine-tunes researchers' recommendations, and will lead to improvements in putting green turf playability, according to UCR turf researchers.

Because 200 rounds of golf per day leave an estimated 61,766,000 spike marks in the turf, trueness of the putting green surface is a major issue among golfers. UCR's metal-cleated simulator has its first job at the Desert Horizons Country Club in Indian Wells and is creating uniform wear over the entire test plot.

"Depending on the number of passes per week, the simulator can deliver low, moderate, or high traffic to mimic the playing conditions on any golf course," said Robert Green, UCR turfgrass research agronomist. "Since the amount of play influences how much punishment cleats deliver to turf, accounting for the traffic variable is critical to making recommendations that fit real golf course needs."

Most university research greens do not have traffic on them, unless a practice putting green doubles as a research plot, Green said.

The new putting green traffic simulator facilitates fine-tuning cultural practice recommendations, Green said.

"We designed the apparatus initially to mimic the destruction caused by metal-spiked golf shoes, but it can be modified easily to mimic 'alternative-spiked' shoes," said Steve Cockerham, superintendent, UCR Agricultural Operations.

Alternative-spiked shoes, which have small plastic cleats for traction rather than steel spikes, are gaining popularity among golfers and golf courses, because they cause low turf damage compared to metal-spiked shoes.

In the trade, metal spikes have been called the "metallic mashers of monocots."

The simulator can yield uniform turf wear data for metal-spiked or alternative-spiked shoes, depending on its configuration, Cockerham said. The apparatus was built using the frame of a walk-behind mower.

At Desert Horizons Country Club, superintendent Lane Stave and his staff are applying the traffic treatments and determining the number of passes per week that resemble the moderate traffic delivered by metal-cleated golfers. Stave and his staff recently named the simulator the "Blue Beast."

Because cleat traffic can affect the competitive relationship

among turf species, the simulator will yield representative wear for evaluating the effect of fall renovation practices on the spring transition back to Bermudagrass from an overseeded perennial ryegrass-*Poa trivialis* mixture at the Desert Horizons Country Club, Green said.

The new apparatus has been

unveiled by the UCR Turfgrass Research Advisory Committee.

UCRTRAC provides a formal link between the University of California and the turfgrass industries in Southern California. Member organizations represent golf course superintendents, sod producers, general turfgrass interests, professional

golfers, and UCR researchers with expertise in turf improvement, physiology, and culture. UCRTRAC addresses the research and educational needs of member organizations.

The Hi-Lo Desert Golf Course Superintendents Association is sponsoring Green's research at Desert Horizons Country Club.

GASPER EARNS CERTIFICATION

ROCHESTER, N.Y. — John Gasper of Oak Hill Country Club, has been designated a certified golf course superintendent by the Golf Course Superintendents Association of America (GCSAA). Gasper, who came to Oak Hill last year, joins 1,600 golf course superintendents in the country who hold CGCS status.

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HERBICIDE

Patty Knaggs takes superintendent post in Bay State

GLOUCESTER, Mass. — Patty Knaggs, former superintendent at Westchester Country Club in Rye, N.Y., and Hazeltine National Golf Club in Chaska, Minn., has taken the superintendent post at the private Bass Rocks Golf Course here.



Patty Knaggs

A graduate in turfgrass management from the University of Massachusetts' Stockbridge School of Agriculture, Knaggs held assistant superintendent positions at The Country Club in Brookline and Echo Lake Country Club in Westfield, N.J., before taking her post at Westchester.

She is an editorial advisor for *Golf Course News* and has led a number of seminars for the Golf Course Superintendents Association of America.

... 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 Sprinkle, who has assumed a similar post in Indonesia.

... NAPLES, Fla. — **Wayne Darlington** of ISS has been transferred and promoted to assistant superintendent at the ISS-maintained Wyndmere Golf & Country Club here. Previously, he served as the assistant superintendent at the city of Gainesville's Ironwood Golf Course. Darlington is a graduate of Lake City Community College's golf course management program and ISS' management trainee program. Before joining the ISS team, he gained golf course operations experience at East Lake Woodlands Country Club in Palm Harbor and Innisbrook Resort in Tarpon Springs. He is an active member of many industry associations including the Florida Turfgrass Association.

... HOWEY-IN-THE-HILLS, Fla. — **Barry Bennett** has been hired as superintendent here at the 18-hole Bella Vista Golf & Yacht Club. Bennett is associated with International Golf Management,

Inc. of Lakeland. Before coming to Bella Vista, Bennett gained maintenance experience at the Pinehurst (N.C.) Resort and Country Club, and the Chenal Country Club in Little Rock, Ark., under a cooperative education program at Mississippi State University, where he graduated in 1996 with a bachelor's degree

in golf and sports turf management.

... GREENSBORO, Ga. — Reynolds Plantation has promoted **Michael "Butch" Foust** to director of golf course maintenance, overseeing all three courses at the facility —



Plantation Course, Great-Waters and the new National Course at Reynolds Plantation.

Foust has been employed at Reynolds Plantation since 1991.

... ALPHARETTA, Ga. — White

Columns Golf Club has hired **Will Howard** as superintendent. Howard formerly worked at Southerness Golf Club in Stockbridge, Ga.

... MENOMINEE, Mich. — **Dan Naby** has been hired as golf course superintendent at Riverside Country Club here. He had been at Brookstone Golf & Country Club in Acworth, Ga.



Examine the Difference

Setting priorities allows supers time to 'give back to the game'

By TERRY BUCHEN

Many superintendents give back much of their valuable time to the game of golf, by performing extra-curricular activities above and beyond their normal job duties, with some pretty amazing results. There are hundreds and hundreds of great examples of supers giving back

unselfishly to this great game and you wonder, with the busy schedules in mind, how does anyone have time to accomplish these remarkable feats?

Being organized and putting priorities in proper perspective is the best way to put it. Nothing more, nothing less.

Look at all the supers who, as

part of being a member of Audubon International, give tours of their golf course to school children in their communities; perform speaking engagements on golf and the environment to many commu-

SAVVY SUPERINTENDENT



nity organizations; and host community members as part of a resource committee — to reinforce all of the great work that is being done at their re-

spective courses. It doesn't stop there. Countless supers give their time and energy to giving speeches at university, U.S. Golf Association Regional, Golf Course Superintendent Association of America (GCSAA) national chapter meetings and turfgrass association conferences year in and year out — even though giving speeches is always rated as one of the most frightening experiences anyone goes through in life.

Further sharing of information with peers is accomplished by writing magazine and technical articles, and many, many times by just talking on the telephone with fellow superintendents to help each other out.

It goes even further to the men and women who volunteer their time to serve as officers and on the board of directors of chapters, turfgrass associations/foundations, USGA and other committees and the GCSAA. These groups of individuals spend more time and energy on serving their members and constituents than is almost humanly possible. Their schedule is extremely busy just reading and preparing all of the correspondence, let alone handling speaking engagements, meetings and the telephone communication that goes along with these important responsibilities.

Teaching agronomic and golf course management classes at local colleges during night school and giving presentations to turf students at universities is also a common occurrence. The teachings at the many GCSAA seminars is also a dedicated endeavor.

Last, but certainly not least, is the writing of agronomic and golf course maintenance/management books that preserve the supers heritage while expanding new ideas and technologies for the future. Legendary superintendents, such as Stan Metsker, CGCS, of Colorado Springs, have written books recently that took a lot of time and effort — and sure were worth it judging from the feedback.

Other legends in turfgrass, such as Gordon Witteveen of Toronto, and Mike Bavier, CGCS, of Chicago, have teamed up and written a soon-to-be-released classic, which is modeled after their seminar, entitled "The Magic of Greenkeeping," that they teach together all over the world. With these fine superintendents setting the stage, it is encouraging and exciting that many other superintendents will be writing additional books in the future.

In closing, it is best understood and simply stated that you should all pat yourselves on the back for a job well done for everything you have done for the game of golf, during the past, present and for the future. Thank you very much.

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For The Best Results



School targets marriage of at-risk students, course maintenance

By JOHN TORSIELLO

GLEN MILLS, Pa. — For almost 175 years, Glen Mills School has been turning around the lives of troubled boys and successfully leading them into a number of professional fields. Now, the school is embarking on an ambitious venture that will add one more career opportunity to its program offerings — golf course management and maintenance.

School officials are in the process of clearing the final legal and procedural hurdles of a \$5.5-million project that will culminate in the construction of a championship course on school grounds. The course is being designed by Weed Design of Ponte Vedra Beach, Fla., the firm that has designed the first golf course at the

The school's highly respected golf team will play its home matches on the new layout, which is being designed to play 6,750 yards to a par of 71.

Ipock said 40 to 50 students will be actively involved in educational programs centering around the course. "The emphasis will be on maintenance

mechanics, calibrating machinery, how to properly apply chemicals," he explained. "We'll have a nursery to teach kids about different kinds of grasses and how to grow them. There is little in the operation of a golf course that our kids could not be involved in."

A caddie program was originally planned, but school officials decided that avocation's minimal career opportunities did not justify the formal establishment of a curriculum.

The school hopes to coordinate its golf course management and maintenance pro-

gram with those at colleges, such as Penn State. After students attain a certified level of efficiency in golf course management and maintenance, they may continue their training at a college or university or be placed in a work environment. Officials at

Continued on page 31

'This will be a showpiece for our educational facility and for golf.'

— Gary Ipock
managing director
Glen Mills School

World Golf Village in St. John's County, Fla. Construction at Glen Mills could begin as early as this summer.

"This will be a showpiece for our educational facility and for golf," said Gary Ipock, managing director of the school, which was founded in 1826. "The survival of the course will not depend on income from play. As with other facilities here, operational funds for the course will come from tuition income and other sources. Anything over the operating budget will go toward scholarships for the kids."

Glen Mills is the oldest residential school for court-referred boys between the ages of 15 to 18 in the nation. The 756-acre campus is located 20 miles outside Philadelphia. It has more than 900 students.

Although public play will be allowed, it is clear the primary function will be educational. As if to underscore the low-key nature of the course, no clubhouse is planned, just a "golf cottage" where refreshments can be purchased.

"The kids will have priority on the course," Ipock, a former golf coach at the school, explains. "We can shut the course down if we want and control tee times. This will be a championship course and we may have tournaments here, but that is all down the road."

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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.

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MECHANIC'S CORNER

Texas State Tech introducing 1st golf mechanics degree program

WACO, Texas — The nation's first associate degree program in Golf Course Equipment Mechanics will be offered at Texas State Technical College (TSTC) here, pending approval by the Texas Higher Education Coordinating Board.

The program will be offered as a specialization of the Golf Course & Turfgrass Management (GTM) program at Texas State. Golf course equipment manufacturers have reason to be enthusiastic about this program, which will allow them to hire

technicians who can maintain their equipment as customer service representatives.

"While working in industry," said GTM Department Chair Wallace "Tinker" Clift, "I saw the acute need for golf course equipment technicians. I believe

this program will create a win-win situation for everyone involved. Golf course managers and equipment dealers will be able to find skilled technicians who can maintain their equipment. We also estimate industry will pay these technicians

\$25,000-\$40,000 a year."

Students will take courses in both the GTM and Diesel Mechanics departments at Texas State Technical College for a program specifically designed to meet the needs of the turfgrass industry. Students will learn golf course maintenance as well as equipment maintenance. This will allow them to choose from a variety of positions working as technicians at golf courses, parks, athletic fields, and for lawn care companies, or equipment manufacturers.

In addition to being knowledgeable about landscape construction, turf irrigation and drainage, students will study engines, hydraulic and electronic systems, and reel maintenance. They will learn to maintain equipment by working on \$18,000 high-precision greens mowers, and equipment such as a 7-Gauge Self-Propelled Reel Mower, valued at more than \$35,000.

Students will also participate in three- to six-month internships either in a grounds maintenance environment or with companies that manufacture grounds maintenance equipment.

"Students will receive both technical training in the classroom and field experience in an approved work situation before they graduate," Clift continued. "Jacobsen [Division of Textron] has started a new program of fulfilling service contracts with golfing facilities, and many of these graduates may eventually choose to work into those positions. Jacobsen representatives approved the program's curriculum earlier this year. However, students will learn to work on all types of equipment no matter who manufactures it."

Students can complete the program in six quarters for either an Associate of Applied Science degree or a certificate of completion.

The program was developed using the DACUM (Develop a Curriculum) process, with the help of industry experts from across Texas who participated in panel discussions on industry needs. Companies such as Jacobsen Textron, Toro Company and Deere & Co. (manufacturers of John Deere equipment) will furnish TSTC with equipment and other assistance to develop the program.

Texas State Technical College is the only state-supported technical college system in Texas. TSTC has provided Texas and Texans with technical education and training for more than 30 years. With more than 40 instructional programs in critical and emerging technologies, TSTC is preparing a work force to meet the demands of business and industry.

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Maintenance crews better educated

Continued from page 17

the first assistant superintendent and second assistant level, but extremely tough competition for head superintendent's jobs, where 100 to 200 applicants are becoming the norm for head jobs.

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

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

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

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

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

"The equipment is so sophisticated and expensive that the golf courses have started screaming for qualified people," said Piersol. He said today's golf course mechanic — or turf equipment manager — has to be a far more broadly skilled person than in the past. "He or she has to be 50 percent mechanic and 50 percent manager. Someone who can

set up a shop, organize a preventative maintenance program, use a computer, train and equip operators, and fix things... But the potential for a skilled, organized person is excellent."

Piersol said he hopes other turf equipment management programs start developing around the country. Officials at Delhi

College in New York visited Lake City to study its program and launched a new program at Delhi last fall. And, as reported in last month's Golf Course News, officials at several Denver-area technical colleges are also looking into establishing some type of degree program for turf equipment managers.

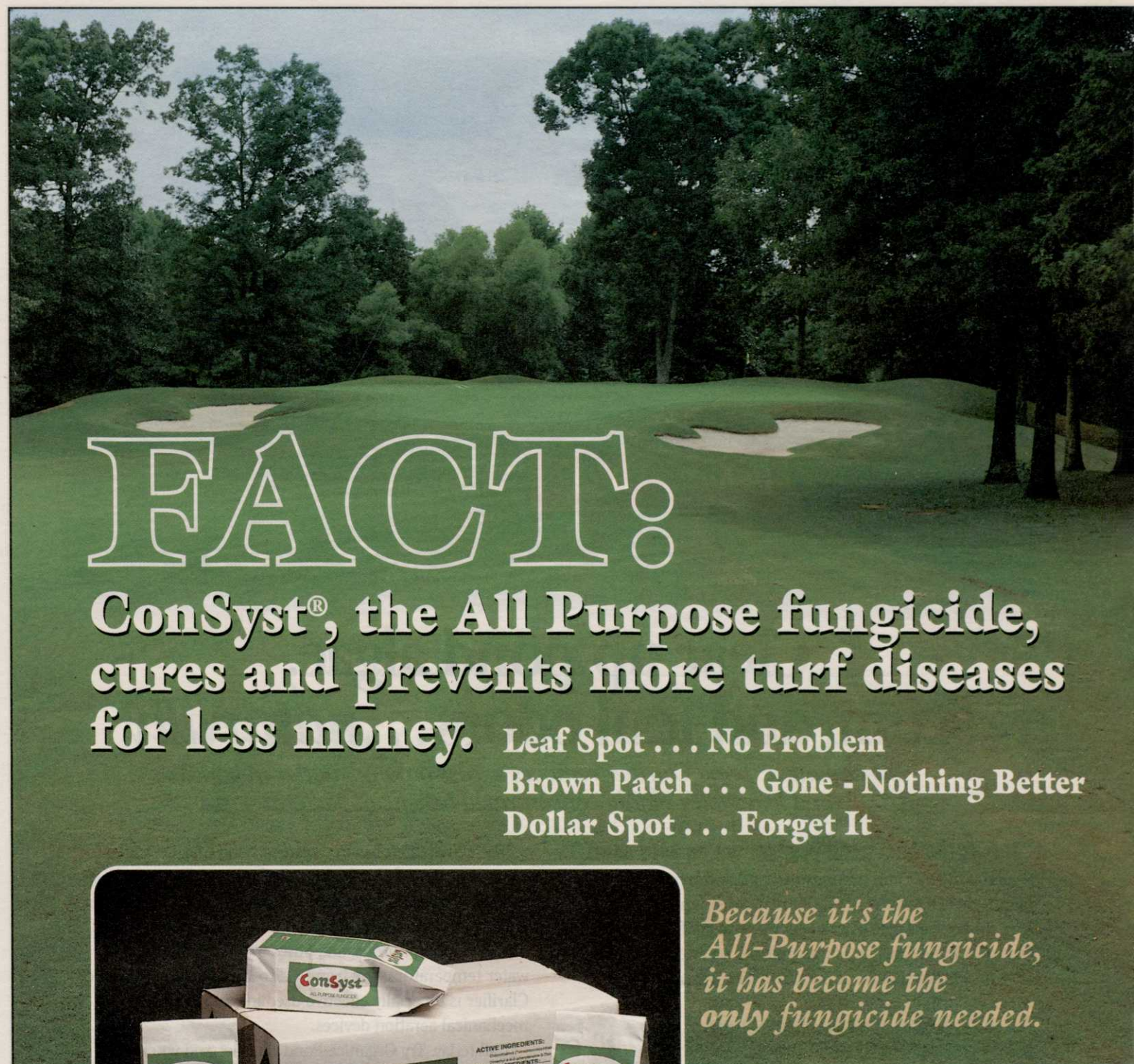
"I hope they're successful," Piersol said. "We can't train all the mechanics in the country, the need is just too huge. There needs to be more good programs scattered around the country. It's a national shortage, there's no doubt about it. It's strange, you've got this big market, with good salaries, but you can't get the students and there aren't enough programs."

And lest anyone think the

mechanic's job is somehow second rate, Piersol, Rogers and others all offered their own version of an unstated truism in the golf course maintenance world.

"If you asked 90 percent of the superintendents who the most important person on the crew is," Piersol said, "he will tell you his right-hand man is not the assistant superintendent.

"It's the mechanic."



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Q&A: Iowa's research paying off for ag, turfgrass

Continued from page 17

the particle size. If you use it on greens it gets picked up in the catch baskets. It works well on taller grass and is just starting to catch on at golf courses.

I'd recommend a superintendent try a small amount first rather than totally convert to it right away.

Try it on the driving range. Put down a 4-by-8-foot sheet of plywood and then apply CGM around it. Take the plywood back up after the application. The plywood area will be your control area so you have something to compare.

The biggest barrier to golf course use is the granular form.

The next step is to convert it to a soluble form that can be sprayed on. But that's a multi-million-dollar leap.

We need to get someone willing to spend that money. I'm going to California to talk to some people about that.

GCN: What is the status of your work with growth regulators?

NC: Primo from Novartis is getting a lot of our attention right now.

It shows little phototoxicity, helps reduce clippings on fairways and could show some reduction of poa annua.

GCN: We understand you have some ongoing work on bentgrass greens. What can you

tell us about that?

NC: Again, we're looking at products that can control poa annua. Turf Enhancer from Scotts, Prograss from Agrevo and Primo are the major ones we've studied.

We haven't come to any conclusions yet, except that all three show a lot of promise. We'll know more about the relative success of each in another year.

GCN: Are you receiving any U.S. Golf Association funding for your research?

NC: We recently completed a major project on pesticide movement through soil profiles. This has resulted in six published papers. We found that there can be movement and that pesticides could potentially reach ground water.

But we have the ability to control movement through proper turf management and reduce the risk. Control happens primarily through the watering program.

We tested movement after a heavy 1-inch rain and compared it to four evenly spaced 1/4-inch applications.

We saw a large reduction in the movement by applying water in smaller amounts at spaced intervals following a pesticide application and by not applying pesticides just before a heavy rainfall.

GCN: Does the USGA do a good job allocating its research dollars?

NC: Yes. I've been on the research committee and admired how the USGA funds a variety of subjects over such a large geographic area.

GCN: What will be the major advances in turfgrass management over the next 10 years?

NC: The Internet. It's such a great way to distribute information. I'm getting e-mail requests from superintendents more and more. In fact, we just added a site to access our latest research on corn gluten meal. The site: [www.hort.iastate.edu/hort then click on faculty, click on Christians, click on CGM].

ROCKY MOUNTAIN ELECTS BOARD

The Rocky Mountain Golf Course Superintendents Association's 1997 board of directors has taken office. It includes Mike Brennan of Pine Creek Golf Course in Colorado Springs, Dave Brown of Flatirons Golf Course in Boulder, Jim Fitzgibbons of Meadows Golf Course in Littleton, John Hoofnagle of Calley Country Club in Aurora, Doug Jones of city of Grand Junction Golf Courses, Rick Robbins of irrigation consultant RRI Inc., George Stowell of Gunnison (Colo.) Golf Club, Lee Terry of Walkingstick Golf Club in Pueblo, Don Tolson Fox Hollow at Lakewood and Jim Wilkins of Westwoods Golf Course in Arvada.



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Cupit loves the challenge at tough Canterwood track

By TERRY BUCHEN

GIG HARBOR, Washington — From its inception, the Canterwood Golf and Country Club here was designed to be the toughest golf course in the Pacific Northwest, and to be the finest. Robert Muir Graves' design accomplished both goals.

"In 1988, the course had a slope rating of 154, and was considered by some to be too tough and unfair," explained superintendent Mark D. Cupit, CGCS. "With Graves' help, we've been improving the course through minor changes such as tree and brush removal; bunker modifications; landing area widening, etc.

"Some of the pond edges have been filled in; landing areas have been reshaped; collars around greens have been widened; new tee boxes have been built. These improvements are ongoing. The club has a long-range goal that extends for several more years of slight improvements. I feel that these improvements will help our golf course become more user-friendly. Our slope rating has been reduced to 141.

Larry Gilhuly, regional USGA Green Section director/agronomist, has his office here at Canterwood. "Thanks to Larry," said Cupit, Canterwood is going 'spikeless' this year — "which we are real excited about."

Cupit's other golf course projects/improvements, both short and long-range plans, include: Making tee surrounds more easy to mow around; completing extensive drainage work; adding landscaped recirculating water features; adding primary rough into non-maintained natural areas; and replacing tall Douglas Firs with flowering trees such as apple, dogwood, cherry and plum.

"I have been superintendent here since the club's inception in 1985, and it's been quite interesting watching the transformation from the toughest course in the Pacific Northwest to a tamer version without losing the course's identity and



Mark Cupit, left, keeps Canterwood playing to a 141 slope rating.

integrity," Cupit continued. "Robert Muir Graves has done a great job with the continuity of the course."

Cupit's entire family is into golf, in one way or another. His uncle Jackie Cupit played on the PGA Tour from 1961-75. He was rookie of the year in 1961; won four times on the tour, including the Western Open and Canadian Open (where his brother Buster came in second). In 1963, Jackie frittered away a two-stroke lead with two holes to play at The Country Club for the U.S. Open. In the playoff the next day, Julius Boros shot 70, and Jackie shot 73.

In addition to Jackie and Buster, Cupit's other two uncles, Bobby and Jerry, played on tour at one time or another. Currently, his uncle Buster owns a golf course in Texas; his uncle David runs a golf course in Atlanta; and his uncle Jackie is a teaching pro in

Dallas. Both of Mark Cupit's sons — Jason, 19, and Brian, 17 — are avid golfers with single-digit handicaps also."

Cupit is happy at Canterwood but he's not a potted plant.

"Larry Gilhuly and I went to China

three years ago where we consulted on a future golf course next to the Yellow Sea," Cupit explained. "My boss developed the course."

Closer to home, Cupit presides over 18 employees, including one head equipment manager, an assistant mechanic, one assistant, and two foreman/irrigation staff members.

"I have a very able and stable staff, over 80 percent with five or more years of service, which we are very proud of here, realizing that the club is only eight years old."

"The club recently bought a border collie, which was trained for sheep and cattle herding. His name is Boss, and he's used for Canada geese control. Last year we had between 60 to 80 geese — this year, zero. Boss is 4 years old, cost \$2,000 and as far as Larry and I know, is the only border collie used for geese on a course in Western Washington.

"Larry is recommending the border collie alternative to everyone."



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MASTERS — ALL

Gary Grigg, far right, past president of the Golf Course Superintendents Association of America, was one of three superintendents awarded Master Greenkeeper status during the British and International Golf Greenkeepers Association (BIGGA) conference in England this winter. Left to right are Master Greenkeepers Mark Broughton of Morecambe GC in England and Ian MacMillan of Balbirnie Park GC in Markinch, Scotland, BIGGA Chairman Dean Cleaver, and Grigg. Grigg is superintendent at Royal Poinciana GC in Naples, Fla. There are now 14 Master Greenkeepers in the world, including Americans Terry Buchan, Bob Maibusch, Richard McNab and Bill Montague.

Lockouts, tagouts crucial in shop

By TERRY BUCHEN

To avoid accidents from unexpected startups or release of stored energy, the Occupational Safety and Health Administration (OSHA) is requiring that locks and/or tags be used before servicing or maintaining golf course equipment and machinery.

A "lockout" is a device that renders a switch, valve, raised load, coiled spring or any energy source inoperative. It may be a padlock, blanking plate, restraining bar, chain and padlock, ignition key or any device which prevents a machine from being energized or releasing stored energy.

A "tagout" (or locking tag) shows who locked out the mechanism, the time, date, and telephone number or radio page. It must be fastened to the locking mechanism so it doesn't fall off accidentally, and only be applied and removed by the same authorized individual. A tagout warns others that a particular switch, valve or energy source is "locked out" in the off or safe position and should not be operated. Outside servicing personnel and contractors should be informed of the course's lockout/tagout procedures.

Lockout/tagout programs include removing ignition keys from equipment and tagging the steering wheel that is inoperable; locking out the main electrical disconnect for the shop air compressor and tagging it; using a safety donut device that can be used to lock out round valve handles of varying diameters, etc.

The 11 elements of a lockout program are:

- Determine what energy sources will be locked out.
- Determine if locks can be applied.
- Determine the sequence to follow.
- Determine who will apply locks and tags.
- Coordinate multiple maintenance personnel use of their own locker tag.
- Be sure all stored energy is safely released and blocked.
- Follow course procedures for performing maintenance and service.
- Before removing locks and tags and returning machinery to operation, be sure that: all safety guards are back in place; work is complete and tools stored away; workers are positioned safely for start-up; and controls are positioned correctly for start-up and the machine is operation-ready.
- Only the person who applied the lock or tag removes it.
- Follow the predetermined golf course maintenance sequence of unlocking and untagging the lockout points to return the machine to service.
- Continue employee training and education.

Lock tips include: one lock,

one key; identify locks; use multiple lockout devices if needed; never give your assigned key or lock to someone else; always use a tagout with your lock; and if a lock cannot be used, contact your immediate supervisor.

A tip to remember: Locks and tags don't de-energize machines or equipment; people do.



ISSUES OF SAFETY

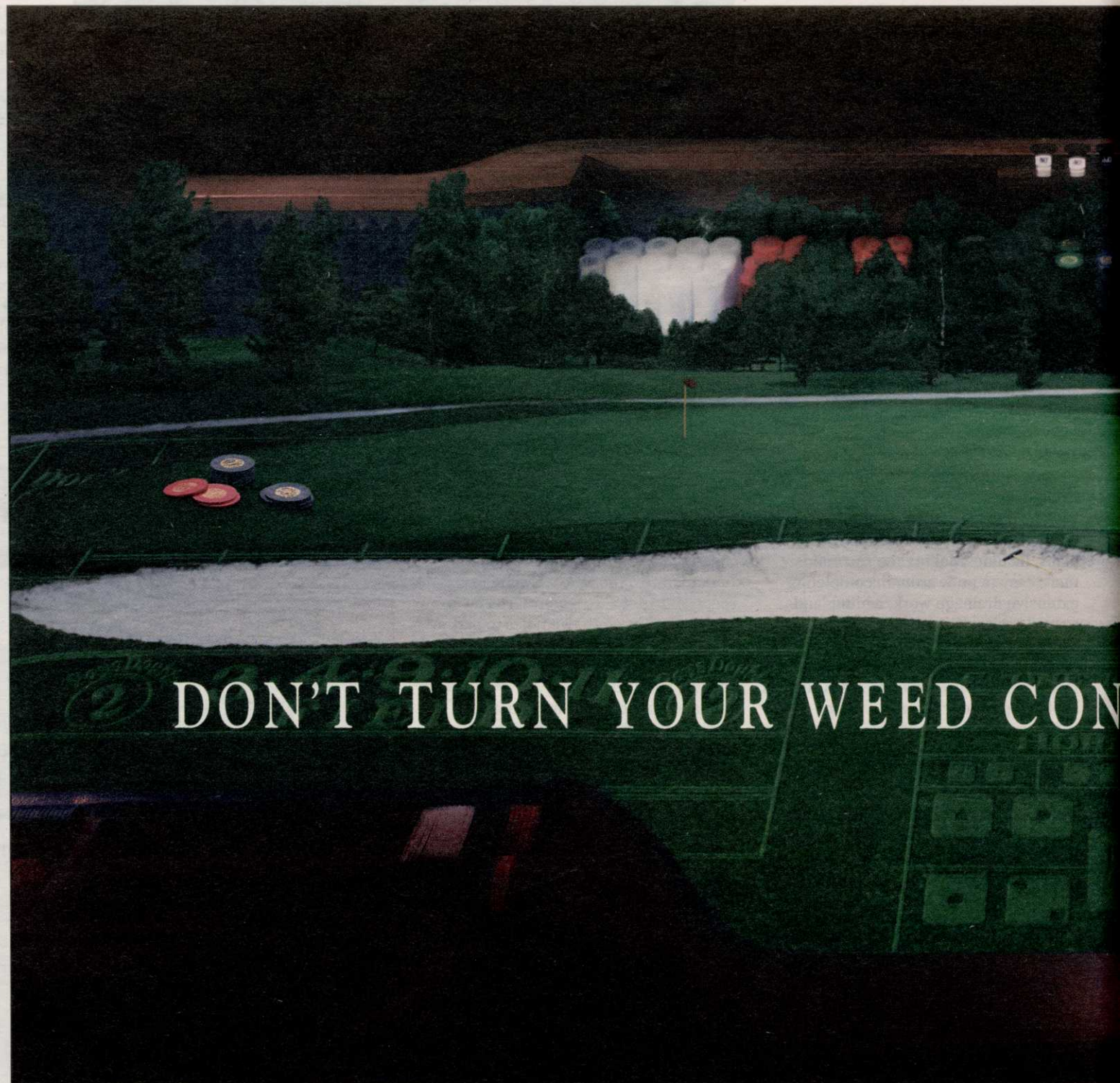
Gasoline can spell d-a-n-g-e-r

By BILL SIURU

Transporting and handling gasoline comes with the territory in golf course maintenance. Unfortunately, many forget the hazards involved and use some pretty unsafe practices. This includes carrying and filling "unapproved" containers in pickup truck beds or utility vehicles.

Plastic bedliners protect pickup beds from scratches, dents and even punctures. They can also present a fire hazard when gasoline cans and tanks are carried or filled in pickups fitted with bedliners. The problem is the static charge which can accumulate as the contain-

Continued on next page



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Gas transport and handling

Continued from previous page

ers slide around even a slight amount.

When either the container or the liner is made of plastic, the plastic material serves as an insulator so the built-up static charge is not easily dissipated.

This charge may be retained

on the outside of the container or in the gasoline itself, conditions perfect for an explosion.

A charged can also be generated when filling the container. While fueling, gasoline flowing through the pump nozzle can also produce a static electricity charge.

This can create a spark be-

tween the container and fuel nozzle, igniting gasoline vapors and causing a fire or explosion. The dangers are greatest on cold, dry days, but the hazard still exists under most climate conditions.

The National Highway Safety Transportation Administration (NHSTA) advises people to place portable containers on the ground before filling them with

gasoline rather than filling them in the pickup bed. If the container is too large to move, use a smaller container.

The NHTSA says they have found two-dozen fires and five injuries associated with static electricity discharge from portable fuel containers.

Most of the fires involved pickup trucks that had plastic bedliners. Fires also resulted

while portable gasoline containers were in filled trunks and passenger compartments of vehicles where carpeting acts as an insulator.

The NHSTA also warns that gasoline should be carried only in approved containers. When filling, bring the fill nozzle in contact with the inside of the fill opening before operating the nozzle.

Keep the nozzle in constant contact with the container at all times while filling.

Do not completely fill containers since gasoline expands as it warms up. Do not use latch-open devices to fill portable containers. Clean up spills immediately.

Finally, secure the container tightly in the truck, and of course don't smoke while handling gasoline.

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Glen Mills



Continued from page 24

Lake City (Fla.) Community College were consulted on how best to establish golf course management and maintenance curriculum at Glen Mills.

Said Ipock, "Many of our students are from minorities. To my knowledge, I don't know of any other project that will highlight minority youth involvement in golf to such a dramatic degree as this will. The proposal has been well received by the community. Local businesses and residents have been very supportive of what we are trying to do."

The course's design will feature such state-of-the-art features as computerized irrigation and an integrated pest management system. "We are being very environmentally sensitive," said Ipock, who adds that the decision to contract Weed Design was an easy one. "We liked Bobby's commitment to the project. He's given us a great routing and technical support, and he understands what we are all about."

Weed is pleased with the opportunity. "There's a lot of diversity in the terrain, from open meadows to streams to hardwood stands. We're excited. It's a great property and it lends itself to a great layout. This will be a tremendous opportunity for the kids."

Int'l Turf Producers donate three research grants

ROLLING MEADOWS, Ill. — Recipients of this year's International Turf Producers Foundation (ITPF) research grants will be Dr. Richard Schmidt of Virginia Tech; Dr. Ronny Duncan of the University of Georgia and Dr. Henry Wilkinson of the University of Illinois.

Specific titles for the projects are "Enhancement of Post-Harvest Shelf-Life of Turfgrass Sod," "Best Management Strategies for Paspalum Sod/Stolen Production and Establishment," and "Designing

and Testing Sod Blends of Bluegrass for Better Resistance to Summer Patch," respectively.

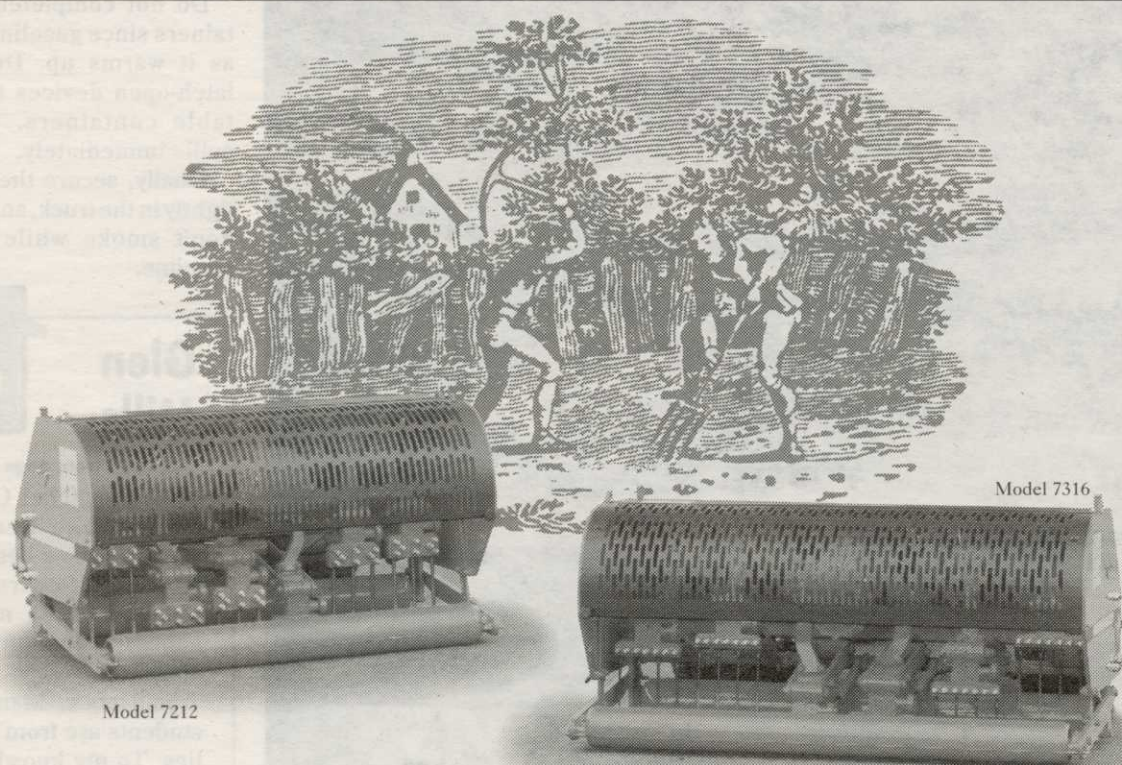
This fall, requests for 1997-98 research proposals will be sent to nearly 300 university researchers around the world. Researchers interested in obtaining additional information about making a grant application should contact the program's administrator, Tom Ford, at 800-405-TURF or by fax at 847-705-8347.

Through the support of turfgrass sod

producers and its manufacturer/supplier partners, ITPF is able to provide research funding to help address critical issues and advance the turfgrass sod production industry. Over the past 12 months, more than 100 members of Turfgrass Producers International (TPI) have made personal contributions to ITPF through voluntary gifts accompanying their TPI membership dues and through their participation in ITPF's "2-Cents Worth" annual campaign.

TPI PLANS FIELD DAYS

MINNEAPOLIS — Turf Producers International (TPI) is planning its 30th annual Summer Convention and Field Days here, July 17-19, featuring educational sessions, equipment demonstrations, local tours and exhibits, and election of officers. Harley and Marge Johnson of Harley's Sod in North Branch are hosting the field day activities, while the Hyatt Regency will host the committee meetings and educational program. More information is available from TPI at 1855-A Hicks Road, Rolling Meadows, Ill. 60008.



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tive of many maintenance-saving features that have been added like sealed bearings. Every change helps make the new generation more user-friendly. Each model has that characteristic construction durability that you've come to expect from Verti-Drain and because they're lighter, lower horsepower tractors can be used with them.

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Audubon Canada gets coordinator

Continued from page 17

find the more we let people know that, yes, it's here, the money's staying in Canada, it's serviced by Canadian personnel with Canadian information, they will jump on board that much more."

With support from the Royal Canadian Golf Association, AI set up a Canadian program some time ago, but there had been no Canadian office or personnel. It was run entirely from the New York headquarters.

Martin expects the Audubon Cooperative Sanctuary System will become "an industry standard, like in the United States." Already, 11 percent of Canadian golf courses are signed up in the golf program, and progress is being made also in the programs for schools, business and corporate properties and individual backyards.

"We have 160 to 165 courses signed up," Martin said. "We just added eight last week. We're very close, percentage-wise, to the States already. The way things have been growing exponentially I think it will work here as well."

"We've been very lucky that a lot of people in Canada latched onto the program and took it upon themselves to get out and push it even though it was not yet a Canadian entity."

With that advance help, three Canadian courses have already earned full certification, fulfilling six categories. Cranberry Resort Golf Course in Collingwood pointed the way, followed by Oakdale Golf and Country Club in Downsview, Ontario, and Point Grey G&CC in Vancouver, B.C.

Martin was, in fact, a member of the advisory committee that oversaw the Audubon program at Cranberry Resort. His specialization in interpretation, combined with a background in biology, made Martin "a perfect fit" for the job, according to Dodson.

"From a point of view of certification requirements, programs and general objectives, Audubon Canada will be exactly the same as the U.S.," Dodson said. "However, we thought it best to serve our members with people familiar with their culture, rules and regulations. They will run their program as seen fit by Canadians and for Canadians."

"We will Canadianize the information as much as possible, and get the office set up and running smoothly," said Martin, who is presently a one-man staff. "By September we hope to have all the Canadian members fully serviced from this office and to find corporate sponsors so that we can hire additional staff."

The Canadian government's response to Audubon Canada? "Basically, we're getting people to voluntarily do things the government wishes they would do anyway," Martin said. "We're giving them recognition and credit for it and serving as a clearing house to set them on the right path. The response from the government is, they love it, they think it's fabulous. And they've helped out already with workshops and helping resource committees on different golf courses."

Canadian President Scenna takes dream one step further

By MARK LESLIE

MONTREAL — Italian immigrant Pelino Scenna, whose dream came true in December 1963 when he became a golf course superintendent, told Canadian Golf Superintendents Association (CGSA) members "I've been involved in this industry for 41 years and I like it more now than ever before." Scenna was speaking as the new president of the CGSA during its International Turfgrass Conference and Show here in March.

He deflected praise, saying he has been "fortunate to be surrounded by a good staff all these years."

After immigrating to Canada in late 1956, Scenna got his first job at Brantford Country Club, the fourth-oldest course in Canada and near Toronto. After winning the superintendent job at Galt Country Club in 1963, he became involved in the Ontario Golf Superintendents Association,



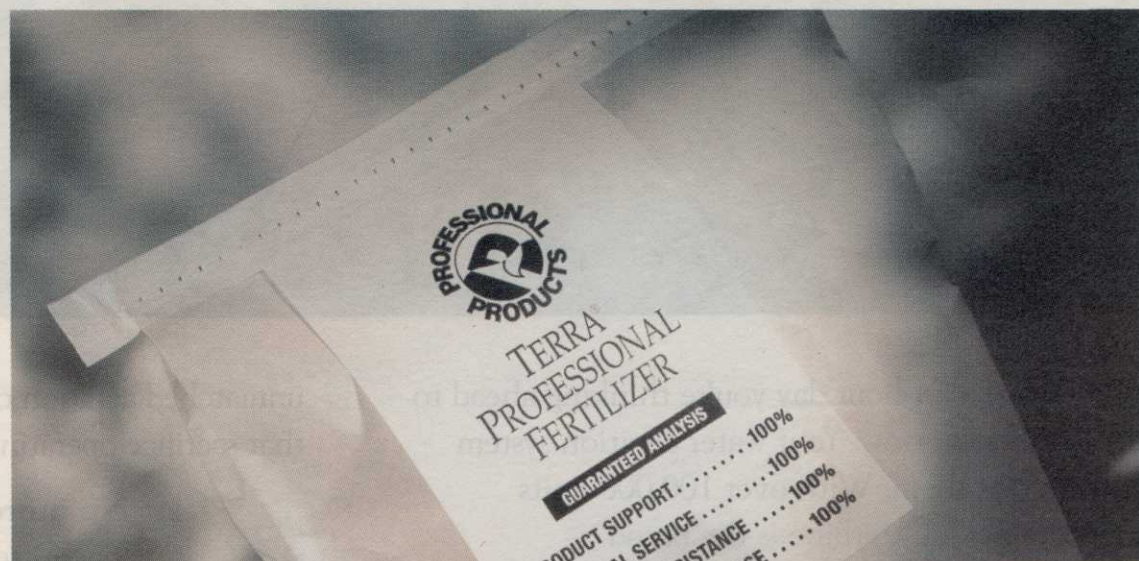
Pelino Scenna

and in 1978 served as its president. "A very, very rewarding involvement," he called it.

After 21 years at Guelph, he left in 1985 to join Burlington (Ontario) Golf and Country Club, where he works today. He was first elected to the CGSA board in 1989 at the urging of Paul White of and Bobby Brewster.

"It has been the highest pleasure to serve the CGSA," he told his colleagues.

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

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Non-profit formed to protect water rights in Arizona's stingy supply

By PETER BLAIS

PHOENIX — Protecting the Arizona golf industry's water rights is one of the main purposes of the Golf Industry Association (GIA), a new non-profit corporation formed to preserve the quality and promote the growth of the game across the state.

"There is a significant need for this type of united advocacy on behalf of the game of golf," said Tom Patrick, president of the GIA and vice president of Phoenix-based SunCor Resort and Golf Management.

"Over the years, golf has made tremendous contributions to our quality of life in Arizona. However, recently many legislative and regulatory issues have arisen which could adversely affect all levels of our industry as well as the spirit of the game."

Many of those legislative and regulatory issues have revolved around water. Strict regulations limit the amount of irrigated turf on Arizona courses, Patrick noted. However, a recent University of Arizona study indicates that traditional

formulas for estimating golf course water use may be faulty.

"The study indicates we need to look at increasing golf course allocations," the GIA president said. "The test plots used to estimate water use don't take into account the edge effect of having golf courses border the desert. On a golf course, there's nothing to stop the

Continued on page 36



WATERING HOLE

With Camelback Mountain at their backs and water hazards ahead, golfers negotiate the third hole of The Phoenician's Desert Nine, the new Ted Robinson-designed layout at the Scottsdale, Ariz. resort. The original Phoenician resort opened with 18 Homer Flint-designed holes in 1988. The new nine opened last April. ITT Sheraton Corp. of Boston owns and manages the facility. The Phoenician and other Arizona courses should benefit from the non-profit Golf Industry Association formed recently to champion water rights and other issues of concern to the state's many golf facilities.

Pebble Beach effluent study ready to go

By J. BARRY MOTHES

MONTEREY, Calif. — A critical, long-term "demonstration trial" to study the effects of reclaimed water on annual bluegrass putting greens — like those at Pebble Beach and several other well-known Monterey Peninsula golf courses here — will start by the end of this month.

Over the next few weeks, 28, 15-by-15-foot field plots will be installed near the 11th and 12th holes at the Pebble Beach Golf Links. Each plot will have different combinations of grass types, soil mixes and construction styles and will be irrigated with reclaimed water. A main goal of the trial will center on finding ways for peninsula superintendents to maintain world-class putting surfaces while using water with a salt content that has proved troublesome.

"There are all sorts of things that people don't know about using reclaimed water on golf courses that get lots of traffic and use low-mowing heights," said Mark Mahady, an agronomic consultant based in Carmel Valley, Calif., who is leading the study. "We think this study will help us figure that out."

The reclaimed water research project was developed in the wake of problems on putting greens at seven Monterey Peninsula golf courses. In 1994, a \$34 million recycled water project was launched by the Pebble Beach Co., whose courses started using reclaimed water to irrigate its tees, fairways and greens. Within a year, however, superintendents started noticing discoloration, wilting and disease on their greens.

The problems have been linked in part

Continued on page 37

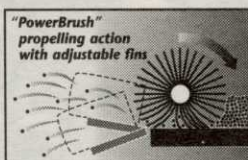
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Arizona group will address alternative water-use regulations

Continued from page 35

desert from siphoning off irrigation water. But the test plots usually don't take this into consideration."

The state has also failed to provide incentives for the golf industry to use effluent, Patrick said. Golf courses are often seen as a way for the state's growing cities to rid themselves of their resulting wastewater. And yet, there is little incentive for golf courses to install the expensive piping infrastructure to transport effluent to the site or suffer through the maintenance headaches of using the salt-laden water.

"We need to develop alternative water-use regulations so that using effluent doesn't count against a course's water allotment," Patrick said. "Using effluent doesn't increase the water available to the course, so why not just use ground water."

The GIA will focus its efforts on effectively communicating the concerns, opinions, and benefits of the golf industry to the state legislature, regulatory agencies, communities and citizens.

"The public's perception of golf as a water user is not always a good one," Patrick said. "We're very visible because of the sprinkler systems. Agriculture uses much more water, but it's a case of out of sight, out of mind."

Several years ago, a University of Arizona study reported golf contributed \$2 billion annually to the state's economy, Patrick said. The state Department of Commerce and the golf industry are undertaking an updated study that Patrick expects will show golf's impact is several times the \$2 billion figure.

"People come to Arizona to play golf," the GIA president said. "Eleven new courses opened in the Phoenix area last year and another eight to 10 are under construction. Each course needs to host 40,000 rounds a year to make the project work. And then there are the resort communities that grow up around the courses that need golf in order to survive."

Although it is part of the state's second-largest industry, tourism, golf has never had an organization that looks out for its interests in the legislature. "It's always been a last-minute scramble to react to something that affected golf," Patrick said. "This [GIA] is an attempt for us to be more pro-active regarding water, taxation and other issues, rather than just waiting for the phone call to tell us something is coming down."

In addition to SunCor's Patrick,

initial GIA board members include representatives from the Arizona Golf Association, Raven Golf, Robson Communities, Resort Suites of Scottsdale, Recreation Centers of Sun City West, Communication Links, John Jacobs,



Tom Patrick

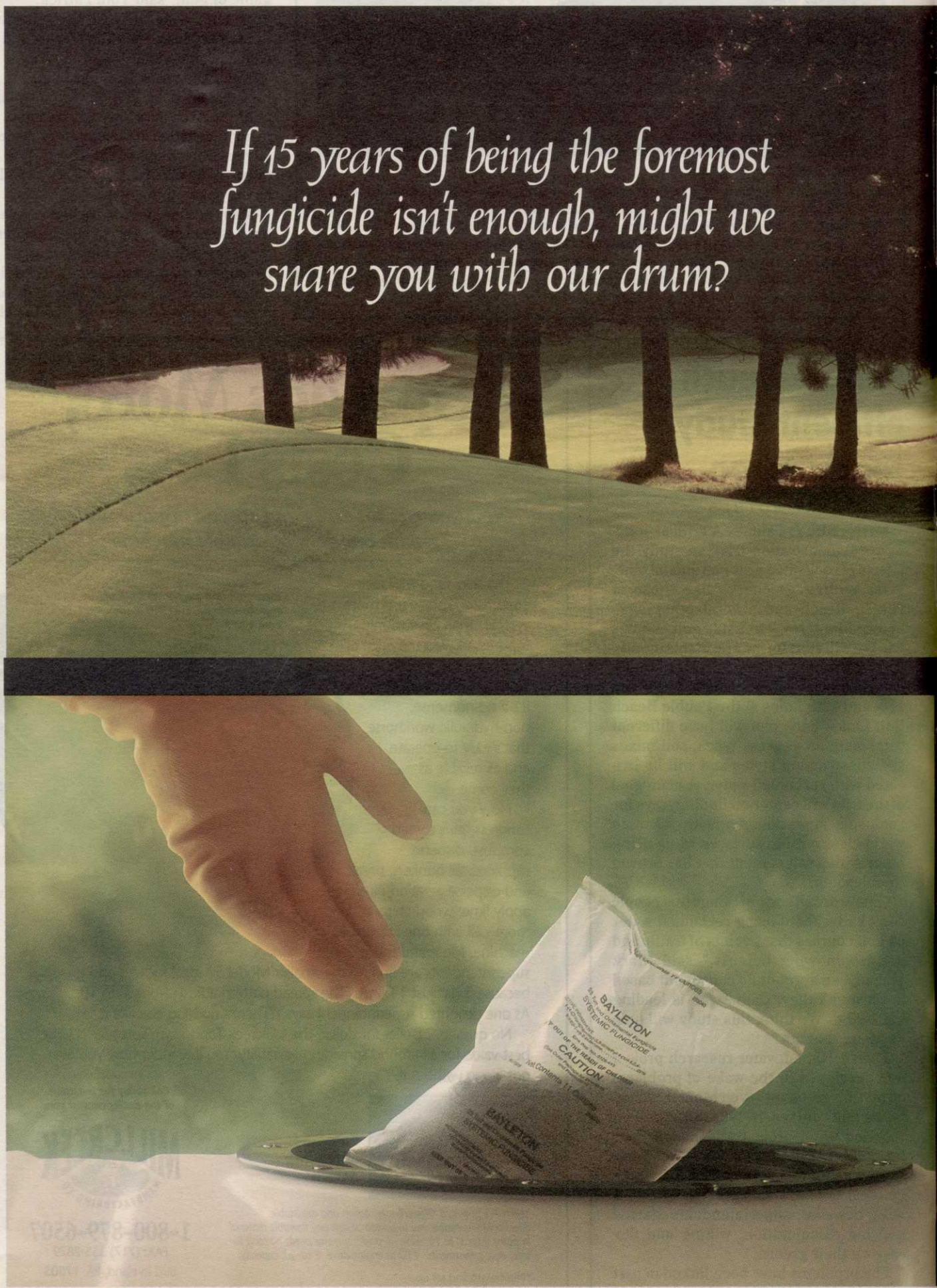
American Golf Corporation, In Celebration of Golf, The Lyle Anderson Co., The 500 Club, Grayhawk Development, Paradise Valley Country Club, Troon Golf, Cobblestone Golf Group, The Masters Group, and

McCormick Ranch Golf Club. Major suppliers such as Toro, ClubCar and E-Z-GO have also backed the group, Patrick added. "We have the nucleus of an outstanding organization," he added. "Everyone is committed to serving the golf industry and the state of Arizona as best we can. But we need more help."

Ideally, we'd like to attract 100-percent participation from those directly involved in the industry. However, we also welcome the support and viewpoints of anyone who has an interest in helping maintain the health of the Arizona golf community."

For more information about the GIA, contact 602-285-6874.

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Oneida Nation promises to employ effluent at \$10M golf center in New York

ONEIDA, N.Y. — The Oneida Indian Nation has pledged to use recycled water from the city's treatment plant to irrigate its future \$10 million golf center.

According to an agreement set to be finalized between the city and Indian community, the Nation will lay a pipeline spanning 3.5 miles from the golf facility

to the treatment plant. The pipeline will intercept effluent that would otherwise flow into Oneida Creek.

The intercepted effluent will be discharged into a reservoir near the golf courses. The irrigation system will have temperature controls and weather systems that automatically extract water to

certain parts of the course. The system is modeled after similar systems used at Walt Disney World courses.

City and state environmental officials here are pleased that it will reduce the amount of material discharged into Oneida Creek. Lake Placid and Canton are the only other communities in New

York state that use effluent water.

The Oneida Indian Nation's golf center, which is scheduled to open in 1998, will feature an 18-hole golf course, a nine-hole par-3 course, a golf academy, a full-size driving range, a short-game center and a 40,000-square-foot putting area. Construction started earlier this spring.

Pebble Beach

Continued from page 35

to a higher salt concentration in the reclaimed water. The putting surfaces at the seven courses are annual bluegrass (*Poa annua*), which has proved to be the best turf to cope with the peninsula's cool, foggy climate. But *Poa annua* is also very sensitive to salt.

The project has been scaled back significantly from last fall, when the plan called for a technically sophisticated "replicated" field study that would have cost somewhere between \$300,000 and \$500,000 over a four- to five-year period.

But the scope and scale of the project shrunk during the winter. Questions were raised over whether there would be a predictable and constant supply of reclaimed water for the entire length of the proposed study. There were two occasions in 1996 when the golf courses were forced to use potable water because there wasn't enough reclaimed water available.

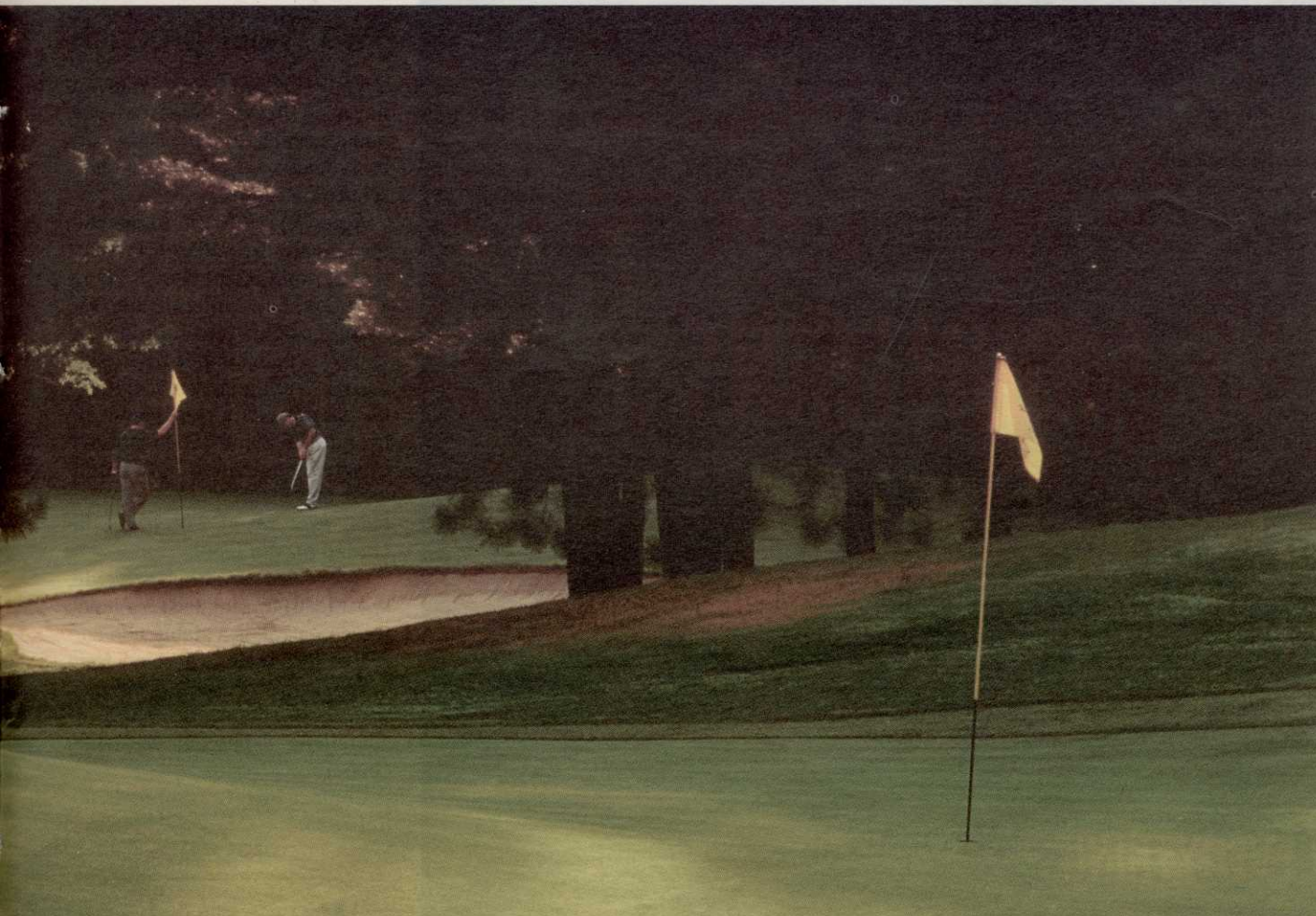
Any interruption in the supply of reclaimed water, according to Mahady, would ruin the scientific integrity of a study trying to determine how the grass will do while relying completely on reclaimed water.

"Although it's not a replicated field study," said Mahady, of the new version of the project, "and it's not as statistically substantial as what we originally planned, there's a great learning curve through this sort of work that is tremendously beneficial. If reclaimed water is used on the peninsula, and it is, we need to know how to use it properly."

With the demonstration trial plots at Pebble Beach, maintenance crews will maintain them as part of their daily routines. Once the grass grows in, they will simulate wear and tear, trying various mowing heights. Mahady will be the lead evaluator.

Mahady said one of the first things that he and others involved in the project will be watching closely in the short term is how water quality affects the germination of the grass type and the rate of that germination.

"We'll start learning from day one," he said.




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CIRCLE #301

Bunker Pumper unveiled by Otterbine

Otterbine Barebo has released its new and improved Bunker Pumper.

By adding a removable float, Otterbine has made the new Bunker Pumper easier to use in those hard-to-reach places. This pump can drain water from irrigation ditches, bunkers, swimming pools, construction and excavation sites, manholes, and any low-lying, hard-to-reach areas. In addition, Otterbine has improved the

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CIRCLE #125

PBI/Gordon adds two water products

PBI/Gordon Corp. has announced the addition of two new aquatic management products to its Professional Turf & Ornamental product line.

AquaCure Aquatic Algaecide, specifically formulated for control of aquatic species of algae, contains a formulation derived from copper-triethanolamine complex with copper hydroxide and containing 8 percent elemental copper. This new algaecide product is reported to provide effective control on both planktonic and filamentous algae species, over 60 of which are included on the label.

AquaCure Aquatic Herbicide, specifically formulated for aquatic weed control, is a stable non-corrosive formulation derived from copper-ethylenediamine complex with copper sulfate pentahydrate containing 8 percent elemental copper.

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CIRCLE #303

Water recycling system unveiled

RGF Environmental Systems, Inc. has introduced an advanced wash-water recycling system, the Ultrasorb Model GC, engineered for the removal of herbicides, insecticides and pesticides in addition to oils, solids and grass.

The Ultrasorb Model GC is equipped with RGF's Proprietary Catalytic Oxidation Process which actually oxidizes contaminants such as herbicides, pesticides, odors, algae, bacteria and other organics to harmless carbon dioxide and water, thereby decontaminating the water and increasing the filter life.

Its Biosorb Series-I Aerobic Digester reduces high B.O.D. loading. The Model GC also contains an auto backflush system for the filters which help to reduce maintenance.

Contact Ron Lye, RGF Environmental Systems, Inc., 3875 Fiscal Ct., West Palm Beach, Fla. 33404; phone (800) 842-7771, in Florida (561) 848-1826.

CIRCLE #304

GOLF COURSE NEWS

BRIEFS



LOHMANN BREAKS GROUND ON EVANSVILLE PROJECT

EVANSVILLE, Ind. — Construction has begun here on Eagle Crossing Golf Club. The new 18-hole golf course and practice facility will be the focal point of the 270-acre Eagle Crossing subdivision. The golf course is being developed by BSH Development of Evansville and designed by Lohmann Golf Designs, Inc. of Marengo, Ill. Construction is being completed by BSH Development and Golf Creations of Marengo, Ill. The par-70 course will feature bentgrass greens with zoysiagrass collars, Bermudagrass tees and fairways, and fescue grass roughs. The golf course is scheduled for completion this fall, opening for play in the summer of 1998. The housing development began last summer and now features 84 of the 245 home sites for sale.

VIOLA TO ADD NINE AT PINE KNOB GC

CLARKSTON, Mich. — A new nine holes are under construction here at Pine Knob Golf Course. The additional holes were designed by West Bloomfield architect Lorrie Viola, whose first solo effort in Michigan, The Timbers near Frankenmuth, opened last summer. She's also undertaking a renovation of Burning Tree Golf & Country Club in Macomb, two championship layouts in Ocala, Fla., and a nine-hole addition in Fairfield, Conn. Planned to intertwine with the existing 18, three of the new holes will wind their way along Lake Fleming, while the other six will offer the wildness of an Irish links course, Viola said. Seeding is expected to take place in June. The new nine will be open for play in 1998.

C-D TO HANDLE MICH. RENOVATION

SHEPHERD, Mich. — The golf course design firm Conroy-Dewling Associates, Inc. will handle a renovation and extensive master plan here at Winding Brook Golf Club, according to President James R. Dewling. The renovation will continue this spring under the direction of head professional Tim Dawkins. Improvements will focus on the tees and drainage around a number of greens and fairways. Phase two, involving an updating and upgrading of the existing course, is expected launch this fall. The course will be available for play while improvements are underway.

GOLF COURSE NEWS

Dye is cast for ASGCA

Alice takes gavel this month

When the American Society of Golf Course Architects (ASGCA) meets in Toronto, May 12-18, Alice Dye will succeed Denis Griffiths as its first female president. A design partner with her husband, Pete, since 1959, Alice has been a storied amateur state and national golfer as well as prime champion of forward tees in course architecture. When son Perry was accepted by the ASGCA last year, it meant the Dyes and both sons were ASGCA members — younger son P.B. having joined several years ago.

...

Golf Course News: What do you want to focus on during your term in office?

Alice Dye: We will continue all of the programs that Denis [Griffiths] started: stressing low-cost golf courses and the President's Award. We also want to improve speed of play and create a greater identity for the ASGCA Foundation so that the industry knows we are

Q
& A



Alice (from left), Perry and Pete Dye conduct a site walk at Thai Muang G.C., a Dye Design in Thai Muang Beach, Thailand.



doing something in a special niche to help.

By building low-cost golf courses we can reduce the price of golf and keep it growing. The Pres-

ident's Award will be directed toward a specific project: this year Junior Golf. So many programs are so big that we can't make a particular contribution, so our foundation will center on some area that is pertinent to our organization where we can really be of help to the golf industry,

golfers, everyone. The Foundation has done some good work with research, and with a living history. We have videotaped about 20 old-time architects who are still living, telling their experiences and philosophies. People like Robert Trent Jones on tape, telling his philosophy — this will be invaluable 50 years from now.

The environmental book that [ASGCA member] Bill Love put together was wonderful. It required a lot of work and dedication, and it is information that only our organization can provide. But we're such

Continued on page 48



The contours catch and enhance patches of sun and shade at Keith Foster's Texas Star Golf Course and Conference Center in Euless.

Foster set to unveil the Texas Star

EULESS, Texas — Hurricane Creek meanders by while century-old oak trees and an assortment of native grasses outline the fairways here on the newest design from Keith Foster, the city of Euless' Texas Star Golf Course and Conference Centre.

The facility, located in the heart of the Metroplex and 10 minutes from the Dallas/Fort Worth Airport, opens for play May 22.

The constant feature of the 287-acre site is Hurricane Creek, which winds

through a landscape of stacked rock ponds, waterfalls and hill country terrain.

The 7,000-yard track, constructed by Landscapes Unlimited of Lincoln, Neb., will play to a par of 71.

Sporting a spikeless golf shoe policy, the course will host The Collegiate Players Tour National Championship on Aug. 12-14.

The state-of-the-art conference center includes more than 5,000 square feet of divisible space.

COMMENTARY

With irrigation and alcohol, hard part is knowing when to stop

By DR. MICHAEL HURDZAN

Recently I had a discussion with perhaps the dean of club professionals, from one of the most distinguished and exquisitely manicured golf courses in America. We talked about, what else, Tiger Woods' prodigious length off the tee, and my friend offered that maybe it was time to bring back fairway cross bunkers that make the classic courses of the 1920s so popular and a great test of golf.

"Only then," he mused, "will par-5s stay three-shot holes and will 460-yard par-4s be more than a drive and short iron for the big hitters."

Personally, as a fan of cross bunkers, I applauded his observation, but we both realized that such hazards would most seriously frustrate the average and below-average golfer, make for slow play and add to maintenance costs.

I suggested there might be another strategic solution, which would actually more fairly increase the challenge of a golf course for all golfers, speed up play, reduce maintenance costs and make golf courses better neighbors to their surrounding environments. That idea was also a 1920s classic, but it was a product of technological depravation, not intelligent decision-making.

This big idea was — to turn off fairway irrigation.

Now my dear Mom taught me "all

Continued on page 42

By MARK LESLIE

It is getting easier to procure financing for golf course projects, but the permitting process is generally longer, according to a survey of golf course architects in the United States.

In a *Golf Course News* poll of architects, more than nine out of 10 also said more environmental planning is being done before permits are sought.

Sixty-two percent of those surveyed said financing is found more easily today than in the past. Brian Curley, in fact,

Survey: Permitting more involved, say architects

responded: "Absolutely!" But 32 percent of the respondents disagreed, saying it is not easier to obtain, and 2 percent felt the situation is unchanged.

Sam Sakocius, president of golf course builder Sajo Construction, said, "It seems there are more sources for financing but those sources are more restrictive."

A full 92.5 percent of those responding said more environmental planning is be-

ing done before the permitting process begins. But despite this advance work, 64 percent reported that it is taking developers longer to get projects approved. Only 13 percent said permitting is being completed more quickly than in the past.

Roger Rulewich of the Golf Group in Bernardston, Mass., who has courses under construction or in planning in six states, balanced the two opinions, saying

the permitting process is "shorter but with more litigation."

Gary Linn of Robert Trent Jones II International in Palo Alto, Calif., credited reports and studies that are mandated by regulations with lengthening the process.

John Sanford of Jupiter, Fla., spoke for some who said the answer to the question depends entirely on the site and state.

Continued on next page

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CIRCLE #126



New take on the golf/real estate combo

By MARK LESLIE

CHARLOTTE, N.C. — Mixing two everyday ideas, a pitch-and-putt golf course and multi-family apartment community, a small golf course operator here feels he has a prize possession — one that should "go national."

"I'm excited about the potential it has for the golf business," said Del Ratcliffe of his concept. "If we have a number of these all over the country, we'll attract a lot of people who have never picked up a club to play on them. It's simple, inexpensive and a great way to learn the game."

Ratcliffe Golf Services opened its Paradise Valley Par-3 here in November in conjunction with a 300-unit apartment complex built by Summit Properties, a local developer.

The has already proven extremely successful, said Ratcliffe, who also operates the 18-hole Sunset Hills and a practice range in the area. "We certainly feel it can be done on a very profitable basis."

Call it "a poor man's country club," he said.

While Paradise Valley and the Summit Green apartment community are under separate ownership, Ratcliffe said: "The ideal situation is to have a fully integrated project, with a single owner, where the par-3 becomes a simple amenity to the project. We want to fully integrate the concept to go to the semi-private golf community where you gain golf privileges when you become a tenant in the apartments."

"The concept is so good," he said, that it should be incorporated in developments around the country. "The golf course benefits from having a lot of people next door to it. The apartments can charge a higher rental and have a much more marketable product than the guy down the street. Most apartment complexes are updated with the better stoves or refrigerators — bells and whistles in the apartment. But the [competition] down the street can't refurbish

Continued on page 50

GOLF COURSE NEWS

EPA deals blow to state permitting initiative

ST. PAUL, Minn. — Gov. Arne H. Carlson and Minnesota Pollution Control Agency Commissioner Peder Larson have objected to the Environmental Protection Agency's (EPA) recent decision to halt an agreement that would allow states to adopt innovative permitting of environmental regulations.

The effect will be the *status quo*, often meaning long delays for golf courses and other projects.

On Feb. 26, Larson and five other state environmental agency commissioners sent a letter to EPA Administrator Carol Browner and Deputy Administrator Fred Hansen stating that members of the Environmental Council of the States (ECOS) were shocked to learn that EPA had made a "unilateral decision" to immediately pull back from public review the draft "Joint EPA/State Agreement to Pursue Regulatory Innovation."

ECOS consists of environmental secretaries, directors and commissioners from 49 states and six territories. Larson is co-chairman of the ECOS Regulatory Innovation Work Group that, along with EPA, developed the draft agreement.

For ECOS members this means that months of hard work of the joint EPA/ECOS Work Group have come to a jolting halt.

"I am frustrated because just as the states and the EPA are about to find ways to streamline environmental regulation, the EPA gets cold feet," said Larson. "The EPA is imposing conditions to halt, or severely impair all future efforts to help business comply with environmental regulations while producing cleaner results in an economically feasible way."

When asked for his reaction to the EPA's recent decision, Carlson said: "It is my duty to the citizens of Minnesota to create the most

efficient system possible for achieving our environmental goals and ensure the best protection of public health and the environment for the least cost. However, the EPA's decision to impose conditions on all future efforts brings future uncertainty to a process that held great promise."

"ECOS members are disappointed that the EPA decided to

impose these unreasonable and counterproductive measures," said Larson. "We believe that the EPA's position shows a lack of commitment to meeting President Clinton's charge of reinventing environmental regulations. The EPA has said publicly that its goal is to apply common sense, flexibility and creativity to move past its one-size-fits-all mentality.

Clearly, the EPA's actions create great barriers to true innovation. I am very disappointed."

Larson said it is ironic that the draft agreement has fallen prey to the very problem the states hoped it would solve. Larson hoped the draft agreement would cause some improvement in the relationship between EPA and the states, which has been increasingly strained in the past few months.

"ECOS hoped that through the principles and process described in the draft agreement that EPA and the states could create a shared commitment to dealing openly with each other and being accountable for our actions," said Larson. "We are instead left with damaged trust and questions about EPA's commitment to working in partnership with states to create a better environmental system for our citizens."

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Architects survey

Continued from previous page

Meanwhile, surveyed about whether the pipeline of new courses shows any signs of drying up, golf course builders agreed that it does not.

"All indications," explained Joe Niebur of Niebur Golf, based in Colorado Springs, Colo., "show 1997's construction activity remaining constant with the past year's."

Bill Kubly, president of Landscapes Unlimited Inc. in Lincoln, Neb., seconded that motion, saying, "If anything, the pace is picking up. We have never seen so much activity. There seems to be a lot of renovation work coming up as well."

Hurdzan comment

Continued from page 39

things in moderation," so even if we do not turn off fairway irrigation, let's reduce it to the minimum amount necessary to keep the turf healthy... not green — healthy. Nearly every turfgrass manager I know believes that we water to excess only to provide that perfectly green sward de-

manded by their clients, customers or bosses.

In the Midwest it is not uncommon to use 1.5 to 2 million gallons of water per week on a fully irrigated 18-hole golf course — and almost that much each day in the desert Southwest. In many cases this might be twice the amount necessary to keep the turf healthy, although not verdant green and lush.

So if healthy turf will naturally go off-color during periods of high environmental stress, will golf then be less enjoyable? No, it will be more enjoyable.

I grew up on a public facility and much of what I fondly remember about golf there was attributable to the course having unwatered fairways and roughs. In particular, the second hole — a 500-yard par-

5. In the spring and fall the rain kept the clay soils moist and the turf lush. During these times, the hole required a driver, fairway wood and wedge to reach the green.

But in the driest part of the summer, when the ball would bounce and roll on landing, it could play as short as a driver and five iron. Between those two extremes, depending on the state of soil drying and the

wind, every combination of second shots was possible. Rarely did the hole even play the same two days in a row, so the golfer who could read those conditions and use them to his advantage, benefited. At times you could aim the ball far up into the right rough, knowing the ball would bounce off the dry hillside, cut off the dogleg, and end up back in the fairway. Had the fairway and/or rough been fully irrigated the hole would have probably only varied a club or two over the entire season.

Was golf less fun because the turf turned brown in the summer? Absolutely not — it was more fun, a greater challenge. With reduced mowing and fertilizing, it had less environmental impact. Dry turf is one of the most charming elements of European golf.

The point is, the wetter the playing condition, the greatest advantage will always go to the golfer who can carry the ball in the air the furthest. In the wet, just "grip and rip it." But in dry conditions, length off the tee is a combination of carry and roll, and the drier the turf, the more importance is placed on the roll which will ultimately determine the final stopping place for the ball. In other words, dry turf rewards the golfer who factors in the wind and places himself or herself in the most advantageous position for the next shot.

Today it seems too easy to over-water turf simply to ensure green grass. And so, for most golfers, it is expected but not appreciated. The old adage of "Today's luxury is tomorrow's necessity," is still true.

Can American golf ever be weaned from over-watering, or is water use more addictive than alcohol? I believe the answer is that even now most of us in the industry are taking every opportunity to reduce water use — because we know it is in the long-term best interests of the game. We begin by selecting appropriately adapted turfgrass cultivars and favoring those that are most drought tolerant.

Irrigation systems are being designed with water-saving features such as low-pressure, low-volume, low-angle heads directed by computers programmed with water-saving software. Site-specific irrigation head location and nozzling have replaced the old standard triangular or square spacing schemes and standard nozzles.

Soil amendments, both organic and inorganic, offer technological advances that, when used properly, can

Continued on next page

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Hurdzan & Fry chosen for #2 at Coeur d'Alene

COEUR D'ALENE, Idaho — Until now the golf course here has been known for its trademark floating green, dreamed up and implemented by Scott Miller. But now a second course is planned.

There will be no floating greens, but the as yet unnamed golf course promises rock cliffs, huge trees and views from 250 feet above the lake. Hurdzan/Fry Golf Course Design will lay out the course for Arrow Point Development Co.

"I feel the site is one of the most spectacular in North America," Fry said. "Given the location and the willingness of our clients to make the golf course the best it can be, Arrow Point at Coeur d'Alene has the potential to be ranked among the Top 100 in the U.S."

Hurdzan comment

Continued from previous page
conserve root-zone water.

Design, construction and maintenance techniques such as modified target golf, zonal planting and plant growth regulators are all contributing to lessen the amount of water applied to turfgrass while keeping it in a healthy state. Our goal is total sustainability of using only recycled water. This goal may be as unobtainable as finding a perpetual motion device, but we must try. Currently we are just scratching the surface of genetic engineering, subsurface irrigation, improved root-zone amendments and even best-management practices. But it takes forward-thinking turfgrass managers and open-minded field experimentation to prove their applicability and economic viability.

The only serious limitation to continuing success is the cooperative understanding of golfers to tolerate less-than-green grass. Golfers in America are clearly addicted to playing conditions achievable only by using more water than is necessary for healthy turfgrass. The first step in breaking any bad habit is to recognize there is a problem, then change attitudes or lifestyles appropriately.

Let's hope that breaking overindulgence of over-watering is easier than that for alcohol.

Michael Hurdzan is a Columbus, Ohio-based course architect and a member of the Golf Course News Editorial Advisory Board. The above column is his first in a semi-regular series.

GOLF COURSE NEWS

McCumber breaks ground on Jersey project

MANALAPAN, N.J. — McCumber Golf and the course design firm of Mark McCumber & Associates of Jacksonville, Fla., have undertaken the building of Knob Hill Golf Course here.

Construction is already underway at the 18-hole, par-70 facility. The upscale daily-fee development is expected to open a

year from now, in July 1998.

McCumber, a PGA Tour player, has laid out a course with dramatic elevation changes that uses water on several holes. McCumber Golf is the construction manager and shaper for the course.

...

In other McCumber & Associates news,

the firm is working on GreyStone Golf Club in Dickson, Tenn. The project is under construction.

Its TPC at Heron Bay in Coral Springs, Fla. — another McCumber product — recently opened and is host of the PGA Tour's 1997 Honda Classic.

In addition, McCumber's firm is designing the second of four courses planned for Del Webb's Sun City Hilton Head in Bluffton, S.C.



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GARL, MARRIOTT UNVEIL LEARNING CENTER IN ORLANDO

ORLANDO, Fla. — Lake-land-based golf course architect Ron Garl has introduced his mega teaching/learning complex here at Marriott's Grande Vista, the newest Marriott Vacation Club Resort.

Serving as home to the Faldo Golf Institute, the learning center is open to the public and

Faldo Institute students. It features Garl's "Scoring" — a muscle-memory practice area designed for shots of 100 yards or less, a nine-hole, 2,400-yard course, a teaching/learning complex with five practice tees and more than 200 hitting stations, and a \$1 million 27-hole lighted putting course.

Costa Rica

Continued from page 1

years. Cariari International Country Club, designed by George Fazio in 1973, has long been the country's only 18-hole golf course, and there are three nine-holers, according to Garl.

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

Costa Rica, Garl enthused, "is definitely an emerging market.

"It truly is a tropical paradise. It's one of the places that delivers more than it promises. It is like Hawaii but one-third the cost," climatic and financial attributes that draw tourists from North America and Europe.

Citing "a number of courses on the drawing board," Garl said developers are excited about having a golfing neighbor in the

Spanish Melia Hotel Group. "The Jones team will do a wonderful job and we'll have a one-two punch," he said.

"From November to June it's like California in the summer," said Linn. "It won't rain a drop and it's 85 degrees."

Traveler magazine has deemed Costa Rica's central valley the best climate in the world in which to live. *Sports Illustrated* rated its fishing the world's best. And the makers of the movie *Endless Summer* declared they had found the No. 1 surfing spot on the globe at Tamarindo. Indeed, it was the surfing, in fact, that attracted superintendent Jay Miller from Daytona Beach to a job at Rancho Las Colinas.

Melia Conchal Golf Resort has completed its first phase, opening 300 rooms. Rancho Las Colinas contains a small-scale, 20-room hotel and a number of single-family residences.

Rancho Las Colinas is being developed by Americans David Girsks of West Palm Beach and Mike and Jack Osborne of Miami and Costa Rica. The Osbornes' father had owned the property for many years.

Garl called it "simply the prettiest place I've ever seen. The mountains go right into the sea. It has coves with white sand beaches."

The golf course site combines ranchland, intersected by creeks, and hills, from which golfers can look across an estuary to the Pacific Ocean. A river borders part of the layout. And elevation changes about 120 feet.

Garl brought some of his Florida-style design to the track, he said, "because it has the same kind of climate and similar vegetation, although it is true tropical whereas Florida is subtropical."

The 13th is the signature hole, climbing up the side of a mountain. When construction crews started cutting out the green, they uncovered a reddish solid rock. So Garl took advantage of it, creating a natural wall in front of the green. It is a par-4 that plays about 365 yards.

"We tried to shape the holes like the mountains in the nearby background," Garl said, "so the golf course is an extension of those mountains."

Having a 30-year presence in Costa Rica, the developers "had a sense the timing was right to bring golf to this part of the world," Garl said. "They have done very well in land sales and golf so far. They are very pleased."

Meanwhile, RTJ II is building nine holes on either side of the Melia Conchal Resort's hotel complex, which sits on a pure shell beach. Each nine is a self-contained entity sitting in a valley and stretching into the hills, Linn said.

The 18 holes will play to par 72 and stretch over 7,020 yards.

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Rick Robbins

Robbins teams again with IOI in Malaysia

By MARK LESLIE

JOHORBAHARU, Malaysia — The contractor is on site and clearing the fairways for a 27-hole, daily-fee golf course that will serve as centerpiece of a huge new development here called Sweelam Estates.

The 6,000-acre property is being developed by Industrial Oxygen Inc. (IOI), overseen by managing director and chairman Tan Sri Dato Lee Shin Cheng. IOI is a large plantation landowner as well as a producer of oxygen and industrial petroleum.

Rick Robbins, the principal of Robbins & Associates based in Cary, N.C., who designed 27 holes for IOI at Palm Garden Golf Club in Kuala Lumpur, is master planning the development as well as designing the golf course.

"This will be mostly a daily-fee course oriented toward the middle market," Robbins said. "So many in the area are high-end private facilities. This one is different. There will be some semiprivate members" in the development.

Spencer joins Matthews staff

By MARK LESLIE

LANSING, Mich. — Some 47 years ago an 8-year-old Denny Spencer and his younger brother sawed off several inches of their dad's new persimmon driver, wrapped tape around the shortened handle and headed out to play golf down the street. Happily banging their way around Toledo's Ottawa Park Golf Course, they were confronted by a grandfatherly man who allowed them to continue on even though they had no "ticket" allowing their play. "I've been lucky my entire life and my luck started that day," Spencer says. "If he had chased us off the course I might not have been a golfer. My brother shot 154 and I shot 146, but I was hooked."

Indeed, being a golfer has transformed Spencer's entire life from what it might have been.

Passion for the young Denny Spencer became two dreams: playing on the professional tour and designing golf courses.

In 1992 a much older Denny Spencer fulfilled the first dream when he joined the T.C. Jordan Tour (now Hooters Tour) and then the Senior Tour. And on Jan. 13 he realized the second of those dreams when he joined Jerry Matthews' golf course design firm.

"I'm one of the luckiest guys you will ever meet," he said. "I shake my head at how fortunate I've been — not only to dream about them but have them come true. I pinch myself sometimes."

Spencer's passion to become a good golfer consumed his early

years. He'd practice all winter long, peeling tarpaulin off the ground when it snowed so he could hit the ball off turf. The practice paid off. Among other trophies, he won the Toledo District Amateur five times in match play and five in stroke play beginning in 1971 at the age of 29; placed in the top five in four Ohio Amateur competitions; was low medalist for the U.S. Amateur five times; coped 11 club championships at Highland Meadows Golf Club in Slovenia outside Toledo; twice was Toledo District Player of the Year. In college he won the Mid-American Conference championship in 1964 and was named to the NCAA East-West All-Star Team, and has been inducted into the University of Toledo Hall of Fame.

While earning a lucrative living in the printing industry, amateur golf was "truly my avocation," Spencer said. Although circumstances forced him to twice refuse opportunities to turn pro, the idea always lurked in his mind, in his dreams. And, all the while, as he drove through the countryside he continually found himself envisioning what golf holes he would design on the passing landscape.

"I had basically two passionate wishes: play on tour and design golf courses," he said.

When, at age 45, he asked his wife Peggy if she would have a problem if he gave the Senior Tour a try in five years, she responded: "I would have a problem if you didn't."

Five years of physical and financial preparation followed, and when the time came he sold himself "like stock, to 10 wonderful sponsors." The result of the next five years on the Senior Tour could be described by what Spencer jokingly says should be on his tombstone: "Missed by a shot."

"I cannot tell you the number of times I would shoot 70, 71 or 72 and go down the road" rather than earn one of the slots open to "Monday qualifiers," he said. He played in eight events and was an alternate 16 times. But time and again he missed qualifying by one shot. Several times he missed by one shot playing with one of his idols, Arnold Palmer. In a field of 532 in 1995 he missed, by one shot, the cut to earn one of eight playing cards. In 1995 he was the first-round co-leader in the Bank of Boston Classic before finishing 24th. He played in only three official events, yet finished 112th on the money list, averaging more than \$5,000 per event.

"I got all of the juice out of the orange except I didn't get an exemption card," Spencer said. "That's the one thing I didn't



Denny Spencer stands behind his design mentor, Jerry Matthews.

accomplish. I really would have been fine if I could have gotten out there full-time."

Yet the dream was fulfilled. He did play on the Senior Tour with such greats as Orville Moody, Dave Stockton, Jim Colbert, Bob Goldby, Gibby Gilbert, Doug Ford and Dave Hill.

Last November marked the point at which things were set in motion for fulfilling Spencer's second passionate dream. He finished 21st in a competition for 20 cards for the European Senior Tour. Friend and Senior Tour player Al Reigel, knowing Spencer was "experiencing one of the low parts of my life," asked

what other job would be at the top of his wish list.

"I didn't bat an eye," Spencer said as he recalled his answer: "The design business."

Reigel called friend Matthews, Matthews interviewed Spencer, and the rest of that story is about to be written.

"This is all I want to do the rest of my life," Spencer said from his office at the newly named Jerry Matthews Natural Golf Design.

"Jerry and I are so much on the same page," he said. "His feeling for golf courses, aesthetics and the environment are identical to my own... Golf courses,

Continued on page 49



Sand bunkers surround the 3rd green on the Robert von Hagge-designed West Course at Arima Royal in the mountains northwest of Kobai, Japan.

von Hagge course lands Asian tour stop

KOBAI, Japan — The Suntory Ladies Open will have a new home this year, playing an 18-hole layout consisting of a new nine holes designed by Robert von Hagge and a remodeled nine from the previous 27-hole facility at Arima Royal 45 minutes north northwest of Kobai in the mountains. The new 18 opened in September. The existing 27 holes had been built more than two decades ago and was due for a facelift of sorts, according to Mike Smelek of von Hagge Design. Arima Royal is owned by the Obayashi family.

Meanwhile, von Hagge should complete construction by the end of April on Malibu International, which lies 30 minutes west of Kobai. It is expected to open in 1998. Malibu International of Tokyo, which is involved in the entertainment business, is the developer of the project which was begun in 1990.

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INSIDE

Upfront Prep

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Sod Science?

High demand for sod 53

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ALL IN THE FAMILY

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

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PLAYERS SURVEYED ON SUPERS' ROLE

Image enhanced but golfers insist on 'green' look

BY PETER BLAIS

ORLANDO, Fla. — Most golf superintendents as trained professionals and the person most responsible for course conditions — news course superintendents should find encouraging national efforts to elevate their image. Disturbingly, however, few superintendents' national efforts to elevate their image. Also troubling was the most golfers to accept poorer conditions in exchange for reduced water use on their courses. According to a recent survey conducted by the National Golf Foundation.

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BY PETER BLAIS
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SENSITIVE STROKES

Architect Ron Carl worked sensitively around wetlands at the newly opened Indian River Club. Located in Vero Beach, Fla., Indian River is only the third course in the world to be granted Audubon Signature status. The course also embodies the Environmental Principles for Golf Courses recently issued at the conference on Golf & The Environment (see page 16).

on course costs

BY MARK LESLIE

Worried the cost of golf is starting to drive people from the game, the incoming and outgoing presidents of the American Society of Golf Course Architects have presented arguments that would lead developers to make harsh choices about their projects.

Picking sides in a point-counterpoint atmosphere, Past President Jeff Brauer of Golfscapes in Houston and new President Denis Griffiths of Braselton, Ga., agreed construction costs have escalated too high but disagreed over the cure.

"Ten years ago there were few upscale daily-fee projects," Griffiths said. "Everyone today is doing

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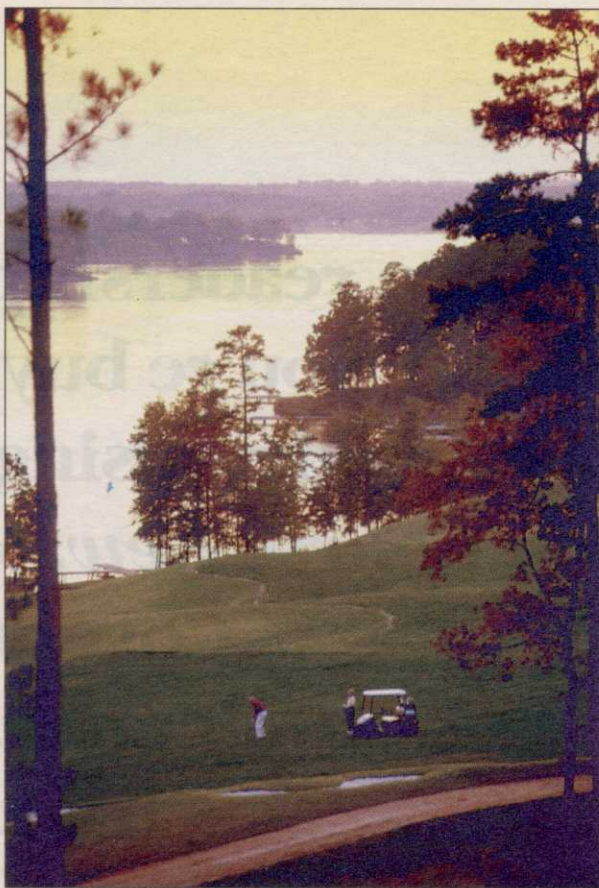
Griffiths

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

Ciba-Sandoz deal creates new firm: Novartis

AND FAZIO MAKES THREE AT REYNOLDS

Reynolds Plantation, a 4,800-acre residential community located in Greensboro, Ga., on Lake Oconee, midway between Atlanta and Augusta, will unveil its third golf course this year. Reynolds National, designed by Tom Fazio, will join the Plantation and Great Waters courses when it opens this fall. Reynolds National is a par-72 layout that features two holes along Lake Oconee, a 19,000-acre impoundment that is Georgia's second-largest lake. Reynolds' original Plantation Course was designed by Bob Cupp in conjunction with touring professionals Fuzzy Zoeller and Hubert Green, while Great Waters was designed by Jack Nicklaus.



A chat with Alice Dye, madame president

Continued from page 39

a small segment that we're not going to be movers and shakers in environmental issues.

GCN: During your term you also want to get the ASGCA and its members better known. Can you address that?

AD: I'd like to work with [the media] to promote that they are ASGCA members. I'd like golf courses built by any of our members to have their photo and "a member of ASGCA" on the scorecard. Most of the top 100 courses on anybody's Best-of List were designed by ASGCA members, starting with Donald Ross. I'd like this known. I'd like it known that belonging to our society is quite an accomplishment... We want everybody who is doing quality work to be a member of the society.

We also want to work to design golf courses to promote speed of play. We can do this by building cart paths with material that is not too distracting and by curbing paths so they can be brought close in to the green. Also, by crossing the fairway with paths, players can get out and walk back or forward to their ball, rather than sideways all the time.

We want to promote alternative spikes. With them, we no longer have to put in a separate walk path. Cart paths become walkways, which is a big advantage. It's very difficult, when you're cutting through a natural area in front of the tee, for instance, to make a walk path through cactus. And we have to watch that our bunkers only require a certain amount of walk-in, so that it is easy to get in, rake and get out.

We can design a lot of things to speed up play. I'll be talking with the members about them.

GCN: You've championed forward tees since the 1980s. Has it been satisfying for you to see the complete transition so that every course that is built today has multiple tees?

AD: It's been wonderful. Everyone has forward tees except some of the old-time courses. So many courses are afraid. They don't want to lose their identity with their golf course architect. And they're afraid that if they put in forward tees it will change their famous old golf course. They don't think much about putting in a new back tee, but they are very hesitant about putting in forward tees. That's funny thinking. But it has come a long way. All new courses are building in manageable yardage for all players.

GCN: Do you see more cooperation with the other associations — PGA, USGA, Golf Course Builders Association, etc.?

AD: We want to work very closely with all those organizations. We were very interested in the USGA's new construction education program, to see that it builds a special niche of in-house operations and that sort of thing. We are interested in everything they are doing because golf is growing and we

want to be very positive in all our relationships. When the USGA presented this Construction Education Program, we made a point to accept it positively even though there was some fear that it might be infringing on the builders' or architects' territory. Our attitude was, this is good for the industry, and as long as you don't infringe we want to work with you and encourage you.

GCN: Judy Bell is president of the USGA while you're president of the ASGCA. What significance do you see in these two organizations having their first lady presidents at the same time?

AD: We've been lifelong friends. We've played golf together, been on teams together and associations together. I don't know if there is a significance. I don't like getting into men versus women. I think it just shows we can work together.

I think it's important that other women see that this field is open to them. That is one of the reasons I accepted the

position. Plus the fact that I think I can do a good job. I had the experience of Pete being president. And I think I have some good ideas. Plus at this point in

my life, my children are out on their own, and I am not as active out in the field, so I have the time. The same with Judy. She has taken the time out of her businesses and has it set up so she can do this. Someone said to me, "Judy is the best president we've had. She's a detail person." And I think women tend to pick up the details.

GCN: Will having two women as presidents heighten awareness of women in the sport?

AD: That's right. The USGA has another woman on its board now: Carol Semple Thompson. They used to have the men's executive committee and the women's executive committee. There were no women on the men's committee, and the women's committee was here [less in importance]. That changed when Judy Bell went on the board. The same thing happened with the PGA 20-some years ago. It was all men. Then they took on their first woman.

GCN: A lot has been said about attracting and keeping women. Many enter the sport but leave for one reason or another. What can be done to keep them?

AD: I think the resorts and others miss out. They have to have a course women can manage.

Our problem in women's golf has to do with slope and rating and all that. Women can't seem to handle the two-tee system. We have a bigger spread of strength in women than you do in men. But we have one tee. I wanted two tees for women, but I stopped doing that because no one played them. So I'm just trying to build very nice forward tees. Men have three sets of tees. They can have the hardest set — 7,000 yards — and they don't have to play it.

Whatever the ladies' tee is, that's the one they want to play. And this is the problem.

Q & A

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Colbert's development team active in K.C.

By PETER BLAIS

SPRING HILL, Kansas — Jim Colbert's business home will be the site of the first development undertaken by the Senior Tour golfer and his new partner, the major national engineering firm Burns & McDonnell.

Colbert-Burns & McDonnell of Kansas City, an integrated golf course development firm specializing in municipal and daily-fee projects, hopes to break ground late this summer on an 18-hole course, practice area and clubhouse for this suburban Kansas City municipality. The architectural firm of Finger Dye Spann has completed a preliminary routing and started construction drawings. Colbert-Burns & McDonnell will help obtain financing, build and eventually manage the facility.

"We hope to have at least three courses scattered around the country under construction by the end of the year," said Larry Lundine, director of project development for the new firm.

Colbert, leading money winner for two consecutive years on the PGA Senior Tour and chairman of Jim Colbert Golf Design & Development, recently formed a limited liability corporation with Burns & McDonnell, one of the leading engineering, architectural and project management companies in the country.

"Through my experiences with Jim Colbert Golf Design & Development, I learned of the need for a higher degree of professionalism and talent in the development of golf courses to better serve municipalities, golf course architects and landowners," said Colbert, chairman of the board for Colbert-Burns & McDonnell.

The firm will concentrate on municipal facilities, banking on the close relationships forged over the years between 1,100-employee Burns & McDonnell and the many cities where that firm has undertaken government projects, Lundine explained. Obtaining financing will be one of the major services the firm provides. In Spring Hill's case, that means developing a \$6.5 million revenue bond, according to Patrick Crooks, director of Colbert-Burns & McDonnell.

"In the financial markets," Crooks said, "those accustomed to providing traditional sources of financing have trouble understanding the golf business, and therefore, are reluctant to fund golf course development. To alleviate this problem, Colbert-Burns & McDonnell has established relationships with some of the premier financing institutions in the golf course development industry, which gives us access to capital markets."

Crooks said the new firm plans to eventually develop five to 10 projects annually, usually performing every step from the initial feasibility study through the opening and management of the course. The only responsibility farmed out will be the actual golf course design.

Many architects looking to

streamline the course development process have started working with Colbert-Burns & McDonnell, Lundine noted. "They see the benefits of having design consultation, feasibility studies, financial planning, permitting, environmental impact studies, engineering and clubhouse design all under one roof," he said.

Spencer hired

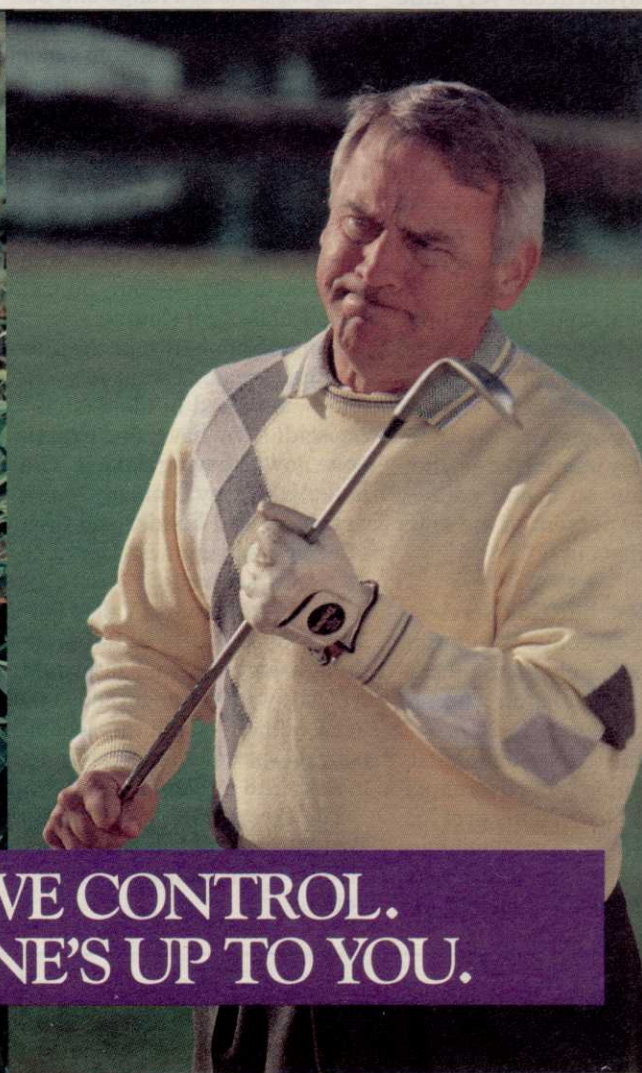
Continued from page 45

first and foremost, should be really and truly playable for all levels. They should challenge me from the back tees and Jerry, who's a 20-handicapper, from the front. We should be able to enjoy ourselves, and if we hit a good shot we should be rewarded. No trick shots,

or hazards you can't see. No buried elephants. Goofy stuff like that drives me crazy."

Spencer remembered the advice of his father before he died in 1982: "One of the last things he said was, 'You don't regret the things you did badly; you regret the things you didn't do at all.'"

Not wanting to ever say that to his son, Spencer not once, but twice, "just flat did it." Result: He has been living the dream.



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RATCLIFFE ON LINE

To learn more about Ratcliffe Golf Services' Paradise Valley Par-3 and Sunset Hills Public Golf Course, people can visit their web sites: <http://www.paradisegolf.com> and <http://www.sunsethills.com>

Paradise Valley

Continued from page 40

his apartments to compete with your golf course."

Developers could also take advantage of the green space requirements that many communities have, since a par-3, or chip-and-putt layout needs very little land.

Paradise Valley Par-3, with an average-length hole of 70 yards, is situated on 15 acres — 13 for the course and two for the clubhouse, parking lot and miniature golf course.

The Summit Green apartments sit on about 20 acres. They are already about 90 percent full, Ratcliffe said, and a lot of those apartment-dwellers are using the Paradise Valley facilities. "Many are non-golfers," he said, "but the project appealed to them because they wanted the aesthetics of living on a golf course. Roughly 60 percent of the units front on the course."

...

Part of Ratcliffe Golf Services' marketing objective is to target the approximately 85 to 90 percent of the population who are not active golfers.

Citing the "intimidation factor" of learning golf on a regulation course, he said his firm has positioned itself to get beginners into the game.

"There is a lack of facilities to

bridge the 'learning gap' between the local driving range and the full-scale, 18-hole golf course," Ratcliffe said. "I believe we have hit upon a means to not only provide such facilities, but make them profit centers in themselves.

"To bridge the gap between banging balls at a range and being a knowledgeable, accomplished golfer, there is no other way but the par-3 golf course. We have a driving range with a discount shop. We can provide them with equipment and range time, graduate them to the par-3 to learn techniques and etiquette, then graduate them to an 18-hole facility — our Sunset Hills Public Golf Course.

Ratcliffe hopes to take the idea to other areas. "I want to go in and be involved in the design," he said. "We have the experience now of having done it. The potential for my company is as a developer and builder and then offering management services on a contract basis."

The cost? Paradise Valley Par-3 cost \$600,000 to build — although Ratcliffe said he would typically want to budget \$800,000 to \$1 million — and the accompanying apartments cost approximately \$18 million, he said.

The course was the first design by local architect and land planner Ken Andrews, an avid golfer.



Of the 268 acres at the Palmer-designed Lost Key GC in Perdido Key, Fla., more than 100 were left in their natural state.

Palmer unveils two Fla. tracks: Legacy & Lost Key

SARASOTA, Fla. — Arnold Palmer dedicated his newest Florida golf course, The Legacy at Lakewood Ranch, here in March. The 7,000-yard daily-fee course, designed by Palmer Course Design Company, is a hallmark of "environmental enhancement."

Accompanied by his partner, Ed Seay, and Vicki Martz, project architect on The Legacy, Palmer reviewed the course in March and conducted a golf clinic on the practice range.

Meanwhile, across the Gulf of Mexico on the barrier island of Perdido Key near Pensacola, the Palmer-designed Lost Key Golf Club has

opened for play. It will be managed by Western Golf Properties of Scottsdale, Ariz. Lost Key is an 18-hole daily-fee course within the new community of Lost Key on Perdido Key. Of the 268 acres allocated for the course, 100 have been designated wetlands and been left in their natural state. This commitment has earned the club designation as an Audubon Sanctuary Course.

Western Golf appointed two of its staff from the Falcon's Fire Golf Club in Kissimmee, Fla., to lead Lost Key. Shane Trice is the new director of golf, while Scott Scamehorn is head golf course superintendent.

Ault Clark, ClubCorp team in Northern Virginia

By MARK LESLIE

LEESBURG, Va. — Loudoun County's population is exploding, and ClubCorp of America is taking advantage of the situation, using a prime property edging the Potomac River.

The 18-hole River Creek Golf on the Potomac, designed by

Ault Clark and Associates of Kensington, Md., "will be spectacular," said Tom Clark.

Battling the wettest year in history in 1996, Wadsworth Golf Construction Co. expects to complete its work by June 1 and have the course ready to open in September.

Responding to a continued population growth in Loudoun County, golf course developers have brought in Tom Fazio, Jack Nicklaus and Arnold Palmer to design other courses in the area.

The all-bentgrass River Creek will feature five holes along the Potomac, Clark said. Years ago, he said, the river scoured the area and "we have 70-foot-high cliffs" on the site.

Meanwhile, Goose Creek runs perpendicular to the Potomac and through two holes. Elevation change on the layout is dramatic. From the flood plain to the highest point is well over 100 feet, Clark explained.

"The rest of the holes meander over open areas and we let them take on a links look for the first few years until homes are built," he said. "It's a 900-acre property, so homes won't bother the course."

The track will play from 5,100 to more than 7,000 yards on four sets of tees.

ClubCorp bought then-River Creek Golf and Country Club from project developer River Creek L.L.C., an entity owned by the Abramson family and Marcus W. Montgomery.

The project will encompass a gate-guarded community, four tennis courts, a six-lane lap pool, toddler pool and clubhouse.

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ADD ANOTHER TO NGP/AGC PORTFOLIO

SANTA MONICA, Calif. — National Golf Properties has acquired Baymeadows Golf Course in Jacksonville, Fla. for \$4.5 million. The course will be leased to American Golf Corp. Baymeadows features an 18-hole, daily-fee course designed by Gene Sarazen and Desmond Muirhead and includes a driving range, practice facility and clubhouse. NGP has acquired three courses in 1997 for approximately \$19 million. Since its initial public offering in 1993, National Golf Properties has acquired 73 courses representing an aggregate initial investment of \$374 million.

CRESTA VERDE BUYS MEADOW LAKE CC

ESCONDIDO, Calif. — Cresta Verde Inc. of Los Angeles has purchased Meadow Lake Country Club here. The property was sold for \$3.8 million. The seller was The Welk Group of Santa Monica, Calif. The buyer has previously owned and operated golf courses in California and Florida, and plans to make improvements to the Meadow Lake property immediately.

BROWN NAMED ROCKY GAP GM

CUMBERLAND, Md. — Gary W. Brown has been named general manager here at Rocky Gap Lodge & Golf Resort, a \$53.1 million destination golf resort under construction here in western Maryland. Brown, who was just awarded the American Society of Association Executive's "Associate Members Fellows Designation," comes to Rocky Gap from G.W. Brown Hotel Sales & Marketing Services, a Virginia-based hotel consulting firm where he served as president. Prior to that he served for six years as director of hotel sales for Colonial Williamsburg Properties, Inc.

PERDUE NAMED TO CMAA POST

ALEXANDRIA, Va. — The Club Managers Association of America (CMAA) has promoted Joe Perdue,



Joe Perdue

CCM (Certified Club Manager), CHE (Certified Hospitality Educator) from director of education and professional development to vice president. Perdue has been

with the Alexandria, Va.-based association since 1986.

GOLF COURSE NEWS

Golden Bear finds niche in managing Nicklaus courses

By PETER BLAIS

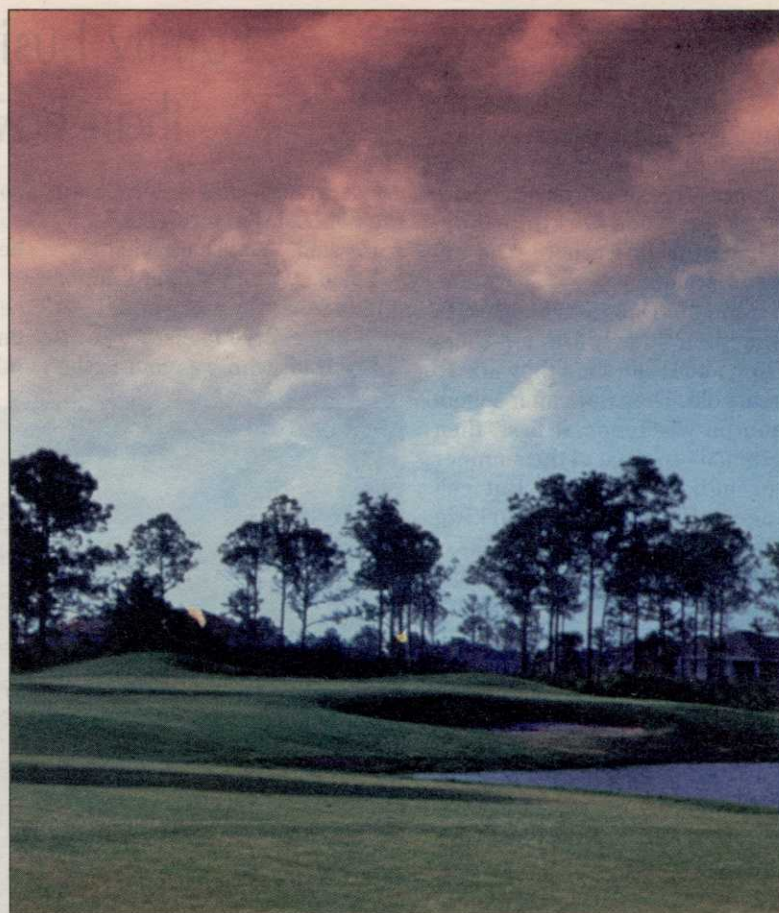
NAPLES, Fla. — The Nicklaus family imprint is all over Twin Eagles Country Club here, the latest project to come under the paw of Golden Bear Club Services, Jack Nicklaus' club management division.

Jack and son Jack Jr. will design the 36-hole private equity club, according to Steve Walser, vice president of Golden Bear Club Services. Nicklaus' construction company, Paragon Golf Construction Inc., will likely do the shaping when construction begins this fall, Walser said. And Golden Bear Club Services will manage the facility once it opens in late 1998.

"Golden Bear Club Services' niche is the management of high-end courses," Walser said. "We plan to have about 15 courses under contract within five years. We're not looking to be the biggest company out there. We have a high-end niche, managing Nicklaus-designed properties in particular. But we'll manage non-Nicklaus courses, as well, if they are in the right market."

The Golden Bear market is worldwide. In addition

Continued on page 54



Nicklaus-designed, Golden Bear-managed Hammock Creek GC in Palm City, Fla.

MOVIN' ON UP

Dick Schulz knew something: Take a risk

By PETER BLAIS

COVINGTON, Ga. — Seeing hard-working people at his father's course pay top dollar to play off hardpan turf convinced a teen-aged Dick Schulz that public golfers of average means deserved better for their money.

Seeing that same stoic father break down in tears the day the insurance company fired him after 21 years of loyal service convinced Schulz that he'd free himself from depending on someone else for a paycheck as soon as possible.

"Sometimes it's the little things that



Dick Schulz (left) and his superintendent, Trey Rusk III.

turn out to be very important in getting you started on a particular career path," said Schulz, 40, a former superintendent who owns 70 percent of the moderately priced Oaks Course, located a 32-minute drive from the state capitol building in Atlanta. If all goes as planned, Schulz will acquire several more courses in the near future.

Schulz grew up in Louisville, Ky., and Chattanooga, Tenn. He played some high school golf and worked on a grounds crew summers, but didn't get serious about a golf career until injuries sidelined the University of Tennessee at Chattanooga linebacker from his first love, football.

Schulz transferred to the University of Tennessee at Knoxville and entered the turfgrass management program, graduating in 1979. He soon found an assistant superintendent position at Lords Valley Country Club in the Pennsylvania Poconos, 60 miles west of New York City.

"I had to go North to learn how to grow bentgrass," said the native Southerner. "I saw that knowledge as the key to my goal of one day operating a first-class facility

Continued on page 56

Family Golf Centers press on with range consolidation

MELVILLE, N.Y. — Family Golf Centers, Inc. — which owns, operates and manages golf-related facilities — has signed leases to operate six golf properties and letters of intent to acquire three additional centers.

Family Golf has leased or acquired concession licenses to operate College of the Desert Golf Center in Palm Desert, Calif.; Capital Sports Center in Raleigh, N.C.; Randall's Island Golf Center in New York City; Darlington Golf Center in Mahwah, N.J.; Trotter's Glen Golf Course in Olney, Md.; and Green Oaks Golf Center in Arlington, Texas.

Letters of intent or purchase agreements have been signed to acquire or

operate San Bruno (Calif.) Golf Center; Rio Salado Golf Course in Tempe, Ariz.; and Divot City Golf Center in Milpitas, Calif. Final approvals with local municipal authorities are pending in San Bruno, Tempe and Santa Clara, Calif.

Each of the nine properties contains ranges, pro shops, and short-game practice areas or mini-golf courses. Trotter's Glen is a full 18-hole course, located near Washington, D.C., and Rio Salado has a nine-hole executive course near Phoenix. Some facilities will undergo renovations.

The expansion brings Family Golf into new markets in North Carolina and Texas. Following completion of all these trans-

actions, three of which are subject to certain conditions, the total number of facilities owned, operated or under construction will be 45 in 17 states.

The company also announced that Michael P. Kelly, formerly a senior vice president of Golden Bear Golf Centers, Inc., has joined Family Golf as senior vice president and manager of the Southeast region.

Dominic Chang, chairman and CEO, said: "The company has more than doubled its number of operating sites in the last year, and we look forward to continued growth in the future. Mike Kelly brings significant management experience and golf industry knowledge to the company."

PERSONNEL CORNER

By VINCE ALFONSO JR.

Family-owned businesses are family-owned businesses. Pro-found, huh? I mean, golf course or grocery store, paving company or woodworking shop, what's the difference? The answer is, none.

Moms or Dads own businesses and their kids work for them from about the time they are 10 years old. They work after school and on weekends at first, then graduate to most of the summer through high school. But college, they're even working Christmas and Easter breaks. I know what I'm talking about because my Dad owned a grocery store during my youth. I was 10 years old in 1956 and loving every minute of it. Loving it, that is, until the day my Dad announced it was time for me to go to work in the family grocery store. It certainly wasn't like going off to war, but at the time I thought it was.

Dad explained that I would learn the produce business, the meat market business, the canned goods business, the dairy business, the stockroom, the ordering, how to take phone orders and our home-delivery system. He said I would learn the credit department and marketing and promotion, which consisted of distributing flyers door to door and painting beautiful sale signs on the windows of Weona #88 (Dad's store).

In two short years of part-time work, I was catching on. There were times I accused my Dad of only knowing one name: mine. It seemed no matter what needed to be done, I was asked to do it. From cleaning up a dozen eggs splattered on the floor at the sackers' station to building a canned tuna fish display that even Charlie Tuna would be proud of, to breaking down a side of beef, my Dad taught me how to do it.

One day, while grouching to the other employees about my wages (\$5 per week), they began to champion my cause of equal pay for equal work. They seemed to agree with me that even though I was the son of the owner, I deserved to be paid on an equal basis with the other employees. By Saturday night (pay day) a vote was taken and a strike was called. It was all agreed: I would strike for higher wages and equal pay. As each employee moved past my Dad, picking up their pay, I became more and more nervous.

I was shaking in my blue suede

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.

Family businesses teach much more than how to earn a paycheck

shoes when I said, "I don't want the \$5, Dad. I'm on strike."

He said, "You're on what!?"

I said, "I'm on strike. I'm not gonna work any more until I get paid like everyone else."

My Dad, who was and is the

coolest Dad on Earth, said, "Well, son, who do you think you should be paid like?"

I looked at the stunned employees frozen in place, with mouths uncharacteristically quiet and said, "Bobby, like Bobby."

Dad said, "I had no idea you were unhappy, son. I'll be glad to pay you the same wage as Bobby." Dad picked up the five-dollar bill I had refused and promptly counted out \$75, I thought to myself, "I should have

gone on strike a long time ago." As I reached for the pile of money, my Dad's hand reached the pile first.

"Son," he said, "now that you are gainfully employed in a full-time job, will you continue to want to live at home, or will you be moving out on your own?"

"What?!" I said.

"Bobby," Dad said, "You do

Continued on next page



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Family values

Continued from previous page
pay rent, don't you?"

"Yes, sir, Mr. Vince," Bobby replied (just a tad on the nervous side).

"Well, I'm sure if you want to continue to live at home we can come to terms on rent," Dad said. "Let's say, \$20 a week? How does that sound to you?"

"Sure, Dad, whatever," I said.

As I reached again for the money, minus the \$20 rent, Dad said, "What about food? Will you be eating all your meals at home, or will you be eating out?"

"Of course, I'll still be eating at home," I shot back.

"I think \$20 will cover your food each week. Oh, yeah, you will probably want your Mom to continue to do your laundry and ironing? And, of course, you'll

need new clothes for school this fall. Will you be paying your own doctor bills, or do you want me to take a flat amount to cover your medical expenses?"

"Let's see now," he continued, "that's \$20 for rent, \$20 for food, \$10 for laundry and ironing, \$10 toward medical expenses, \$10 toward buying new clothes for school. Oh, I almost forgot school supplies. That's another

\$5. I'm sure we've overlooked some things, but this is a good start."

I was in shock, and the employees were in shock. My \$75 was gone! There was nothing left. After a moment of silence, which seemed like an eternity, I blurted out, "Dad, now I have nothing!"

My Dad said, "That's not true at all, son. You have your rent,

food and laundry paid in full for a week, school supplies, medical coverage, and you will be able to sport some new clothes for fall."

"But, I have no money for anything else," I said.

My Dad's response still rings clear in my ears today. "Look, son, you wanted equal pay. Well, you got it and with it comes added responsibility. You must not have considered that when you went on strike."

Sadly, I said, "No, sir, I didn't."

Swallowing as much pride as a 12-year-old could stand, I said, rather sheepishly, "If it's OK with you, Dad, I'd like to forget this strike stuff and just go back to being your son. I'll be glad to take my \$5."

My Dad said: "You didn't ever stop being my son, Buddy. But I'll be glad to settle this strike by giving you back your \$5 spending money."

Maybe your son or daughter doesn't quite understand why they're not getting paid exactly like the other employees. I challenge you to help them see that more compensation creates more independence and more independence creates more responsibilities. As someone so aptly put it, there is no free lunch!

Some people would say I missed a lot from age 10 to 18. But, the time I spent with my Dad and the things he taught me about life and business, I wouldn't trade for a million bucks. Like I said, my Dad was then and is now the coolest Dad on Earth. Thanks, Dad.

IGM signs new S. Florida deal

WEST PALM BEACH, Fla. — International Golf Management, Inc. has been retained to provide maintenance services for the Palm Beach County-owned Okeeheelee golf complex here.

The complex is located in 900-acre Okeeheelee Park. IGM will provide turnkey maintenance services for the entire 188-acre complex, which includes 27 holes on three courses — the Eagle, Heron and Osprey.

Maintenance at Okeeheelee is being handled by a 13-member staff working under the direction of Dennis McNally, IGM's resident superintendent, and Jimmy Witt, IGM's South Florida regional manager.

Bobby Brown is Okeeheelee's head golf pro while Donna White, a former member of the LPGA Tour, is director of golf. Steve Cox is course manager.

Opened late in 1995, Okeeheelee was designed by Roy Case and features gradual elevation changes and abundant water, with 43 lakes scattered over the 188-acre tract.

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NOVARTIS

Golden Bear

Continued from page 51

to Twin Eagles, the North Palm Beach, Fla.-based firm has a consulting service agreement with Classic Golf Resort, a planned 27-hole Nicklaus-designed private/resort project in New Delhi, India, that opened its first nine holes in April.

Golden Bear clubs in the planning stage include Golden Bear Golf Club at Boston, an 18-hole, daily-fee design by Nicklaus scheduled to open in 1999; Dos Mares, an 18-hole Nicklaus design in Puerto Rico that opens next year; and Golden Bear Golf Club at Keene's Pointe, an 18-hole private course designed by Nicklaus that will also open in 1998.

Golden Bear first entered the management business in 1974, when it assumed operational responsibility for the Nicklaus-designed Muirfield Village Golf Club in Dublin, Ohio. Eight years later, Golden Bear took over the neighboring Country Club at Muirfield, another Nicklaus design.

But it wasn't until the mid-1990s that the firm decided "the management business was a direction the company really wanted to go after," Walser said. "It was a natural complement to the other services Nicklaus offered and we saw it as a significant opportunity."

In the past two years, the company has added four more Nicklaus-designed courses to its management portfolio, including Golden Bear Golf Club at Hammock Creek in Palm City, Fla.; The Country Club of Purchase in Purchase, N.Y.; Golden Bear Golf Club at Laurel Springs in Atlanta (scheduled to open in July); and Old Works Golf Course in Anaconda, Mont. (scheduled to open in June).

Among the services Golden Bear provides are operational plans; maintenance/agronomy programs; staffing consultation and capital-expenditure planning; customized club budgets, monthly reviews and financial forecasting; membership marketing, recruitment and fee structuring; planning and design support for the clubhouse and other amenities; and development of club policies, service manuals and job descriptions for all facets of club operations.

Golden Bear Club Services generally restricts itself to management contracts, Walser said, although it also owns Golden Bear Golf Club at Hammock Creek and is a partner in the Golden Bear Golf Clubs at Laurel Springs

and Keene's Pointe.

Walser is part of a Golden Bear Club Services management team headed by Senior Vice President Mark Hesemann, who has been with Nicklaus since 1982. Walser came to Golden Bear in 1995 from Palm Springs, Calif., where he served as director of construction and development at PGA West and LaQuinta Resort for KSL

Recreation Corp.

"Management companies, like Golden Bear, will continue to grow in the golf industry," Walser predicted. "We got into the business through Nicklaus Design. Now we can provide a developer with one-stop shopping providing golf course design, construction, agronomic services and club management."

Marriott to remain at Toftrees Resort

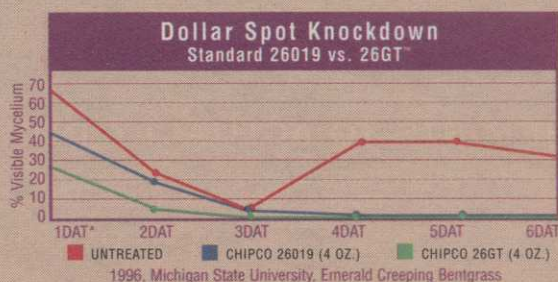
STATE COLLEGE, Pa. — Marriott Golf's management contract has been extended here at Toftrees Resort and Golf Club. Marriott has managed the facility since 1991.

Marriott Golf will continue to manage the 18-hole facility designed by Edmond Ault.

"We are excited the contract has been extended," said Claye Atcheson, vice president-operations for Marriott Golf. "Toftrees Resort and Golf Club is consistently recognized as one of the top 10 golf facilities in Pennsylvania and we take pride in being associated with them."

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New Colorado course management company signs agreement with first facility

COLORADO SPRINGS, Colo. — Sunlinx, Inc., a new Colorado-based management and consulting firm, has signed its first contract — to operate Pine Creek Golf Course here.

The contract is with Pine Creek at Briargate, Inc. and La Plata Investments, LLC. In 1995, this partnership purchased 4,500 undeveloped acres east of the Air

Force Academy in order to develop an upscale Briargate community. Pine Creek, a daily-fee course, was included.

Thomas Kelly, manager for La Plata Investments, said the agreement is for eight years.

Scott Jeffrey Simpson, 44, is the president and owner of Sunlinx, which will have offices here and in Castle Rock.

Simpson at one time supervised Patty Jewett and Valley High golf courses, both of which are owned and operated by the city of Colorado Springs.

From 1995 until forming Sunlinx, Simpson was director of operations for Premier Golf International, a golf management firm headquartered in the Denver Tech Center of Greenwood Village.

Golf Trust

Continued from page 1

ers. The lessees pay a fixed base rent and participating rent based on revenue growth at the courses.

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

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

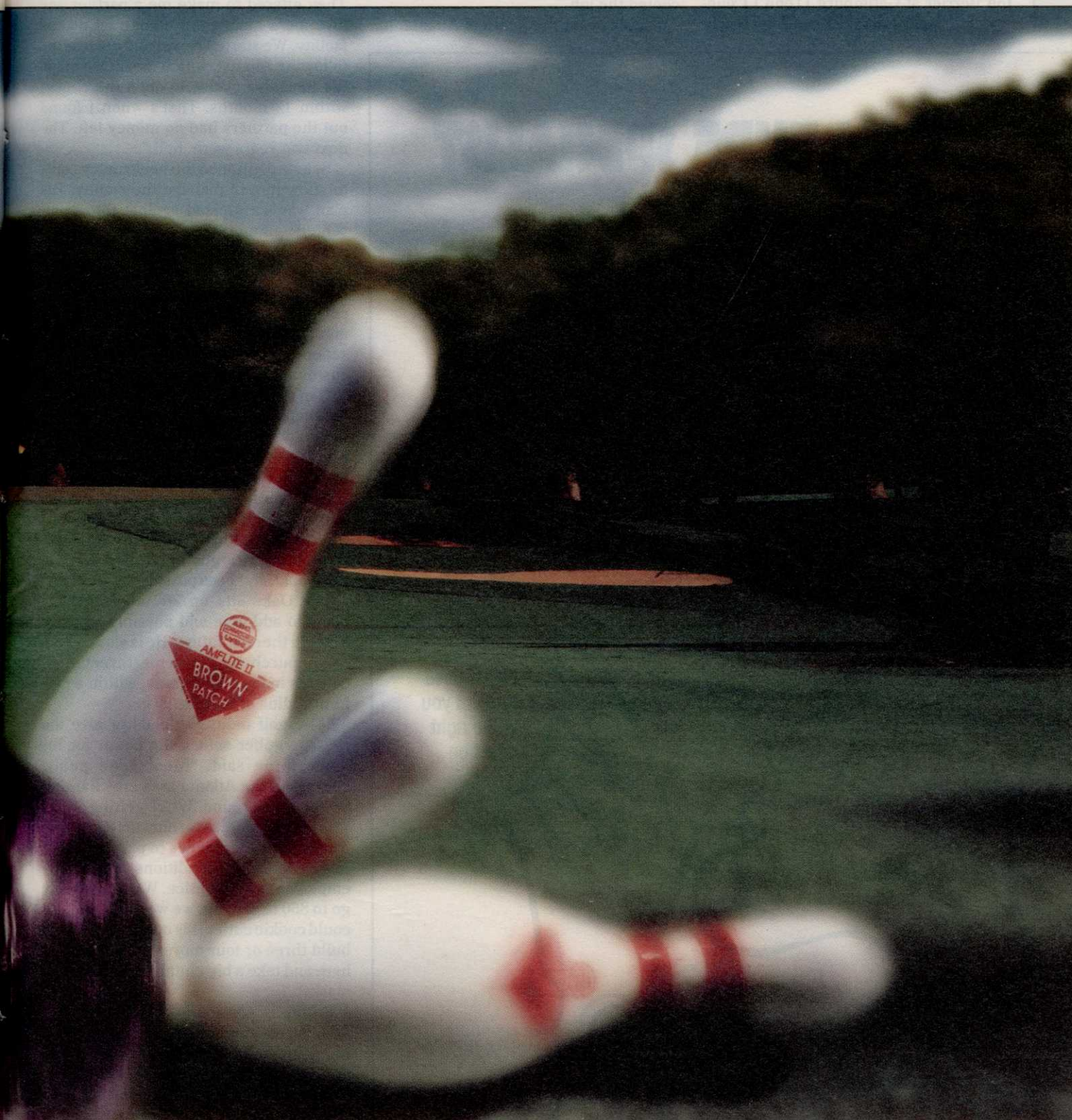
Golf Trust and National Golf Properties are the only two publicly traded REITs in the United States focused on owning and acquiring golf courses, Haley said. The 10 courses Golf Trust controls are the Legends Resort courses (Heathland, Moorland, and Parkland), Heritage Golf Club and Oyster Bay, all resort courses located in Myrtle Beach; The Woodlands, a resort course in Gulf Shores, Ala.; Stonehouse Golf Club and Royal New Kent, a pair of upscale, daily-fee courses in Williamsburg, Va.; Olde Atlanta (Ga.) Golf Club, a daily-fee track in the Georgia capital; and Northgate Country Club, a private facility in Houston.

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

The company has signed a non-binding letter of intent with Troon Management Co. that would allow Golf Trust to acquire certain golf courses that Troon is negotiating to purchase. The courses would in turn be leased to Troon.

Golf Trust's chairman of the board and president is W. Bradley Blair II, executive vice president and chief operating officer of Legends Group Ltd. Other directors include David Dick, executive vice president, and Larry Young, founder of The Legends Group.

The original stock issue opened Feb. 7 at \$21 per share and was selling at \$24.50 in early April, Haley reported. Golf Trust was scheduled to make its first quarterly distribution in April. The first dividend was expected to be figured on a *pro rata* basis at the yearly rate of approximately \$1.62 per share per year, Haley added.



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

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COBBLESTONE MAKES FIRST GA. BUY

SNELLVILLE, Ga. — Cobblestone Golf Group, Inc. has purchased The Champions Club of Gwinnett near Atlanta. Cobblestone operates 24 golf properties located in California, Texas, Arizona, Virginia, Florida and Georgia. This is its first Georgia acquisition. The Champions Club of Gwinnett is an 18-hole facility designed by Steve Melnyck.

Movin' on up

Continued from page 51
in the South."

Schulz credited Lords Valley superintendent Levi Travis, who died five years ago, with teaching him most of what he knows about growing bentgrass. After a year at Lords Valley, followed by a brief stay with the Fairfield Corp. building a Joe Lee-designed course in Crossville, Tenn., Schulz went to work for pro Cotton Berrier at Gatlinburg (Tenn.) Country Club. Schulz thanks Berrier for teach-

ing him the pro shop side of the business. Schulz was runner-up among 250 applicants for the head superintendent position at Atlanta Country Club in 1984. Two weeks after the members of the greens committee made their selection, their top choice died in a plane crash and they offered Schulz the job.

"It was an eerie situation," Schulz recalled. "I talked to Cotton, Nancy [his wife] and my dad. Cotton said it was a once-in-a-lifetime opportunity and I accepted the job."

Schulz spent five years in Atlanta, up-

dating much of the course and particularly the turf-care facility, formerly a 106-year-old barn where the chemical storage room opened onto the employee lunchroom. He formulated 10- and 20-year plans, which are still guiding maintenance efforts at the nationally ranked club.

Schulz had several opportunities to move on before finally deciding to leave Atlanta CC. "In 1989, a group asked if I'd design, build and operate this course. They offered to make me a partner and give me a maintenance contract on the facility. We started Nov. 1 and opened the following August, which meant we made the incentive clause to open the course within 12 months. That's when I found out the partners had no money left. The next two years were hell."

Schulz petitioned the bankruptcy court to allow him to manage the facility. His plan was scrutinized against those presented by some major management companies, he recalled. The judge eventually awarded Schulz the facility and granted him a year to put a reorganization plan in place. It took Dick and Nancy seven months to free The Oaks from reorganization. The course greeted its 300,000th customer in February.

"I'm a risk taker," Schulz explained of his success. "I like to dream about something and then put it into action. But for every dream you must have a back-up plan."

"Nancy is the detail person on our team. She can translate a dream and put it on paper in a way that makes sure everyone can follow what is going to happen. None of this would have been possible without her."

The Oaks sits on 260 acres. Schulz plans to add nine and possibly 18 more holes in the near future. He is also considering purchasing two or three more courses in his market area, within a two-hour radius of Atlanta.

"The golf industry needs to give the average golfer something better for his money," he said. "Most good public courses in the Atlanta area are charging \$80 to \$100 a round. We're getting \$25 to \$39. Seventy percent of our customer base drives 30 or more miles to play here. We give people great conditions and friendly employees for that price. We could easily go to \$50 to \$60, but we won't do that. If I could cookie cutter this operation, I could build three or four more courses around here and take a big chunk of the daily-fee market."

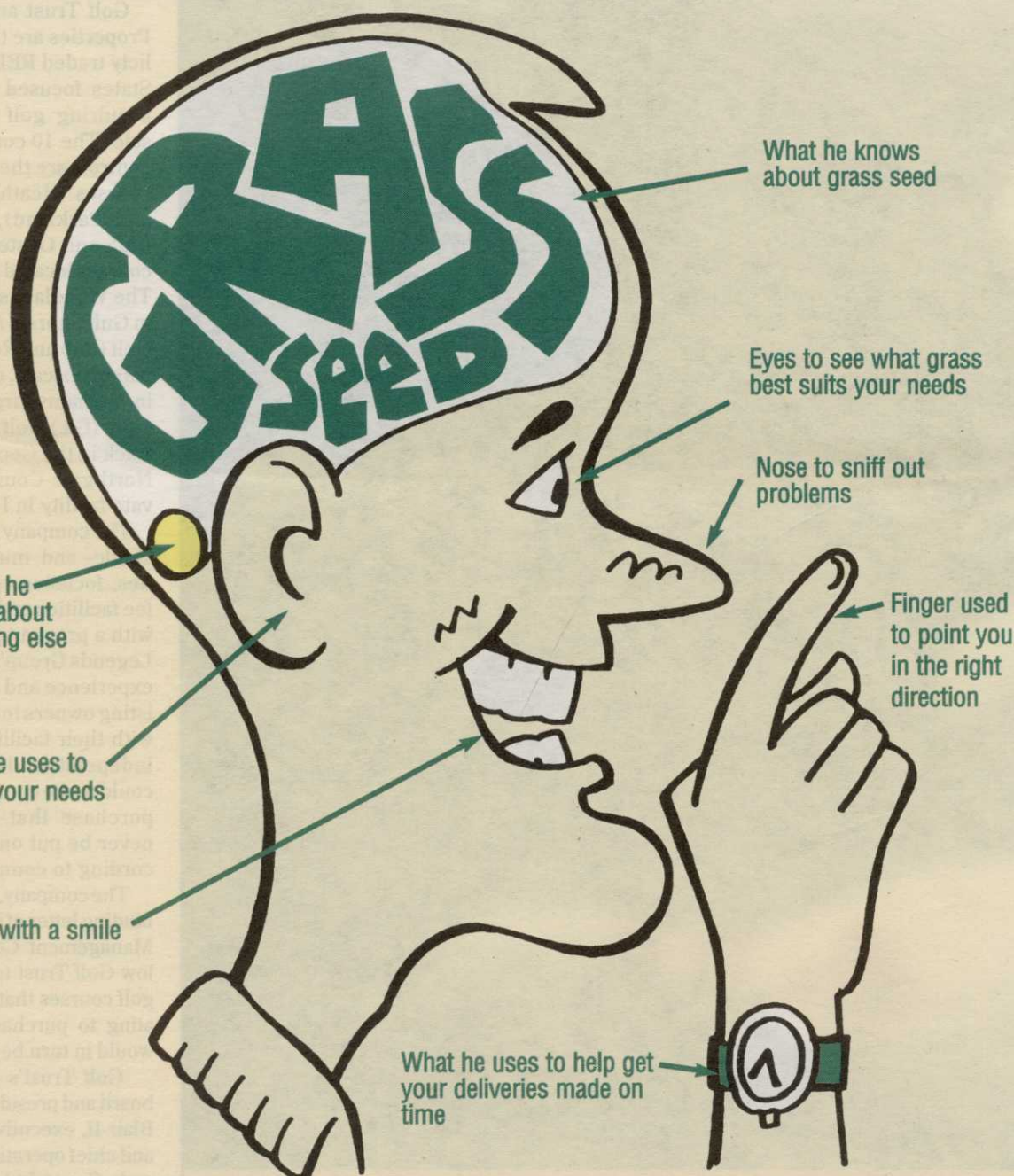
Schulz is considering buying another Atlanta-area course that is going through reorganization. "We'd need to do something to set it apart," he said. "Putting in bentgrass would make it an ideal facility."

What would be his advice to other golf course superintendents who want to become course owners?

"If you are putting up your own money, be very careful of the pie-in-the-sky syndrome," he advised. "You don't have to have everything state-of-the-art right from the start. There are always two or three unexpected things that come up and you'll need the money to take care of that."

"If you're part of a group, check out your partners' financial strengths and character references. Do your homework and stick to your plan. If it's a good plan, it will see you through."

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Meadowbrook

Continued from page 1

Meadowbrook Golf Group, Inc. (OTCBB: MEGB) selling \$4 million of a new 10-percent convertible voting preferred stock to Apollo Meadowbrook LLC, an affiliate of Apollo Real Estate Investment Fund II.

Meadowbrook Golf Group and Apollo have also formed a new limited partnership with \$36 million of committed equity capital for the acquisition and development of golf courses and related properties. Apollo has the right to name up to four designees to Meadowbrook's board of directors, which will be expanded to eight members.

The Apollo Real Estate Investment Fund II is a New York-based private real-estate investment fund with in excess of \$550 million of committed capital. It is managed by Apollo Real Estate Advisors II, LP.

"We had the resources internally to do a few deals, but this gives us the ability to do a lot more," Behrstock said.

"Apollo has a very experienced financial team. We'll be glad to have them looking over our shoulder to check out the deals we make."

Under the agreements, Meadowbrook will manage the properties acquired by the partnership, receive certain fees, and participate in the profits of the partnership to the extent the profits exceed certain target levels.

Meadowbrook's ticker symbol changed to MGGI effective Monday, March 17.

Meadowbrook said its shareholders approved the company's proposed reincorporation as a Delaware Company at a special meeting of shareholders.

The change was effected through the merger of Meadowbrook Golf Group Inc., a Utah Corporation into its wholly owned subsidiary MGG, Inc., a Delaware Corporation. MGG, Inc. subsequently changed its name to Meadowbrook Golf Group, Inc., a Delaware Corporation, and holds all the assets of the former Utah Corporation.

In other news, Meadowbrook recently signed a 20-year lease to manage and operate Thunder Hill Golf Club in Madison, Ohio, but will first close the facility for a year for some major renovations.

Measuring 7,200 yards from the back tees and with a slope rating of 154, Thunder Hill is generally considered one of the country's most challenging courses.

Michael Rippey, president of Meadowbrook's Eastern Division, said Thunder Hill has been a "work in progress" for more than 20 years.

GOLF COURSE NEWS

"The owner, Fred Slagle, has created Thunder Hill hole by hole, actually doing much of the work himself," Rippey explained. "Because some part of the course has always been under construction, Thunder Hill has never really been finished."

"We are going to invest \$1.5 million to clean up some of the rough edges, and re-open the course in 1998 as one of the top

courses in northern Ohio."

Planned work includes improving overall drainage, renovating most of the greens, converting all the fairways to bentgrass, reshaping numerous bunkers and redesigning some elements to make the course more playable from both the middle and the front tees.

"We believe Thunder Hill is a diamond in the rough," Rippey said.

Sanderson to direct Widow's Walk

SCITUATE, Mass. — Corcoran Jennison Hospitality, Inc. (CJH) has named Robert Sanderson director of golf here at Widow's Walk Golf Course.

A native of Deerfield, Mass., Sanderson previously served as director of golf at

The International in Bolton and as head professional and general manager at Crumpin-Fox in Bernardston.

Owned by the Town of Scituate and managed by Corcoran Jennison Hospitality, Widow's Walk is scheduled to open in July.

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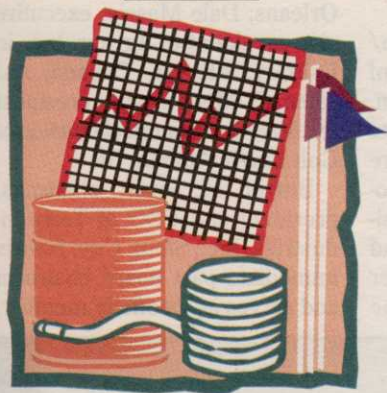
for scholarships and turfgrass research — in your name.

A list of all participating superintendents will be provided to The GCSAA Foundation when the donation is presented at the 1998 Conference and Show.

For participation certificates, or for further information on this unique program, call The GCSAA Foundation, or call us direct 1-800-821-7925.



BRIEFS



CZERNIK MANAGING LASCO CENTER

WOOD DALE, Ill. — Lasco Fluid Distribution Products has opened a new 24,500-square-foot distribution center here. The new facility will serve plumbing, irrigation and industrial distributors in the Chicago area. Stan Czernik, formerly of Great Lakes Business Forms, has been named service center manager. Lyn Mojonier has been named customer service coordinator. In other Lasco news, the firm has named a new Southern California sales rep, Todd Chilton, who joins Lasco after nearly 14 years with L.R. Nelson Corp.



Stan Czernik

YUCHS JOINS CETCO

ARLINGTON HEIGHTS, Ill. — Colloid Environmental Technologies Co. (CETCO) has announced that Dr. Steven E. Yuchs has joined the company as manager of research and development for CETCO's laboratory facility here. Yuchs holds a bachelor's degree in chemistry from Northeast Missouri State University, Kirksville, and a doctorate in organic/organometallic chemistry from the University of Southern Mississippi, Hattiesburg.

UHS HIRES FRANCOIS, EXPANDS MARKET

HOUSTON — Ernie Francois has joined the staff of United Horticultural Supply (UHS) as a sales representative, servicing the Professional Turf and Ornamental Industry here and the Southeast Texas market. Francois will be an integral part in the development of the newly formed Southern Division of UHS, which will now encompass New Mexico, Texas, Louisiana, Arkansas, Mississippi, Kentucky and Tennessee.



Ernie Francois

U.S. BATTERY NAMES V-P

CORONA, Calif. — U.S. Battery Manufacturing Co. has announced the addition of Nawaz Qureshi to its engineering department staff. Qureshi has been appointed to the position of vice president of engineering. He brings 29 years of experience in the battery industry to U.S. Battery.

Yamaha jumps into Tour sponsorship spotlight

By HAL PHILLIPS

MYRTLE BEACH, S.C. — Sometimes it's easy to spot a trend in the making. Witness the increasing number of golf industry firms which have secured national television exposure by sponsoring PGA and Senior tour events.

The latest is Yamaha Golf Cars, which has agreed to become the "sponsored by" sponsor of the Energizer Senior Tour Championship; Energizer batteries will retain its title sponsorship.

The move follows last month's announcement that John Deere would assume title sponsorship of the PGA Tour's Quad City Classic, heretofore known as the John Deere Classic. For the past three years, The Scotts Company has served in various sponsorship capacities with the Senior Tour's Tradition tourney.

While similar, Yamaha's decision sets it apart from Deere and Scotts, both of which have allied consumer divisions that will certainly profit from national television exposure. On the surface, the Senior

Tour Championship would appear to offer fewer synergies between Yamaha Golf Car Division and its parent company, Yamaha Motor Manufacturing Corp. of America.

The season-ending Senior Tour Championship, sponsored in part by Energizer batteries and Myrtle Beach Golf Holidays, features the top 31 Senior PGA Tour players and the top 16 MasterCard Champions (formerly the Super Seniors), many of whom use golf cars during competitive

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TFI elects IMC's Bueche chair

NEW ORLEANS, La. — Wendell F. Bueche, chairman of IMC Global Inc., has been elected to a 1-year term as chairman of The Fertilizer Institute (TFI). The election, which also included the selection of TFI's 1997 vice chairman and executive committee, was conducted during the association's annual meeting, an event which drew close to 1,000 industry representatives here.

During this meeting, TFI also elected Fritz Corrigan, president of Agriculture Group of Cargill Inc., to serve as TFI's vice chairman. Gary Myers was re-elected president and chief staff officer for the Institute.

Others elected to the executive committee were: Wendell F. Bueche, chairman and CEO of IMC Global in Northbrook, Ill.;

Continued on page 60



NEW PRODUCT OF THE MONTH

John Deere's RZ 700 Tractor Mounted Injection System features 16 nozzles spaced 3 inches apart and ensures total coverage of 48 inches. This self-contained unit injects chemicals directly into the soil, penetrating the root system and eliminating drift and surface disruption. The unit can cover up to 64,700 square feet per hour, depending on ground speed, nozzle size and pulse frequency. The RZ 700 is compatible with John Deere compact utility tractor models 955, 970 and 1070.

Tractor makers push protection

In an unprecedented joint effort, North America's five leading tractor companies are working together to encourage tractor owners to have their older machines equipped with rollover protective structures (ROPS) and seat belts, in an effort to help reduce deaths and injuries associated with rollovers and runovers.

As an incentive to owners, AGCO Corp., Case Corp., Deere & Company, Kubota Tractor Corp., and New Holland North America, Inc. are making it possible to purchase ROPS and seat belts at the companies' cost.

This joint effort is aimed at reducing the two leading causes of death and injury to tractor operators. Statis-

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Toro Co. moves ahead with Hardie integration



BLOOMINGTON, Minn. — The Toro Co. has announced it has aligned its irrigation and international businesses, completing the first phase of the integration of the James Hardie Irrigation Group.

Rick Parod was named vice president and general manager of the irrigation business. In this role, Parod will oversee all U.S. irrigation sales, marketing, technical operations and after-market service for Toro and Hardie branded products.

TORO RELEASES 1ST-QUARTER FIGURES

BLOOMINGTON, Ind. — The Toro Co. has announced that earnings per share for the first quarter ended Jan. 31, 1997, met revised expectations on slightly lower sales. Toro posted earnings per share of 20 cents for the first quarter compared to 67 cents for the same period last year. Net earnings for the quarter were \$2.5 million compared to \$8.5 million during first quarter 1996. Revenues for the period were

Continued on page 60

The Toro agricultural irrigation business, acquired as part of the Hardie deal, will remain separate from the combined irrigation business under the direction of Jim Shearer, agricultural irrigation business managing director.

Internationally, Toro is now organized around three regions of the world: Europe/South Africa/Middle East; Canada/Latin America; and Asia/Pacific. The international irrigation business will be integrated into this structure.

Richard Pollick will continue as vice president and general manager of the international business. Don Masini has been named managing director of sales, responsible for two world regions. Richard Walne is area director and head of the Asia/Pacific region. Phil Burkart was named worldwide marketing director and will manage marketing efforts of all world regions for commercial and irrigation products.

In other Toro news, the company has

Continued on page 60

Lesco manufacturing moving to Ohio site

STREETSBORO, Ohio — Lesco, Inc. has announced it will relocate its equipment manufacturing operations from Sebring, Fla., to a new, 177,000-square-foot facility here. The plant will be operated by Commercial Turf Products, Ltd., the company's new joint venture with MTD Products Inc.

The new plant, purchased from Aquatech, Inc., will be available for occupancy in late Spring 1997. Production is scheduled to begin in mid-summer and it is anticipated Commercial Turf Products will employ up to 225 people within the next two years. Lesco has announced plans to close the Sebring manufacturing plant in October 1997.

The proximity of the Streetsboro site to several existing MTD facilities will enable the joint venture to minimize start-up expenses and to utilize manufacturing resources already in place. "We are excited about this development because it will enable us to begin manufacturing operations al-

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Lesco moving plant

Continued from page 59

most a full year earlier than originally planned," said William A. Foley, Lesco's chairman, president and chief executive officer.

"In October 1996," said Ware H. Grove, vice president and chief financial officer, "Lesco announced an estimated fourth quarter charge of \$6 million in connection with formation of the joint venture and the repositioning of our equipment business. Lesco also completed a significant rationalization of its entire product line

during 1996. As a result of one-time charges that will result in a net loss for the year ended December 31. This step strengthens our balance sheet and positions Lesco very solidly for future growth."

Lesco has also announced that sales revenues for the year ended Dec. 31 reached a record \$312 million, 29.1 percent higher than 1995. Changes in accounting estimates and other non-recurring charges taken in the fourth quarter resulted in a net loss of \$2.3 million for 1996, compared with net income of \$4.8 million for 1995. Earnings per share reflected a loss of 29cents for 1996, compared with income of 59 cents per share in 1995.

TFI elects board

Continued from page 59

Charles E. Childers, chairman/president, CEO of Potash Corp. of Saskatchewan, Inc., in Saskatoon, Saskatchewan, Canada; Fritz Corrigan, president of Agriculture Group, Cargill, Inc. in Minneapolis, Minn.; Al Giese, vice president, agronomy of Cenex/Land O'Lakes Ag Services in Inver Grove Heights, Minn.; Rene

Latiolais, president and CEO of Freeport McMoRan Inc., in New Orleans; Dale Massie, executive vice president of Agrium Inc., in Calgary, Alberta, Canada; and Allen C. Merritt, vice president fertilizer and chemical division of Golf Kist in Atlanta, Ga.

Burton M. Joyce, chairman, president and CEO of Terra Industries, Inc., Sioux City, Iowa is immediate past board chairman and serves as ex-officio member.

Toro merger

Continued from page 59

announced its acquisition of OSMAC, a central irrigation control system for the large turf irrigation market, from Motorola, Inc.

Toro has acquired the exclusive marketing rights to the OSMAC control system, the OSMAC trademark, the OSMAC 4.0 software and a license to the proprietary communications protocol that drives field hardware. Motorola will continue to manufacture and supply Toro with components for OSMAC.

Motorola has manufactured OSMAC products and Toro has marketed them for more than five years. During that time, OSMAC has been installed on nearly 1,000 systems world-wide.

"We are very excited that we were able to reach this mutually-beneficial agreement with Motorola," said David McIntosh, office of the president, The Toro Co. "Toro is committed to providing solutions for today's turf managers, and OSMAC is an integral part of our product mix that helps us accomplish this goal."

Toro's 1st quarter

Continued from page 59

\$209 million compared to \$211.5 million last year. The company also said integration of the newly acquired James Hardie Irrigation Group was on schedule.

Commercial equipment sales were flat for the quarter, reflecting continued field inventory management. Sales of equipment to other commercial customers and landscape contractors were also lower than last year.

Sales of irrigation products increased 55.1 percent due primarily to the addition of Hardie Irrigation. Toro's core irrigation product sales were down for the quarter as a result of wet weather conditions and field inventory adjustments.

Toro international sales continued to be strong with a 37.1 percent increase due in part to the addition of Hardie international sales. Toro's core international business also increased led by sales of commercial equipment products to golf courses, particularly in the Pacific Rim and sales of consumer products to Canada and Australia.

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REWARD is also the one herbicide you can 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.



ZENECA Professional Products

Jacklin promotes Yanagisawa, Connolly, Nelson

POST FALLS, Idaho — JacklinGolf has promoted Hiromi Yanagisawa, Jim Connolly and Dr. Eric Nelson.

Formerly vice president, marketing, Yanagisawa is now the vice president and managing director of JacklinGolf.

Connolly, formerly senior technical agronomist, will assume the title of director of agronomy and technical services. Connolly, under the direction of

Yanagisawa, will focus on U.S. markets, as well as international consulting in Asia.

Nelson, formerly technical agronomist, will assume the title of senior technical agronomist.

JacklinGolf, which continues to expand its department to meet the needs of the growing golf market, markets turfgrass seed and agronomic advice to golf courses through a network of distributors in the United States and around the world.



Hiromi Yanagisawa



Jim Connolly

Tractor makers back rollover protection

Continued from page 59

tics compiled by the National Safety Council show 55 percent of all tractor-related deaths in 1995 were associated with rollovers and 26 percent involved people who were run over by tractors.

Approximately one-half of the people run over were operators who were thrown from tractors.

A recent study of 76 tractor rollover fatalities by Iowa State University and the University of Iowa Center for Agricultural Safety and Health (I-CASH) showed all 76 victims were operating tractors without ROPS and seat belts.

"If a tractor rolls over and it doesn't have a ROPS, there's a 75 percent chance of dying," said I-CASH Director Dr. Kelley Donham. "If you put a ROPS and seat belt on the tractor, and wear the seat belt, you have a 95 percent or greater chance of walking away from the situation."

Donham stresses that wearing a seat belt is important, because it ensures the operator remains in the protection zone of the ROPS.

To encourage owners to have ROPS and seat belts installed on their older tractors and to reduce the effect that price may have on the decision, AGCO, Case, John Deere, Kubota, and New Holland are offering kits at cost to their dealers and asking them to sell these kits without markup.

For tractor owners concerned about low overhead clearance, such as barn doors, folding ROPS kits are also available for some tractors.

Depending on the tractor model, most ROPS kits cost less than \$600, plus freight and installation.

Kits are available for most tractors manufactured in the mid/late 1960s up to 1985 (when ROPS and seat belts became standard).

In addition to the price incentive, the companies plan to place co-sponsored announcements in various farm media, including company-produced communications, to promote ROPS and seat belts on older tractors.

At the same time, each company will continue its individual educational and promotional programs to encourage owners to have their older tractors equipped with ROPS and seat belts.

Tractor owners should contact their local dealer for more information and to set up an appointment to have ROPS and seat belts installed on their older tractors.



And when you use REWARD, you never have to worry about non-target vegetation, fish and wildlife on your course.

Take your best shot against broadleaf and grass weeds with REWARD. And give your course the winning edge.

For more information, contact your Zeneca representative, or call 1-800-759-2500.

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Barenbrug opens offices in Pittsburgh and Beijing, moves Oregon HQ

PITTSBURGH, Pa. — Barenbrug Northeast's Vice President and General Manager, William (Bill) Lind, has announced the opening of the Barenbrug Northeast Pittsburgh Division.

"Our new sales, production and shipping facility in Pittsburgh will enable us to establish

a presence in Central and Western Pennsylvania, West Virginia, Ohio and other parts of the Midwest," said Lind.

Al Suvak, formerly of Mock Seed Company, has been selected as general manager of the Pittsburgh Division. The Barenbrug Northeast Pittsburgh Division is located at 2246 Cali-

fornia Ave., Pittsburgh, PA 15212. For more information, call Suvak at 412-321-1272.

...

Barenbrug USA, headquartered in Tangent, Ore., will move into its new office/warehouse facility this month. Upon completion in 1998 the entire complex will encompass over 100,000

square feet and will be designed for maximum efficiency. Adjacent to the new building will be several acres of turf and forage trial plots which will be a highlight during the annual Oregon summer tour. An open house will be announced soon.

...

Meanwhile, in Beijing, Bar-

enbrug Holding BV of The Netherlands has opened an office and the appointment of Chen Gu as chief representative of Barenbrug China RO.

Chen is responsible for an office staff in Beijing, and will coordinate all trials, market development and sales activities for the Barenbrug Group in China.

Previously, Chen was managing director for a joint venture between the EU and PRC Governments, focusing on implementation of Western agricultural practices and input into farm and animal husbandry systems in various areas of China.

The Barenbrug Group Worldwide consists of three sub-holdings, each with numerous subsidiaries; Europe, North America and Southern Hemisphere (with offices in Australia and New Zealand).

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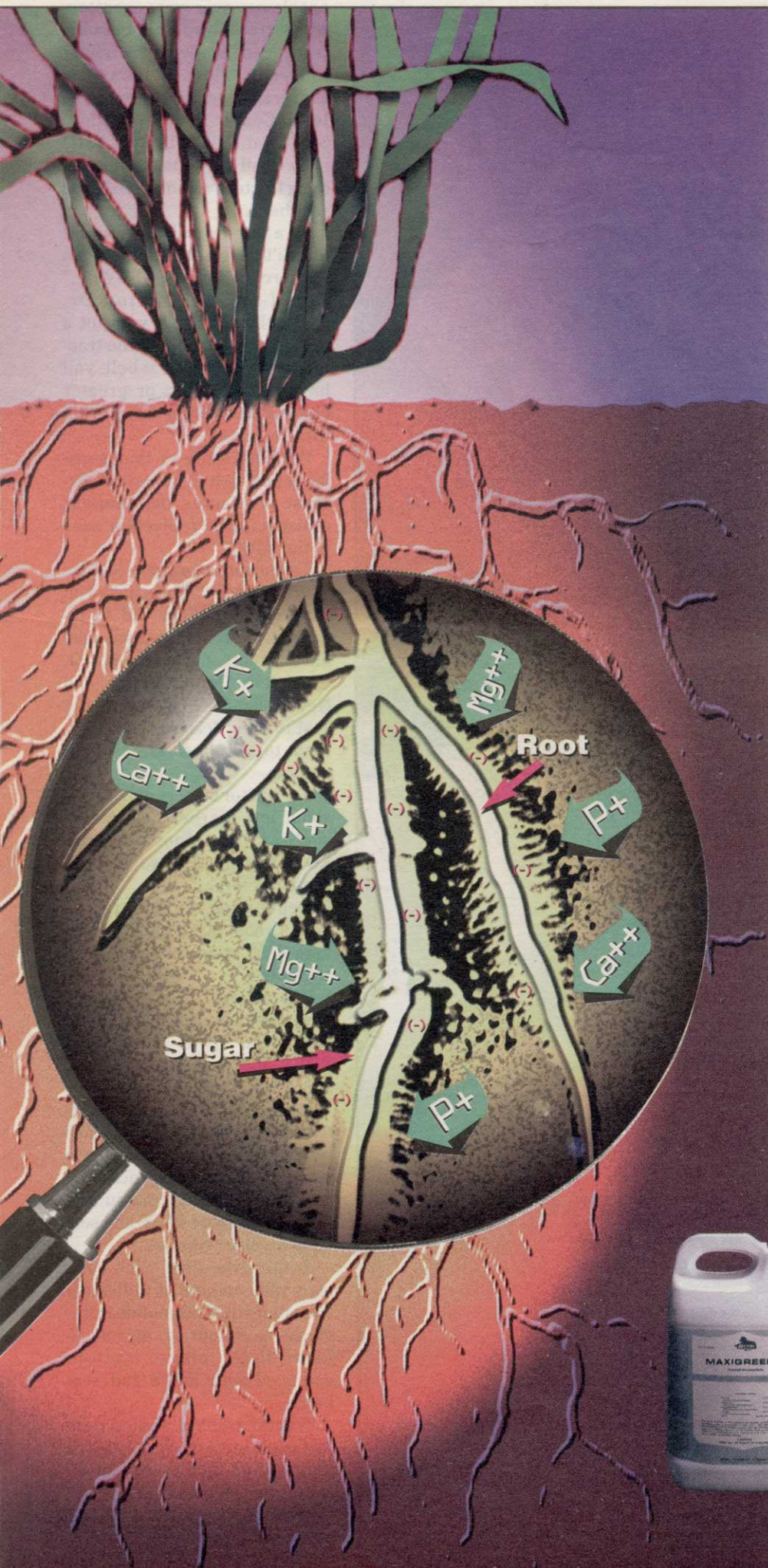
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CIRCLE #140

Yamaha

Continued from page 59

tournaments. When these 47 competitors tee it up Nov. 3-9, 1997, here at The Dunes Golf and Beach Club, they will be driving Yamaha golf cars.

"We are excited to become the exclusive 'sponsored by' sponsor of this prestigious championship," said Scott Wall, vice president-Golf Car Division of Yamaha. "This major sponsorship is further opportunity to achieve our golf car marketing objectives not only in Myrtle Beach, S.C. — the golf capital of the world — but also nationally and internationally. We view this partnership with Myrtle Beach Golf Holiday as a natural progression of our tremendous success with the National Golf Course Owners Association."

Yamaha is one of several firms that participate in the National Golf Course Owners Association's (NGCOA) Smart Buy Program, a package whereby NGCOA receives discounts on products purchased from participating companies. Although its membership is national, the NGCOA is based in Charleston, S.C., just south of the Myrtle Beach region.

Myrtle Beach Golf Holiday (MBGH) is a non-profit association of 96 accommodations and 87 golf courses in the Myrtle Beach area, which reaches from Georgetown, S.C. north to Southport, N.C. MBGH shares financial responsibility for the event with the PGA Senior Tour.

"Yamaha golf Cars are a great fit for Myrtle Beach with us being the seaside golf capital of the world," said Tom E. Baugh, Jr., president of Myrtle Beach Golf Holiday. "Yamaha is a first-class company with a very strong commitment to quality."

GOLF COURSE NEWS

Jake honors distributors

LAS VEGAS, Nev. — Jacobsen has honored 11 of its distributors worldwide by presenting them with "Distributor of the Year" awards for 1996. The awards are given annually to recognize superior sales and service efforts on behalf of Jacobsen products. This year's presentations were made during the recent Golf Course Superintendents Association of America Show here.

Distributors earning the award were Automatic Turf Equipment Company, Indianapolis, Ind.; Bob Ladd Inc., Memphis, Tenn.; Delta States Turf, Inc., Baton Rouge, La.; Hijos de a Ferrer Dalmau S.A., Barcelona, Spain; H.V. Carter Company, Inc., Livermore, Calif.; Intermac S.A., Buenos Aires, Argentina; Kilpatrick Turf Equipment Co., Boynton Beach, Fla.; NBK Trading Corp., Harmon, Guam; Outdoor Equipment Co., Chesterfield, Mo.; Valley Turf, Inc., Grandville, Mich.; and Wilfred MacDonald, Inc., Lyndhurst, N.J.

In addition to the Distributor of the Year awards, Jacobsen presented more than 40 other awards in 12 categories, including Performance Plus, Distinguished Service, Fast Start, Outstanding Achievement and Jacobsen Pacesetter awards.

...

In other Jacobsen news, G.L. Cornell Company of Gaithersburg, Md., has received the Jacobsen Professional's Choice Outstanding Service Award for 1996. The Outstanding Service Award recognizes a high level of customer service and participation in Jacobsen-sponsored service programs.

Also, Baker Vehicle Systems, Inc. of Macedonia, Ohio has earned a Jacobsen Leasing and Financing One Million Dollar Club Award for 1996. In addition, Baker Vehicle Systems earned a Textron Financial Corporation (TFC) First Choice Award.

Medalist names blending head

POST FALLS, Idaho — Medalist America has announced the appointment of Debbie Bean to the position of blending coordinator.

Bean will coordinate blending of pre-formulated seed blends, specials and customs. She will initiate computer-generated blend sheets and prepare tagging information to the blending facilities.



Debbie Bean

GOLF COURSE NEWS

The One Million Dollar Club Award was presented to Jacobsen distributors who helped finance more than one million dollars in sales through Jacobsen Leasing and Financing. The TFC First Choice Award was given to the Jacobsen distributor who helped finance the highest percentage of total sales through TFC.

Tire recyclers go nat'l

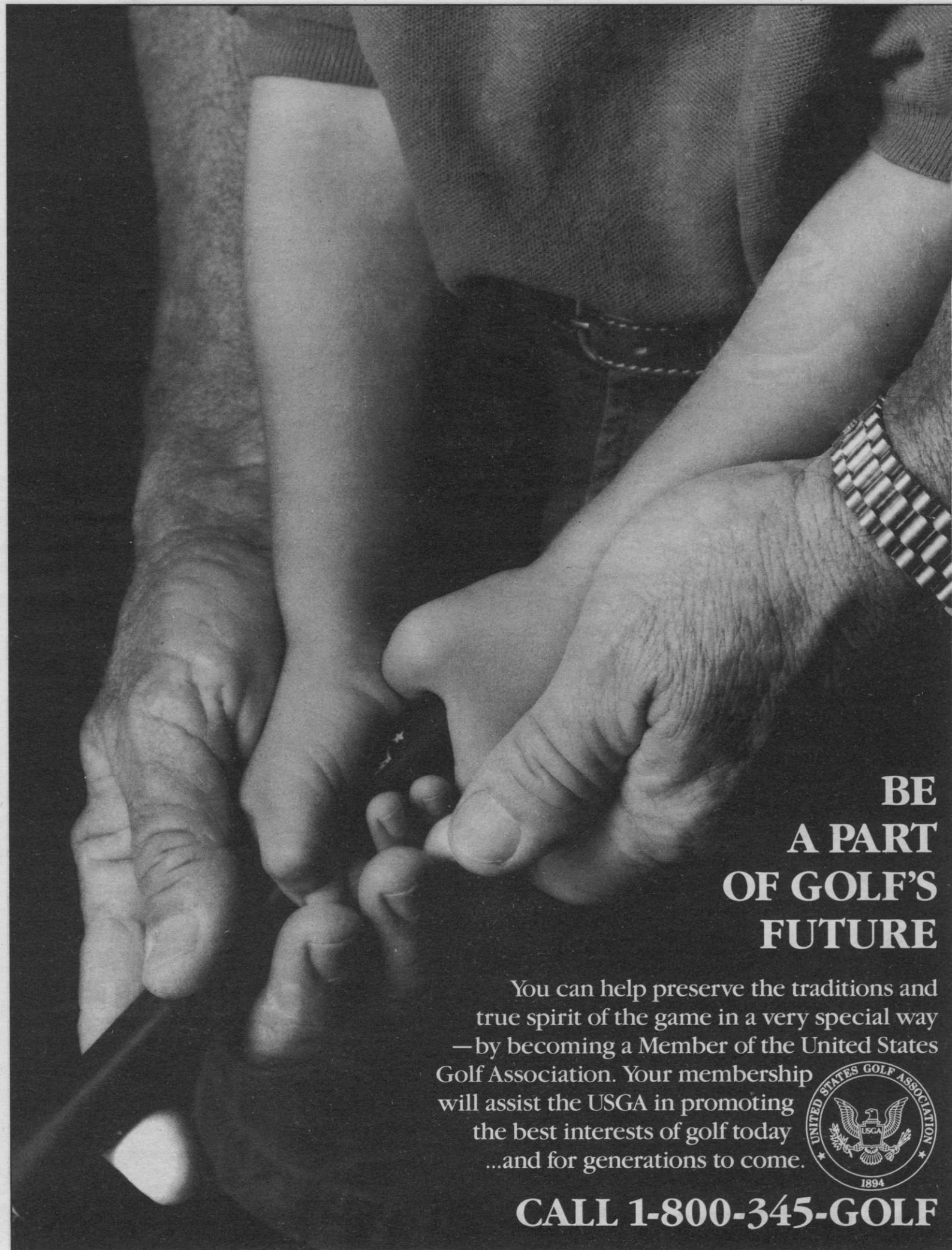
JACKSONVILLE, Fla. — American Tire Recyclers, Inc., the patent holder of Rebound soil amendment, has established a national sales program to recruit and manage a network of dealers and distributors. The RNO plan includes a targeted marketing program to turf product distributors across the nation, according to Linda Monroe, RNO's national marketing manager.

Rebound is a subsoil amendment that combines crumb rubber and organically composted

material that is rototilled into the ground and designed for use under turf that is routinely subjected to heavy use, i.e. golf tee boxes, cart paths, and public parks.

After years of testing and research, Rebound has shown the properties to enhance agronomic conditions by increasing aeration, nutrition and absorption abilities of native soils. It also reduces soil density by permitting deeper, healthier root structures. The best benefit comes from rubber's inherent resiliency which reduces soil compaction.

Those interested should contact Linda Monroe or Tiffany Hughes at 1-800-741-5201.



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Leslie comment

Continued from page 14

"I had death threats. I had to change my clothes in the car. I had to drive my automobile during the day and couldn't find a place to stay at night," Black said.

Tiger doesn't have those problems. "His pressure," Black said, "is staying in good health and standing up under the pressure

to step in and play. He's got to be Tiger Woods, not Jackie Robinson. Everybody has their own time zone. This is a different time zone."

If we were all truly "color-blind" in our thinking, the whole debate of Tiger's "responsibilities to his race" would be moot. And, yes, it should be. As Black pointed out, the enthusiasm, loyalty and dedication Tiger has to the game make it possible for

anyone of any age to respect him.

The golf industry? Let's just watch and enjoy the ride that is stirring the American public.

...

Tradition, from whence comest thee?

Do you think having all greens roll at the same speed is an idea favored by inimitable golf course architect George C. Thomas Jr., whose book *Golf Architecture in America* (see review, page 14) is

considered a classic? Think again. Thomas viewed green speed in a way that flies in the face of today's demand for consistency.

"Yes, the greens should, undoubtedly, have great variety," Thomas wrote. "What interest or sport if they were all flat — all of the same speed; what chance for the real putting touch, and, more important, the ability to judge their speed, their rolls and

slopes, so as properly to apply the skillful touch?"

Referring to "an old authority" who favored different greens having different grasses in order to change the speed as the golfer went from hole to hole, Thomas said: "The thought of the old writer is not ill-timed at this late date."

Meanwhile, was Thomas ahead of his time concerning tree-thinning? "While it is expensive to take out woods and build the course where the forest stood, nevertheless it has been done successfully many times," he wrote. "The greatest danger in such work is that of the shade given to the green, which often secures little sun; but this may be overcome by additional tree thinning nearby, which must be done before seeding, by the use of grasses suitable to shade, and by under drainage to the green, because shaded greens hold moisture too long in all but somewhat sandy soils."

Who knows Thomas' favorite course, but... "If one could have a course with sand dunes, with water hazards both as streams and as lakes, with fairways through virgin forests, with long, rolling contours, high plateaus, lovely little valleys to play through and to cross as hazards, one would have the superlative and almost ideal golf country. Such is Pine Valley, laid out by the master hand of that sterling sportsman, George Crump. Every true golfer loves Pine Valley."

And in defense of course architects, Thomas warned land planners that one very common error is to place the clubhouse on the highest point of the property. This, he said, "is often at a corner, making it very difficult to start and finish the course... Much criticism aimed at finishing holes is the fault of the clubhouse location rather than that of the golf architect."

...

Alice Dye shed interesting light on the success of her husband in the world of golf course design [see story, page 39]. We asked her what it has been like to team up with Pete all these years.

"We started the business together. But I had other duties and couldn't travel as much with two small children. For very personal financial reasons — like being sued or insured — it was better to go under one name and to promote Pete, which I did. I did become a member of the ASGCA [American Society of Golf Course Architects] and play in a lot of tournaments — a lot of promotional work besides working with him on sites.

"The LPGA didn't even get formed until 1950... But amateur golf was big, big, big, and every time I won a city or state title the

Continued on next page

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Blais comment

Continued from page 15

those where many architectural, building, management and supplier contracts had yet to be signed — during the 14-month period. Michigan was second in the five-state region with 19 followed by Indiana, 14, Ohio, 11, and Wisconsin, 10. An indication of things to come? We think so.

Other states that should be among the leaders in new course openings over the next few years — based on the number of planned projects reported in the *GCN Development Letter* during the 14-month span — include California (45), Massachusetts (19), New York (18), Florida (18) Texas (14), New Jersey (12) and Arizona (11).

If knowing about new course development and yet-to-be-signed contracts is important to your business, then take a good look at the *GCN Development Letter* subscription offer many of you will receive in May. If the offer doesn't show up in your mailbox, then call us at 207-846-0600 and we'll gladly mail or fax along a copy for you to review.

...

Listen, I'm really not trying to rain on this Tiger Woods' parade. But, it's been four days now since Tiger's march through Augusta. I've hung around a lot of youth hockey players and Little Leaguers since then. And I can honestly say I haven't heard a single one of them mention Tiger's name.

The only time I've heard this year's Masters champ discussed by anyone born after 1979 has been on television, when a microphone has been placed before the youth and a reporter asked, "So what do you think of Tiger?"

Now granted, I live in Maine where golf isn't exactly a statewide passion. The mud is flowing and golf is still just a gleam in most Mainers' eyes this drizzly April 17 morning. Our family doesn't belong to a golf club, so we're not spending a lot of time around the clubhouse waiting for the ground to dry out and talking with other golfing families.

But still.

Leslie comment

Continued from previous page

headlines were 2 inches tall in the papers. The publicity was really something, and that's how we got our name in golf. Then, of course, I was named to the women's executive committee and played in the national tournaments, on the Curtis Cup team and was captain of the World Cup team.

"It's been a wonderful trip," she added. "And we've shared so much. Pete does maybe 75 or 80 percent of the architecture. Pete's an artist. He's very, very creative and has wonderful ideas. They change and evolve, as we all do and as we see the type of people playing golf being different today than when we started.

"I'm the other side. I'm the side that comes up to him and says, 'Pete, you can't do that. That bunker wall is too steep. Somebody's going to get hurt.' Or, 'You've got to put rock around the edge of this green so when they back up to line up a putt they feel they are on sort of a warning track.'

"When the original green at Sawgrass sloped toward the water, I said, 'You can't do that. If there is a wind behind them, they'll never finish the tournament.' "

Is this Tiger Mania for real? Is his name being yelled out at recess or discussed in the high school cafeteria the way students talk about Michael Jordan, Brett Favre, Ken Griffey and Mario Lemieux? Are kids lining up putts or driving imaginary golf balls 330 yards in front of their bedroom mirrors? Or are they still nailing 10-footers into their laundry baskets with rolled up socks and screaming "Jordan from the corner!"

I hope Tiger's in there somewhere. It could mean a lot for the game, not to mention those who want to build courses, fill tee sheets and sell golf equipment.

But I wonder: Is Tiger Mania a golf industry/media creation, or is it really the start of a junior golf boom? Time will tell.

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These questions came straight from the customers of lawn care operators, pest control operators and other professional pesticide applicators across the country—and probably reflect the concerns of your customers. The more your customers know about the products you use, how you use them and how much is used, the more confident they will be in you and your service.

Communicate With Your Customers

Your customers expect you and your employees to be credible and knowledgeable sources of information about your products. Take time to talk with them about your safe and responsible use of pesticides.

Studies show that most people don't know that pesticide products are among the most highly tested products sold. The U.S. Environmental Protection Agency (EPA) registers only those uses of pesticide products that pose minimal risks.

- Emphasize that pesticide products must undergo stringent government-monitored testing before they can be sold. It is a long and costly process. For example:

- It takes a chemical manufacturer eight to 10 years to test and register a product, at an average cost of \$30 million to \$50 million.
- As many as 120 tests or more are performed, many specific to health, safety and the environment.
- Only one potential pesticide in 20,000 makes it from the research lab to the market.

- Explain Integrated Pest Management (IPM) to your customers. Most do not fully understand the concept. Point out that a successful IPM program stresses prevention, pest identification and selection of the best method of pest control, which may require the use of pesticides. Tell how you incorporate IPM into your pest management practices.

- Identify the specific pesticides you use and the pests they control.

- Indicate that professionals use an array of products, many the same as those used by homeowners.

- Assure customers of the benefits pesticides provide for turf, trees and ornamentals, and in the home. For example:


- Termites cause over \$1 billion in structural damage each year.

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"Are the pesticides you use safe?"

"Are the pesticides that professionals use stronger and more toxic?"

"When is it safe for my children and pets to return to an area after a pesticide application?"



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- One large, pest- and disease-free tree has the same cooling effect as 15 room-size air conditioners.

- A well-maintained lawn and landscape adds as much as 15 percent to a home's value.

- Discuss your safe and responsible use of pesticides as a professional applicator. Note the many steps you take to ensure that the pesticides you use are used properly.
- Advise your customers that you closely follow label instructions. The label contains instructions for only those uses approved by EPA.
- Outline the extensive training that is mandatory for professional applicators in order to apply specialty pesticides. Applicators are required by law to undergo training, certification and licensing, as well as to keep records of each job performed.

- Explain what happens to pesticide containers once a job has been completed. Note that containers are disposed of properly.

What Else Can You Do?

Provide your customers with materials such as newsletters, brochures, fact sheets and bill stuffers that communicate these messages. Be sure that someone at your company, who has a basic knowledge of the products and application methods your company uses, is available to answer questions.

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RISE is the voice for the specialty pesticide industry. Its members include manufacturers, formulators, distributors and other industry leaders.

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CIRCLE #150

Hydroseeding, Erosion Control formula released

Erosion Control Technologies has announced the release of its newest Tackifier formulation for hydroseeding and erosion-control professionals.

It is a highly concentrated granular material that requires only 2.5 pounds per acre. Packaged in waterproof resealable bottles, the dry granular formula is extremely cost-effective and very easy to ship and store. The product works well as both a fiber-mulch binder and as a straw tackifier.

"Besides being an effective Tackifier, it's ultra-convenient packaging is making the new product a real success," said Neil Reinecker, president of Erosion Control Technologies. "The new product has already been listed in the new standards for erosion control in New Jersey, so we expect to do very well with it."

Contact Erosion Control Technologies, Inc. at 1-800-245-0551.

CIRCLE #311

Brouwer releases Large Roll Sod Layer

Brouwer Turf Equipment has introduced its new SPI 2400 Large Roll Sod Layer designed to install the 24-inch wide rolls of sod produced by the Brouwer RollMax 2400 sod harvester.

The SPI 2400 has the versatility to handle a variety of conditions. On smaller jobs, it is able to get in tight areas and maneuver around obstacles, thanks to its hydrostatic rear wheel

drive and steering design. The self-loading capability and 7 mph transport speed will make short work of larger installation sites. It features a 15-hp Kohler Command engine, a lifting capacity of 1,600 pounds, and a ride-on operators platform with easily accessible hydraulic and steering controls.

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CIRCLE #143

TRIMS unveils Windows format

TRIMS Software International, Inc. has announced the release of its latest Windows product, TRIMS 97.

TRIMS 97 for Windows comes standard with Open Data Base Connectivity (ODBC), which is a translator that allows Microsoft Word, Excel, Access, and many other programs to directly access the TRIMS 97 data files via the Btrieve record manager. With ODBC you can transform TRIMS 97 data into your own spreadsheets, reports and mailing labels using your favorite word processor, spreadsheet or database program.

Along with the standard features of TRIMS products, TRIMS 97 also includes multi-media animated tutorial (on-line help movies); Internet access using Microsofts Internet Explorer; Audio Prompts with helpful hints and informative error messages; AutoCad connectivity allowing you to view AutoCad drawings; view equipment and personnel photos on-screen.

Call 800-608-7467.

CIRCLE #313

Standard Golf offers nylon flags

Standard Golf has expanded its line to include affordable embroidered nylon flags.

Using only the finest materials and UV-resistant, color-fast threads, Standard artists translate full-color logos or designs into superior embroidered flags that provide a terrific way to dress-up a course — or make great pro-shop souvenirs.

Depending on a superintendent's needs, all Standard Golf flags can be produced with traditional brass grommets or the company's convenient Tube-Lock design. Tube-Lock flags are sewn to a sturdy, one-piece plastic tube, which simply slides over the flag stick and is secured with a twist of an acorn nut.

For more information and the name of nearby distributors, write Standard Golf Company at PO Box 68, Cedar Falls, Iowa 50613-0068, or call 319-266-2638.

CIRCLE #314

Water research

Continued from page 1

expected higher concentrations of chemicals and a higher frequency of detection because of storm-water runoff. But he was unpleasantly surprised by high detection rates in the ground-water database.

"I think that if we got more data from more sites, the two [ground and surface water] would even out," he said.

"I feel if we had more data from more golf courses around the country, and where the wells weren't immediately adjacent to managed areas, the ground-water detection rates would drop off significantly over time."

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

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

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

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

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

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

The federal standard for Maximum Calculation Level (MCL) or Health Advisory Level (HAL) of nitrate is 10 parts per million (ppm). The HAL is the upper concentration a person could drink in water for a lifetime without showing any harmful effects. Levels slightly above 10 ppm might or might not be harmful.

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

Continued on page 69

Golf Course Classifieds

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GOLF COURSE CONSTRUCTION

WANTED- Crown Golf Construction is currently seeking qualified and experienced superintendents, irrigation specialists, shapers and finish operators. **Mail resume or fax to: Crown Golf Construction, Attn: Bob Steele, 3703 West Lake Avenue, Suite 300, Glenview, IL, 60025-5823, Office#: (847) 832-1800; Fax#: (847) 832-1834.**

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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. EOE.**

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Thomas on design

Continued from page 14

a trick taught to him by Willie Tuckie Jr. concerning laying out a golf course on a contour map. In Thomas' words: "Your map is, of course, contoured to scale, and you cut out of blotting paper miniature fairways, making them also to the same scale as the map; it is easy to place them on your contour map with thumb tacks, first having your map on a board. You will find that by hinging these little fairways at or about the 200-yard mark, you can make them follow the contours on the map as doglegs or straight holes.

"You can play with them just as if they were picture puzzle units; and by making them of different lengths, all to scale, with their width corresponding to that of fairways from 65 to 80 yards wide, the one shot holes unhinged and the three-shot holes hinged twice, you

will find them of the utmost help."

Read this and you have to love Thomas. Was he prophetic? Hear this: "It is most important for the future of golf in this country that every aid should be given to the building and upkeep of municipal courses, because such will eventually become of the greatest value to the game, and from them we may expect to produce many of our future great players."

Was he a rule-breaker? "To my mind, five one-shotters [par-3s on one course] are not too many. Certainly, a fine test of this type is superior to a poor two-shotter, and, in addition, they usually surpass the two-shotter in character, because ground for them is easily found, and they may be made with less trouble and expense..."

"Furthermore, by saving ground in the use of one shotter, it is easier to secure better two shotter on the balance of a course, and in badly broken country they help the problem of plan."

Was he walled in by tradition or grandeur? "It is possible to make a very short nine-hole approach and pitch course, where the holes will average around 30 yards, all of which will require most skillful playing to secure the average par of 3; and I know of several layouts of this character in crowded districts, which are very interesting and attractive. It would seem that such short pitch-and-approach courses could be easily installed at many clubs, at hotels, and even for private grounds, and give the utmost pleasure, as well as fine practice, for the short game."

Was he humble? Speaking of the concentration of municipal golfers ("There was no nonsense as 'Please move your shadow off the line of my putt,' or, 'Stand still, caddie, while I play this shot'), he said: "I admired those golfers; I realized they were far above me as sportsmen and golfers."

Here are some thoughts on:

• Nature vs. man: "...the truly Ideal

course must have natural hazards on a large scale for superlative golf. The puny strivings of the architect do not quench our thirst for the ultimate..."

• Walking: "Broadly speaking, where it is necessary to climb more than two steep hills and more than four medium grades, the course is approaching impracticability..."

• The sun. "The tract to be purchased must have a clubhouse site where several finishing holes on both nines of an eighteen hole course have the sun at their back. The thirty-six hole layout must also finish away from the setting sun. By noting possibilities for the clubhouse site the avoidance of sun holes as finishes is a simple one."

• Art and utility: "In golf construction art and utility meet; both are absolutely vital; one is utterly ruined without the other... If you fail in either, your course is without true merit."



CALENDAR

May

5-7 — 51st Annual Southeastern Turfgrass Conference in Tifton, Ga. Contact Dr. Wayne Hanna at 912-386-3360.

16 — Golf Environments of the 21st Century: Integrating Wildlife Conservation and Golf Courses, a conference coordinated by the U.S. Golf Association and National Fish and Wildlife Foundation at National Geographic Society Headquarters, Gilbert H. Grosvenor Auditorium, 1145 17th St., N.W., Washington, D.C. Contact Dr. Kimberly Erusha, USGA, Golf House, P.O. Box 708, Far Hills, N.J. 07931; 908-234-2300.

12-18 — American Society of Golf Course Architects Annual Meeting in Toronto. Contact 312-372-7090.

June

13-15 — Medfest '97 in Post Falls, Idaho. Contact Brandie Beebe at 800-568-8873.

18 — SUNY Cobleskill's Turfgrass and Landscape Workshop in Cobleskill, N.Y. Contact Robert Emmons at 518-234-5644.

27 — Turf-Seed Inc. Field Day 15 in Rolesville, N.C. Contact Melodee Fraser at 919-556-0146.

July

29 — Midwest Regional Turf Field Day in West Lafayette, Ind. Contact Midwest Regional Turf Foundation at 317-494-8039.

August

19 — Cornell Field Day in Ithaca, N.Y. Contact Frank Rossi at 607-255-1629.

September

4-5 — Southwest Horticultural Trade Show in Phoenix.

October

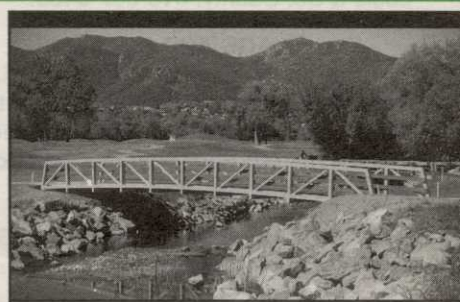
26-28 — Public Golf Forum in Oak Brook, Ill. Contact Golf Course News Conference Group at 207-846-0600.

November

2-4 — 18th Annual Irrigation Association International Exposition and Technical Conference in Nashville, Tenn.

Golf Course Marketplace

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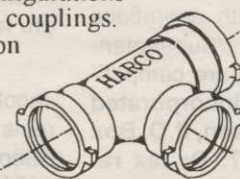
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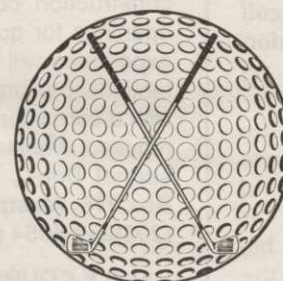
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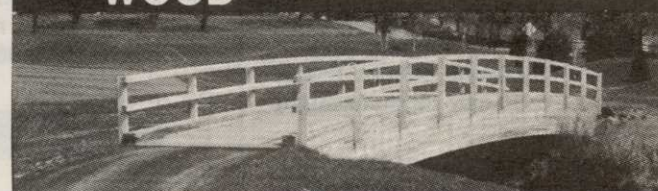
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CIRCLE #165

Water research shows positive results for courses

Continued from page 67

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

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

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

Surface-water monitoring discovered that in 2,731 entries, pesticide

levels exceeded MCLs or HALs five times, or 0.02 percent. Nineteen of the entries (0.7 percent) exceeded aquatic MACs (Maximum Allowable Concentrations for aquatic organisms). The average concentration was 0.07 to 6.8 ppb, Cohen said, depending on how non-detections were counted.

The most frequently detected chemicals in ground water were 2,4-D, fenamiphos/f. sulfoxide (found in Namacur) and arsenic, he said. Atrazine, fenamiphos, diazinon and 2,4-D were the most-often detected chemicals in surface water.

The 2,4-D levels are not a concern because, although it is very mobile, it has a very short half-life and con-

centrations are usually very low, Cohen said. "And, in some cases, it may not have been from golf course use. In two places where it was detected those courses do not even use 2,4-D. And it can easily be misidentified by labs."

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

Cohen intends to make his recommendations to the GCSAA and publish his findings in a peer-reviewed journal as well as in the GCSAA's *Golf Course Management*.

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* Appears in regional editions.

NGF's 1996 report highlights

Other 1996 highlights from the National Golf Foundation's Golf Facilities in the United States report:

- Nationwide, 442 courses opened with 319.5 18-hole equivalents, down 5 percent from a year earlier.

- Forty-eight golf facilities ceased operation. Illinois had the most closures with five. California, New York and North Carolina had three each. The five-year average for closures is 33.

- Courses under construction numbered 850, the highest total in the 20 years NGF has tracked new course development.

Of those, 658 are scheduled for a 1997 opening. History shows that two-thirds open on time, meaning roughly 440 more courses should open this year.

- Approximately 88 percent of all openings were daily-fee facilities,

compared to 86 percent in 1995. All 11 New England openings were public, making it the region with the highest percentage of public openings for the third straight year.

- Sixty-one percent, or 268 of the 442 courses, were located at new facilities. Eighty-nine of the new courses were nine-hole layouts. In all, 245 new golf courses were nine holes, representing 55 percent of all new openings.

- The number of facilities reached 14,341, 70 percent of which were public.

- The 15,703 golf courses nationwide totaled 231,930 golf holes (12,885 18-hole equivalents).

- South Dakota and Myrtle Beach, S.C., continued to rank No. 1 in terms of potential golf accessibility at the state and Metropolitan Statistical Area, respectively.

Jammed courses give developers reason to expect continued success

Continued from page 5

"We see the boom continuing," said Ryan Doyle, communications director for Illinois' Chicago District Golf Association, "especially with the amount of land still available for development and the 40 courses reportedly planned, under construction or having opened recently in the Chicago area."

Tiger Woods' success at The Masters, Doyle said, should fuel the junior golf boom that has taken particular root in Illinois, ranked seventh with 19 new course openings. The problem is building courses that are accessible and affordable for junior players.

"We can put clubs in 5th- and 6th-graders' hands, but it's hard to find them tee times," Doyle said. "You drive a half hour in any direction from our office and you can't find a greens fee under \$35. That worries a lot of people concerned about the game's future."

Ohio tied Illinois with 19 new courses last year. "Ohio has two things going for it," said Jim Popa, executive director of the Ohio Golf Association. "First, we have every type of geography imaginable, from the hills in the south, to the river valleys to the lake shore, everything except the ocean. Second, the economy is humming. Columbus and Cincinnati are in great shape and there don't seem to be any restrictions on the future."

Popa noted that five private courses have opened in Columbus in the past seven years. Still, when recently opened Arnold Palmer-designed Tartan Fields next to Jack Nicklaus-designed Muirfield Village began its membership drive, it sold 150 memberships at \$20,000 apiece the first day.

"And the public courses are jammed, too," he added.

Upscale, daily-fee facilities led Indiana

'At this point, there is plenty of play at all the new courses. The danger is that we could get too aggressive with building, although we're not currently at that point.'

— Steve Quale

Golf Foundation of Wisconsin

to a 9th-place showing with 16 new courses opening last year, according to Mike David, executive director of the Indiana Golf Association.

"There have been very few private courses built in the last three years, and those few have usually become semi-private to help meet expenses," he said. "Otter Creek [Columbus] and Golf Club of Indiana [Indianapolis] used to be head and shoulders above the rest of the state's courses. But some very good public facilities have opened in the past few years and are already ranked in the Top 10 in the state, very much in the same league with Otter Creek and The Golf Club of Indiana."

The new upscale, public courses are performing well, generally hosting a healthy 25,000 to 35,000 rounds a year, David said.

"A few more will open this summer," he added, "including Prairie View on the north side of Indianapolis, a Robert Trent Jones Jr. course that people are very excited about. Things should level off in the next one or two years. But all the new courses have found a niche, even the ones in fairly remote areas. We seem to be catching up with the demand."

Wisconsin is 10th on the Top 10 list, with 15 new tracks opening in 1996. The state is blessed with the second-highest participation rate (18.2 percent) in the country, a nationally-acclaimed junior golf program and an abundance of developable space, particularly in the northern vacation areas, explained Steve Quale, executive director of the Golf Foundation of Wisconsin.

"At this point, there is plenty of play at all the new courses," Quale said. "The danger is that we could get too aggressive with building, although we're not currently at that point. We realize that we need to build up our base of junior players to make sure these courses are filled in the future."

The Golf Foundation of Wisconsin, Quale said, is introducing several thousand juniors to the game every year at very affordable rates through \$1-a-lesson programs with local PGA pros; \$1 green fees at Milwaukee County park courses; \$1-per-club equipment sales; competitive events at area par-3 courses; and redeveloping par-3 facilities, like Milwaukee's Noyes Park, for junior-player use.

"Participation nationally has been flat the past few years," Quale said. "The game has basically been limited to Baby Boomers who can afford the game. But with Tiger Woods coming along, we realized we need to make the game affordable for young golfers. We can open the market to junior players, but will the golf industry react by making fees affordable for them? I don't know."

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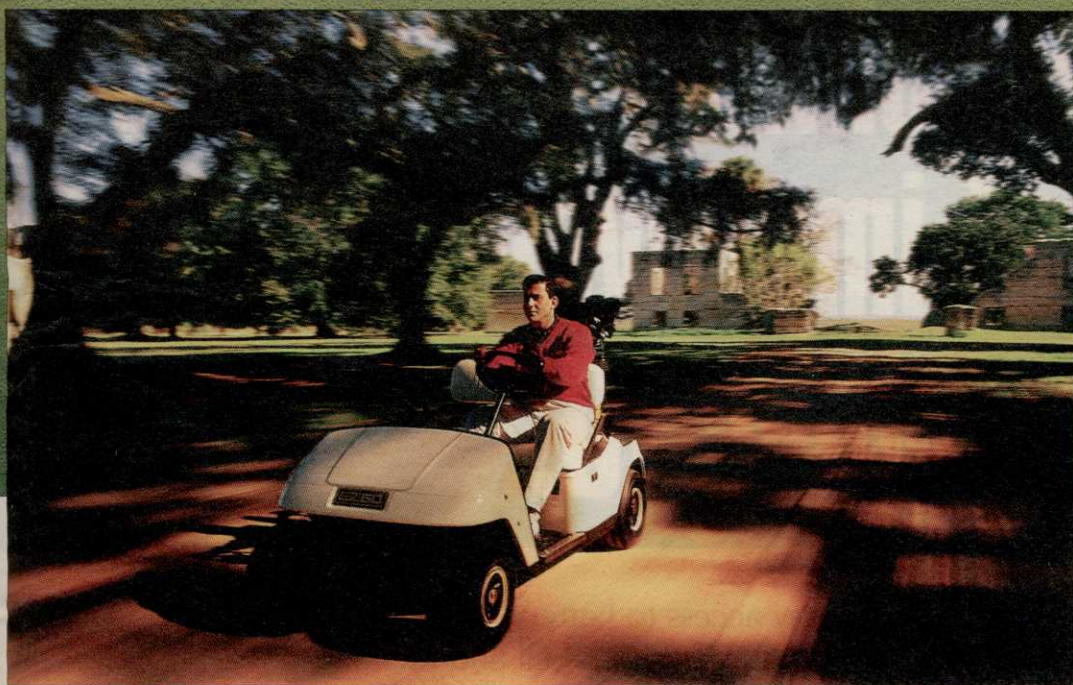
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