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GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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Golf car manufacturers make progress in both gas, electric

Better controllers combine with UST, emission laws to push electric sales. 32-33

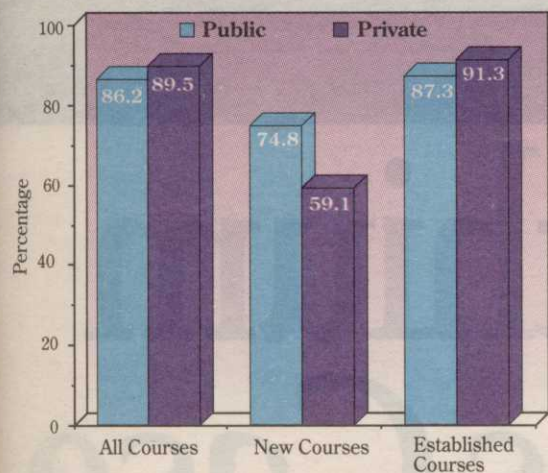
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Supers' 10 deadly problems

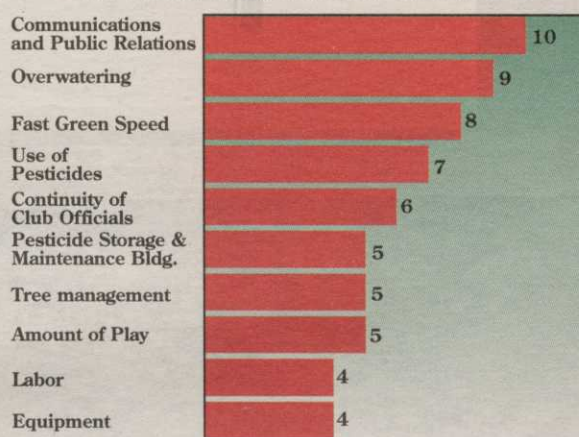
By Peter Blais

Inability to communicate is the major sin committed by those involved in golf course maintenance, according to United States Golf Association agronomists.

Agronomist James Connolly of Willimantic, Conn., gave a talk entitled The Top 10 Sins of Golf Course Maintenance during the recent Maine Golf Turfgrass Conference and Show in Portland.

The Top 10 list resulted from a survey of USGA agronomists conducted last year at the request of a group of golf course owners. Twelve of the 14 USGA Green Sec-

10 Worst Maintenance Problems



These 10 worst problems are listed according to the times they were mentioned by 12 of the agronomists with the United States Golf Association Green Section. Communications was listed the most times — 10 — and labor and equipment the least — 4.

tion agronomists responded.

Architectural comments were eliminated from the survey. But Connolly conceded architectural shortcomings — both outright architectural errors and outdated features like too-small greens or tees — were among the major problems superintendents face daily. Architectural errors would have ranked somewhere in the middle if they had been included.

The responses were regional. Western agronomists sometimes saw problems where their Eastern counterparts said none existed.

Continued on page 24

Water tax may cripple Florida courses

By Peter Blais

A water tax proposed by the Florida Legislature would have a "staggering" effect on the state's golf industry, according to Bob Young, head of the Florida Turfgrass Association.

The proposal calls for a 10-cent tax on every 1,000 gallons over a water user's allotment, with the money funding water conservation studies and practices. Courses using effluent would not be affected.

Emerald Dunes Golf Club owner Raymon Finch said the bill is aimed

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A golfer tees off at a unique hole at Venice (Fla.) Golf and Country Club, designed by Ted McAnlis of North Palm Beach, Fla. Venice G&CC has received high marks since opening Jan. 12. For more information on new course development, see pages 29-31.

Tight money dampens optimism

By Mark Leslie

A "tremendous surge" of interest in golf course development is being met by a cautious, stand-pat attitude by banks, according to industry sources.

Whether their optimism springs from

the quick resolution of the Persian Gulf War, lower interest rates, improving demographics or other reasons, developers and buyers are actively looking to move forward on projects.

"There has been a tremendous surge

of new business since Jan. 15, with people going forward planning their projects," said Jim Applegate, president of Gary Player Design Co. of Palm Beach Gardens, Fla. Jan. 15 was the deadline for

Continued on page 40

USGA to fund final research projects

By Peter Blais

Studies on golf course wildlife and the psychological benefits of the game's playing fields are being considered for the final \$300,000 in funding from the United States Golf

Association's \$2.8-million environmental research project.

The USGA will act by July on proposals concerning the effects of golf course maintenance on wildlife, managing wildlife on the course

and the psychological impact of courses on people, according to Mike Kenna, research director for the USGA Green Section.

Studies on the psychological effects of courses have

Continued on page 21



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Florida county approves two private clubs

NAPLES, Fla. — Collier County has approved two private, non-residential golf clubs. They are Arete National Golf Club, an 18-hole course to be designed by Naples resident and PGA professional Ken Venturi, and Olde Florida Golf Club, a 36-hole layout whose principals include Chicago Bears football head coach Mike Ditka.

Arete would encompass 240 acres on County Road 951, between Davis Boulevard and Rattlesnake Hammock road.

Olde Florida would be on 550 acres off County Road 951, 11 miles north of Arete. Arete would have 254 members. Olde Florida would cap membership at 350 while a one-course club, expanding to 650 for a second 18 holes. Olde Florida's first Rees Jones-designed course is scheduled to open in the spring of 1992.

Memberships at Olde Florida will cost \$40,000, at Arete \$55,000. Membership in either club brings an equity interest.

The formula at Old Florida will be no tee times, no social club, no tennis courts. Strictly golf.

Arete will have more luxurious services and facilities.

Architect C. Mark Mahannah dies of cancer at 85

NAKOMIS, Fla. — Charles Mark Mahannah Sr., who designed more than 80 golf courses, mostly in Florida and the Caribbean, died of cancer at his home here March 18 at the age of 85.

The Delta, Iowa, native attended the University of Florida in Gainesville and began designing courses in 1946. His first job was on the construction crew for William S. Flynn at Boca Raton Hotel and Country Club, north of Miami. He later was on the maintenance crew at Miami Biltmore Country Club, becoming its head greenkeeper in the early 1940s. The club was closed during World War II, and Mahannah spent the duration as a technical adviser on turf problems at an Army Post in Pinellas County, Florida.

After the war, he renovated one 18 at Miami Biltmore, which reopened under the name Riviera Country Club, and he served as its superintendent.

His experience at restoring the course led to other contracts, which he handled part-time until the early 1950s when he resigned to practice design full-time.

Elected a member of the American Society of Golf Course Architects in 1961, Mahannah was named a fellow in 1976.

Survivors include two sons, course architect Charles Jr. and Gary; a daughter, Suzanne; seven grandchildren and five great-grandchildren.

State agency takes over Pease AFB course

Development Authority opens ex-military 18 as daily-fee facility

By Peter Blais

PORTSMOUTH, N.H. — A New Hampshire state agency has taken over the golf course at Pease Air Force Base, the first military facility to close among the 86 installations targeted by the Commission on Base Realignment and Closure.

The 18-hole, Alexander Findlay-designed layout opened in early April as a daily-fee facility after 35 years as a strictly military course, according to Skip Jones, chairman of the seven-member Pease Development Authority.

"The course is in better shape than when we took it over," said Jones, whose agency has had two mechanics attending to the machinery and a crew renovating the clubhouse since it signed a lease for the course in January.

The development authority,

which is seeking new uses for the former Air Force facility, plans to operate the course for many years, Jones said.

"Having another public course fills a need in the area," Jones said.

"And we're hoping it will generate some revenue. We're looking for 20,000 to 25,000 rounds this year. I'd be ecstatic with 30,000."

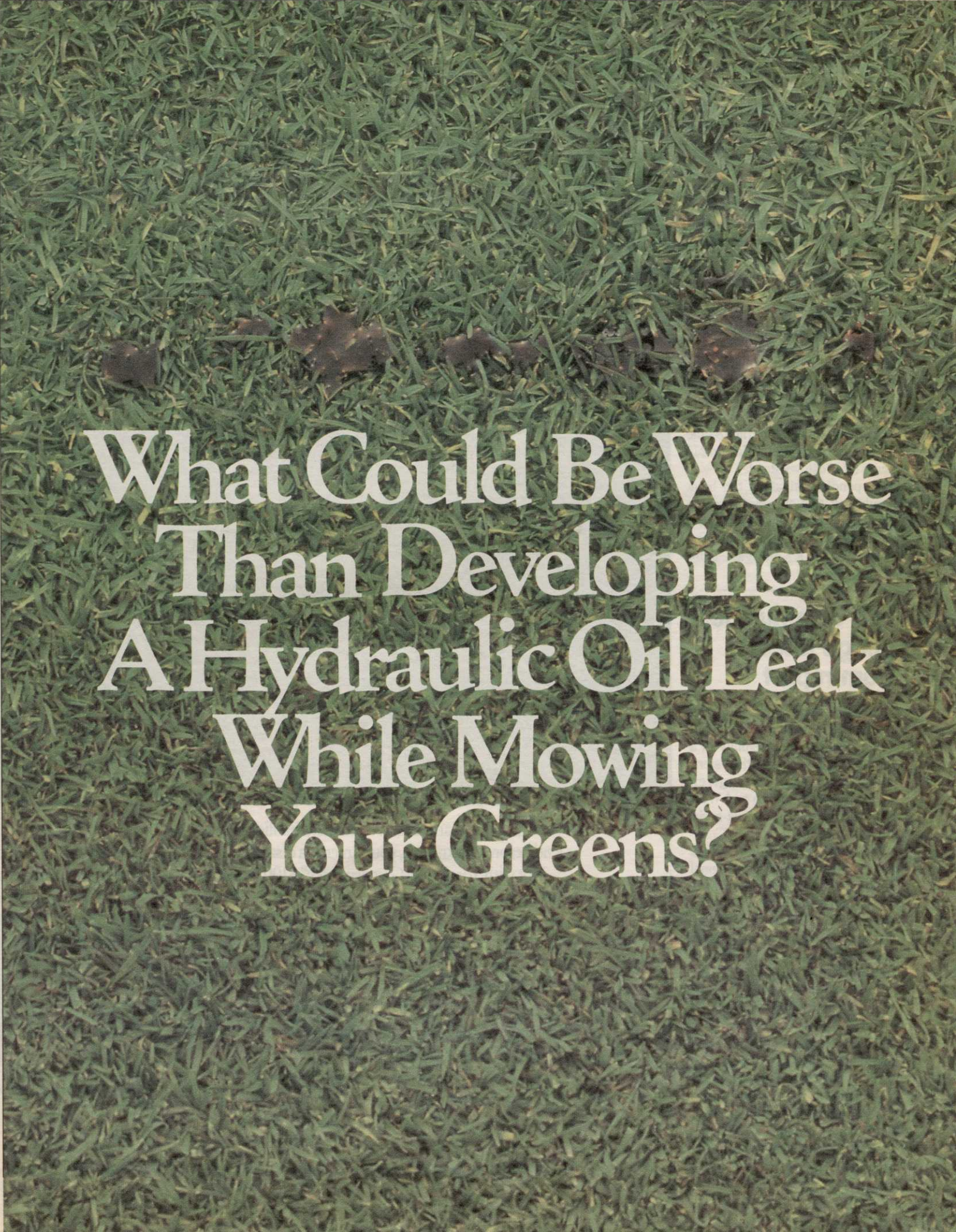
Long-time Portsmouth Country Club head pro Tony Loch is the general manager and former

Portsmouth CC superintendent Bob LaRoche the superintendent.

"We have the best superintendent in New England," Loch said. "Bob is planning to enlarge some of the greens, edge the traps and put in new sand, contour the fairways and build two or three new tees."

Expanding the course to 36 holes has also been discussed.

"The area needs two more public courses," Loch said. "This is one of them. Hopefully we'll build the other 18, too."



What Could Be Worse Than Developing A Hydraulic Oil Leak While Mowing Your Greens?

Historic Sturbridge Village looks to course for income

STURBRIDGE, Mass. — Old Sturbridge Village, a threatened victim of time and tough times, may get a financial shot in the arm from a proposed 18-hole golf course.

Golf can provide a new source of badly needed income. Therefore, 335 acres of village land is being set aside for a course and conference center.

Said museum president Crawford Lincoln: "We cannot support the institution through admissions and sales through the shops alone."

The golf course, which would be near the living history museum, would cost from \$3 million to \$4 million to construct, according to Harry McCracken, former Massa-

chusetts Golf Association president in charge of the Sturbridge project.

The course, designed by Rees Jones, would measure 7,000 yards from the back tees and, McCracken said, promises to be a picturesque layout worthy of future Massachusetts Opens and Amateurs.

The conference center would cost an estimated \$35 million to build and would net the town \$400,000 annually in tax revenues.

Everything hinges on a zoning change.

\$12M plan KO'd, so new site in sight

Quentin Hammons teams with A.J. Wright in California project

MORRO BAY, Calif. — Plans for 200 homes and 100 retirement condominiums have been jettisoned, but the owners of land at the base of Hollister Park hope to build a \$12-million golf course three miles south of Morro Bay.

A clubhouse, possible outdoor recreation and a lodge would be included, according to project architect Tom Courtney.

The layout incorporates two ponds designed to catch silt flowing down Chorro Creek. Silt has been

filling Morro Bay, causing major problems for the estuary.

The property is owned by John Quentin Hammons, a Missouri developer whose net worth is estimated at \$340 million. He is a partner in the proposal with Morro Bay developer A.J. Wright.

The land currently is used to grow vegetables. Courtney figures that the project will reduce water consumption by 10 to 15 percent in the drought-stricken city's wells.

Obtaining a general plan amend-

ment and required zoning change — from agricultural to recreation — will take at least two years, it is estimated.

"The demand in this area (for additional golf facilities) is absolutely overwhelming," said County Parks Manager Tim Gallagher, adding that the coastal area could financially support a third new course.

"We have people who already want to reserve tee times," Wright added.

CC of N. England may face bank foreclosure

EASTLYME, Conn. — Although Suffield Bank may attempt to foreclose on East Lyme property owned by the Country Club of New England, club founder Nathan M. Shippee remains optimistic.

"The development of the country club will continue," Shippee said. "The project is in solid shape."

He added that there have been discussions with the bank and that the situation should be cleared up shortly.

The club plans to build an 18-hole golf course and country club on 240 acres off Mostoway Road.

In pending litigation, the bank would ask that the mortgage on CCNE's property be foreclosed and the bank be given possession of the property. CCNE's mortgage is for \$3.25 million.

N.J. communities get go-ahead from report

ELIZABETHTOWN, N.J. — An optimistic report from consultant Larry Wise on the feasibility of a new golf course in northwestern Lancaster County has given Elizabethtown Borough and West Donegal Township officials a virtual green light.

Wise, former head professional at the prestigious Congressional Country Club in Bethesda, Md., said of the 18-hole public course he estimated would cost \$4.9 million, "It offers an outstanding geographic and community location, and should provide the foundation for a successful project."

The adjoining municipalities would manage the course.

Wise wrote that the course would not conflict with those existing or planned, since 17 additional courses are needed in the Lancaster-Harrisburg region "to satisfy the existing demand for golf."

The course could be ready by the spring of 1993.



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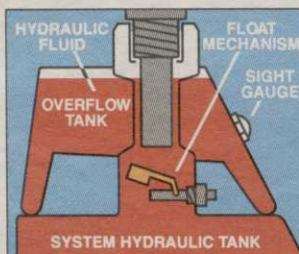
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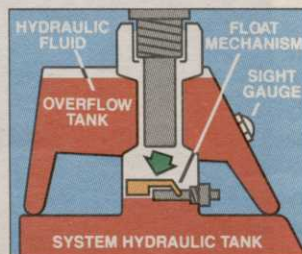
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Von Hagge calls for facelift of Blue Monster

MIAMI, Fla. — It's high time for changes in Doral Country Club's Blue Monster golf course, says architect Robert von Hagge, who oversaw course construction 30 years ago.

Owner Howard Kaskel counters, "The estimated \$1.5-million cost exceeds the benefit."

According to von Hagge, bunkers, once vast and steep, have grown smaller and shallower because mechanical rakes sweep sand toward the center, and grass grows around the edges.

Tour pro Raymond Floyd cited

the 11th hole. "The bunker in front of the green is a quarter the size of the bunker that used to be there. Every hole, there's a tremendous difference."

Formerly distinctive fairway lines have grown blurry and ragged, said von Hagge, and greens that once abutted bunkers and lakes have shrunk.

Collars and fringes between greens and hazards have grown wider to accommodate tractors instead of the 28-inch hand-pushed mowers that once groomed the fringe.

As-is Doral has its defenders.

Jack Nicklaus said Doral "still has plenty of challenge" while conceding that it has gotten easier over time. "The bunkering is not as deep, and the greens have gotten flatter, but if you're going to design a facility to move a lot of people, a resort course, it's a darn good one."

Architects Tom Fazio and Pete Dye consider the course a classic.

Declared Fazio: "If you made a substantial change to Doral, the first reaction from tour players would be that you ruined the golf

course. They'd say, 'This used to be a great course.'"

Von Hagge estimates that the Blue Monster would have to be closed for almost 10 months to return it to the shape that made it one of the country's top 30 courses. Its current ranking is 99th.

Kaskel, who inherited ownership from father Alfred, does not take such a dim view.

"We have a few suggestions — nothing major. I wouldn't call it a 'rehabilitation.' It's a beautiful course," Kaskel said.

Weed Society cites Taylor for research

GREENSBORO, N.C. — The Weed Science Society of America has presented its Outstanding Industry Award to Dr. Don Taylor, senior technical support specialist with Ciba-Geigy Turf and Ornamental Products. It was only the third time the award has been given.

Taylor, recently elected president of the North Central Weed Science Society, said, "I feel deeply honored — and surprised — that my peers feel I'm worthy of such an award."

Taylor joined Ciba-Geigy in 1968 as a field research representative and moved to the Turf and Ornamental Products group in 1989. He holds bachelor's and master's degrees from Auburn University and a doctorate in plant physiology from Purdue University.

The North Central Weed Science Society represents more than 1,000 weed scientists from 16 states and four Canadian provinces.

Retirees to get their request at Alabama town

DALEVILLE, Ala. — "What recreation facilities are available?" is a question frequently asked of Daleville Mayor Gene Hughes by many retirees moving to this city.

Their interest seems to center on golf. Hughes must explain that, though 75 percent of Daleville's residents play golf, area courses are full most of the time or not available to residents.

Things soon may change in the form of a \$2.5-million 18-hole municipal golf course.

City officials and citizens heard Don Barnett, vice president and national marketing director for First Golf Corp., a Colorado concern, outline such a proposal.

Barnett said that if the feasibility study determines a need for a golf course, and the city decides to build one, construction could begin in June. Course completion would be around October 1992.

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Baltimore Orioles complex may have golf

NAPLES, Fla. — Golf was to have played an important part in a planned Collier County spring training stadium for the Baltimore Orioles, but the Birds aren't yet in hand.

Developers, investors and baseball officials are cautious in comments on progress of negotiations

for the proposed 445-acre complex that would house a 6,000-seat stadium, 203-acre golf course, 60-acre regional park, soccer fields, jogging track and 84-acre commercial center at the corner of Interstate 75 and Immokalee Road.

Pullout last December of Baltimore-based backer USF&G has presented a problem.

Financial backing is needed to pay for the \$16-million stadium. The county's tourist tax fund supposedly would collect about \$1.5 million annually specifically for baseball.

\$75M project will be first for Tennessee community

FAIRVIEW, Tenn. — Fairview's first golf course will be part of a \$75-million project on 610 acres of undeveloped land. About 450 new

houses will be included.

Greene Springs, located on the east side of the city and south of Highway 100, has received zoning

approval.

The project is being developed by Joseph C. Greene and Associates. Bob Greene is in charge.

Developer must hire planner

FRENCHTOWN, N.J. — Developers of a proposed golf course in Tinicum Township have reached agreement with supervisors on hiring a professional planner to review zoning amendments that would allow the project.

Mario DiLiberto wants to convert his River Road quarry into a "championship golf course" and clubhouse.

The two sides had been at odds over which planner should be used.

"It would be criminally negligent not to seek professional advice" before approving the golf course

amendment, said township solicitor Robert Sugarman.

George O'Connell, DiLiberto's attorney, questioned why the planner is needed. He called the board's request for a land development plan "putting the cart before the horse." He added, "We are prepared to submit a land development plan, but only after the zoning change is adopted."

O'Connell said the plan would cost "several hundred thousand dollars," and his client is "not prepared to spend the money without an ordinance in place."

Tee-time waits behind, golfer develops course

WINNECONE, Wis. — Lake Breeze Golf Club, testimony to LaVerne Olson's faith and vision, should hit its Memorial Day target opening date for the front nine.

The back nine is expected to open July 1.

Olson, a retired accountant, took the construction plunge after enduring lengthy trips to find a place to play golf. He feels Lake Breeze will help fill the recreational needs of community and family.

Jim Hasz, who assisted Madison architect Homer Fieldhouse in course design and was prominent in construction, will be the course superintendent. Olson will manage the course and Craig Tordour will be the club professional.

Lake Breeze is located on the west side of state Highway 110 between Lasley Point Road and State 116 in the town of Winneconne.

Construction began Jan. 19, 1990. Five months later, the state Department of Transportation expanded Highway 110, which is near the course, to four lanes. This meant loss of 12 Lake Breeze acres and forced re-design.

Olson weaved into the course a unique tribute to the Badger State. The first green is in the shape of the state of Wisconsin.

Okeechobee adds 2nd nine holes

OKEECHOBEE, Fla. — Okeechobee Golf and Country Club should be an 18-hole course by Jan. 1.

Club manager Ray Coburn, who received a final permit of construction from the South Florida Water Management District, began actual construction March 1 and the digging phase April 1. A control structure permit will be the final paper process.

Four fairways have been seeded. A road will be opened this summer. The new nine has an "all-in-the-family" approach.

Ray Jr. is the course superintendent. He was active in the course maintenance field for 15 years before returning to Okeechobee GCC four years ago.

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Celebrity Fish Camp adds golf

ORANGETAKE, Fla. — Celebrity Resorts Inc. has entered into a lease agreement enabling the company to develop a golf facility at its Celebrity Fish Camp now under construction.

Use of an additional 35 acres adjacent to the company's 72-acre site will permit construction of a 36-hole golf course, as well as 75 to 125 permanent housing units.

GATX pushes capital into Greensboro's Harbor Club

GREENSBORO, Ga. — Harbor Club, a private golf and equestrian country club on Lake Oconee, has entered into an investment agreement with GATX Capital Corp., which will provide financial support for completion of the development and beyond.

GATX is involved as a lender in more than 30 golf courses in the

United States. Harbor Club and the Marsh Landing golf course community in Ponte Vedre Beach, Fla., are the only two private home communities.

Harbor Club is located 65 miles east of Atlanta, off I-20 at exit 53.

Created by the golf course design team of Tom Weiskopf and Jay Morrish, Harbor Club has been

nominated as "Best New Private Golf Course for 1991" by Golf Digest.

Harbor Club's launch April 6-7 was both auspicious and disastrous.

The inaugural Mickey Mantle Celebrity Invitational Golf Tournament was a smash hit.

The former New York Yankees

slugger cavorted with former teammate Yogi Berra and other sports luminaries.

The next day was reserved for tennis. There was, however, no rallying cry of "Tennis, Anyone?" Instead, more than 1,000 guests were evacuated and the event canceled because of a chemical plant fire a few miles away.

Dearborn council OK's \$3.9M in bonds for betterments to muni course

DEARBORN, Mich. — The City Council has approved issuance of \$3.9 million in bonds to improve Robert Herndon Dearborn Hills

Golf Course.

The action will expand and improve the course that the widow of local realtor Robert Herndon do-

nated to the city in 1987.

Cost of the expansion and renovation is expected to be about \$4.45 million.

The course will be closed for part of this season for construction. In 1992 and 1993, play will be limited to permit the grass to grow.

Town may take troubled project under its wing

BLUE ISLAND, Ill. — City officials are weighing taking over financing and construction of a public golf course on Blue Island's northwest end.

Private developer Art Daniels, president of John Sexton Contractors of Hillside, is having difficulty securing financing for the course, so is asking the city to consider taking over the development and running the course.

Mayor Donald Peloquin noted that municipalities and park districts have a better chance of securing financing at lower interest rates than do private developers.

The golf course is slated to be built as part of a residential development on a 174-acre parcel on the site of the closed Sexton landfill.

Columbus Zoo investigates Safari GC redesign

COLUMBUS, Ohio — The Columbus Zoo is weighing the feasibility of redesigning Safari Golf Club to its south.

Zoo trustees who serve on the association board's golf committee have received routing and budget proposals from Hurdzan Design Group of Columbus, and plan shortly to make a recommendation to the entire board.

Proposals include opening up the 120-acre course by 20 acres, re-routing about 12 of the 18 holes, and making it a more strategic challenge.

There are warning sounds by some not charmed by what might become a "walk with the animals, talk with the animals" nature romp.

Blaine Sickles, golf committee chairman, strikes a cautionary note in what could be termed "monkeying around."

Sickles said flying balls could endanger the animals, and they could be agitated by the sight of humans on their turf.

He added that the cost of building new facilities on the course to contain the animals "would be something awful."

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Golf Digest opens instruction center at Sea Island Golf Club

ST. SIMONS ISLAND, Ga. — The Golf Digest Instruction Schools Learning Center, offering state-of-the-art video swing analysis and an expanded practice facility, has opened at the Sea Island Golf Club.

Andy Nusbaum, schools director, said: "Its prime location, right on the Atlantic Ocean, and the club's affiliation with the renowned Cloister Resort makes it one of the top instruction centers in the world."

The practice range embraces a 300-yard tee area in a circular pattern with five target greens, two cut fairways, an aiming chute for shots between trees, a 10,000-square-foot pitching green with bunkers, a putting green and fair-

way bunker.

Yardage-marker plaques are placed around the tee to indicate distance to the target greens.

Inside the center are two video studios, editing room, meeting and conference rooms, club repair

area and a book and video library.

The teaching staff includes director Jack Lumpkin, who spearheaded the final design and development of the facility, head professional Scott Davenport and pro Gale Peterson.

Columbus puts five muni courses on 'go-it-alone' operating basis

COLUMBUS, Ohio — Columbus' five municipal golf courses will, for the first time in seven years, be on a go-it-alone policy.

Any profit will be theirs, said the

Recreation and Parks Commission after approving fee increases at all courses.

Accompanying announcement of surprise financial independence was

word that Turnberry, the first new city course in 20 years, is scheduled to open Memorial Day weekend. Turnberry is near Rt. 256 and Tussing Road on the Far East side.

Play also is due to open Memorial Day at Wedgewood, a private club in Powell, and in July at Royal American Links, a public course in Galena.

Fees at Turnberry will be somewhat steep, \$18 to \$20 per round, because of the quality of the course and other amenities, officials said.

Brevard County says Savannahs short on income

MERRITT ISLAND, Fla. — The new Savannahs at Sykes Creek golf course here in its first four months didn't make enough money to cover expenses, but Brevard County officials aren't panicking.

Said Tom Jenkins, county administrator, "To say the Savannahs is in trouble is premature." He thinks course activity will pick up.

County officials expected the course, which opened in May 1990, to bring in \$1.2 million during the 1990-91 budget year that started Oct. 1. That amount would cover operating expenses and two bond payments of \$172,092 each.

During the first four months, greens fees, cart rentals and pro shop sales realized \$278,814. This was \$121,186 less than needed to stay on track.

County officials are cutting back employees' schedules and offering discounts to attract more golfers.

"If it keeps up like now, we'll be fine," said Dave Pemberton, director of golf course operations.

Franklin aboard as Cherokee Ridge construction starts

ARAB, Ala. — Construction of Cherokee Ridge golf course has begun, and superintendent Odell Franklin is aboard.

Local businessman Sid McDonald, president of Brindlee Mountain Telephone Co. here, said the course would meet all design criteria of the United States Golf Association and would be open for play in the spring of 1992. Annual memberships will be available and the course open to the public on a daily-fee basis, he said.

Development would include a residential area between Arab and Huntsville.

Cherokee Ridge will be located six miles north of Arab and 11 miles south of Huntsville, about one mile off U.S. Route 231.

Total project investment will be about \$4 million. Development will begin with 545 acres, with options on an additional 100 acres.

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S. Dakota business park will feature nine-holer

RAPID CITY, S.D. — The visual centerpiece of the new Fountain Springs Business Park will be a nine-hole golf course.

The Frank Simpson family, in the printing business the past quarter-century, hope to place their stamp on the park aesthetically in the form of flower beds and 13 ponds, some spouting plumes of water.

The course will not use the ponds to irrigate, instead relying on a city-owned well that taps the under-

ground Madison formation. Simpson said he doesn't believe any underground water will be needed to keep the ponds full.

Simpson Landscape and Development Co., with the aid of golf course consultants, sprinkler system specialists and earth-moving subcontractors, is handling construction.

A second nine holes will be developed as the business park fills with tenants.

Course would set resident weekday rounds

EAST QUOGUE, N.Y. — Developer Neil Rego proposes to build an 18-hole golf course on a 187-acre site off Old Country Road here.

The course would be private, but Rego would allow public access for Southampton Town residents on weekdays for up to 225 rounds of

golf per week.

The course is a prohibited use on the current zoning of the site.

Councilman James Needham long has been lobbying for a public course in Southampton Town.

William Esseks, attorney for the developers, estimated it would take up to three years to build a course.

He said he wanted to get the "feel of the board" on the proposal because "golf course architects cost a lot of money."

Rego and site co-owner Patrick Malloy already have received conditional final approval for a course on an area known as Chardonnay Woods.

Montana city grants approval for golf resort

WHITEFISH, Mont. — The Whitefish City Council has followed local planners in approval of the Kinnikinnick Golf Resort here.

The golf course could be completed in two years.

Greg Bryan, project manager, said developers plan to build an 18-

hole course, a restaurant-clubhouse-lounge facility, about 475 housing units and a 27-acre commercial resort with 275 units.

Four-course Nipomo Mesa plan postponed

OCEANO, Calif. — Plans for four new golf courses on the Nipomo Mesa are on hold.

Postponed indefinitely were scheduled presentation of conceptual drawings to the South San Luis Obispo County Sanitation District for building a seven-mile pipeline to carry treated sewage water from Oceano to the golf courses.

Russ Lambert of RRM Design Group said, "Our client was unable to make this meeting and we don't know when he wants to come back."

The multimillion-dollar development proposed by Hanson Industries calls for four golf courses, 1,000 hotel rooms, commercial centers and research facilities on the mesa between Highway 1 and U.S. Route 101.

Illinois town securing options for course site

TUSCOLA, Ill. — Tuscola City Council members have voted 5-1 to secure options on land for possible development of an 18-hole municipal golf course.

Mike Hurdzan, owner of a Columbus, Ohio, golf course design firm hired to evaluate sites and draft a preliminary design, told aldermen municipal courses generally turn out to be outstanding investments.

"They give a community identity and recreational diversity," he said, "and can operate very profitably."

First Golf Corp. of Denver, Colo., has proposed to build and finance a golf course for Tuscola under a lease-purchase plan.

Golf Corp. building \$7M muni course

ESCONDIDO, Calif. — Golf Corp. Inc. will build and operate the \$7-million Escondido municipal golf course.

Grading permit applications have been submitted to the cities of Escondido and San Diego. The latter city owns some course property.

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Kite puts hand to major development

Pro puts money in \$23M plan, adds design touch

PORTLAND, Ore. — Tom Kite, PGA tour professional, is a major partner in a golf course development company that plans to build a 36-hole golf course.

The project may cost \$23 million to develop and would cater to golf purists at both amateur and professional levels.

In a departure from building custom, there would be no surrounding residential development, according to Kite/Cupp Golf Enterprises Inc., based in Atlanta, Ga.

The courses, located on 350 acres along Southwest 229th Avenue, hopefully would eventually tie in with the Columbia Edgewater Country Club.

There have been huddles with that club's board of directors on a proposal to combine the two operations to form a 54-hole country club

that would be operated by Columbia Edgewater.

Kite, all-time leading money winner on the pro tour, and company chairman Robert Cupp designed the new courses. Kite said the courses would be "more traditional in size and scope, accessible to recreational golfers but challenging enough to host professional tournaments."

Should permit applications be approved, construction might begin this summer. The 36-hole layout could open in the fall of 1992.

Maryland muni's first nine ready for summer opening

FREDERICK, Md. — The first nine holes of this city's intended 18-hole golf course have been fine-grained and seeded, and may be ready for play this summer.

A maintenance facility has been built, and purchase of 64 golf carts budgeted. A driving range, practice green and four large ponds also will be part of the course. The site is part of a 200-acre parcel donated to the city by Neill Jenkins and earmarked for a golf facility.

Total costs, including carts and other equipment, will be about \$4 million.

The city does not wish to operate the course, so its management will be let out to the best bidder. There will be greens and cart fees, but the course will be "totally public" and not require membership.

Target date for 18-hole opening is the spring 1992.

The course is located on the banks of the Monocacy River.

Quick nine holes aim of developer at Provo resort

PROVO, Utah — Seven Peaks Resort owner Victor Borchers never has swung a golf club in anger or exhilaration, but he's excited that his new course surrounding Seven Peaks Water Park is nearing completion.

"All earth work at the course is finished," Borchers said, "and we're next going to plant the driving range."

Although the course won't be open to the general public this year, Seven Peaks officials may allow about 5,000 rounds of golf by invitation this summer to break in the course. Formal opening is planned in the spring of 1992.

The course is bigger than an executive course but smaller than a championship course.

"We're trying to attract the guy who doesn't want to spend 3-1/2 hours playing golf," Borchers said, adding that the course would take 2 to 2-1/2 hours to play.

New York town buys parcels for muni course

CHEEKTOWAGA, N. Y. — The Cheektowaga Town Board has purchased for \$69,600 three parcels of land for a planned municipal golf course.

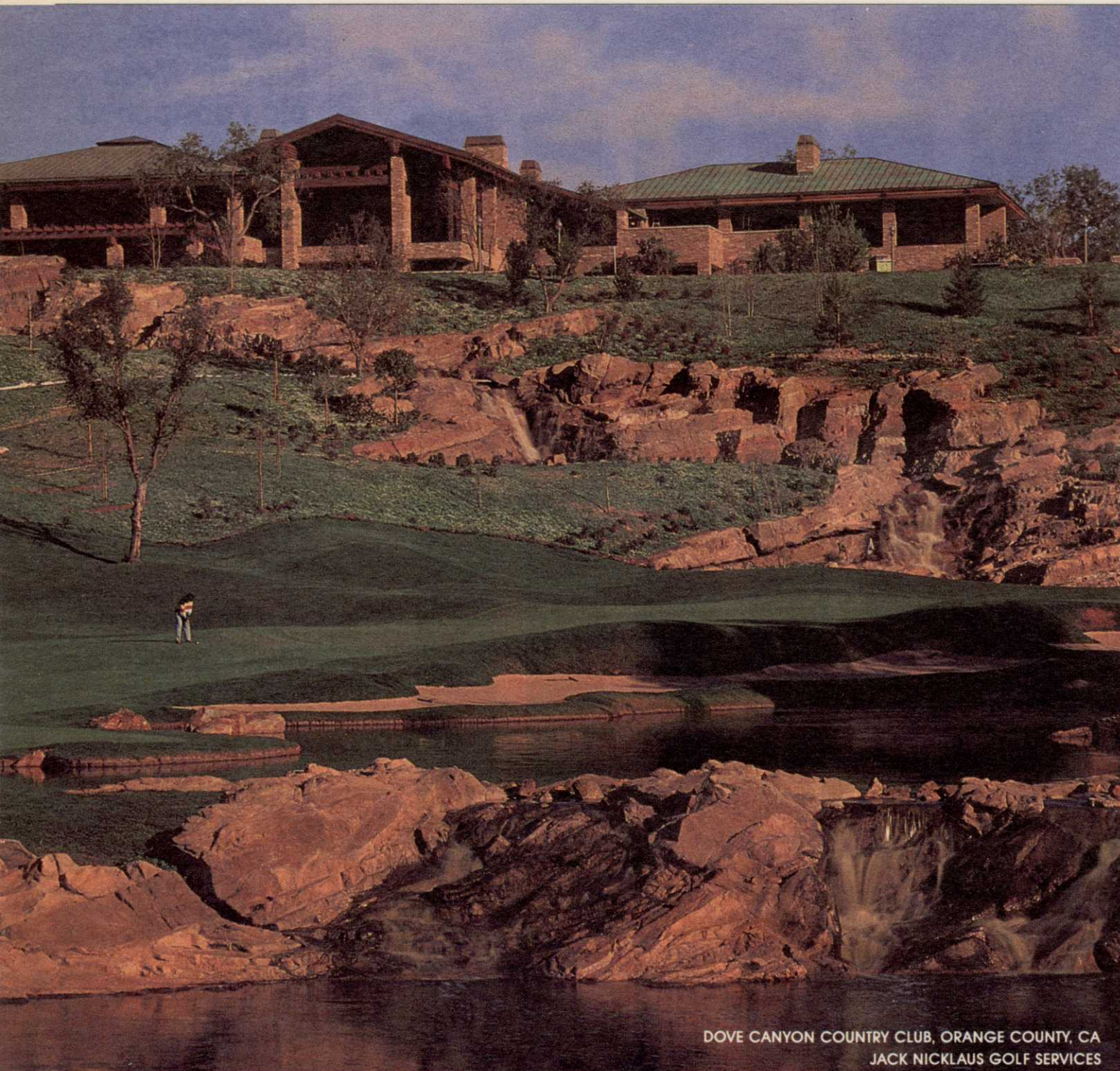
Of the original \$2 million allocated for the golf course, \$1.2 million remains in the fund.

Town voters last November rejected a proposal that would have bonded the town for an additional \$1.9 million for the course. Planned for 18 holes, it may be reduced to nine holes unless the town finds alternative ways to fund it.

Williamsburg Env'l moves

WILLIAMSBURG, Va. — Williamsburg Environmental Group, Inc. has relocated its office to 5248 Olde Town Road, Suite #7, Williamsburg, Va. 23188.

Mailing address is P.O. Box 3584, Williamsburg, and the phone number 804-220-6869.



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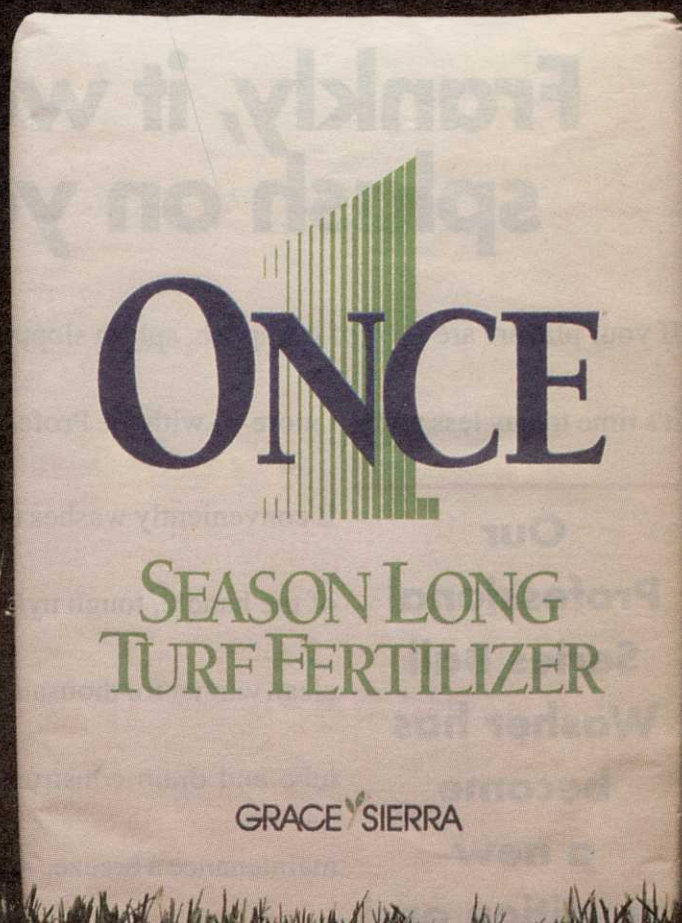
Representative Projects: Tomisato Golf Club, Narita, Japan and Imperial Wing Country Club, Nagoya, Japan, J. Michael Poellat Golf Design Group • Kinojo Country Club, Okayama, Japan, Robert Trent Jones II • Wood Ranch Country Club, Simi Valley, CA • Palm Valley Country Club, Palm Desert, CA • Art Lake Golf Club, Osaka, Japan, Golf Plan Incorporated

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GRACE SIERRA

Board handling purchase, lease of Meritage GC

Deal will ensure remaining 18 open to public play

MUSCLE SHOALS, Ala. — City purchase of Meritage Golf Course is on hold.

The three-member public park and recreation board named to handle the transaction hasn't met.

Plans call for the city to buy the course, then lease it to Shotop Investing Inc. The city would be responsible for \$1.1 million should Shotop default on lease payments.

The deal would ensure that

Meritage remains an 18-hole course, open to the public, with no development on the city-owned land for at least 20 years. The deed would be turned over to Shotop after 20 years.

Shotop officials said they would sell the course to the city for the \$10,595 per acre purchase price. Shotop last November bought the ailing course from Triple A Properties for \$1.35 million.

Office park could get 2nd course

Study shows six courses needed to meet burgeoning demand of golfers

WEST VALLEY, Utah — Development of a second new golf course in West Valley City is possible.

West Valley City is constructing a course near the Hercules site west of 5600 West and 5100 South.

A second course has been pro-

posed in conjunction with an office park development in the city's northwest quadrant.

The proposal is for the real-estate firm of Property Reserve Inc. to donate 120 acres to Salt Lake County for park and golf course development, with the use of an additional 106 acres of lakes and streams that could form parts of fairway areas.

Consultant Don White explained: "West Valley City covers a large area. Even though the city is developing its own course about six miles away, golf courses are so popular you can't build them fast

enough to supply the demand.

"In fact," he said, "recreation experts estimate another six golf courses could be developed just to meet the needs of current golf enthusiasts."

"We've made the county an offer," he added, "but many items must be finalized."

White declined to reveal the estimated cost of developing the full 542-acre project, but said, "I think you'd be looking in the \$4-million range for the golf course portion, which would be up to the county to build."

Pa. township's landfill studied as course site

CUMRU TOWNSHIP, Pa. — "What nicer thing to give to the community than to take an old landfill and turn it into a golf course?"

Board directors of the Western Berks Refuse Authority, which owns landfill space here, sided with Frank Garbini's suggestion. They instructed Planning Committee Chairman Garbini to meet with representatives of Chase Golf Management Group, Balal-Cynwyd, Montgomery County, and draft a proposal for a feasibility study.

Garbini noted that the authority already owns the property needed for the course and has the manpower to build the facility.

Leigh T. Tallas, representing Cumru, said he knew of a successful multimillion-dollar golf course built over a landfill in his hometown of Hollywood, Calif.

Course eyed as incentive to new business

HILLIARD, Ohio — Local golfers soon may not be forced to hit the road to get in a game.

James Barbeau, a Board of Zoning Appeals member, has expressed interest in a public golf course.

Phyllis Ernst, director of parks and recreation, seized the ball. She told Barbeau the possibility of using 90 to 140 acres of land open for development far west of Main Street is "very real."

Barbeau favors a public rather than a private course. He added that a course would be an incentive for businesses to develop in Hilliard.

Charleston getting private community

NORTH CHARLESTON, S.C. — Construction has begun on Coosaw Creek Country Club, the first private golf course community here.

The 654-acre project, located a half-mile off Dorchester Road across from Whitehall subdivision in the Dorchester County section, will feature 568 houses.

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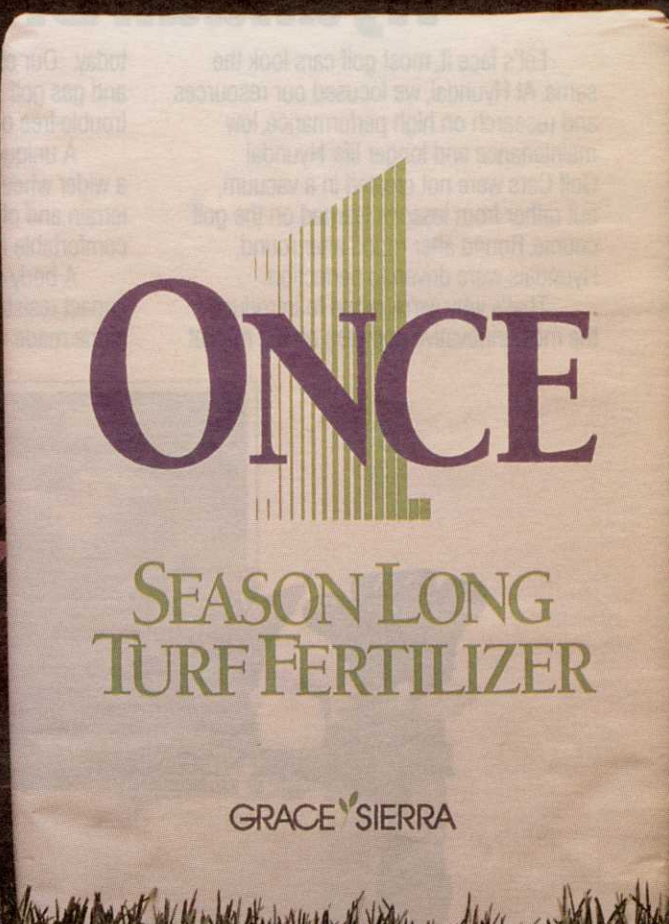
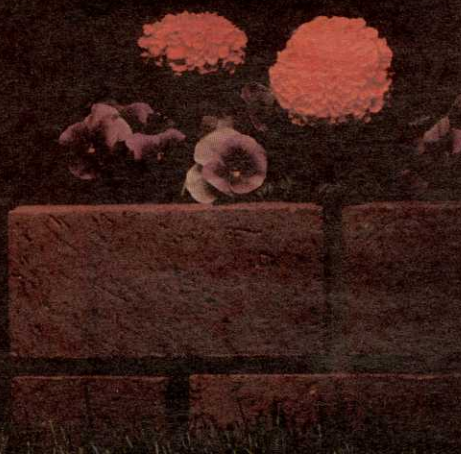


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GRACE  SIERRA

Northway Heights sold, \$4-million remake planned

BALLSTON LAKE, N.Y. — Albany developer William F. Paulsen has purchased the 18-hole public Northway Heights Golf Club here for \$950,000.

The course will be renamed Eagle Crest Golf Club. Paulsen estimated the cost of developing the golf course at \$4 million. He plans to build 20 to 25 executive homes on 64 acres of land not being used for golf.

The course is located on Route 146A.

335 members put up \$12 million for Wedgewood building costs

Would-be members waiting for openings

POWELL, Ohio — The soon-to-be-launched Wedgewood Golf and Country Club gained firm financial footing when its 335 members April 10 paid the bulk of a \$12 million construction cost.

Wedgewood will open May 31, with 57 golfers in the wings waiting for membership which costs

\$30,000.

Larry Cassidy, who with brother Tom directs golf operations at the debt-free club, is thankful that developer Charles Ruma stepped in last February to inherit about \$4.8 million in construction costs. Ruma has invested \$5.4 million in real estate adjacent to the course.

Ruma described the course designed by Robert Trent Jones Jr. as "one of the finest built in central Ohio in the past 20 years."

Cassidy also is pleased that course superintendent Joe Noppenberger came on board a year ago to see the 18 holes take shape.

The Cassidy brothers also are spearheading construction of Jefferson Golf and Country Club in Gahana, on the east side of Columbus.

Jefferson also is an 18-hole course designed by Jones.

Seeding will start this spring. Projected opening is May 1992.

Carbondale ready to build first public course in Illinois county

CARBONDALE, Ill. — Carbondale is about to tee off with its first golf course and with the wind at its back in the form of firm financial footing.

The 18 holes have been staked out, the course is set for public bid, and the city has contracted with the Omaha, Neb., firm of Chiles Hieter for \$2 million in installation contract certificates.

The course will be the only public course in Jackson County and the second publicly owned and operated course within Southern Illinois' 30 counties, noted George Whitehead, Park District director.

Carbondale's population is 26,000.

The Bruce Co. of Middleton, Wis., will handle the earth-moving, Ryan Inc. Central of Jamesville, Wis., the irrigation system.

Course completion target date is early in 1993.

Town searching for financing

ROME, Ga. — A committee charged with finding a company to finance and build an 18-hole public golf course here has huddled with a representative of First Golf of Denver, Colo.

First Golf was one of four firms submitting proposals ranging from \$4.5 million to \$5.25 million.

The city plans to hire an independent architect to design the course.

Don Barnett, vice president of First Golf, told the committee: "We want to be the builder and funder. We don't want to own or manage the course, but we must be the general contractor."

Loma Linda adds nine holes in fall

JOPLIN, Mo. — Loma Linda South may be 18 holes in late August.

That's the target date for opening a new nine holes. Nine holes were opened last year.

Once the new nine is completed, the entire course will be measured by laser and slope-rated by the Missouri Golf Association.

The new nine will be designated the front and the existing nine will become the back when the course is ready.

Loma Linda South was designed by Scott Brown, former manager of the Loma Linda complex. George Royer is clubhouse manager.

Coleman phone

The telephone number for Universal Industries, manufacturers of Coleman's Fire Ant Killer, appearing in the April chart on fire ant insecticides was incorrect. The correct number is 800-727-ANTS.

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steel and electrostatically applied paint keep maintenance to a minimum.

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Wide range of public courses needed

During the past month, I've had the opportunity to play two levels of public golf in my home state of Florida. I say two levels because these courses, although both public, are on nearly opposite ends of the public golf spectrum.

Buffalo Creek is a municipal course operated by Manatee County. It's out in the sticks, where rattlesnakes and armadillos still thrive, and gators sun their backsides in the shallows and on the banks of water hazards. It's a wide open links-style course with plenty of water, plenty of length and in decent condition (the greens were in great condition). The cost to play this fine course is approximately \$25 with cart (per person). Buffalo Creek has a comfortable pro shop and coffee shop, and was fun to

play.

On the other end of the spectrum is Emerald Dunes, located a half mile from the Florida Turnpike in the middle of Palm Beach County. Designed by Tom Fazio and opened a year or so ago by Ray Finch to be an upscale public facility, it is truly a spectacular golf facility.

As you arrive, the attendants at the bag drop are cordial, and direct you to parking and the pro shop. The locker room facilities equal many private facilities and the locker room attendant was terrific. The



Charles von Brecht
publisher

course is a tough but fair test of golf in excellent condition. For a day, Emerald Dunes makes you feel you're a member of a private club. For \$94 (including cart and tax) you can enjoy a round at this great facility. I might add that Palm Beach County residents pay less, and out-of-season rates are lower.

The point is, here are two extremes. I enjoyed each equally for different reasons. Although the majority of us can not afford the upscale fees of the new breed of public facility, I believe there is a market for these courses. The TPC courses have been very successful in promoting public participation of their facilities around the country for a high greens fee.

The major point I'm making is the continued need for public golf

— whether it be the Emerald Dunes/TPC concept, municipal facilities like Buffalo Creek, or nine-hole executive courses. We need more public facilities of all types.

In case you missed the National Golf Foundation's reply to the *Forbes* article, "Extrapolation Madness," you should get a copy through the NGF. Joe Beditz responded with expertise and specific numbers that will dispel any concern the *Forbes* story may have raised.

There is no question the golf industry has taken some hits in this recession, but I'm convinced it will come back strong, and perhaps sooner than many other leisure industries.

You can reach the National Golf Foundation by calling 407-744-6006.

COMMENTARY

The tongue: Quieting or creating the storm

The tongue.

The more we talk with superintendents, their mechanics and crew members, club professionals and others in the industry, the more we hear about the importance of that little organ.

The quality of communication between people in the golf course industry is the most critical factor in their jobs, they say. Superintendent Ken Flisek's guest commentary in April focused on communication between the super and the pro. Mechanical technician Dave Franz's commentary below zeroes in on the super-mechanic relationship. And a poll of USGA agronomists (see page 1 story) showed they felt communication was the No. One problem in the world of golf course maintenance.

You might think the worst problem would concern agronomics. Or pesticides. Or mechanics. Or just about anything... But communication?

Communication has to do with speaking and listening—the latter being a major problem with too many of us. We should practice listening, make an art of it. All too often, though, we are just anxious for others to finish speaking so we can say what's on our own mind; and thus we never hear what they're saying.



Mark Leslie
managing editor

Eighteenth-century English essayist Sydney Smith once said of a man: "He has occasional flashes of silence that make his conversation perfectly delightful."

And British author Samuel Johnson said: "That is the happiest conversation where there is no competition, no vanity, but a calm quiet interchange of sentiments."

But the tongue is the center of the most illustrative comment I can recall to improve communication.

St. James wrote: "It is an unruly evil, full of deadly poison... It is a fire, a world of iniquity... so set among our members that it defiles the whole body, and sets on fire the course of nature; and it is set on fire by hell." (James 3: 6,8)

The tongue is the smallest, yet by far the strongest, muscle in the

body.

With it, we can destroy another person just as surely and powerfully as we can by physical violence. We can set a forest ablaze if we let it go unmuzzled. We can destroy friendships. We can wreck reputations. We can do immeasurable harm to people we do not even know.

Yet, we can do a world of good with it as well—if we bridle it. By keeping it under control, thinking before we speak, we can maintain lines of communication—even in the midst of disagreements—and work cooperatively with employers and employees. Just as unpleasant words do evil, pleasant words are a powerful source for good, improving the entire atmosphere of a workplace.

Let's exercise that muscle for the good of one another, not for harm.

GUEST COMMENTARY

Mechanics deserve more respect

By David Franz

Have you ever wondered what the golf club member thinks when he sees a meticulously manicured course? Does he think the superintendent is the best professional around? Or does he think the turf equipment technicians have their act together?

I think the superintendent probably receives the accolades, while the equipment technicians are left wondering if they are doing the job this member expects of them for his "enormous" greens fees.

I feel it is high time turf equipment technicians of this industry stand up and take a bow for the tremendous task of maintaining today's complex and vast variety of equipment.

Turf equipment is a lot more precise and complicated than 15 to 25 years ago.

Years ago, superintendents realized they weren't qualified to re-

pair the new equipment. So they found "mechanics" to do the job. At that time, anyone who was mechanically inclined could be a golf course mechanic.

But, like the industry itself, times have changed. The turf mechanic of 1965 would have a tough time keeping up with the turf technicians of 1990.

The evolution of more complex equipment and technology to meet the changing desires of golfers has increased the demand for skilled technicians.

Technicians have to constantly update their knowledge of troubleshooting and repairing equipment through schooling or practical experience.



David Franz

A major industry change has come from low cuts on turf. Greens are mowed at one-eighth inch, tees are mowed at one-fourth to three-eighths, and fairways are mowed at seven-sixteenths to one-half inch.

This makes for fine putting, but also for headaches for the technician.

When I started in this business 10 years ago, golfers wanted fast greens, and greens that looked good to boot.

So one-fourth inch was acceptable. Not any more. Not for the members, and they are the ones we have to impress, since they ultimately pay our salaries.

COST CRUNCH

As golfers want better conditions and faster greens, we as technicians have to step up our maintenance routine to keep the equipment in perfect condition.

The intensified mowing routine,

along with all the other aspects of equipment repair and maintenance, causes scheduling problems. Equipment is in the shop for repair or maintenance when it should be out on the course mowing, vacuuming, etc.

Thus the need for overtime on a budget that might not allow for overtime.

With the budget not increasing as fast as technology and the price of equipment, pay scales did not rise enough to attract skilled persons. So equipment got (and still does get) abused.

If it weren't for the technicians, the equipment wouldn't stay in working condition, the course would start to suffer, and the superintendent would start to look bad.

Technicians deserve credit for doing the job they do—not only keeping the equipment running,

Continued on page 17

GOLF COURSE NEWS

Publisher
Charles E. von Brecht

Editorial Director
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Production Manager
Joline Gilman

Circulation Manager
Nicole Carter

Editorial Office
Golf Course News
PO Box 997
38 Lafayette Street
Yarmouth, ME 04096
(207) 846-0600

Advertising Office
National Sales:
Charles E. von Brecht

Marketplace Sales:
Simone M. Lewis

Golf Course News
7901 Fourth St. North
Suite 311
St. Petersburg, FL 33702
(813) 576-7077

West Coast Sales
Wayne Roche
James G. Elliott Co.
714 W. Olympic Blvd.
Suite 1120
Los Angeles, CA 90015
(213) 746-8800

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MEMBER**



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Franz

Continued from page 16

but doing so within the budget guidelines set up by the superintendent.

So there's the question of salaries. How much do you pay a top-notch technician? In the Sarasota, Fla., area \$8 per hour is about average. But is this wage really competitive and fair compensation for this dedicated "backbone" of the golf course maintenance department? I think not.

My feeling is that a qualified technician should earn at least \$350 to \$450 per week. The term "qualified" meaning someone who has been a professional for at least five years and has worked on a diversity of equipment ranging from string trimmers to backhoes.

But how does a superintendent justify paying a technician \$8 to \$12 per hour? Tell the bean counters the truth about his position of great importance and responsibility. Tell them he is responsible for perhaps hundreds of thousands of dollars worth of equipment.

This should aid the bean counters in their decision. If superintendents will more fairly compensate their technicians, we will see a marked increase in professionalism among technicians.

And these qualified technicians are invariably the backbone of this very prosperous industry.

COMMUNICATION A KEY

Now let's talk about communication.

It is a big word that means one simple thing: Let's talk!

If communication exists between technician and superintendent, life is great. If it doesn't exist, life can be unbearable at times. I know this first-hand. I love to be patted on the back as much as the next guy. It's human nature.

But I also like to be told when I'm doing a less-than-pleasing job. This type of communication is very productive. It works in both directions. Too much criticism and too little praise is detrimental. But too much praise and not enough criticism isn't healthy either.

There should be a balance. There are some superintendents who will only talk to their technicians when something is wrong on the course.

Yet when something looks great, they keep it to themselves instead of thanking their technicians. Why is this? It's an age-old problem that too often goes unsolved. When it goes on for a long time without resolution, it can ruin a friendship as well as a professional relationship.

Superintendents are like parents. Some are more strict and dominant than others. Some give you room to grow and express yourself, while others suppress and limit you like a dictator.

But each individual is allowed to run their golf course as they see fit. All I am asking superintendents and technicians is to talk to each other.

Air your feelings, your likes, your dislikes, so that you can work on your problems together.

Be allies, not enemies. We are all on the same side here. To coin a phrase: This marriage either works or it works. It cannot not work. It has to work.

Superintendents, talk to your technicians. Technicians, talk to your superintendents. And let us all reap the benefits and rewards that will inevitably result from this industry that we all love and count on to pay the bills.

Even a backbone needs a little support sometimes!

Dave Franz is a technician living in Sarasota, Fla.

Boom in management competency next on agenda

To the editor:

As the golf industry accepts the reality of its "boom" not touching all with Midas-like prosperity, the certainty is there'll be another boom. This external surge in the popularity of the game will happen when the baby boomers who have been an anomaly throughout their lives begin to reach retirement after the year 2010.

To survive in these intervening years, we'll need a boom in management competency; a preoccupation with management that can deliver profits, consistent with public expectations of benefit and value.

Future growth of the industry should stress the mundane skills of financial analysis, cost containment, scheduling, forecasting, marketing, public relations and a host of other talents perhaps overlooked in our recent celebration of unbridled optimism.

In my younger days in the hotel industry, a mirror-image of golf existed. The 1960s saw hotel occupancies and industry predictions soar with the opening of each new hotel. No one gave much thought whether the needs curve was being hyper-extended.

While building in the 1970s continued to meet the needs of earlier years, the industry was intoxicated with its own success and oblivious to over-leveraged "Taj-Mahals."

The "morning after" did arrive in the 1980s with an extended hangover and continuing industry distress of today. This new reality indicated in sad retrospect how overbuilding and unsound business practices can be intoxicants of choice.

Much the same can be said for golf courses. Some served their purpose as realty sales inducements, testimonials to bloated egos, or victims of inept management. In the future, they must be able to stand alone as businesses. There won't be a need for them to stay open, dispensing charity in their markets.

The business of golf can create an internal boom in management know-how. It can sharpen skills demanded by the public, the lending community, owners and elected officials charged with operating public golf courses.

Better tools to judge the quality of management through studies of other successful operators will equip these constituencies to reward or punish their golf enterprises. Expectations will increase as public awareness of success in other quarters demands imitation.

At least for the moment, golf has it all.

Ninety percent of the courses today can take advantage of the lessons of other businesses to survive and prosper. The public's

wide variety of choices will mean loyalty to courses perceived as good values.

Returning to the basics of seeking customer satisfaction, courtesy, cleanliness, telephone courtesy, image projection and a wide variety of costless improvements will tell the public we want and appreciate their business. It should continue the reasonable growth of the game, consistent with its universal appeal, an aging population and greater leisure time.

These changes will have their price.

A leaner, meaner breed of professional manager, meeting the expectations of his/her various constituencies, will emerge. They'll be the superstars of the next 20 years, helping to create internal and financial growth for the business of the game, and thus the game itself.

The lesson of the '90s will be: Manage or move!

Sincerely,

Curt Walker, executive director
Public Golf Management Assn.
Minneapolis, Minn.

Letters to the editor are welcomed.
Just address them to: Letters, *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.

P.J. Boatwright, 'soul of USGA,' dies at 63

MORRISTOWN, N.J. — P.J. Boatwright Jr., 63, called "the soul of the USGA" by the organization's current president, died April 5 at a hospital here after a long illness.

Boatwright had been prominent in the United States Golf Association since 1959, when he was named assistant director. He served in that capacity for 10 years before succeeding Joseph Dey Jr. as executive director. In 1980 he became executive director of rules and competitions. He was joint secretary of the World Amateur Golf Council for the last 20 years.

"He meant so much to golf. For many

years he was the ultimate authority," said USGA President C. Grant Spaeth of Palo Alto, Calif.

"Whenever anybody anywhere had a sticky problem, they came to P.J., whether it was in the United States or anywhere in the rest of the world."

David B. Fay, USGA executive director, said, "We grieve for him and his family, and at the same time we're so much better for having known him."

An Augusta, Ga., native, Boatwright grew up in Spartanburg, S.C., attended Georgia Tech University and Wofford College. He

won the Carolina Open in 1957 and 1959, the Carolina Amateur in 1951, and qualified for four U.S. Amateurs.

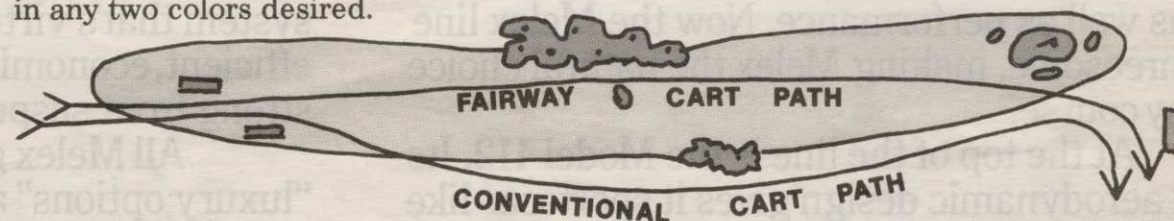
He was inducted into the South Carolina, Carolinas and Wofford College Halls of Fame, and was presented the Metropolitan (N.Y.) Golf Association's Distinguished Service Award in 1983, and the Metropolitan Golf Writers Association Gold Tee Award in 1986.

He is survived by his wife Nancy; two daughters, Cindy of Wayne, N.J., and Carolyn of Columbus, Ohio; a son, P.J. III of Dallas; and three grandchildren.

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Briefs



SOD PRODUCERS FUND RESEARCH

ROLLING MEADOWS, Ill. — The American Sod Producers Association has provided \$21,000 to researchers at the universities of Florida, Maryland, Nebraska and Illinois.

ASPA's Research Committee reviewed 24 projects from 19 researchers at 14 institutions before reaching its decision.

Grants went to Dr. P. Busey of the University of Florida for his study on "High Impact Turf: Design Specification for Natural Sodded Parking Areas"; Dr. M.C. Carroll of the University of Maryland for his study entitled "Sediment Capture by Materials Used To Line Construction Site Waterways."

Also, Dr. G.L. Horst of the University of Nebraska for research on "Water Use on Turfgrasses and Ground Covers in Conventional and Xeriscape Conditions"; and Dr. H.T. Wilkinson of the University of Illinois for work on "An Integrated Biological Control Program To Reduce Fungicides Used for Control of Lawn Diseases."

Funding for the grants came from the organization's general revenues and a \$5,000 donation from Ciba-Geigy Turf and Ornamental Group.



Steve Edwards, right, of Pro Turf in St. Louis, presents Wesley Mathany the Superintendent of the Year Award.

MATHANY SUPER OF THE YEAR

Wesley L. Mathany, superintendent at Glen Echo Country Club in St. Louis, has been named Superintendent of the Year by Seed Research of Oregon.

The company also presented Dr. Milt Engelke of Texas A&M University with its annual Excellence in Research Award, given to a leading turfgrass research "whose work deals with modern-day solutions to modern-day problems."

Mathany "has consistently shown himself to be a leader and innovator in golf course management," Seed Research of Oregon President Mike Robinson said. "He has constantly been at the forefront of trying new ideas on turf management for the tough transitional region of St. Louis."

Mathany is president of the Missouri Valley Turfgrass Association and vice president of the Mississippi Valley Golf Course Superintendents Association.

Engelke was cited for contributing to improvements in turfgrasses, most recently buffalograss, creeping bentgrass and Zoysiagrass.

Grads' job market good, not great

By Peter Blais

College graduates have fewer superintendent job openings to select from than a year ago, although most should still find employment, according to faculty members at turf management schools.

"The job market isn't as good this year," said Michigan State University Professor John 'Trey' Rogers. "There may be fewer openings because superintendents haven't moved from course to course as much."

Maybe employers are being more conservative. Or they were worried about the Gulf war and the economy. I'm not sure.

"But all our graduates should get jobs. Last year there were two openings for every student. This year it's more like a one-to-one ratio."

Texas A&M's Richard Duble also noted fewer superintendents changing jobs throughout the South.

"I suspect it had something to do with all

the winter kill last year," the extension turfgrass specialist said. "Usually a superintendent loses his job if his greens die. But everyone's greens died last year, so they didn't blame the superintendent. If you fired the superintendent there was no one around to fix the greens."

Lake City (Fla.) Community College Professor John Piersol noticed a drop-off in job openings, even in the country's

Continued on page 23

Mechanics are in high demand

Job openings for beginning assistant superintendents may be down, but not so for golf course mechanics, according to Lake City (Fla.) College Professor John Piersol.

"I've gotten calls from Arizona and South Dakota in the last week looking for mechanics. They've looked everywhere," said the chairman of the school's Division of Golf Course Operations, which includes a one-year certificate program in equipment and shop operations for aspiring mechanics.

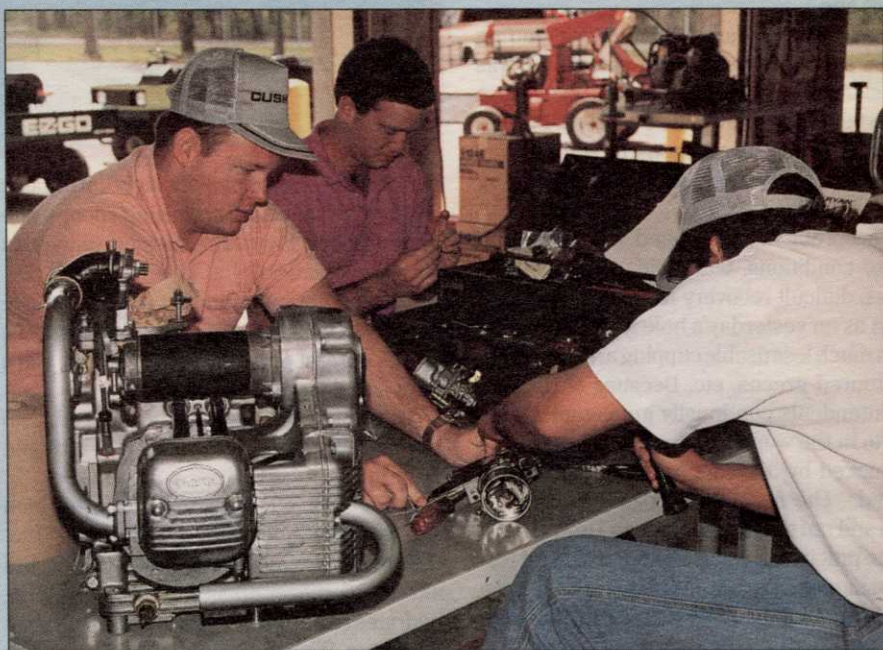
"We have just seven people graduating from the program this year. If we had 50 we could easily place them in jobs right away."

And the pay isn't bad. Lake City graduates start at \$7 to \$10 an hour and are usually in the \$25,000- to \$35,000-per-year range within a couple of years, Piersol said. Pretty good for someone with a high school degree or GED and a one-year certificate.

So why aren't students knocking down Lake City's doors to get into the golf course mechanics program?

"High school students have never heard of the job," Piersol said. "Students who become mechanics usually don't play golf, so they don't know what's available. When they hear the title, they think about lawn mower and golf car repair."

"There's a real misunderstanding of what



Students get hands-on training at Lake City (Fla.) Community College.

golf course mechanics do. Guidance counselors think all they do is grease equipment. But that's far from the truth.

"Golf course mechanics are often responsible for \$500,000 or more in equipment. They're not grease monkeys. They're turf equipment managers. They set up shops, train people, develop preventive maintenance programs and work with computerized equipment."

"A properly trained head mechanic warrants \$35,000 to \$40,000 a year. He can save a course at least that much. Most superintendents will tell you the mechanic is their right-hand man."

Lake City's program is 18 years old. Four instructors handle the class work and have access to \$500,000 of state-of-the-art turf equipment donated by golf industry suppliers. College level reading, writing and mathematics courses are not required.

"The program concentrates solely on aspects of golf course mechanics," Piersol said.

"Among our classes are a three-credit course on sharpening and grinding mowing reels, one on preventive maintenance and another on setting up the maintenance shop."

In search of the perfect superintendent

Trent Jones joins with Faubel, Payne in new enterprise

By Peter Blais

Three of the best-known names in the golf course management business have formed a worldwide executive search firm for superintendents.

Architect Robert Trent Jones Sr., Golf Course Superintendents Association of America Immediate Past President Gerald Faubel and Michigan State University Professor Emeritus Ken Payne recently founded Executive Golf Search, Inc.

The firm will deal primarily with superintendents but may eventually branch into the club professional and general manager areas, Faubel said.

One of the company's primary services will be helping courses define their needs regarding the type of superintendent they want. Conversations with club officials and follow-up questionnaires will be used to determine those needs, Faubel said.

See related story on page 42.

"Some superintendents are strong in construction and others in maintenance," he added. "It's important clubs recognize what is entailed in hiring a superintendent who can meet their needs regarding communications, technology and the environment."

"I've always felt if a club first identified its needs before hiring a superintendent it would have greater success in keeping that individual."

Faubel said the firm will stress placing GCSAA-certified superintendents.

"We will closely adhere to the GCSAA code of ethics," the former association president said. "If a club has a superintendent we're interested in recruiting, we'll notify the club properly. We don't want anyone treated unfairly."

Faubel said the firm's strength lies in its founders' international experience and contacts in the course maintenance industry.

Limited placement services are currently available for superintendents, according to Faubel. The GCSAA's Employment Referral Service lists job openings and salaries. At

least two other placement firms deal with golf industry personnel, Faubel said.

"But no one has the in-depth experience we do with superintendents," Faubel said. "Other firms deal with architects, builders and club managers, too. We'll be just superintendents for now."

Executive Golf Search will help clubs develop salary, benefit and educational packages while assisting in contract negotiations to help recruit the best superintendents available, Faubel said.

"Our goal is to meet and identify highly qualified individuals and attempt to reward them for their service to golf with the best possible jobs," Faubel said. "We have some fantastic people in the golf course maintenance field who are ready to move on to clubs. Often, those clubs don't realize how important the superintendent is, especially with the environmental situation today."

"We want to have an impact on the industry by having employers realize how important the superintendent is to their operations. It's a win-win situation for everyone."

The company is located at 699 Westchester, Saginaw, Mich. 48603.

Wayne Otto, a 'maverick' proven a pioneer

By Vern Putney

"Bring back the good old days, when greens held better and putted faster."

This golfer lament doesn't ring true for Wayne Otto, course superintendent at Ozaukee Country Club in Mequon, Wis., though he recognizes that golf course conditions and playability have changed.

"Unfortunately," noted Otto, "greens then held poorly struck shots. And I am certain they were not better and not faster 10 to 15 years ago."

The current player craze is for putting surfaces that roll extremely fast. What was considered fast 10 years ago is not even close to fast enough today, Otto observed. Players will not accept slower greens, he added. They feel speed is the ultimate criteria for judging the best greens.

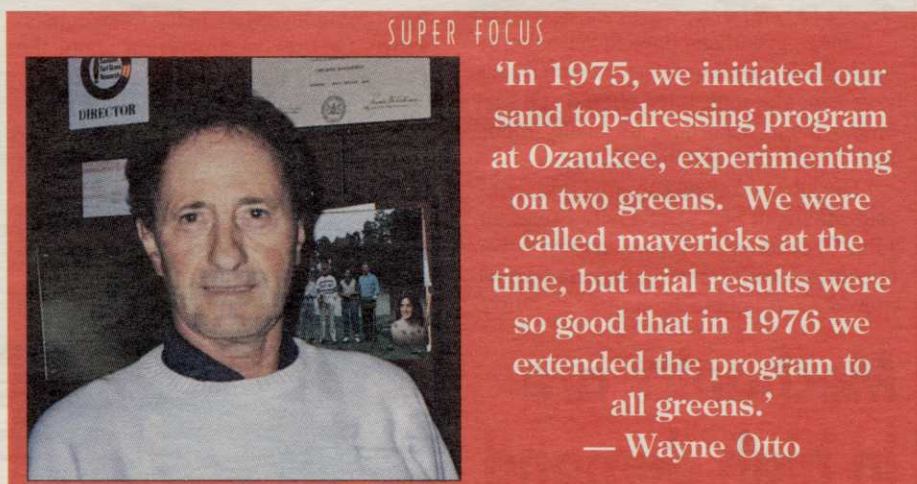
The problems associated with providing these conditions, Otto said, are algae and moss, difficult recovery from wear and tear, such as on yesterday's hole location, coping with much less usable cupping area on highly contoured greens, etc. Because of this, superintendents continually get complaints of "Who in the world put the hole there?"

Backed by 30 years in the field, Otto declared, "The finest putting surface must be firm and not soft and spongy. In 1974, I heard of the practice of using 100-percent sand top-dressing from Dr. John Madison of California-Davis University. Only a few courses were attempting this.

"In 1975, we initiated our sand top-dressing program at Ozaukee, experimenting on two greens. We were called mavericks at the time, but trial results were so good that in 1976 we extended the program to all greens."

"I firmly believe that with the right sand, with good quality control (consistent particle size distribution), frequent applications (8 to 10 times per year) at one to two cubic feet per thousand square feet, the finest possible putting conditions will result.

"It is very important that the sand be applied lightly and frequently throughout the growing season. Where this procedure has not



SUPER FOCUS

'In 1975, we initiated our sand top-dressing program at Ozaukee, experimenting on two greens. We were called mavericks at the time, but trial results were so good that in 1976 we extended the program to all greens.'

— Wayne Otto

been followed scrupulously, layers of organic matter have developed, causing spongy putting surfaces. Sand top-dressing now is an accepted practice."

Otto's criteria for judging putting surface quality are uniformity, smoothness, firmness, speed, upright growth habit of the turf, and a tight and dense turf.

To produce the desired greens speed, Otto in June, July and August uses less nitrogen fertilizer.

"Our height of cut is below one-eighth inch and we double-mow on occasion," said Otto. "In the fall, the mowing height is raised and nitrogen fertilizer applied so that the carbohydrates build up in the grass plant to prepare for winter. With the grasses we have to work with, it is not possible to maintain U.S. Open conditions for the entire golf season."

Another major improvement to playability, Otto pointed out, is the fairway playing surface. "Many players have commented that our fairways today are better than putting greens once were. This is due largely to the use of lightweight mowing equipment and clipping removal, less use of water, less nitrogen filter and lower heights of cut.

"Back in the early 1970s, Bob Brue, our golf professional at Ozaukee, was watching one of my staff mowing the approach to the 18th green with a Jacobsen Greensking with

grass catchers. Brue remarked to me that 'someday, all fairways at better golf courses will be mowed with a triplex greensmower, with baskets to catch the clippings.'

"I replied that he was 'crazy as hell' and, because of manpower and extra expense, that would not be practical. Boy, was I ever wrong!"

Otto said that in the early 1970s, he started mowing par-3 holes and approaches with the greensmower. "After seven or eight years, we could see that these areas were predominantly bentgrass. Soon, a few prominent golf courses in Ohio began mowing all fairways with triplex greensmowers. Results were fantastic in a very short time.

"The triplex greensmower used had solid rollers and baskets to collect clippings, which allowed the bentgrass literally to crawl over the top of the poa annua. We have improved a few areas where there wasn't much bentgrass population with Verti-drain cultivation and overseeding with bentgrass. In some areas, bentgrass populations exploded. Much aerification had to be done to keep the bentgrass close to the soil.

"Late in the decade, we began mowing swales on some fairways with the Greensking. The larger tractor-pulled mowers did not cut the grass very well down in these crucial areas where the better player hit the tee shot.

The smaller cutting units on the greensmower did a far superior job of cutting grass — especially in depressions commonly found on older courses."

Otto said that for the better player, improved playability — more ball roll and better shot control — has resulted. There have been a few complaints from the higher-handicapped players of tight lies, 'not enough grass to hit wood shots.'

Irrigation and drainage are of prime concern to Otto.

"I have learned," he said, "that if we are to keep our course in top condition, irrigation water must be applied very discriminately to avoid wet spots and soggy situations. The large pop-up sprinklers now are run much less, and we do more watering by hand or spot watering with hoses and sprinklers. This may seem a step backward but, despite our antiquated irrigation system, the heavy clay/silt 'Mequon Gold' soil we must work with, and the undulations, we still have provided much-improved playing conditions with good water management.

"Hopefully, we soon will install a new state-of-the-art irrigation system that will give us much better control of water."

As with many superintendents, Otto has found significant drainage progress from installation of gravel silt trenches with drain tubing put in the ground over the years. This work will continue and, perhaps, the problem will disappear. "Ha," added Otto lightly but realistically.

He summarized: "My goal is to produce the best possible playing conditions for our members and their guests in a cost-effective manner, to preserve and enhance both natural and man-made beauty, which is the substance of the golf course."

What of the future?

"We must use pesticides safely and discriminately. New grasses must be developed that will be disease-resistant, drought-tolerant, need little or no supplemental fertilizer and yet provide an acceptable playing surface."

Otto, a Milwaukee native, is a 1960 graduate of the Pennsylvania University Turf Program. He spent 1959-1960 in placement training with Harold Glissmann in Omaha, Neb., and from 1960 to 1963 designed, constructed and established the turf and maintained the golf course at Sunset Valley Country Club in Omaha.

From 1963 to 1967, Otto was superintendent at Pioneer Park and Holmes Park Golf Course in Lincoln, Neb., then switched to Ozaukee.

Otto didn't confine his drive and talents to daily course activities. He's been helpful away from the links as member of the Golf Course Superintendents Association of America, past president of Nebraska and Wisconsin GCSSAs and the Midwest Regional Turf Foundation, vice president of the Wisconsin Turfgrass Association, and board member of the O.J. Noer Turfgrass Research Foundation.

Besides his wife JoAnn, Otto cited several persons as very influential and helpful in his golf turf management career.

"Professor H.B. Musser and Dr. Joseph Duich taught turf program students not only how to 'grow grass' but how to deal with the real world. Dr. Duich had a better handle on what's happening in the field than anyone I've ever seen from academia. Maybe that's why he is in demand all over the world.

"I met Glissmann at the Penn State turf conference through Professor Musser. Glissmann hired me, and I did my internship with him. He was known as 'Mr. Turf' in Nebraska. It was indeed an education!"

CHAPTER I

Nurse Flo, has just opened **Growth Products Turf Grass Clinic**. Meanwhile the guys at the **Blade Club** have their hands full ... OOPS and the **Weedy Waskies** are up to something devious.



to be continued ...

Klauk and crew earn redemption at TPC at Sawgrass

By Vern Putney

The 1990 PGA Tour stop at Sawgrass Stadium Course at Jacksonville, Fla., is remembered ruefully for the "Frying of Fred," a public pillorying by the media of the golf course superintendent.

The 1991 version will be recalled as "Kudos for Klauk" long after Australian Steve Elkington's victory is forgotten.

Fred Klauk and his crew of 52 accomplished perhaps the biggest course turnaround in tour history.

Last year, the pros heaped scorn on the course and Klauk for conditions admittedly on the ragged side. Mother Nature had sabotaged the course, but the pros were not inclined to forgive.

They were similarly outspoken on the eve of this year's event. They went public as loudly, not to bury Klauk, but to praise him.

Sessions with PGA Commissioner Deane Beman, critiques, intense preparation, a two-week pushback in tourney dates and a break from the weather paid off handsomely.

Though Klauk felt players were overly critical in 1990, given winter wind and storm troubles, he took the heat. He didn't duck an NBC interview with Bob Costas in which difficulties appeared magnified.

Greens 1 and 2 were unquestioned rough spots and, yes, there were other areas of concern. Instead of hiding his head in the sand, Klauk stood his ground and said his mission for 1991 was to make the course the best ever.

He set the goal — and delivered.

First step was to huddle with Beman and define needed changes. It was agreed that an earlier end to daily play was necessary prior to the tournament.

The course was closed in the fall for overseeding. This procedure became 80 percent poa trivialis of the sabre variety and 20 percent bentgrass, instead of the other way around. The week's shutdown permitted uninterrupted germination.

A tree-trimming program meant more course sunlight.

Three months before the tournament, preparations were intensified. Two or three persons were added to the work force.

A key element was shutting down the course the Monday prior to tournament warmup action. Players arriving the Saturday before Thursday's opening-day round were amazed at the playing surfaces that loomed like huge carpets fit for a king's royal entry.

In what was believed an unprecedented effort, ball marks on all greens had been seeded. A fairway divot couldn't be found. The course was inviolate.



The recent PGA Tour stop at the Tournament Players Club of Sawgrass in Jacksonville, Fla., drew rave reviews from competitors for course conditions. Much credit goes to the golf maintenance management staff. Left to right are Mark Sanford, chief mechanic; Bob Clarkson, assistant superintendent, Stadium Course; Cathy Macormic, office manager; Gene Baldwin, assistant superintendent, Valley Course; Lee Rowe, landscape assistant, and Fred Klauk, superintendent.

Rocco Mediate, Sawgrass resident and the Tour's leading money winner, best expressed fellow pros' feelings during a practice round. Attached to his bag was a button reading "Fred Knows Greens."

Maintenance staff members also wore these buttons, supplied courtesy of Don Kepler, Klauk's junior high school coach in North Palm Beach, and former high school teammate Larry Mueller.

Greens 1 and 2 were no longer verbal targets. They matched the others in immaculate grooming.

Greg Norman, perhaps the No. 1 course critic in 1990, summed up the 1991 layout in one word — "perfect."

Elkington said of Sawgrass: "I don't think there's a harder course in the world to play than this one when there is this kind of wind (42 miles per hour the second day), but course conditions couldn't be better."

Sawgrass' reputation as a destroyer of title hopes in the stretch was reinforced. The finishing holes, especially the dreaded but hauntingly beautiful 138-yard 17th, finished many contenders.

Most memorable was Phil Blackmar. He'd teed off on that most unique hole on the tour, water-surrounded, most-photographed and most-hazardous, tied for the lead. Kerplunk! Bye-bye, Blackmar.

Sawgrass was open for resort play the morning following Fuzzy Zoeller's birdie miss

for a tie, and Gary Player hosted a corporate outing shotgun tournament Tuesday. He spent part of the morning trying to match Brian Claar's ace on the 17th.

A seed soil mix quickly cured the post-tourney divot blues.

Klauk, staff and tour officials have reviewed the tourney. A few minor adjustments are planned next year.

Despite the 1990 media battering, Klauk enjoys excellent press relations. He pointed out that the print media were most favorable from 1987 through 1989.

Klauk works at media exposure. He's friendly with the press and the players.

"I am aware of the temptation by the press to create controversy, and that it might be the supers' lot that tourney players and members might say, 'What have you done for me lately?' That goes with the territory."

"The big thing is that the public now has

'The public now has a better perception of how important the superintendent is to the success of the PGA Tour and golf in general.'

— Fred Klauk

a better perception of how important the superintendent is to the success of the PGA Tour and golf in general. With such sharp and critical focus, it's perhaps understandable that the super gets all the blame when things go wrong. On the other hand, reward can be great when conditions are near-ideal."

Tour players recognize Klauk as a big hitter in his own right. A two handicapper, he's been champion the past four years at Oak Bridge, a testing course within the Sawgrass complex.

He never scored better, though, than in his strictly spectator role in the tournament.

Elkington made off with the \$288,000 first-prize Sawgrass swag. Klauk made millions for superintendents in terms of public awareness and goodwill.

That Sawgrass was bracketed by the world's top pros with Augusta National and Medinah, Ill., on the "best-groomed" list was icing on Klauk's cake.

That coupling is far better than such shafts as "Marriott Muni" and J.C. Snead's "They messed up a perfectly good swamp."

Sawgrass resident Snead the past few months has eaten his words — gladly. "Freddie's Fashion Plate" had prevailed.

Course designer Pete Dye's contributions shouldn't be overlooked. Paul Azinger, tourney leader most of the way, said: "It turned out to be a great golf course. Maybe Dye did a better job than we gave him credit for."

Fortrivia buffs, the playing absentee among the top 20 in the Sony World Ranking was Payne Stewart. Sidelined by an ailing neck, he was restricted to commentator duty.

USGA deciding fate of last \$300,000

Continued from page 1

stirred the most debate among the review committee, Kenna said.

"Eighty-five percent of the population knows little about golf," he said. "Basically, we know that when people drive by a course, they look at it. But that's about it."

"We know people enjoy open space. That's why urban planners usually try to include parks in their designs. Golf courses are like parks, but they have the advantage of also generating revenue."

"We're wondering how funding that type of project would appear to USGA associates. That's what we're debating. The psychological effect proposals have come from schools of architecture. Maybe we need to get the golf course architects association on board a

project like that."

A major concern is getting hard, re-creatable data from such a project, or any of the \$2.5 million in studies the USGA has already funded under the environmental research project, Kenna said. The studies already funded have involved pesticide and agronomic issues.

"If someone finds fault with any of your data, it can crumble your whole argument," Kenna said. "We've started a quality assurance/control program to make sure the university research we get is of a quality we can use."

"We want the numbers to be well-documented and know where they came from so we can re-create the procedure and get the same numbers."



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Sprinkler calibration innovation means water, cost savings

By Lynn Tilton

For years superintendent Al Kline relied on factory-calibrated sprinkler heads at the University of New Mexico's two golf courses. After all, quality control at the factory assured him the sprinklers would perform as needed. But persistent watering problems caused him to take a second look.

He's still looking — and doing his own calibrating. That's because he has his own test area. The first thing he learned during 157 three-hour tests was that he was throwing plenty of water on the grass. "I was

overwatering 140 percent and still had Dunkin' Donuts on the fairways," he said during a calibration seminar at the test site just south of Albuquerque.

Troubled with brown spots, in spite of extra sprinkler work, Kline decided to contact California State University at Fresno's Center for Irrigation Technology about its work on sprinkler calibration. CIT has been testing sprinklers for 35 years and includes three technicians on its staff.

Kline soon decided to test every head.

The test is simple, far easier than the traditional way of placing 400 cans to take readings. It consists of putting 50 cans two feet apart in a straight line from the sprinkler head to the end of its throw.

It's a simple matter to collect and measure the water, and run the results through the computer program Kline bought from CIT.

CIT's Dr. Kenneth Solomon helped him get started, and the whole CIT staff has been "super cooperative," Kline said.

He said, "Dr. Solomon believes so strongly in head testing that he wrote me, 'There should be a law requiring sprinkler head testing prior to installation.'"

Kline agreed, adding that no brand should be exempt.

He also emphasized that Tim Cavellier, his sprinkler representative, "has given up weekends, holidays, and other time off to help me. When he couldn't be here, my wife, Jo Ann, has helped with the study."

TEST ACCURACY

The first challenge was test accuracy. Kline got this by stretching out an aluminum track, set dead level. Atop the track are concrete half-blocks, with cup holders glued in place. Plastic cups fit in the holders, and can be turned upside down and tightly fitted when not in use.

This keeps them from blowing in the wind between tests. Kline also installed, for \$4,500, a weather station, with the aerometer wired to pump controls. Thus, when the wind blows, the test shuts down automatically.

This leaves Kline and his crew free to take care of the regular work on the course.

Kline credits Jim McPhilomy, a retired golf course superintendent and irrigation consultant from Denver, for bringing the CIT test to his attention.

"We've found there is a difference even in the individual head," Kline said. "Planning an irrigation system is like planning a war. The goal is to fire for effect, and a sprinkler isn't effective if it's not accurate."

He's learned that even altitude plays a role in a sprinkler's accuracy. That may be why a head that performs well at the factory may not water as uniformly when installed, especially if there is significant el-

evation difference between factory location and the course.

Since Kline uses Toro, Buckner and Rain Bird heads, several factory representatives were on hand for the seminar.

Toro golf irrigation specialist David Marsh agreed with Kline's strategy.

"The goal is to schedule the irrigation cycle so you're not overwatering. Al's tests show how precise a given sprinkler head is for uniform application, he said.

Marsh noted that the traditional Christiansen's Coefficient of Utilization (CU) still is the industry benchmark, but manufacturers have tightened up the specifications.

"Ten years ago an 85-percent CU was our internal benchmark for good performance. Now the minimum for anybody is in the 90s," Marsh said.

BIG SAVINGS

The high cost of buying water and pumping it is a major factor. He said greater watch care in general can help reduce irrigation bills.

"Too often turf managers set up their watering cycle when it's dry, but fail to adjust for wet times," Marsh said. "A manager must check sprinkler use at least monthly to stay atop any overwatering problems."

The question of CU came up again and again during the seminar.

Kline said: "We don't think you guys can go with averages. Unlike a corn field, you have to keep the whole thing green."

No longer sold on CU, Kline said: "CIT would have us look at a scheduling coefficient which is expressed as a percentage of additional time to apply the water needed. I agree."

"We need to get off the average as looked at by CU, and determine how much more time we'll have to run that valve or that system to get all areas to a minimum wetness."

"This will help turf managers determine whether a particular head or system can remain as is, or whether it will pay to get into a major renovation."

That is what brought Kline into the picture. He knew the university was paying dearly for water, yet he still was troubled with brown spots on the course.

THROW INCONSISTENT

A typical problem is brought on by the head throwing less water next to itself, more water in the middle of the throw, and tapering off to the edge.

"We found that sprinkler application evenness can vary from one-eighth to a half-inch per application," Kline said.

For example, a sprinkler with a CU of 0.7 inches of water per hour at the head dropped to 0.62 just four feet away, only to peak 10 feet further along at 0.778.

From there it was downhill all the way. That same head registered 0.59 at 20 feet, 0.41 at 26 feet, 0.285 at 32 feet, 0.15 at 42 feet, 0.075 at 46 feet and 0.004 at 54 feet.

Extending the watering time to get adequate amounts for the deprived areas of the throw means overwatering other parts. Not only does this lead to higher energy bills, but to increased disease problems.

Kline said: "We need to know how accurately a particular head performs. This doesn't currently appear in manufacturers' catalogues. They tell us how much water a head uses and how far it will throw at given pressures, but there's not a thing on how well that individual head operates."

Kline reiterated: "By this test, we've discovered that all sprinklers are not created equal, even those from the same manufacturer."

But after 157 three-hour tests, Kline has been able to trim individual heads, resulting in more even watering patterns.

The limit of repair has been economic. While he's been able to adjust or change orifices, he hasn't had the budget to deal with pipe sizing, head spacing, or even outright head malfunctions.

He admitted: "I used 280 million gallons of water last year, and at least 80 to 100 million gallons were wasted. In this part of the country that's \$40,000 to \$50,000 in excess water expenses."

"We're working next on heads in triangulation. Too often we managers put down twice as much water as we need. We need to react before we drown in our own water bills."

Lynn Tilton is a freelance writer based in Hereford, Ariz.

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Heavy rains aid parts of drought-stricken Fla.

Parts of Florida have benefitted from a wetter-than-normal winter and spring, while others continue to suffer the effects of a drought heading into its fourth year in some areas.

"We've gotten abnormally large amounts of rain in some portions of the state, particularly the southeast, in what is normally our dry season," said John Foy, director of the U.S. Golf Association Green Section's Florida office.

One of the beneficiaries has been John's Island Club in Vero Beach, where the 5.6 inches of rainfall from

April 1-21 was more than double the average 2.6 inches for that period, according to West Course assistant superintendent Tony McKenna.

The 65 inches of rain for the 12 months from April 1, 1990 through March 31, 1991 was significantly higher than the 49.9-inch average for the preceding three years.

"We had watering restrictions for a short time last year, but they were lifted," McKenna said.

"We've shut down watering whenever we can. We got 1-3/4 inches Saturday (April 20). We

didn't have to water Saturday or Sunday and we'll just do the greens tonight (Monday)."

Foy mentioned another Vero Beach club where talk of installing a new, water-efficient irrigation system has died down for the first time in three winters because of the wet weather.

But other sections continue to suffer from the drought. Foy noted the Lakeland area between Orlando and Tampa where Phase III watering restrictions, "about the most serious you can get," have been imposed.

Proposed water tax would put squeeze on Florida courses

Continued from page 1

primarily at the agricultural industry, the state's biggest water user, but will cost most Florida courses an additional \$20,000 to \$30,000 annually.

Supporters hope to have the tax in place by July 1992. But that is unlikely since the bill was still in the committee process and wasn't expected to be ready for a full legislative vote before the Legislature adjourned in April or early May, said Bob Brantley, executive director of the Florida Golf Council, the trade association representing the state's \$5.5-billion golf industry.

The Legislature could take it up if a special session is called this fall, although it probably won't be addressed again until the next regular session begins in March 1992, he added.

Still, like most states, Florida is in a financial squeeze. The bill would raise money and the Legislature could try to rush it through, Brantley said.

"We're opposed to the bill as it stands," he said. "The bill's supporters hope the tax will encourage golf courses to speed up the process of hooking into reclaimed water systems."

"We want to do everything we

"We want to do everything we can to help conserve water. But we don't want the state mandating that everyone use reclaimed water when there isn't enough available."

— Bob Brantley

can to help conserve water. But we don't want the state mandating that everyone use reclaimed water when there isn't enough available. It's not fair to begin taxing courses if the reclaimed water isn't there."

The Florida Golf Council favors further study on the availability of effluent use before imposing any new taxes. At the very least, Brantley expects the state's four water districts to soon begin requiring courses to use reclaimed water where it's available. A new tax, while not a certainty, is a definite possibility, he added.

Finch and Brantley fear any new tax would not stay at 10 cents for very long.

"I was in the Legislature for eight years and served as lieutenant governor for four," Brantley said. "In my experience, it's very rare that a tax is ever replaced or reduced. Once it's on the books, the only way it usually goes is up."

The Florida Golf Council and the regional superintendent, sod grower and athletic field associations are committed to working with the state to find an equitable way to conserve water, agreed Brantley and Young.

"We need to conserve water," Young said. "We don't oppose a tax as long as it is equitable."

Making the tax equitable requires taking a course's seasonal watering needs into consideration, Young said. Monthly allotments should be higher when courses traditionally need more water — during the summer, while overseeding or when growing in a new course — and lower when the need drops, he said.

The state's four water districts and the Legislature have been very cooperative, Young said.

"We've met many times. It's a foregone conclusion we must consider something like this to con-

serve water," the FTA official said.

Florida's water shortage resulted from several successive drought years.

Heavy spring rains might help Orlando, Young's home area, reach its average 60-inch annual rainfall this year, he said. But if the rains stay away this summer, as they have the past several years, the spring downpours will be of little value, he added.

"The weather patterns have changed the last few years," Young said. "The timing isn't what it used to be. We haven't been getting the

rain when we need it."

Non-golfers are generally unsympathetic to the turf industry. Many view it as wasteful in times of drought, Young said.

"But the golf industry produces a lot of revenue. People are starting to realize the importance of golf to the state. We want to be viewed as part of the solution, not the problem," Young said.

Toward that end, the FTA is helping finance a 31,000-square-foot, \$700,000 environmental research facility being built at the University of Florida, Young said.



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Graduates: One job apiece, instead of two

Continued from page 19

busiest golf development state.

"It's a little slower than last year," said the chairman of the school's Division of Golf Course Operations. "But I'm sure we'll have 100-percent placement, just like the past 24 years."

Piersol blamed the slowdown on the effects of the savings and loan crisis on new course construction and negative attitudes about the economy.

"When people are uncertain about the economy, they may hold off hiring someone right away," he said. "But the sluggish economy is overemphasized. Overall, the golf industry is in good shape."

The only students having problems finding jobs are those restricting themselves to certain geographic areas, according to Pennsylvania State University's Don Waddington.

"There seem to be more job openings for assistant superintendents in eastern than western Pennsylvania," the soil sciences professor said. "Those limiting themselves to a certain locality are at a disadvantage. They are much better off if they can remain mobile."

While more 1990 Lake City graduates (17 of 42) wound up in Florida than any other state, many found jobs in Georgia and the Carolinas, Piersol said.

"We have graduates working in Finland, Japan, Thailand, Indonesia. It's hard to go anywhere in the world without running into a Lake City grad," he said.

Educators report starting salaries for novice assistant superintendents remain in the \$18,000 to \$28,000 range, with a full range of benefits from health insurance to vehicle allowances.

"Students aren't even looking at jobs without those types of benefits," Rogers said.

The recession hasn't slowed the

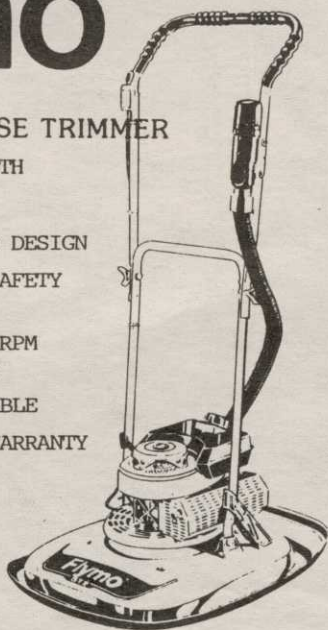
pipeline flowing into turf management programs. Michigan State, Penn State, Lake City and Texas A&M all reported waiting lists to enroll in their turfgrass programs.

"We limit enrollment in our two-year program to 40 students," said MSU's Rogers. "We have 85 applicants wanting to get in. That's even a little higher than last year."

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10 deadliest maintenance problems spelled out

Continued from page 1

and vice-versa.

Just three of the top 10 sins were agronomic. Of the remaining seven, some are within the superintendent's control and others are not.

Following are the Top 10 sins with the number of votes each received in parentheses.

1. Communications and public relations (10). "Poor communications is probably the No. 1 fault in every industry," Connolly said.

For the superintendent it involves daily communication with staff, newsletters, playing golf with members, personal image, keeping informed on issues, handling the media and attending meetings.

It also involves communication by others, for instance club officials who may have trouble communicating their wishes to the superintendent.

"You have to listen," Connolly said. "Too often, we're thinking about what we're going to ask next rather than listening to the other person."

2. Overwatering (9). Overwatering can result from a poor irrigation system, insufficient drainage, lack of knowledge, outdated equipment and pressure problems.

Compaction, impeded root growth, moss and algae, oxygen reductions, disease, erosion, maintenance changes, lost revenue, green speed and course closures are among the problems that can result.

"When you pump and you have the diesel engine fired up, you want to put out as much water as you can. So I can understand some of the problems in the past, but not today," said Connolly, adding that new systems help eliminate the water-while-you-can philosophy.

3. Fast green speeds (8). "Some of you probably immediately think USGA, USGA, Stimp-meter," Connolly said. "You're right. The USGA did promote use of the Stimp-meter. Whether or not it was used properly depended on whose hands it fell into."

"The philosophy behind the Stimp-meter is sound. But we all know we all got a little crazy trying to deliver 10-1/2- or 11-foot green speeds because of the perception that all courses had to be like those we saw on television. I can tell you that we (USGA) are more interested in environmental issues and maintaining healthy turfgrass than maintaining fast green speeds."

With environmental issues and the problems of maintaining healthy turfgrass looming, "That means only one thing, higher cutting heights," Connolly said.

The Stimp-meter was invented to check green speeds and keep them consistent throughout a course, the USGA agronomist said. The USGA recommends it be used only by the superintendent. Green chairmen shouldn't be allowed to use one without the superintendent's supervision, he said.

When the Stimp-meter was first invented in 1976, the fastest green speeds were 7-1/2 feet, with an average range of 6 to 7-1/2. Competition among courses and conditions at major tournament sites have fueled the engine for faster green speeds.

New equipment allows cutting heights of 1/8-inch and lower for faster green speeds. Lower fertilizer rates also lend added zip to putts.

Cutting heights are coming back up to 5/32 and even 3/16 of an inch, Connolly said. USGA agronomists

don't recommend mowing heights below 5/32-of-an-inch.

"Here's my recommendation. We change to metric and just confuse the hell out of everyone," Connolly cracked.

4. Pesticide use (7). A regional response. Eastern agronomists

didn't see it as a problem. Westerners and Midwesterners did.

"That's a great example of how superintendents on the East Coast are more aware of the pesticide issue," Connolly said. "They take more precautions when applying pesticides and are more educated

in the application of these products."

Misidentifying a disease and then applying pesticides on a panic basis was one of the concerns mentioned. Also listed were haphazard and broad-spectrum application without regard for integrated pest management as well as over-managing with too much product to achieve superior conditions.

"I know several guys who left their jobs because they disagreed with applying pesticides at seven-day intervals regardless of what was

Poor communications is probably the No. 1 fault in the industry.'

—Jim Connolly



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in nationwide survey of USGA's agronomists

out there. I commend those superintendents for taking a stand like that. And they've gone on to other excellent jobs," Connolly said.

5. Continuity of club officials (6). This included everything from being ignorant of maintenance techniques to being a constant headache.

"I know of a course where an official visited the superintendent every morning at 6 a.m. He would even come to the superintendent's house and sit there while his family was eating dinner," Connolly said.

I know of a course where an official visited the superintendent every morning at 6 a.m. He would even come to the superintendent's house and sit there while his family was eating dinner'

—Jim Connolly

Here recommended officials spend at least three straight years on the board. Three years can be a long time with a difficult board member, the agronomist conceded. But perhaps he or she can be educated.

"It's an advantage in the long run to have people involved with what you're doing for more than one season. It's chaotic and self-destructive to have a quick change-over in these people," he said.

Only one agronomist said all club departments should be controlled by a general manager.

"There are very few qualified general managers who know your business and view their job as the monitoring of expenses. There are some clubs where the general manager is excellent. The Country Club of Brookline (Mass.) is an excellent example," Connolly said.

6. Pesticide storage and maintenance building (5). "Improper storage facilities are a big problem," Connolly said. "I've visited courses

that have had pesticides stored in a wooden building by a stream. I said to the superintendent, 'you've got to do something about this.' He told me club officials told him to just wait until we get caught and then we'll do something.

"The mentality is just ridiculous. If you don't do something you could be facing a stiff fine, and besides, it's just good stewardship."

7. Tree management (5). "Not cutting down enough trees is one of my main complaints," Connolly said.

Proper thinning, air movement and keeping roots from competing with the turfgrass for space, nutrients and water were also noted.

All five tree management votes came from Eastern agronomists. It wasn't listed at all by those in the Midwest or West.

"They don't have as many (trees), I guess," Connolly said. "Although in the Northwest I know they have a tremendous amount."

Trees left in the wrong place, memorial trees planted here and there and trees located in the middle of a fairway affecting maintenance and playability were also mentioned.

8. Amount of play (5). This primarily involved too much play. Tee times from dawn to dusk simply leaves too little time for maintenance, Connolly said.

Other complaints included play beginning too early in the day, continuing during inclement weather, or lasting too late into the season. Holding too many outings for the course to handle was another concern.

9. Labor (4). Labor problems included too little help, lack of quality workers and management decisions to spend money elsewhere, even when the money for labor was available.

"A couple of years ago in the New York-New Jersey area you just couldn't get labor. First, we weren't offering enough money, and second, you couldn't find people who wanted to work on the golf course," Connolly remembered.

10. Equipment (4). This is frequently out of the superintendent's control. Some said they saw courses without enough equipment. At others the equipment was outdated. Still others had insufficient capital budgets for new equipment and lack of knowledge regarding the use or availability of new equipment.

"Of all the industries out there, golf course maintenance has to have some of the most innovative people for making do with what they have. Some of these guys take the junkiest piece of equipment and make it work. It's a compliment to the industry," Connolly said.

Sins coming up just short of the votes needed to make the Top 10 list included superintendents not spending enough time on activities other than course maintenance; inability to read soil tests; poor record keeping; inappropriately timed maintenance; and taking advice from the wrong people.

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West

SOD CONFERENCE, FIELD DAYS SET

The latest in sod farm equipment, products and technology will be featured in live demonstrations and static displays at the American Sod Producers Association's Annual Summer Convention and Field Days, July 31-Aug. 2.

The convention will be headquartered at the Red Lion/Lloyd Center in Portland, Ore., while the demonstrations are slated to be at Paul Jensen's J-B Instant Lawn farm in Silverton, Ore.

The equipment demonstrations will be conducted on Thursday, Aug. 1, while the displays will be open Wednesday and Thursday.

Friday, visitors will tour Tom DeArmond's Oregon Turf & Tree farm and Turf-Seed/Pure-Seed Testing's research operation, both in Hubbard, Ore.

The tour will be highlighted by turfgrass research experts Crystal Rose Fricker and Drs. C. Reed Funk, John Hall, William Meyer and Richard Smiley.

Officers will be elected Wednesday at the annual business meeting and education assembly. The education talks — on subjects ranking from Pacific Northwest turfgrass research to implementation of urban forestry legislation — will be given



by Professor Tom Cook, Harry Fahnestock, William Friesen, Dr. Fred Ledeboer and Arthur Milberger.

Southeast

WOMEN'S GOLF SUMMIT READIED

Women in Golf Summit 91, planned to assess the status of participation and opportunities for women in all aspects of golf, will be held at the Ladies Professional Golfers Association headquarters in Daytona Beach, Fla., Oct. 24-26.

The conference will present research, which participants will analyze to prepare a plan to improve women's participation in the industry. Interested persons and organizations will follow up on the ideas and suggestions and present progress reports at summits in 1993 and 1995.

The LPGA is hosting the summit, with assistance from the National Golf Foundation, United States Golf Association, Women's Sports Foundation and other industry associations.

Issues to be covered are executive women in golf; why women leave the game; discrimination; junior and competitive golf; equipment, clothing and accessories for women; club membership and tee times; career opportunities; and the men behind women's golf.

Attendance will be limited to 200 to 300 by invitation. To apply, people should contact the LPGA at 2570 Volusia Ave., Suite B,



Daytona Beach, Fla. 32114; 904-254-8800.

TREE AND SOD TOUR

Plans are being made for a May 16 tour and research update at Skinner's Wholesale Tree & Sod Farm in Crescent City, Fla. IFAS experts will present the research update.

More information on the Florida Cooperative Extension Service program is available from Uday Yadav at 407-323-2500, ext. 5559.

CENTRAL FLORIDA TURF DAY

Hunter's Creek Golf Course in Kissimmee will host the Central Florida Chapter GCSA Turf Field Day on June 21.

The CFC of TESTA will also hold a 10 a.m. meeting as part of the activities. The annual CFC golf championship will be held the next day.

RICHBURG HIRED

Hal Richburg has been hired as superintendent at Heathrow Country Club in Orlando. Richburg is a graduate of Mississippi State.

North Central



MID-AM ELECTS OFFICERS

Richard Schwarz of Schwarz Nursery & Garden Center in Addison, Ill., has been re-

elected president of the Mid-America Horticultural Trade Show.

Schwarz represents the Illinois Nurserymen's Association.

Peter Grathoff of Thornapple Landscape Maintenance in Geneva, Ill., representing the Illinois Landscape Contractors Association, was re-elected vice president.

William McDevitt, representing the INA, was elected secretary; and Don Broth, representing the Wisconsin Landscape Federation, was elected treasurer.

McDevitt is from McDevitt Nursery Inc. in Dieterich, Ill., while Groth owns a landscaping firm in Greenfield, Wis.

New directors elected are Cheryl Muskus of C&J Landscaping in Addison, representing ILCA, and Thomas Hoerr of Green View Cos., Inc. in Dunlap, Ill., who represents INA.

Continuing as directors are Paul Swartz of Swartz Nursery & Garden Shop in Burlington, Wis., representing WLF, and W. Scott McAdam of McAdam Landscaping in Forest Park, Ill., representing ILCA.

The 1992 Mid-Am show has been scheduled for Jan. 16-18 at the Hyatt Regency Chicago.

BLEW, JOHNSON CERTIFIED

Gregg Blew of Carey Park Golf Course in Hutchinson, Kan., and Curtis Johnson of Grand View Country Club in Springfield, Mo., have been certified by the Golf Course Superintendents Association of America.

NEW ASSISTANT SUPERINTENDENT

David Wegner has been named assistant superintendent at Kansas City Country Club.

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Mountains

NUTT WINS THIRD TITLE

Roger Nutt shot a first-round 69 on Scottsdale's Papago Golf Course, then held on with a final-round 75 at Stonecreek, The Golf Club, to defend his GCSAA Golf Championship title and win for the third time in eight years. Nutt, the superintendent at Norwood Hills Country Club in St. Louis, took home the Bobby Jones trophy and the USGA traveling trophy.

Null, who won his first GCSAA title in 1985, said: "I work hard at my golf game. This just feels great. It makes me feel that it's all worthwhile. And to win in front of my peers is great. It's a good feeling."

Two strokes back in second place was another three-time champion, Dave Powell, superintendent at Myers Park Country Club in Charlotte, N.C.

The Carolinas GCSA team won the Scottish Trophy for winning the gross division of the chapter team competition. The Frank Lamphier Trophy, awarded to the winner of the net division in the chapter team competition, went to the New England #2 team.

More than 400 competitors teed it up at five Scottsdale, Ariz., courses.

The chapter team and flight winners were:
Chapter Team (gross) — Gary Bennett, CGCS, Crickentree GC, Blythewood, S.C.;

Chuck Green, Florence CC, Florence, S.C.; Leonard Hill, Jr. Palmetto GC, Aiken, S.C.; Dave Powell, Myers Park GC, Charlotte, N.C.

Chapter Team (net) — James Bean, CGCS, mt. Pleasant CC, Boylston, Mass.; Donald Hearn, CGCS, Weston CG, Weston, Mass.; Paul Jamrog, the Orchards GC, South Hadley, Mass.; Gary Luccini, Franklin CG, Franklin, Mass.

Championship flight (0-6 handicap) — Roger Null, CGS, Norwood Hills CC, St. Louis. — Glenn Smickley, CGCS, RTJ International, Gainesville, VA.; Net: Ken Braun, Bonnie View CC, Baltimore, Md.

2nd Flight (7-12) — Gross: Raymond Kasprack, CGCS, McCormick Ranch GC, Scottsdale, Ariz.; Net: Peter Rappoccio, Jr., CGCS, Silver Spring CC, Ridgefield, Conn.

3rd Flight (19-24) — Gross: Allan Barry, Hampton Hills, G&CC, West Hampton Beach, N.Y.; Net: Ted Maddocks, CC of Fairfield, Fairfield, Conn.

4th Flight (25+) — Gross: Bruce Williams, CGCS, Bob O'Link GC, Highland Park, Ill.; net: James McNally, Green Rock Corp., Tarrytown, N.Y.

Senior I (50-56 years) — Gross: Ed Stocke, Santa Rosa G&CC, Santa Rosa Calif.; Net: Fred Scheyhing, CGCS, Mt. Kisco CC, Mt. Kisco, N.Y.

Senior II (57-64) — Gross: Gene Frase, Querbes Park GC, Shreveport, La.; Net: Peter Voykin, Twin Orchard CC, Long Grove, Ill.

Super Senior (65+) — Gross: Harold Baldwin, Indian Hills CC, Marietta, Ga.; Net: Frank Simoni, retired, Canton, Mass.

Affiliate — Gross: Jim Davis, Hydro-Scape Products, San Diego, Calif.; Net: Mike Renn, McCormick Ranch GC, Scottsdale, Ariz.

Northeast

ICE KILLS TREES

A March ice storm was the worst natural disaster in New York State this century, destroying or crippling trees especially in the Rochester area.

While the storm left some areas without electricity for two weeks, golf courses won't be the same for 100 years. Oak trees that old were split in two and some trees were even felled by the layers of ice.

Maintenance crews were left carting away debris, cleaning the fairways and wooded areas, and planting replacement trees.

HEROES WELCOME

The New England PGA has declared July 1-7 "Heroes Welcome Home Week" and is scheduling a celebration that will include a major golf event.

To show appreciation for the troops returning from the Persian Gulf war, the NEPGA is working with state Treasurer Joe Malone, chairman of the Heroes Welcome Home Committee, and Tony Mangini, the committee's executive director.

NEPGA professional David Gianferante, golf chairman for the Heroes Classic golf tournament, is arranging the golf event.

TWO CERTIFIED

The Golf Course Superintendents Association of America has certified Wayne P. Remo and Thomas E. Zurcher.

Remo, of Wyckoff, N.H. has been superintendent at Rock Spring Club in West Orange since 1988.

Zurcher has been superintendent of the Old Bridge course since 1986 and lives in Toms River.

South Central



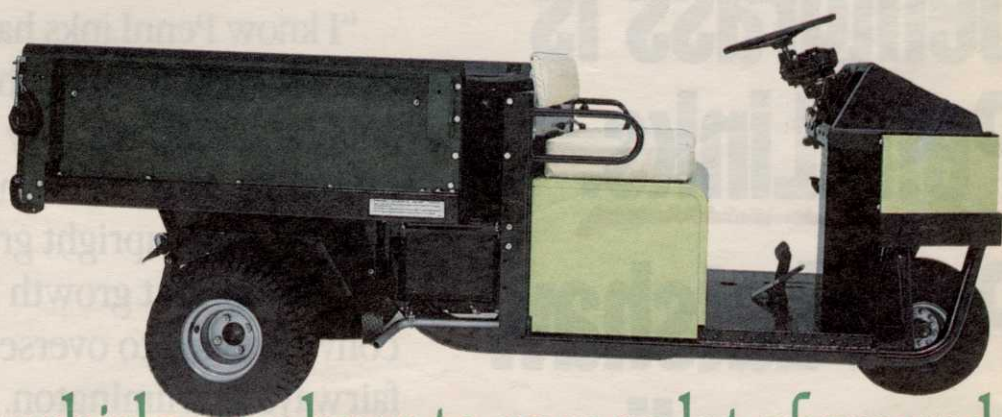
IRRIGATION EXPOSITION PLANNED

The Irrigation Association is coordinating the 1991 International Irrigation Exposition and Technical Conference, Nov. 10-13, at the Convention Center in San Antonio, Texas.

IA officials expect more than 4,000 people to attend and more than 400 companies to exhibit at the annual event.

Superintendents associations and others are invited to send news stories to:

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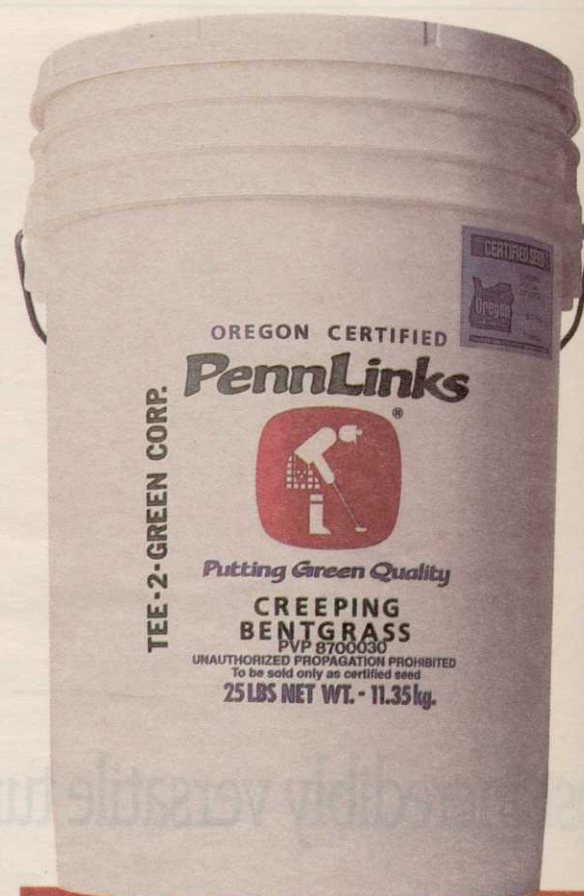
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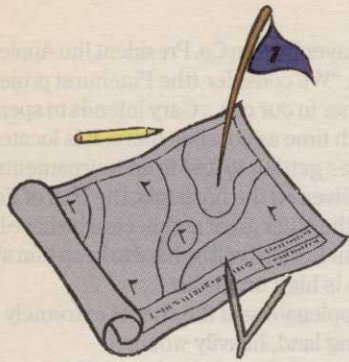
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Briefs



GLORSO LEAVES DYE, FORMS FIRM

DENVER, Colo. — Dean Glorso International Golf Course Design has been formed, with headquarters here.

Glorso, formerly senior director of design at Dye Designs International, has worked with Pete and Perry Dye to design and build golf courses around the world.

While at Dye Designs, Glorso directed and coordinated golf course designs in the United States as well as Spain, Japan, Thailand, Taiwan, Korea, France, Brazil and Australia.

An Illinois native, Glorso built his first bunker in 1968 in DaNang, Vietnam, while serving with the first Marine Airwing. He studied land surveying and civil engineering at Metro State College here and is a registered professional land surveyor in four states.

GRI BREAKS GROUND IN JAPAN

DALLAS — Golf Resources, Inc., a golf course consulting company headed by PGA tour pro D.A. Weibring, recently broke ground on the Ie Petaw Golf Club in Hokkaido, Japan.

This 27-hole country club resort complex is just outside Sapporo. Course completion is scheduled late in this year.

Meanwhile, GRI recently was named the management firm for Crestwick Country Club in Bloomington, Ill. Bloomington is the home of Illinois State University, which Weibring attended in the early 1970s.

GRI provides agronomic consulting services to more than 30 golf courses throughout the world.

MARRIOTT'S LEE COURSE GROWS IN

MARCO ISLAND, Fla. — Carved out of 180 acres of southwestern Florida cypress, palm and pine trees, the new golf course at Marriott's Marco Island Resort and Golf Club is scheduled for completion next fall.

The 6,925-yard par-72 course was designed by Joe Lee. The club will include the 18-hole championship course, 14-acre practice facility and a John Jacobs practical golf school.

The practice area will have chipping and putting greens, sand traps and a fairway bunker.

SOUTH SEAS REBUILDS COURSE

CAPTIVA ISLAND, Fla. — South Seas Plantation Resort & Yacht Harbor has rebuilt its golf course at a cost of \$1.5 million.

The course was designed by Bates/Heard Golf Design. Partner Jerry Heard, a former PGA tour professional, is the golf director for South Seas.

The rebuilt course was constructed on the property's pre-existing course area. Among improvements to the nine-hole, par-36 layout were reshaped greens, new men's and women's tees, replanted fairways and roughs, and an upgraded drainage system.

PGA Tour enters public marketplace

By Bob Seligman

Following this winter's opening of the Golf Club of Miami, PGA Tour officials said they intend to operate more public golf courses.

The Florida facility, which opened its third 18-hole course in January, joins The Golf Club of Jacksonville (Fla.), as public courses operated by the PGA Tour. The Tour runs several Tournament Players Club private, semi-private and resort courses.

Gary Dee, director of operations for PGA Tour Public Golf, Inc., said the announcement of a third public facility may come by

late May or early June.

Dee said the PGA Tour would like to open one or two public facilities a year for the next 10 years, and, ultimately, to have 15 to 20.

"It's a significant commitment of resources and staff of the PGA Tour. But compared to major operators of public facilities, it's not a lot," said Dee. "We'll pick our spots here and there. The TPCs will still be the primary thrust."

Dee said the new spots will likely be in warm climates, primarily in communities with at least 300,000 people living within a 30- to 40-minute drive. An ideal facility would have

27 to 36 holes. Public courses could eventually become part of a resort, but he is uncertain when, or if, that will happen.

Dee said greens fees will be \$20 and up. Current greens fees at The Golf Club of Miami range from \$6 in the off-season at its executive course to \$31 in-season at its West course. The Golf Club of Jacksonville charges \$15 on weekdays and \$19 on weekends.

The PGA Tour is aiming for 40,000 to 50,000 rounds per year at each facility.

Dee said the rise in golfers, particularly public-course players, is a driving force in the

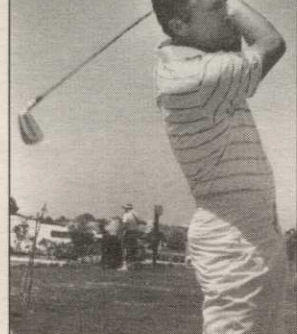
Continued on page 40

Player excited about designing Pinehurst #9

By Mark Leslie

PINEHURST, N.C. — Contemplating the nostalgia, the Golf Hall of Fame and the great architects who have designed courses at Pinehurst Resort and Country Club, Gary Player said it is a "great thrill" to be chosen to design Pinehurst #9.

"I've always had respect for the Pinehurst area, and to be able to put your ideas into your own course there is wonderful," said Player, who agreed in March to design the course.



Gary Player

Among the first five men inducted into the Golf Hall of Fame, the South African Player will join co-Hall inductees Arnold Palmer and Jack Nicklaus as having designed courses at Pinehurst. Sam Snead and Ben Hogan, the other two among the first group of inductees, have not designed layouts here.

Player said playability, good drainage and beauty are critical aspects of the design philosophy he will instill into Pinehurst #9, also called "The Holly Course" at Pinewild.

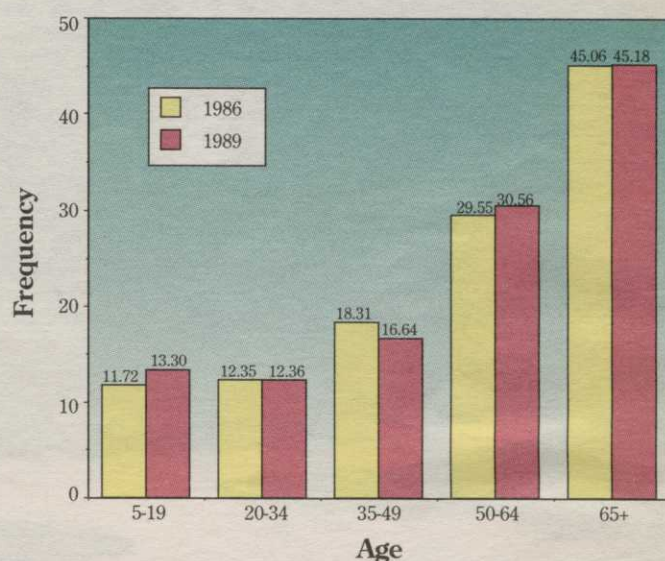
"I don't believe in the type of golf courses many are building today," he said, adding that golfers want to get away from the stress of life. "After playing some of the courses out there today, they have to go back to the office for a vacation."

Player said: "I'm 'anti' huge undulating greens. Members can hardly play them if the pros can't. I'm 'anti' hazards in front of greens. Ladies and the elderly are the backbone of the game, and you can't design hazards that penalize a straight shot. I believe in putting trouble on the side of greens."

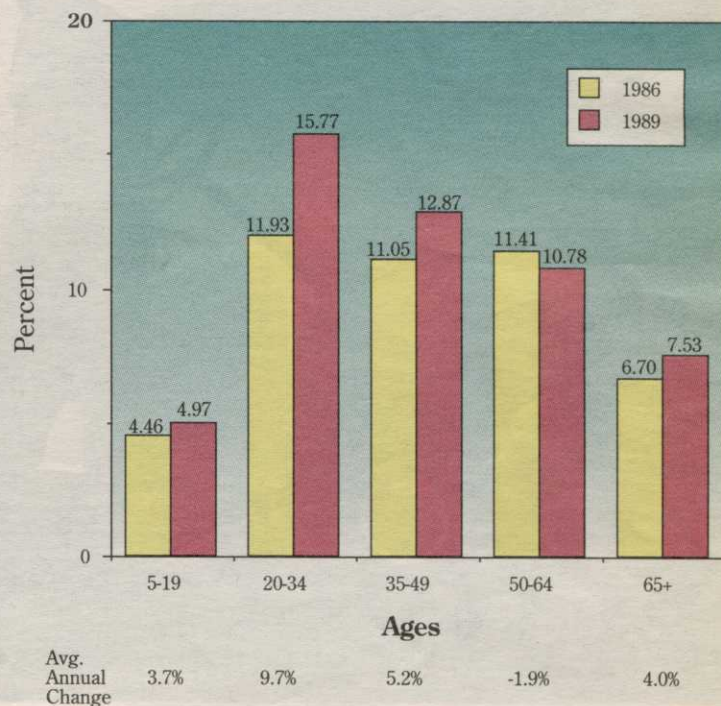
"I design flat greens with a neck where judgment on the second shot is vital," he added. "I'm a believer—and Scotland's courses are great examples—in being able to carry the ball to the flag or run it up. I'm also a great believer in variety of greens."

Continued on page 30

Recent changes in frequency of play



Participation Rate Changes — 1986-1989



Source: NGF

McAnlis wins raves of distinction at Venice G&CC

Golf course designer Ted McAnlis of North Palm Beach, Fla., has opened Venice (Fla.) Golf and Country Club this winter and has two other 18-hole courses under construction in the state.

Venice G&CC, the cornerstone of a golfing community that will include 500 homes, has received high marks since opening Jan. 12.

Under construction are Calusa Lakes in Laurel and a yet-unnamed course in Brooksville. Shaping has been done on 16 holes at Calusa Lakes and the course is expected to open in October.

The Brooksville site has a long construction schedule. McAnlis said the first nine

holes will be seeded in October.

Approved and with construction pending is 18-hole Stoneybrook in Bradenton. Meanwhile, planning is under way on Oyster Creek, an 18-hole executive course in Englewood, and University Commons, an 18-hole layout in Bradenton. Approvals are pending for the 27-hole Gardens Country Club in Palm Beach Gardens and the 18-hole Lakes of Indianwood in Indiantown.

At Venice G&CC, McAnlis said, "each hole has its own character," the front nine being routed through pasture and the back nine through pine and oak woods.

"The tee angles are critical to the design,"

McAnlis said, adding that he also likes to pitch his greens from back to front so the player can see the green on the approach shot.

One of McAnlis' favorite holes is the 428-yard dogleg left 10th, which features a series of island tees.

The par 72 course plays from 6,790, 6,380, 5,964 and 5,203 yards.

The site work contractors were Wendall Kent and Co. of Sarasota and Deans Contracting of Venice. The shaping was done by Richard Laconte of Stuart, while the irrigation and finish work were completed by MGI Inc. of Clearwater.

Rob Roy is Venice G&CC's professional.

Three Player designs opening

Gary Player Design Co. of Palm Beach Gardens, Fla., opened one course in April and will have two open in June.

River Falls Plantation in Spartanburg, N.C., an 18-hole daily-fee course, opened April 22.

Blackmoor at Myrtle Beach, an 18-hole daily-fee layout, opens June 10.

River Run, a daily fee resort course in Ocean City, Md., will open June 16 and 17.

Player also will begin construction in September on 36 holes for the city of Palm Beach, Fla., in conjunction with the PGA of America.

Player touch a personal one at Pinehurst #9

Continued from page 29

"I want a course everyone can play, but also where the pros can go to the back tees and have a heck of a test," he said.

A garden enthusiast, Player said beauty is crucial for a course. "The right landscaping does a lot for your soul," he said.

He also stresses a variety of grasses, especially around the tees and moundings to add character. Yet he is highly selective.

"Some architects have gone to high-humidity areas like Atlanta and put in bentgrass. But you're looking for trouble," he said.

Player decried the huge maintenance costs designed into some courses.

"Some courses in the United States are costing \$2 million a year to maintain," he said. "Any time a course costs more than \$600,000 for maintenance, that's a (sign of a) bad architect."

Water is valuable and you don't buy soil in a drug store, Player said, pointing to the need for conservation.

He said he adds the superintendent to each project "as early as possible, so that he learns our ideas, gets a feel for the course, and plays an important role in the project."

"You need a good superintendent to follow along the lines you want, or the course can deteriorate very quickly."

Player Design Co. President Jim Applegate said: "We consider (the Pinehurst project) a feather in our cap... Gary intends to spend as much time as possible there. It is located on routes getting to and from tournaments."

"Given all the nostalgia, the Hall of Fame, and the other great architects who have been at Pinehurst, it will be hard to keep him away. This is high on his list."

Applegate said the site "is extremely nice rolling land, heavily wooded."

He said Player's design will bring "normalcy." He said the success of that style of golf at Player's Myrtle Beach and Hilton Head National courses "speaks for itself. People keep coming back and coming back to play it."

"When they leave the course they don't feel like they've been beat up by a Mack truck."

Player was to do the initial walk-through on the site on April 24 and construction should begin late this fall, Applegate said.

Jeff Myers, head of the Player design department, is project designer. An Ohio State University agronomy and landscape architecture graduate, Myers is a nephew and apprentice of architect Karl Litten. He has been with Player eight years.

The construction contract will go out to bid to two or three experienced companies in the Pinehurst area, Applegate said.

Player has retained ClubCorp Realty of Dallas to supervise construction, according to George I. Blonsky Jr., managing director of Pinewild and senior vice president of ClubCorp, which owns Pinehurst Resort and Country Club.

Saying the agreement between Pinewild and Player was the result of several months of planning, Blonsky added: "It is a major coup to bring the International Ambassador of Golf here to design a championship signature course for our community. It will positively influence the future tradition of golf at Pinehurst."

Pinehurst #6 opens after redesign work

Pinehurst (N.C.) Resort and Country Club officially reopened its championship No. 6 golf course on March 1, after eight months' work redesigning all of its greens and four fairways.

The original No. 6 greens were removed, then enlarged and recontoured to reflect the character of each hole. The four fairways were redesigned to enhance their playability.

"In 1979, under previous ownership and due to budget limitations, No. 6 was constructed with smaller greens than designer Tom Fazio wanted," said Don Padgett, Pinehurst director of golf operations. "With Tom's input, the redesigning makes No. 6 an even better course than it was because the new greens and fairways allow for increased playability."

Pinehurst No. 6 is a 7,098-yard, par 72 course, with a 74.5 rating.

Officials also upgraded No. 6's driving range and added a new putting green, new golf carts, cart storage facilities and clubhouse.

Pinehurst is owned and operated by Club Resorts Inc., an affiliate of Club Corp. of America.



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Courses newly approved in the United States

Golf Course News is publishing this list in each issue. It includes courses that have been approved around the country in the past month. In addition, the chart below this one contains the sites and contacts for new courses and renovations in the planning stages. When those courses are ready to begin construction they will be

listed again in this "Courses newly approved in the U.S." chart.

We would appreciate your help in updating this section. To contact us call 207-846-0600 or write *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.

Under "Type" — D= Daily Fee; P= Private; and M= Municipal.

Location	Course Name	Type	Holes	Address	Architect/Contact
Alabama					
Decatur	Cherokee Ridge	D	18	Alabama 231	Sid McDonald
Florida					
Marco Island	Marco Island Resort & GC	D	18	N/A	Joe Lee
Tallahassee	SummerBrooke	D	18	Meridian Rd.	Dean Refram
Vero Beach	St. Lucie County Muni GC	D	18	Fairwinds Dr.	Jim Fazio
Illinois					
Carbondale	N/A	M	18	N/A	Park Dir. George Whitehead
Massachusetts					
Plymouth	Head of the Bay CC	D	18	N/A	Ray Richard
Montana					
Whitefish	Kinnikinnik Golf Resort	D	18	N/A	Project Mgr. Greg Bryan
New York					
Cortland	Willow Brook GC	D	9	3267 NYS TLT 215	Charles Timmerman
Ohio					
Licking County	Village View GC	D	18	210 S. Main St.	Douglas P. Crowl
Pennsylvania					
Pittsburgh	N/A	N/A	18	N/A	Arnold Palmer
Texas					
Houston	Bentwater	P	18	Bentwater	Scott Miller Design
Wisconsin					
Fond du Lac	Whispering Springs	D	18	N/A	Bob Lohmann
Green Bay	Haller Creek	D	18	Elmwood Rd.	Richard Reinhard
Richfield	N/A	N/A	9	1580 Mayfield Rd.	Donald Zimmerman

Speed of play crucial element to Childs' design

SOUTHLYON, Mich. — Speed of play was a major objective when architect Don Childs and developer John Williams of W.S. Golf Inc. designed Cattails Golf Club in this Detroit suburb.

"We plan to do a lot of outing business, and we wanted to insure speed of play," Williams said.

So the "upscale public fee" course, which will open in early July, was designed with gentle slopes so that no hand mowing is required, few fairway bunkers, and only two bunkers per green.

Williams said 40 acres of wetlands add definition and beauty to the layout, which is 5,800 to 6,600 yards long and plays to par 72.

Michigan Golf Associates built the course that includes a 175- by 300-yard practice area.

Palmer course feature of \$450M project

PITTSBURGH, Pa. — A \$450-million residential/golf community is to be built on 1,400 acres in the North Hills.

Construction will start late in the spring or early in the summer. The 18-hole course was designed by Arnold Palmer.

Courses newly planned in the U.S.

Following is a chart containing the sites and contacts for new courses and renovations in the preliminary planning stages. When these courses are ready to begin construction they will be listed again in the "Courses newly approved in the U.S." chart, above.

We would appreciate your help in updating this section. To contact us call 207-846-0600 or write *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.

Location	Contact	Location	Contact
Arizona		Montana	
Litchfield Park	SunCor Dev.t Co.	Great Falls	Developer Gary Lee
Sun City West	Del Webb Communities	New Jersey	
California		Elizabethtown	Town Manager Peter Whipple
El Segundo	Rec & Park Comm. Fred Roberts	Galloway Twp.	Atlantic Cnty Adm. Helen Walsh
Escondido	Golf Corp Inc.	Raritan Twp.	Park Board Chair. John DeMarrais
Meadow Vista	Robert Trent Jones	New York	
Mill Valley	Branwell Fanning	East Quogue	Developer Neil Rego
Morro Bay	A.J. Wright	Pennsylvania	
Colorado		Butler Twp.	Developer Harold Benjamin
Canon City	First Golf Corp.	Kennett Twp.	Developer Charles Robinson
Connecticut		Upper Makefield	Jack Nicklaus
Bristol	Developer Douglas Reif	South Dakota	
Bristol	Developer Kevin Della Bianca	Rapid City	Developer Frank Simpson
Guilford	Al Zikorus	Sioux Falls	Kemper Lesnik
Guilford	Selectman Frank Larkins	Tennessee	
Middletown	Albert Zikorus	Fairview	Joseph C. Greene and Associates
Seymour	Developer Chris Bargas	Texas	
Florida		Tyler	Parks & Rec. Dir. Larry Morgan
Naples	Ken Venturi	Utah	
Naples	Mike Ditka	West Valley	Don White
Orange Lake	Celebrity Resorts Inc.	Washington	
Georgia		Everett	R.E. Moultrie
Lawrenceville	Developer K.C. Bowen	Maple Valley	Developer Brad Hebenicht
Rome	Park/Rec. Director Bob Saylor	Richland	First Golf Corp.
Hawaii		Spokane	William Robinson
Maui	Robert Trent Jones Jr.	Wisconsin	
Illinois		Madison	City Hall
Blue Island	Donald Peloquin		
Tuscola	Mike Hurdzan		
Massachusetts			
Sturbridge	Rees Jones		
Minnesota			
St. Peter	City Administrator Bob Ringhofer		

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Golf car manufacturers making

Better controllers combine with UST, emission laws to push electric car sales

By Mark Leslie

From front to rear, whether electric or gasoline-powered, golf cars are getting lighter, quieter and more durable, with more efficient power trains and better electrical control systems.

"A lot of innovations are coming into the

product line," said Dave Hardy of Club Car, Inc.

"The electric car manufacturers are using solid state controllers. Gas car manufacturers are going to a better, more efficient power train design. So gas engines are getting better, electric motors are getting better," Hardy said from his Augusta, Ga., office. "They are making golf cars less intrusive on the game and more convenient, to enhance the enjoyment for all the people playing. That's really what it's all about, what we're trying to do."

Ronald Skenes, marketing communica-

tions coordinator for E-Z-GO Division of Textron, Inc., said the industry is "constantly working to improve the efficiency of operation ... to get more rounds per gallon, more rounds per charge, more dependability... Golf courses want cars for rental revenue. If they're broken down, they're not bringing in any money."

Golf courses have been buying more electric cars in the past year or so, Skenes said, explaining that solid-state controls have dramatically increased the range of electric cars.

"Whether a car can go two rounds a day is no longer an issue," he said. "Also, because it

uses so much less energy for two rounds, it's taking big cuts out of power bills—a 20- to 30-percent reduction because it recharges quicker. Plus, you're extending battery life."

Hardy agreed, saying: "In past years the market seemed to be leaning toward gas. Right now I'd say there's a trend toward electric cars. Electric cars are better and more efficient than they were a few years ago. They have better speed controls, better batteries, better chargers."

"There is probably an equal trend among gas car manufacturers to make them quieter, lower emissions, more fuel-efficient."

GOLF COURSE NEWS

Exclusive industry survey of golf

Company	Model	Type	Engine Manufacturer	Horsepower	How cooled	Length of warranty	Material of frame	Frame Design	Rust-proofing	Type of Springs
Club Car, Inc. P.O. Box 4658 Augusta, GA 30917 Mark McClure 404-863-3000 Circle #201	DS	Electric	N/A	2.97	N/A	3 yrs.	Aluminum	I-Beam	Yes	Mono leaf
	DS	Gas	N/A	8.5	Air-cooled	3 yrs.	Aluminum	I-Beam	Yes	Tapered mono leaf
Columbia ParCar Corp. P.O. Box 1 Deerfield, WI 53531 Ben Sherwood 608-764-5474 Circle #202	Legacy	Electric	Columbia	2.0	N/A	3 yrs.	Steel	Tubular	Powder coated	Leaf front/Coil rear
	Legacy	Gas	Columbia	8.0	Air-cooled	3 yrs.	Steel	Tubular	Powder coated	Leaf front/Coil rear
	Classic	Electric	Columbia	2.0	N/A	3 yrs.	Steel	Tubular	Powder coated	Leaf front/Coil rear
	Classic	Gas	Columbia	8.0	Air-cooled	3 yrs.	Steel	Tubular	Powder coated	Leaf front/Coil rear
E-Z-GO 1451 Marvin Griffin Rd. Augusta, GA 30913 Ron Skenes 800-241-5855 Circle #203	GX-444	Gas	Fuji	8.5	Air-cooled	3 yrs.	Steel	Tubular	Electrostatic	Spring & Coil
	X-440	Electric	GE	2.0	N/A	3 yrs.	Steel	Tubular	Electrostatic	Leaf
	X-444	Electric	GE	2.0	N/A	3 yrs.	Steel	Tubular	Electrostatic	Spring&Coil
Hyundai 23382 Mill Creek Dr. Laguna Hills, CA 92653 James Lester 714-837-1515 Circle #204	HGG-1	Gas	Suzuki	8.5	Air-cooled	3 yrs.	Steel	Tubular	Electrostatic	Spring&Coil
	HGB-1	Electric	GE	3.0	N/A	3 yrs.	Steel	Tubular	Electrostatic	Spring&Coil
Melex USA, Inc. 1221 Front St. Raleigh, NC 27609 Bryan Taylor 800-334-8665 Circle #205	412 (4-wheel)	Electric	N/A	2.1	N/A	3 yrs.	Steel	Tubular	R.I.M.	Leaf spring
	152 (3-wheel)	Electric	N/A	2.1	N/A	3 yrs.	Steel	Tubular	Aircraft type	Leaf rear; Coil front
	252 (4-wheel)	Electric	N/A	2.1	N/A	3 yrs.	Steel	Tubular	Aircraft type	Leaf spring
Shuttlecraft 2803 Murray Rd. Estherville, IA 51334 Robert Jensen 712-362-5846 Circle #206	2000	Gas	Honda	8.0	Air-cooled	3 yrs.	Steel	I-Beam	Paint	Leaf
	2100	Gas	Honda	8.0	Air-cooled	3 yrs.	Steel	I-Beam	Paint	Leaf
	2500	Gas	Honda	8.0	Air-cooled	3 yrs.	Steel	I-Beam	Paint	Leaf
Yamaha Motor Corp. 6555 Katella Ave. Cypress, CA 90630 Joe Stahl 714-761-7602 Circle #207	Fleet Master G9A	Gas	Yamaha	8.85	Air-cooled	3 yrs.	Steel	Tubular	EDP	Coils over shocks
	Fleet Master G9E	Electric	GE	2.97	N/A	3 yrs.	Steel	Tubular	EDP	Coils over shocks
	Fleet Classic G8A	Gas	Yamaha	8.85	Air-cooled	3 yrs.	Steel	Tubular	EDP	3-link rear suspension
	Fleet Classic G8E	Electric	GE	2.97	N/A	3 yrs.	Steel	Tubular	EDP	3-link rear suspension
	Sun Classic G5A	Gas	Yamaha	8.85	Air-cooled	3 yrs.	Steel	Tubular	EDP	Strut front/3-link rear
	Sun Classic G5E	Electric	GE	2.97	N/A	3 yrs.	Steel	Tubular	EDP	Strut front/3-link rear

progress in both gas, electric

Since more rounds are being played nationwide, and golf cars are used more than in the past, manufacturers are targeting durability. At the same time, laws regulating emissions have focused research on ways to improve body and engine efficiency.

DURABLE AND EFFICIENT

Hardy said Club Car switched this year to bayflex. "It's a molded plastic material that's very flexible and durable, yet repairable," he said. "We had used metton, which ... is fairly durable and flexible, but it is difficult to repair."

"Everything was fiberglass. Now you're

finding metton, bayflex, polypropylene, and a lot of different materials being used in bodies and body designs that are much more durable, much more flexible, and yet are capable of maintaining the finish the manufacturer is looking for."

Skenes said engineers have also improved gas engines.

Referring to the years-long debate over two-cycle and four-cycle engines, he said E-Z-GO "leap-frogged over the rest of the industry" with a twin-cylinder design it has introduced in its utility vehicles. With its twin-cylinder overhead cam engine, it is "a

whole new concept for that type of vehicle," Skenes said.

He said the two-cylinder's advantage over the single-cylinder engine is "it's a much smoother running engine and quieter."

Yet it will not be introduced into the E-Z-GO golf car line until "some time in the future," he said.

Meanwhile, in a *Golf Course News* survey, all golf car makers expressed the No. One selling point of their vehicles.

• Shuttlecraft U.S.A.'s Robert Jensen said the best points of his Models 2000, 2100, and 2500 are their styling and Honda engines.

• Bryan Taylor at Melex USA, Inc. pointed to the electronic speed control system of his models, plus their ease in maintenance, durability, and narrow clearance circle.

• James Lester of Hyundai Golf Cars, U.S.A. said Hyundai-engineered reliability and the comfort of more leg room, coupled with an automotive-style ride, are his cars' top selling points.

• E-Z-GO's Skenes said his gas model is dependable and electric models are the most efficient on the market.

• Ben Sherwood at Columbia ParCar Corp. said the Legacy gas and electric models feature a clam shell body design for easy main-

tenance and cleaning, and a safety directional key switch. The Classic models, he said, are set apart by an angled bag rack and safety direction key switch.

• Cary Rivers said Club Car's DS gas model has a highly durable and quiet engine and the DS electric model is "lightest weight and highest efficiency."

The manufacturers using bronze bushings said they made that choice because it is longer-lasting, of higher quality and allows for better lubrication.

Those using rubber cited the better ride it gives and also claimed durability, while Lester said Hyundai's rubber and steel bushings match with its welded high-tensile strength tubular steel frame.

Only two companies — Club Car and Shuttlecraft — use I-Beam frame construction. The rest use tubular.

STATE OF THE MARKET

Hardy said the last year has "generally been a very healthy one."

Pointing to the downturn in real-estate oriented golf course development, he said there is nevertheless "a lot of new course construction. And the existing courses are doing very well, at least in the purchase of new golf cars."

car manufacturers

Type of Bushings	Type of Steering	Type of Brakes	Weight	Turning Radius
Urethane&Bronze Urethane&Bronze	Rack&Pinion Rack&Pinion	Rear drums Rear drums	447 622	6-9 6-9
Bronze or Rubber Bronze or Rubber Bronze or Rubber Bronze or Rubber	Rack&Pinion Rack&Pinion Rack&Pinion Rack&Pinioin	Shoe Shoe Shoe Shoe	590 655 629 694	8-0 8-0 8-0 8-0
Rubber Rubber Rubber	Rack & Pinion Rack&Pinion Rack&Pinion	Auto adjusting Auto adjusting Auto adjusting	685 521 562	9-9 8-9 9-9
Rubber&Steel Rubber&Steel	Worm&Pinion Worm&Pinion	Mech'l brake cable Mech'l brake cable	617 529	10-2 10-2
Bronze Bronze Bronze	Worm — auto type Worm — auto type Worm - auto type	Mechanical Mechanical Mechanical	643 652 684	9-3 8-3 9-7
N/A N/A N/A	Rack&Pinion Rack&Pinion Rack&Pinion	Disc Disc Disc	670 670 670	9-6 9-6 9-6
Rubber&Steel Rubber&Steel Rubber&Steel Rubber&Steel Rubber&Steel Rubber&Steel	Worm gear mech'l Worm gear mech'l Worm gear mech'l Worm gear mech'l Worm gear mech'l Worm gear mech'l	Drum Drum Drum Drum Drum Drum	606 606 662 662 662 662	9-3 9-3 9-6 9-6 9-6 9-6

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Golf car fleet buyers must consider many variables

By Joe Stahl

Golfcourse decision-makers face a growing number of factors, and options, when choosing a golf car fleet. Durability, reliability, long-run profitability, local service, refueling/recharging practices and environmental considerations — as well as the gas-vs.-electric and lease-vs.-buy decision — all enter the equation.

Superintendents nationwide have their own set of circumstances that can be as different as day and night — the North's seven-month season compared to the South's year-round operation, a hilly Northwest course compared to a flat Southeast layout, emission-conscious California legislators or fewer landfills accepting batteries.

Jim Lewis, superintendent at Marriott's Tan-tar-a Resort and Country Club in a hilly region of the Ozarks in central Missouri, had his own set of compelling factors when he shopped for a rental fleet.

Lewis knew he wanted a rental fleet with enough acceleration, torque and power to handle elevated terrain. He also knew the cars would have to provide the durability and extended life necessary for long-term operating revenue. And, while environmental regulations had yet to take hold in central Missouri, Lewis was keenly aware that a noisy, fume-emitting fleet would hardly be in keeping with Tan-tar-a's exclusive image. Finally, he wanted to be sure repairs would be conducted as quickly and inexpensively as possible.

Due to the number of makes and models on the market, rising prices and a growing reliance on golf car rentals for revenue, the once-simple practice of selecting a fleet has become a major decision. Armed with a thorough knowledge of their



Golf manufacturers offer a world of choices to fleet buyers.

courses' specific needs, the considerations involved in the purchasing process and common sense, superintendents can select a fleet that will positively impact a course's bottom line for many years.

LONG-TERM PROFITABILITY

Crucial to the selection process is profitability — the trade-off between an attractive initial purchase or leasing price and long-term revenue.

Embedded in the long-term profitability equation are a host of basic management and maintenance issues. All affect whether a club's car rental program is a players' convenience or a profit center.

Superintendents want a fleet that combines top performance, maximum up-time and user flexibility with a minimum of "behind-the-scenes" headaches, such as breakage, parts replacement and excessive labor costs.

The secret to maximizing revenue over the long haul is to compute all known management and maintenance factors over the pe-

riod of time a golf course anticipates using its cars, which today averages three to four years, nationally, according to the National Golf Foundation.

Value-conscious golf course operators must concentrate on the net present value of the purchase decision — that is, the fleet's long-term income/cost comparison, as well as its ability to withstand the rigors of everyday use.

GAS VS. ELECTRIC

There is no general consensus on whether a gas or electric fleet has an advantage. Recent technological advances have both types running efficiently.

Historically, for hilly courses, there has been no substitute for the power and nominal torque of gas-operated cars. Gas engines still have torque advantage over electric motors when the path turns sharply upwards.

In overall performance, however, electric cars perform very cost-effectively and hold their ground remarkably well against their gas counterparts.

In fact, advancements in electric car acceleration via energy controllers, now enable electric models to deliver smooth, efficient power on most terrain.

The gas-vs.-electric debate usually comes down to questions of purchase price and long-range operating costs.

Gas models sell for more. In return, they offer as many as 30 to 40 rounds without refueling. They also cost less to run and require little daily maintenance.

In general, electric fleet owners trade off lower initial costs for the daily routine of recharging their fleet and occasionally replacing worn-out batteries. Electric motors are fairly simple, and may be the choice if the course can afford to build a cart barn for car recharging.

ENVIRONMENTAL CONSIDERATIONS

In states where clean air standards have been imposed or are being drafted, environmental considerations must be factored into purchase decisions. In addition, as golf continues to grow in popularity, the sport's demands will test courses' physical resources and people will scrutinize a fleet's impact on its surroundings.

While electric fleets are the cleanest, the latest four-stroke gas engines generate the lowest levels of unburned hydrocarbons — the fumes created when gas and oil don't completely burn in the combustion process — in the history of the game.

Other constraints cloud the issue.

Concerned that fuel may be leaking into ground water from storage tanks, environmental legislation is being proposed that calls for improved drainage, leakage detection, encasement and ventilation modifi-

cations at facilities storing gas. For the gas-car enthusiast, the result is a cleaner operation at a greater cost.

In an increasingly waste-conscious society, many people feel electric cars are the way to go. However, electric models pose environmental problems also. While the lead in batteries can be recycled, the acid cannot — and more landfills are refusing batteries.

FINANCIAL CONSIDERATIONS

Financing considerations — especially in fleet leasing — must be figured into the selection process. A number of third-party organizations tailor their leasing and billing structures to fit a course's individual budgetary needs. Thus, customized leasing and financing arrangements can be created for any fleet purchase — regardless of the make and model.

The primary advantage of fleet leasing is that it doesn't require a course to tie up large sums of money in a depreciating capital investment.

THE BOTTOM LINE

While the largest source of golf course revenue is derived from greens fees, fleet car rentals are the second-leading source of profit. But cashing in on this financial windfall is far from easy.

It requires a thorough analysis of the many factors surrounding fleet selection, purchase, use and everyday maintenance. Perhaps most importantly, it requires today's decision-makers to give up their emphasis on short-term returns and profitability and consider a rental fleet as a long-term tool to maximize overall course and club revenue.

Joe Stahl is vice president of the Golf Car Division of Yamaha Motor Corp., U.S.A.

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Ross course owners nabbing Forse for remodeling jobs

By Vern Putney

Golf course designer Ronald A. Forse of Uniontown, Pa., who has put his restoration philosophy into play at several Pennsylvania and Ohio courses, has moved to Massachusetts with his handiwork.

He's making long-range improvements at Hyannisport Country Club, implementing Donald Ross drawings and making the course play for modern equipment.

Project completion is due in mid-August.

Reconstruction of bunker complexes and additions of women's tees at the Lebanon (Pa.) Country Club were the focus of a recent project.

"By researching architect Alexander Findlay's style, we were able to remodel with an authentic feel and character. This 'sympathetic remodeling' addresses the desired flavor in addition to the course's functional and agronomic needs," Forse said.

"Holes on a lackluster front nine were made attractive, and recontouring of the 17th green's surface made subtle breaks while creating a more level putting surface."

Forse's restorative touch also will be evident at the Lancaster (Ohio) Country Club. Donald Ross and Jack Kidwell each designed nine holes there.

The course has blind shots to correct and other problems, but J.B. McGovern's 1926 drawings will be the guide. Focus will be on using contour of the land to best advantage.



Lebanon Country Club's renovation featured reconstructed bunker complexes.

A charter member of the Donald Ross Society and its history committee, Forse reveres early architects. He emphasizes restoration in their image (not the remodeling architect's) while yielding some ground to modern yardage demands.

Forse frequently visits classic courses to study their design features. Last spring he

explored Pinehurst #2 course, and this spring will revisit Pinehurst and the Donald Ross Archives for further study.

"Golf courses properly designed are works of art and should be regarded and preserved as such," Forse said. "Modern equipment has altered shot value and effective lengths on many holes."

"Sympathetic remodeling" addresses the desired flavor in addition to the course's functional and agronomic needs.'

— Ronald Forse

"Holes should, therefore, be updated in the spirit and character of the original design. Bunkers can be relocated to play for today's lengths but made to fit the original concepts and look of the course. One bunker strategically placed can affect shot planning as much as a multitude of hazards."

"Shot value and strategy are of utmost importance in design, much more to be valued than difficulty. Hazards are to make the game interesting, not to penalize."

The 1979 graduate of West Virginia University with a bachelor's degree in landscape architecture traces his appreciation for the classic golf course to roots at Mt. Ridge Country Club in West Caldwell, N.J., a Ross design. There he caddied, worked on the maintenance crew and played often.

Bruce Hepner, Forse's design associate, has a civil engineering degree from Michigan Tech and once was an auto designer.

Incline Village courses begin lengthy remodeling

LAKE TAHOE, N. Y. — The Incline Village Golf Resort is in the midst of a major restoration project that encompasses both the championship and executive courses.

The resort's \$4 million five-year plan will include a state-of-the-art irrigation system at the championship course, remodeling the existing championship clubhouse, and minor improvements at the executive course.

The irrigation system involved installation of 19 miles of pipe in 60 days last summer at a cost of \$800,000.

Robert Trent Jones Jr. designed the master plan to improve the course.

With the severe water shortages affecting the Tahoe basin the past five years, the system will use water more efficiently.

Within the next five years, the Incline Golf Resort plans to spend \$1.2 million on remodeling the clubhouse at the championship course.

Last summer, 40,000 rounds of golf were played at the championship course, 25,000 rounds at the executive course.

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Ken Lapp, Cog Hill Golf and Country Club—Site of 1991 Western Open, "We have 4 Courses and 60 employees. This is a great training aid...really enjoyed it."

Harold Fredrickson, Englewood Valley Country Club, "Excellent Video, my Spanish guys loved it."

Brian Green, Sunset Valley Golf Club, "Spanish Guys finally got something in their own language that helps explain our philosophies."

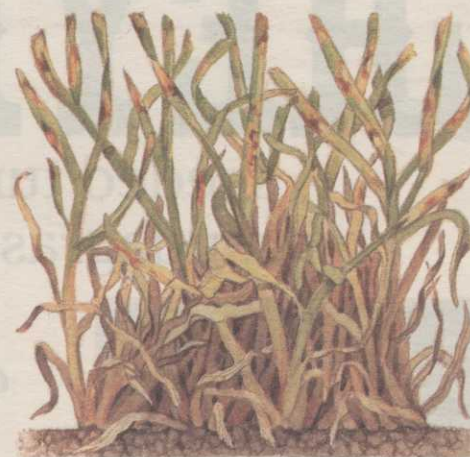
Al Bevers, Hilldale Country Club, "Especially enjoyed cups and traps—Spanish version professionally done."

Roger Stewart, Stonebridge Country Club, "Good basic training tape, good job of explaining jobs - especially liked cart maintenance."

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Superintendent Bishop changes titles with help of friends

Recruits Bobby Knight, Randy Wittman, Rohn Stark, others for finances

By Mark Leslie

FRANKLIN, Ind. — One super brought together several greats, and they all hope to have a legend of a golf course here.

Ted Bishop, the superintendent and golf pro at Phil Harris Golf Course in Linton, has lined up Indiana University coach and Basketball Hall of Famer Bobby Knight, former National Football League All-Pro punter Rohn Stark, Indiana Pacers basketball great Randy

Wittman, Indiana University Director of Golf Sam Carmichael and 20 other investors.

Bishop has also pushed through all necessary approvals, signed on architect Jim Fazio, and is ready to build the \$3.8-million Legends of Indiana course.

The 18-hole daily fee course is the first phase of a master plan that will include 27 holes, a separate par 3 course and a practice facility.

"Johnson County is the fastest-growing county in Indiana," said Bishop, a 1976 Purdue University graduate who is on the PGA board of directors. "I spent 13 months doing market research and putting together a financial

prospectus and, then, in January, February and March raised the money and picked Fazio."

Bishop knew Knight and the other investors through Knight's years of involvement in Indiana golf.

He has not chosen a course builder yet, but hopes to start construction in May and to open in the summer of 1992.

The site is 384 acres of mostly open farmland, but Bishop expects nine lakes to be dug and 60 bunkers to add zest to a layout that will span 6,100 to 7,000 yards from multiple tees.

"We want to play a lot of outings and tournaments, so we need the course to be flex-

ible," Bishop said. "I hope someday it can host the Indiana Open or state amateur championships."

"With Jim Fazio involved, we know it will be a great design. It will be unique to Indiana in that it will be the first Fazio course built here. George didn't do any here and Tom hasn't. We wanted the classic, traditional Fazio design," he said.

Though the course will be daily fee, a limited number of memberships will be sold, Bishop said.

The nearest course, Hillview Country Club, has a 2 1/2-year waiting list for membership and has not opposed the new development.

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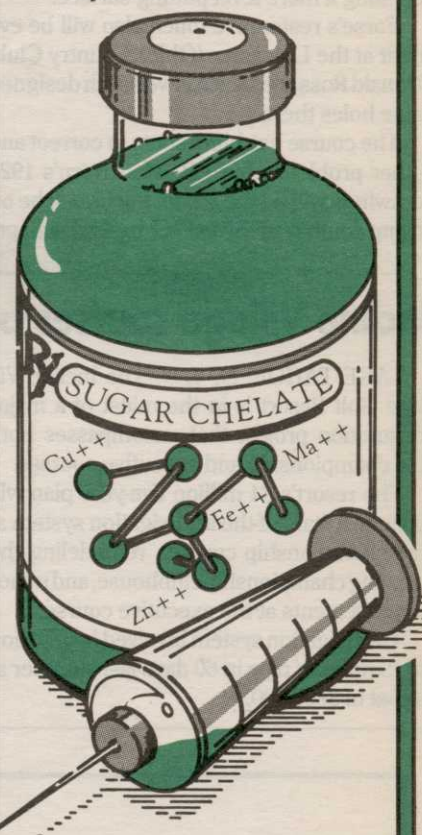
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Finger takes expertise to wide-open territory — Mexico

By Frances G. Trimble

The adage, "Go west, young man," has taken a directional and age twist for semi-retired golf course architect Joe Finger, who has headed south to help Mexicans build courses.

Only about 150 private clubs and no municipal courses exist in Mexico, said Finger. Yet there is "a big market" for munis and daily fee tracks as times change in that country, he added.

Finger, who has formally retired from the firm he founded — Finger.Dye.Spann of Houston — said that, while demand for courses hasn't existed before, "The young Mexicans are real-estate hungry and are buying their homes and land away from the cities, where they can find peace, clean air and water.

"The country has been influenced by everything from affluence and Lee Trevino to the availability of American golf matches on cable TV."

Mexico does have a white-collar, golfing middle class, he said, adding, "Anyone who believes Mexico is a Third World country is foolish."

It is no surprise, Finger said, that Mexican developers are intent on giving American, Canadian and Japanese visitors what they want — golf.

But those developers face lack of know-how, shortage of parts and supplies, and hand-me-down equipment.

"In some respects the Mexicans are way ahead of us ... earthquake design, for instance. But on golf course contracting, they are behind because the demand hasn't been there in the past," Finger said.

He said although there are some excellent Mexican engineers and architects, top-notch golf course contractors simply do not exist.

With 34 years of design experience under his belt and being fluent in Spanish, Finger feels comfortable consulting and doing "plans in metric and specs in Spanish."

He is now working on two widely dissimilar projects — Cabo Real in Baja California Sur and Los Encinos Country Club near Toluca.

Mexicans are eager for the advice and assistance, said Finger, a chemical engineer who believes course architecture is "45 percent engineering, 25 percent golf knowledge and agronomy, 15 percent landscape architecture, and the rest an artistic sense that is either a gift or genetic."

The average Mexican developer is a babe in the woods, Finger said.

"The wealthy people who have the financial backing to do one of these courses don't know what it takes to build a good course," he added.

So they have sought Finger, author of "The Business End of Building or Rebuilding a Golf Course," a publication dealing with contracts, cost estimates, plans and specifications, checkpoints for design and construction, and choosing an architect and construction company.

"The Mexican developer has the



Joe Finger designed this waterway that runs through Los Encinos Country Club near Toluca, Mexico. Los Encinos was built by Mexican amateur champion Mauricio Urdaneta, with Finger's consultation.

right to expect the same kind of professionalism from the architect and contractors as one expects in the U.S.," Finger said. He added that even in the United States, professional standards are neither required by the industry nor offered by some individuals and companies.

Construction costs are similar in both countries.

"Even though labor is cheap, it takes a lot more of it," he said. "They are not as efficient."

Mexican equipment is frequently "American cast-off" and less powerful than that north of the border, he said. Parts and supplies are in short supply or unavailable.

"Herbicides approved for use here are held up by the Mexican

counterpart agency," Finger said.

The upside is Mexico's weather, which is better for building than that in the United States.

"They have a predictable rainy season when some work can be done. Otherwise, work is unhindered by weather," Finger said.

Mexico also offers spectacular sites for golf courses.

"Terrain varies from mountainous regions to swampland. There are areas that are rocky and covered with cactus and areas that look like the Austrian Alps. One course I consulted on — Los Encinos — was built by a Mexican amateur champion named Mauricio Urdaneta. Mauricio did a great job but called on me to help with the technical aspects of his operation. The water-

falls around the course are my doing," he said.

About 25 minutes from Mexico City and 10,000 feet above sea level, Los Encinos has 100-foot-tall white cedars, pines and eucalyptus all around. It is part of a residential development that will soon have townhouses for summer vacationers and is, according to Finger, "the place to join if you're a serious Mexican golfer."

The lead partner in the Cabo Real project near Cabo San Lucas is Corona beer owner Eduardo Sanchez Navarro.

"They already have a couple of beachfront hotels there," Finger said. The course will sit behind them on hillsides, with "hills and

ravines, huge cactus, but very little topsoil and water."

Though the contrast between Cabo Real and Los Encinos is striking, Finger said Mexico can always be counted on to amaze visitors with her "density of color," the year-round green of her courses, and the hospitality of her people.

Golf is certainly blooming in a country abundant in natural color. And Finger, who has designed or remodeled around 100 courses in the United States, intends to add to the nine "flowers" he has created there.

Frances G. Trimble is a freelance writer based in Houston, Texas.

Quarantine Kikuyugrass, Finger urges

Houston golf course architect Joseph Finger said he has "begged" the U.S. Department of Agriculture to quarantine Kikuyugrass east of



Joe Finger

the Rocky Mountains.

Finger, who is also trying to keep Kikuyu from being exported from Mexico north into the United States, said, "It is controllable so long as there isn't enough water. But if it ever gets east of the Rockies, or north of the Rio Grande, we're in big trouble."

So far, the Department of Agriculture has not agreed to a quarantine on the grass, which spreads and becomes almost unplayable. It also goes dormant in the winter and becomes unsightly.

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Fast Faster Fastest

By Kit Bradshaw

Kenova Construction Co. — creator of the “95-day miracle” — has gotten even faster.

The West Palm Beach, Fla., firm that built an 18-hole course in 95 working days in 1989 has cranked it up a notch, using its experience to make its “fast-track” approach an Indy Speedway method.

With major doses of pre-planning and coordination, and an army of professionals, Kenova needed just 101 days to build the 18-hole Queenstown (Md.) Harbor Golf Links, mass-grade and rough-shape a third nine holes, finish the driving range and practice green, and build another developer's five-hole course nearby.

The feat in 1989 — Carillon in Plainfield, Ill. — was dubbed “a 95-day miracle.”

Owner Lex Birney called the Queenstown construction “a blitz.”

Golf course architect Lindsay Ervin termed it “beautiful.”

Skeptics might question the quality of a course built so quickly. Yet Carillon and Queenstown Harbor officials alike said they got a high-caliber courses.

The “fast-track” system employed by Kenova is not a theory. It's a fact President Steve Balogh is proving — again and again.

Queenstown Harbor was built, from start to planting, between Aug. 6 and Nov. 30, and will open July 1. The five-hole course, Fairview Links, on a private estate, was built entirely within the month of October and was expected to be ready for play in May or June.

Balogh said the firm got a late start at Queenstown Harbor because of permitting problems.

“Basically, our fast-track system is nothing more than great teamwork,” he said.

The course is on 750 acres of farmland owned for decades by the Birney family. It is

located on the Chester River, a tributary to Chesapeake Bay.

The 160-acre course is situated among critical wetlands, and as a result, much of the soil is wet, and had to be dewatered. The wetlands are part of the beauty of the course, but their existence also extended the permitting process and forced an extensive effort to preserve and protect them.

By the time Kenova began work on Aug. 6, its goal was to have the project seeded before winter set in.

Kenova met the goal.

By the end of November, the 18-hole course, driving range and practice green were planted and ready for the winter germination period, and the second nine holes were ready for seeding this spring.

KEEPING PULSE OF THE JOB

The trick to getting the work done — and maintaining quality — is twofold. Kenova sets up an exceptionally coordinated plan of action, and brings in approximately 125 people who work nearly dawn to dusk, seven days a week, during the construction period.

This speed is possible because of extensive preplanning, according to Bill Zabel, president of Ryan Inc. Eastern, the mass-grading and excavation company that worked with Kenova on Queenstown Harbor.

“You can't just get out there with the equipment and expect it to happen,” Zabel said.

“Before the project is started, you plan how things will interface. You do a week-by-week plan, and sometimes a daily plan. You do this with the cooperation of everyone involved. You get the key people around a table building the entire project on paper before they go out into the field.

“And you maintain a critical path system



An aerial view shows the beauty of Queenstown Golf Links' surroundings. The 750-acre site in Queenstown, Md., has been owned for generations by Lex Birney's family and he hired Kenova Construction Co. to turn it into a golf course.

throughout the project. During the job, we had an administrator at the project, with a computer set up in the office. He tracked all the production and created data bases of information, so he had the pulse of the job at any given time.”

To maintain the timetable, it was important for key players to be available. Golf course architect Ervin was on site an average of three days a week, so design decisions could be made in the field.

“We had the plans finished as they started construction,” Ervin said. “Being on site helped Kenova and Ryan facilitate the schedule. As problems came up, we could make a decision, and the work was done immediately.”

In addition, there were weekly meetings of the architect, golf course professional, superintendent, civil engineer and construction people throughout the project to keep the schedule on line. This interaction was crucial, Ervin said.

“One thing that makes us unique,” Balogh said, “is our shapers. They all play golf. They understand what a golf course needs to be. The shapers can look at a set of plans and totally visualize what the holes will look like. They are artists with bulldozers.”

These bulldozers and other machinery moved 450,000 cubic yards of dirt and created nine lakes on the property during construction.

None of it could have been done, Birney said, without everyone's coordination.

“You could bring in a lot of people and create a god-awful mess. But to Kenova, this is an organizational task. It's not the typical way a course is built.”

Balogh said this “fast track” system evolved by necessity.

“We got into a couple of instances where the owner and developer requested a fast track,” he said. “I studied the whole scenario and figured out that it's nothing more than having the machinery and qualified, capable people doing the work.

“The secret is to have enough supervision, qualified people ... and total coordination during the life of the project.”

DEVELOPER NEEDED SPEED

The fast-track system was important to Birney.

“We had had some significant opposition to the project, so when we started, we wanted to make our presence known with as much impact as possible,” Birney said. “We also wanted to stabilize the property as soon as we could because of the environmental aspects.

“Finally, there were the financial considerations of the project. It was important to us to have it buttoned up as quickly as possible to begin creating revenues.”

Balogh said the cost of construction itself is about the same as with a slower schedule, but in the long run, the developer profits.

“Usually, you build one season and then put in the grass, and the course isn't playable until the third year,” Balogh said. “But when we get it all seeded, it's playable by the second year.

“If they are building homes, then the course helps them sell the homes, because the potential homeowner can see where he wants to build. If it's a public course, such as Queenstown Harbor, the owner can build his revenues faster.”

Birney said the quality of the course is very high and he's happy it will be opening July 1. “If I had to do it over again, I'd consider doing it with these same contractors,” he said.

Balogh said: “During the time we were working on Queenstown, the course architect for a very private five-hole course saw us working and was intrigued by the fast construction and the quality of work we were doing. As a result, we were hired to create this five-hole course in the same area — and we completed it in 25 days. It's a very unusual little course. It can be played in 12 different ways.”

Balogh said his company's fast-track system is generating a lot of interest.

“I think our company is more in demand because of our ability to provide a service on a fast schedule, while keeping the quality in the project. We take a lot of pride in that,” he said.

Kit Bradshaw is a contributing editor based in Jupiter, Fla.

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Investigate buying rather than building — experts

By Mark Leslie

Developers may be better advised to buy existing courses rather than build new ones, considering the many facilities on the market, according to golf industry finance experts.

"There are more people out there selling than buying," said Tom Powers, executive vice president of Goodkin Research Corp., a real-estate research and marketing firm based in Lauderdale-By-The-Sea, Fla.

"There are probably opportunities for acquisitions all over the country," said John Johnson IV, a partner in the national accounting and consulting firm of Laventhal & Horvath in West Palm Beach, Fla. "The interest in acquisitions seems to be in existing facilities. The money is usually prearranged — particularly in parties from Japan."

Powers said the only buyers he is dealing with are from the Pacific Basin. "Two years ago there was a very healthy mix of ethnic types. It would have been 50-50," he said.

Why build new when you can buy existing stock and upgrade it for less than the cost of construction?

— John Johnson IV, partner
Laventhal & Horvath

Powers said that from 1985 to 1987 most developers were Americans whose plan was to "build a course, run it for a year or a year and a half, take the equity out of it and go to course number two, repeat that and go to course number three. At the end of five or six years, they'd have five golf courses."

"But the financing environment fell apart and the vast majority of those guys are sitting out there now with one or two golf courses and they are very, very heavily positioned to sell."

He said he is seeing more foreign investors in that particular market.

James McLoughlin of The McLoughlin Group in Pleasantville, N.Y., said Japanese and Asian groups don't want to take the time to plan and build.

"They just want existing properties," he said.

McLoughlin said that whereas in the past Japanese and Asians usually wanted to buy a golf facility to operate it and sell tradable memberships back home, nowadays half are buying properties solely as investments.

Johnson said historically golf course buying has been characterized by "surges of interest in regions."

Pacific Rim and Sunbelt courses have been the most sought-after this year, he said.

"Pacific Rim buyers are concentrating in Hawaii and the West Coast, Johnson said. "The interest in Florida is from both domestic and foreign investors. There is a sense the Texas markets are coming back, that there are some good buys there. Also, the Southeast in general. The season is longer, therefore more rounds are played, and operation can be more productive."

McLoughlin added that they are also interested in New York and Arizona.

"Why build new when you can buy existing stock and upgrade it for less than the cost of construction?" Johnson asked. "Also, permitting is getting more and more difficult, which gives the advantage to the existing course."

"The downside to existing courses is that a lot wasn't built right or without technology that's available today. You have to be careful."

Tight money putting squeeze on optimistic developers

Continued from page 1

Saddam Hussein to remove his Iraqi troops from Kuwait.

"We have signed six significant golf course design agreements in that time period," Applegate said. "However, the caveat is that we see very little change in the ability to finance these projects."

Applegate said the six courses are all stand-alone facilities, not dependent on residential components.

"That's a huge change in the industry, because three years ago golf courses and architects were hired to do courses inside housing developments. We see a 180-degree change in that now."

John Johnson IV, a partner in Laventhal & Horvath, a national accounting and consulting firm that specializes in the real-estate and leisure-time industries, said: "There's certainly optimism in the marketplace, and the design firms are going to get it first because they are going to do the routing plans... Developers need routing plans and conceptual materials for a package to present to investors and financing sources."

"Also, developers of a number of projects that were conceived in 1990 were hesitant to commit to significant further progress until they felt better about the economy."

Golf course architect Gerald Matthews of Lansing, Mich., said the optimism is hard to measure, but "my sense is, yes, it's there. There is certainly relief about the war. People are smiling and talking about projects."

Frederick D. Jarvis, a principal of LDR International, Inc., planners and landscape architects based in Columbia, Md., said consumer confidence is certainly returning, but "most are saying it will take another six to 12 months to turn around. The primary constraint is that development clients are still unable to get funding."

James McLoughlin of The McLoughlin Group in Pleasantville, N.Y. said the uncertain economic atmosphere reveals "the real versus the marginal players... In the past, out of five calls we got (from potential developers), two or three would know where the money was coming from. Now it's one of five."

Robert Frame, senior vice president for GATX Golf Capital in San Francisco, said his customers never stopped looking for acquisition and development opportunities.

"As a financier of golf course and manage-

ment companies, we haven't changed our lending criteria at all, because we believe the underlying fundamentals of the growth of golf are long-term," Frame said. "Attractive acquisitions and development projects continue to be there and were there even during the recession and war. So, consequently, we haven't changed our posture toward the industry or financing our customers."

"The process of developing or acquiring a golf course takes time... And you don't turn it on or off like a spigot."

Yet, despite high hopes and optimism, the marketplace is dampened by the continuing difficulty in finding financing in a volatile economy marked by high unemployment.

HUGE EQUITY BEING REQUIRED

Applegate said: "There is a continuance, if not a growth, in foreign money coming to the rescue of American developers who want to go forward, because our banking system is so locked up. I don't know what it's going to take to get our banking system around to the point where they'll lend money on good projects... I'm not so sure banks understand the business of golf."

Applegate said banks are requiring large cash equity to make deals.

"Unless you are in the neighborhood of 75 percent cash equity in a deal, banks just don't seem like they want to participate," he said.

Frame said: "Whether it's 50 or 75 percent, banks are requiring an awful lot of equity in order to make this investment. That's consistent."

Tom Powers, executive vice president of Goodkin Research Corp. in Lauderdale-By-The-Sea, Fla., an internationally known real estate research and marketing firm, said development of golf courses "is increasingly getting out of reach for the vast majority of developers. You can call it a credit crunch, liquidity crisis, whatever... The bottom line is, there are not enough equity dollars out there for golf and, consequently, you're not seeing more golf investment. You're actually seeing somewhat less."

Powers said lenders for all types of real estate — whether it's a home, office building or golf course — are requiring increasing amounts of equity. While there could be some loosening of cash for residential, real estate, or other "traditional products, I don't see it for golf," he said.

Applegate feels banks are handcuffed by dictates of the federal banking system. And Johnson asserted that the lending community in the United States "does not have a real

cohesive golf lending track record."

"Most conventional lenders, like banks, have to balance their investment portfolio," he explained.

Donald W. Carson, executive vice president of Barnett Bank of Palm Beach County in West Palm Beach, Fla., said, "Banks have gotten tight on (development) projects that are two or three years in nature because of the potential regulator risks."

Projects that include a course are generally large, encompassing 500 or more lots, he said.

"In that case, even in a strong economy, that number of lots would probably take two, three, perhaps four years for a projected sell-out. So the regulator risk is that if that project doesn't march along with your original projection, one or two years out, the regulators could force you to downgrade that project or that loan," Carson said.

He said stand-alone courses "have always been difficult for banks to finance because they're admittedly single-purpose in nature. And banks, even in good times, shy away from special-purpose projects..."

"Their support requires discretionary income by the users. That being the case, during a downturn in the economy, we see that support as not being there as much as during a strong economy."

He said Barnett Bank's last loan on a residential course was made a year ago, and it has not made any recent loans on stand-alone courses.

FEWER RESIDENTIAL COMPONENTS

Golf courses that are winning financial support are more often daily-fee or municipal.

Applegate said, unlike the past few years, banks are reluctant to lend on projects involving housing or when "they view the course as an amenity rather than as a profit center... If it is just a course being run as a profit center, I think they will support it."

Frame said residential courses got a "bad rap" from failures in the early 1970s, but he added GATX "has never funded a golf course that was dependent on a residential community to make it work. We've been involved with courses that were part of developments, but we don't want any course we finance to be dependent on residential developments."

"For a long while it has been difficult to find financing for residential developments. Resi-

dential developers were the first victims of tightened credit."

Frame said a number of developers are considering splitting the course from the residential development and financing it separately.

The experts agree public, semi-private and municipal courses will be the wave of the future.

Johnson said: "Most of the development in the 1980s was in planned communities. Very little was developed in the form of pure daily fee. The downturn in the residential markets suggests there was ample supply of housing-related golf, but there was ... a market opportunity for daily-fee and municipal courses."

Powers said: "We don't need any more equity courses. There's no doubt about that. Semi-private is the way to go. Creative financing is definitely where most golf dollars are going to come from. You'll see limited partnership financing, mortgage refinancing, pensions, that kind of entity."

Powers said capital will be injected into the industry, "but it will be more difficult to attract it in the coming five years than the last five."

Municipal courses are the major exception, according to Powers, noting he had contracted out three municipal courses in Florida during the last month.

"Municipalities are beginning to look at golf as, one, you're providing contingencies for recreation, etc., and, two, you can make some money on it," he said. "Plus, their interest rates or bond issues are generally less than market rates, and they often have tax-free land to use."

LDR International's Jarvis said even local governments are often "so strapped (for money) they can't build courses." In some cases, such as Howard County in Maryland, where there is a heavy need for municipal facilities, developers are building courses and handing them over to the county or community in 20 years, he said.

Applegate said lending institutions will free up their money when they realize the profitability of golf courses — "through their track record, through proof."

"For example," he said, "our golf course in Myrtle Beach was built as a daily-fee resort course, and there is some housing that will eventually go in around it. The entire project was profitable from Day One based on just the course... Once you can demonstrate that kind of profitability, lending institutions will start backing those courses."

PGA Tour dedicates efforts to public course construction

Continued from page 29

PGA Tour's involvement with public golf.

Angelo Palermo, vice president of golf course development for the National Golf Foundation, said 60 percent of golfers are public-course players.

"We're trying to promote golf, and the access to golf, through high-quality facilities that would feature a quality conditioned course with a reasonable design that's well maintained every day," Dee said. "The PGA Tour creates an image and an awareness of golf through

the season. Our public facilities promote the game through clinics and various events at the club that are accessible to everyone.

"We think in the '90s, if golf reaches its potential and continues to grow, it makes sense for the PGA Tour to be involved in that growth," Dee added. "It is certainly a revenue source and a potential profit center for the PGA Tour."

Dee said the PGA Tour will design, build and manage facilities on a long-term basis, but won't put up its own money. It built the 18-hole, 6,620-yard par-71 facility in Jack-

It makes sense for the PGA Tour to be involved in (golf's) growth.'

— Gary Dee

sonville. But in some cases it might buy and renovate a facility like Miami's, formerly The Country Club of Miami.

The PGA Tour renovated the 6,343-yard par-70 East course and the 7,017-yard par-72 West course last year. A 4,240-yard par-62 ex-

ecutive course opened in January.

"We prefer to start from scratch," Dee said. "You have more control over what's there. The Miami facility had fallen on hard times and needed some sprucing up and modernization. We may find a facility like that too many times in the marketplace."

"We're looking for money from a developer or municipality. We're looking for land and development capital. We provide the golf expertise."

Dee said the PGA Tour will staff the facility, train the staff, and pro-

vide equipment in the pro shop.

The courses will also benefit from the PGA Tour's contracts with merchandise, food, beverage, and golf course equipment manufacturers, he said.

"We bring a significant amount of buying leverage to the table as a multi-course operator," Dee said. "When we start a club from scratch, it's not like we haven't done it before."

The PGA Tour's involvement in public golf will be separate from the development of its TPC courses, Dee said. The public facilities will also be different from the TPCs, both on and off the course.

The courses won't have the stadium golf features of TPC courses, and will be less severe and dramatic.

They will have limited bunkers and other features to be as easily maintained as possible. That will enable greens-fee structures to remain low, Dee said.

"We are looking for a traditional design," Dee said. "We are looking to move as little dirt as possible to keep costs down."

Cost considerations are also entering the design of the clubhouses, especially compared to TPC buildings.

Dee said the public-course clubhouses will be 4,000 to 5,000 square feet, as opposed to the 25,000-square-foot TPC giants.

No locker rooms or evening dining room service will be included. Sandwiches and hot dogs will be available instead, and there will be a full bar. Dee said costs of building the public facilities will be \$6 million apiece, while PTC courses cost \$14 million to \$15 million. Both figures are exclusive of land costs.

Dee said the PGA Tour's public and TPC courses could enter the same market. Yet they won't compete because they're different types of facilities.

"In a major market, a TPC course and a PGA Tour public facility could co-exist quite nicely," Dee said.

Malphrus works long hours to meet deadline

HILTON HEAD ISLAND, S.C. — Facing a summer deadline, Malphrus Construction Co. has been working 10 hours a day, six days a week building roads and utilities for Colleton River Plantation.

The Hilton Head Island-based Malphrus firm is completing the 2 1/2-mile-long main entrance road leading from Highway 278 through the South Carolina Nature Preserve to the clubhouse site.

In this case of high speed, the aim is high return, more quickly. When the roads and utilities are completed, buyers will be able to start building their homes in Phase I of the build-in plan. More than 40 Phase I home sites, ranging in price from \$107,000 to \$300,000, were sold, pushing Colleton River over its goal to more than \$6.5 million in sales revenues.

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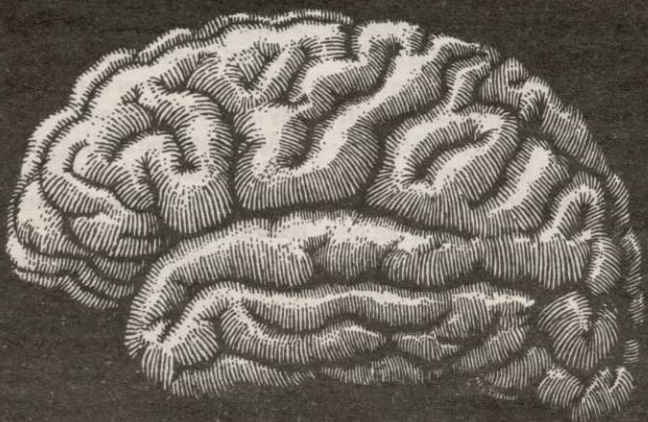
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Palmer, California team up for public facilities

PLEASANTON, Calif. — Believing the 1990s will emphasize public play golf, California's 58 counties and 460 cities have teamed with Arnold Palmer to build municipal courses.

The joint announcement was made by Palmer and California Muni Golf, a public/private partnership sponsored by the County Supervisors Association of California and the League of California Cities.

Called MuniGolf Partnership, the team will develop "well-planned and well-designed municipal courses that will not only be self-supporting without taxpayer subsidy, but will also provide an economic return to the community," Palmer said.

Palmer's course design and management companies in Ponte Vedra Beach, Fla., will work with economists Alfred Gobar and Associates of Brea, Calif., Kajima Engineering and Construction Inc. of Los Angeles, and planning specialists Pacific Investment Network Inc. of Los Angeles.

Courses will be designed as cen-

terpieces for community and neighborhood development. The program will emphasize reclamation and water conservation, irrigating with wastewater when possible.

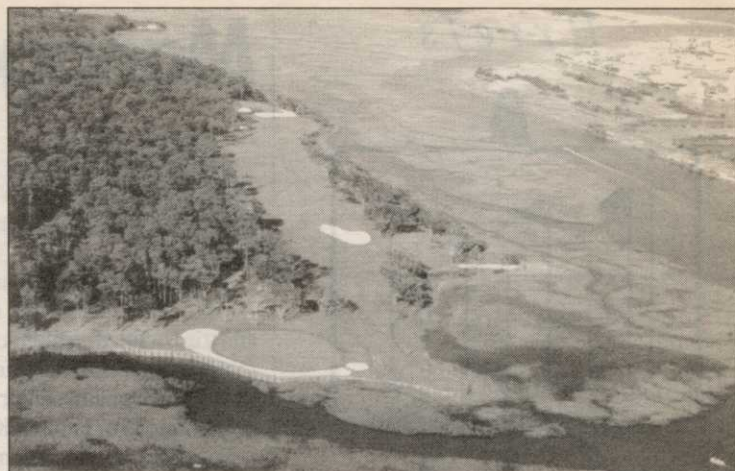
Available for new courses and rehabilitation projects, the partnership's range of services includes economic development/feasibility studies, financing, planning and design, construction management and operations management.

Tax attorney's first design wins national honors

NORTH MYRTLE BEACH, S.C. — Tidewater Golf and Country Club has been selected 1990's Best New Public Course in America by *Golf Digest* and headed the list of 1990's Top 10 New Public Courses in America by *Golf Magazine*.

Evaluation was based on shot values, playability, design balance, memorability and aesthetics.

Ken Tomlinson, a tax attorney who bought the land and turned course designer, supervised every detail. His design philosophy high-



The 13th fairway at Tidewater Golf Club and Plantation in N. Myrtle Beach, S.C. unobstructed by artificial man-made mounds.

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CIRCLE #144

New Jersey county needs \$5M for course

RARITAN TOWNSHIP, N.J. — The county park board seeks \$5 million to develop a golf course site. The 244-acre Kuster Farm in Raritan Township appears the land of choice.

The Kuster Farm would replace the board's previous golf course site, county-owned 150-acre Tower Hill Farm in Bethlehem Township. This site was ruled out late in the planning stages because of wetlands.

As to doubts that land owner Ernest Kuster Jr. would wait for Green Acres funding to come through, freeholder George Melick said, "He probably will. It's the best deal in town."

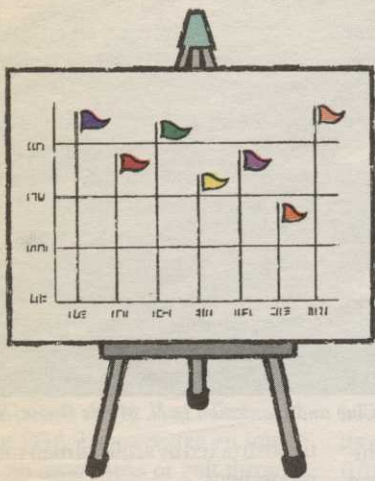
Panks designed Paradise Valley CC

Architect Gary Panks of Scottsdale, Ariz., did major portions of the design work at Paradise Valley (Ariz.) Country Club.

March's *Super Focus* article on Paradise Valley superintendent Bill Emerson mentioned that Emerson works on renovations with architect Geoffrey Cornish of Amherst, Mass. But when the course was first built, Cornish did the routing and consulted, while Panks directed all the shaping and other finetuning, and added bunkers and a number of mounds.

Cornish said Panks has also instituted a major tree-planting plan on the course and did all the design work on the practice fairway.

Briefs



CLARK JOINS U.S. GOLF

Dr. Elizabeth Clark is joining U.S. Golf Properties as director of golf instruction. A LPGA member, she was previously head teaching professional and director of instruction at Graysburg Hills Golf Course in Chuckey, Tenn.

Headquartered in Washington, D.C., U.S. Golf Properties owns and manages golf courses. It is directed by Charles Staples.

As director of golf instruction for U.S. Golf Properties, Clark will have overall responsibility for golf instruction at the company's facilities. She will recruit instructors and ensure all facilities have consistent and standardized teaching programs.

Clark has been an educator for 23 years and a specialist in teacher education since 1970. Prior to becoming a golf professional in 1974, she coached the University of Utah women's golf team and played the women's amateur circuit in Colorado.

MARIOTT TO MANAGE TOFTREES

Marriott Golf has been named to manage Toftrees Resort Golf Club in State College, Pa. Toftrees has consistently been ranked in the top 10 golf courses in Pennsylvania by "Golf Digest" magazine and the number one resort course in the state.

Marriott will manage the 18-hole Edmond Ault-designed championship golf facility, golf shop, and course maintenance program.

Bill Lee, most recently a manager at Marriott's Seaview Golf Resort near Atlantic City, N.J., will be director of golf. Lee is a Class "A" PGA member and has prior experience at La Paloma Resort in Tucson, Ariz., and Valhalla Country Club in Louisville, Ky.

Marriott will retain Toftrees golf professional Raymon Lancianese and superintendent Lew Morgan. Morgan has headed maintenance at Toftrees for 15 years and is a graduate of the Pennsylvania State University turfgrass management program.

MUNDLE TO HEAD MIDDLEFIELD

University of Oregon graduate Al Mundle is returning to that state as director of one of Oregon's newest golf courses, Middlefield Village in Cottage Grove.

Mundle will be reunited with Gene Mason, chief architect and consultant for the 18-hole facility located in the southern Willamette Valley. Mundle was assistant professional to Mason at Columbia-Edgewater Country Club in Portland in the early 1960s.

Mundle's duties include facility planning, administration, operations, promotions, instructional services, marketing and maintenance. Middlefield Village will emphasize learning and scheduled activities.

Managers can cope with the recession

By Peter Blais

The country is feeling better about itself since the Persian Gulf War, but many U.S. businesses continue to struggle through the recession.

Private country clubs are no different.

One of the best ways to keep your club afloat in troubled economic waters is to closely monitor financial statements, according to Betsy MacDonald, senior principal with the accounting firm Pannell Kerr Forster.

Speaking at the recent Club Managers Association of America Annual Conference

in Dallas, MacDonald said: "Managers often don't feel comfortable scrutinizing financial statements. But they need to look at every line to see if there is a way to increase revenues or cut expenses."

INCREASING REVENUES

This is no easy task during a recession. But there are ways to do it, according to MacDonald.

Increase function business. Some managers are concerned that outside tournaments or parties can increase the club's tax liability.

Often the extra revenue more than makes up for the added taxes. And occasionally it is considered member-generated business, in which case there may be no tax obligation.

A manager should solicit function business from his members. A country club in Houston had many of the city's top businessmen as members. But they were holding their companies' functions elsewhere. The manager was able to get many to move that business to the club," MacDonald said.

Membership dues. Clubs often postpone

Continued on page 44

Mixed bag of financial news for private clubs

By Peter Blais

Private country club memberships rose but so did costs in 1990, according to a report on 325 private clubs conducted by an international accounting firm.

Memberships grew by a half percent through the fiscal year ending Sept. 30, 1990, reported *Clubs in Town and Country*, an annual assessment of the private club industry assembled by Pannell Kerr Forster. Regular memberships jumped 0.4 percent and other classes of membership 0.7 percent.

"A half percent is just about right, just

about average," said Patrick J. O'Meara, national director of club services. "Generally the club industry is in pretty good shape, although some clubs are starting to feel the pinch and waiting lists to join may be down."

The East was the only geographic region reporting a decline. The South and Far West were up 0.9 percent and the Midwest ahead 0.2 percent.

Meanwhile costs jumped 5.6 percent, more than twice the 2.3-percent increase in revenues.

The 2.3-percent hike in total revenues (in-

cluding dues) at private country clubs continued a 20-year trend during which revenues have risen 246.6 percent. The catch-all "All other sales and income" led the way over the past 20 years, rising 308.2 percent. Food and beverage sales have jumped 238.6 percent and membership dues 234.3 percent.

The 5.6-percent jump in costs moves the 20-year cost-increase figure to 330.9 percent, far exceeding the 246.6 percent revenue increase. Payroll and related costs are up 315.5 percent since 1970 and all other operating

Continued on page 45

American Golf Corp. plans to double size

SANTA MONICA, Calif. — American Golf Corp. officials anticipate doubling the company's growth in the next five years.

Chairman of the Board and owner David Price said AGC is aggressively instituting a strategic plan to increase the number of courses it operates to 250 locations. Privately held AGC now operates 135 courses in the United States, with annual revenues exceeding \$220 million.

The company's Statement of Strategic Direction says: "Future growth will be achieved through market development, acquisitions and above-average rates of return in existing operations."

Price reorganized the firm in January and implemented the strategic plan, saying, "This reorganization will focus our resources on our commitment to outstanding customer service, product quality and financial results."

Price founded AGC when he bought a country club in 1968. Two years later he developed the concept of approaching municipal owners with losing operations and offering to remodel and

Continued on page 43

Headhunters enhance club manager careers

By Peter Blais

With the professional stature and salaries of club managers on the rise, so are the numbers of employment specialists willing to help them find jobs.

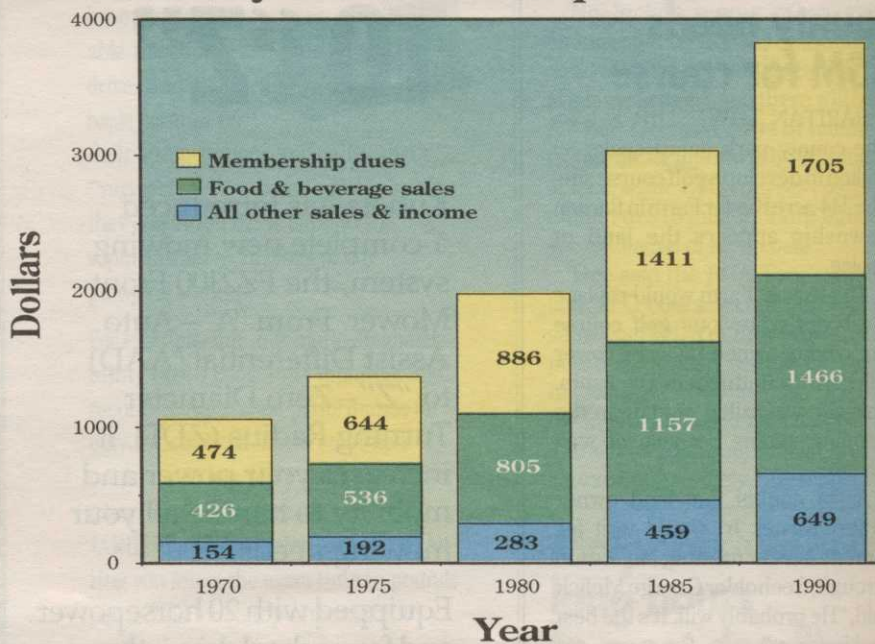
Executive recruiters, headhunters, employment specialists, outplacement workers — call them what you will. When a club manager is looking for a new position or finds himself between jobs, these professionals are another resource.

Three executive search firms were represented on last month's panel discussion titled "Using Employment Specialists for Career and Club Enhancement" at the Club Managers Association of America 64th Annual Conference in Dallas.

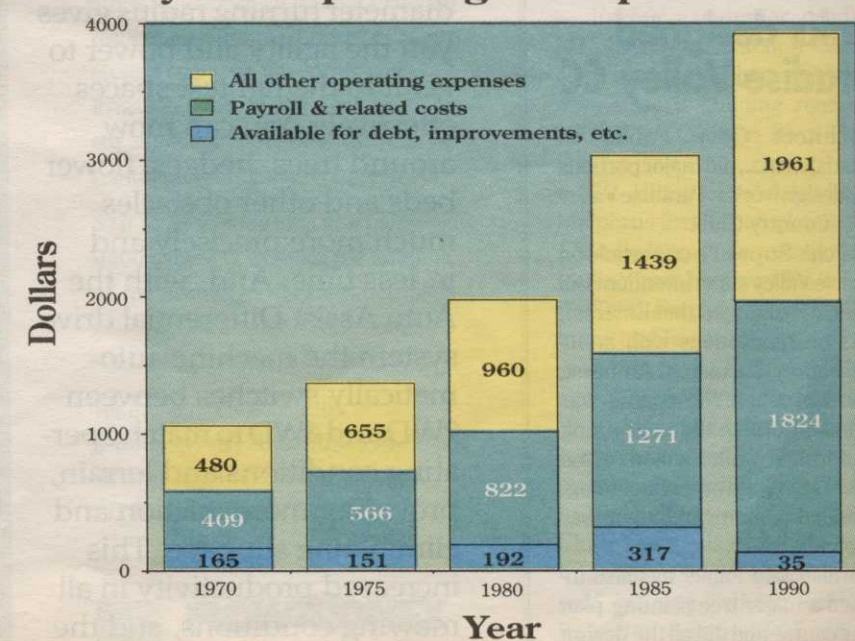
Continued on page 45

The two graphs below show where the money came from and where it went at 250 private country clubs reviewed during the 1990 fiscal year by the international accounting firm Pannell Kerr Forster.

Country club income per member



Country club operating costs per member



Source: Pannell Kerr Forster

CMAA elects full slate of officers during Dallas meeting

ALEXANDRIA, Va. — Club Managers Association of America President James D. Pearce of The Dallas (Tex.) Club is joined by Vice President John R. Sullivan of Grosse Pointe Yacht Club in Grosse Pointe Shores, Mich., and Secretary-Treasurer Richard Kolasa of Skyline Country Club in Tucson, Ariz.

The new officers were elected, along with board members, at CMAA's annual conference in Dallas.

Elected to the board were Wiggo K. Anderson of Wilson (N.C.) Country Club, George P. Carroll of Town and Country Club in St. Paul, Minn., and Jack L. Morgan of Davenport (Iowa) Club. Jay DiPietro of Boca West Country Club in Boca Raton, Fla., was re-elected to the board.

Sullivan, general manager of Grosse Pointe Yacht Club since

1987, was manager of the Nakoma Golf Club in Madison, Wis., before that. He was first elected to the CMAA board in 1985, and was elected secretary-treasurer in 1990.

He has been president, secretary and director of the Wisconsin Badger Chapter, and has worked on numerous CMAA national committees.

Kolasa, at Skyline CC since 1978, has been a CMAA member since 1968 and was elected a director in 1987. He has served on the magazine, membership, bylaws, execu-

tive career services and student development committees, as well as the CMAA Services Task Force and Private Club Planning Task Forces.

He has been president and secretary-treasurer of the Arizona-Nevada Chapter and secretary of the Mid-America Chapter.

Anderson, general manager and secretary-treasurer of Wilson CC since 1983, is a member of the CMAA Honor Society. He has served on membership, chapter achievement, conference round

table and at-conference idea fair committees. He has service as president and vice president of the Carolinas Chapter.

Carroll, Town and Country Club general manager since 1986, was first elected to the CMAA board in 1988. A member of the Honor Society and various committees on the national level, he has also served the Upper Midwest Chapter as president, vice president and secretary-treasurer.

An Honor Society member, Morgan has managed Davenport Club

since 1983 and served on CMAA's governmental affairs, bylaws and audit committees, among others.

He has been president, vice president and secretary-treasurer of the Mid-America Chapter.

DiPietro, at Boca West Club since 1985, was first elected to the CMAA board in 1990 and has worked on various committees including conference, chapter services and bylaws.

He has been South Florida Seminole Chapter's president, vice president and secretary.

NCA reports new chapters forming

The National Club Association has reported attempts in several states to organize chapters, in part to fight anti-discrimination legislation aimed at clubs' private status and access to licenses.

Clubs in Connecticut held a special meeting in January, led by NCA Director and Past President Herbert L. Emanuelson Jr. at the Quinnipiack Club.

Club officials in New York, New Jersey and Virginia are also considering chapters, as well as Illinois, which faces legislation similar to New York City's Local Law 63.

NYCLL 63 redefines a private club as a public accommodation if it has more than 400 members, provides regular meal service, and regularly receives payment directly or indirectly from or on behalf of nonmembers in furtherance of business.

NCA chapter status relies on dual membership. Clubs in the defined area must be dues-paying members of the NCA and the chapter.

American Golf

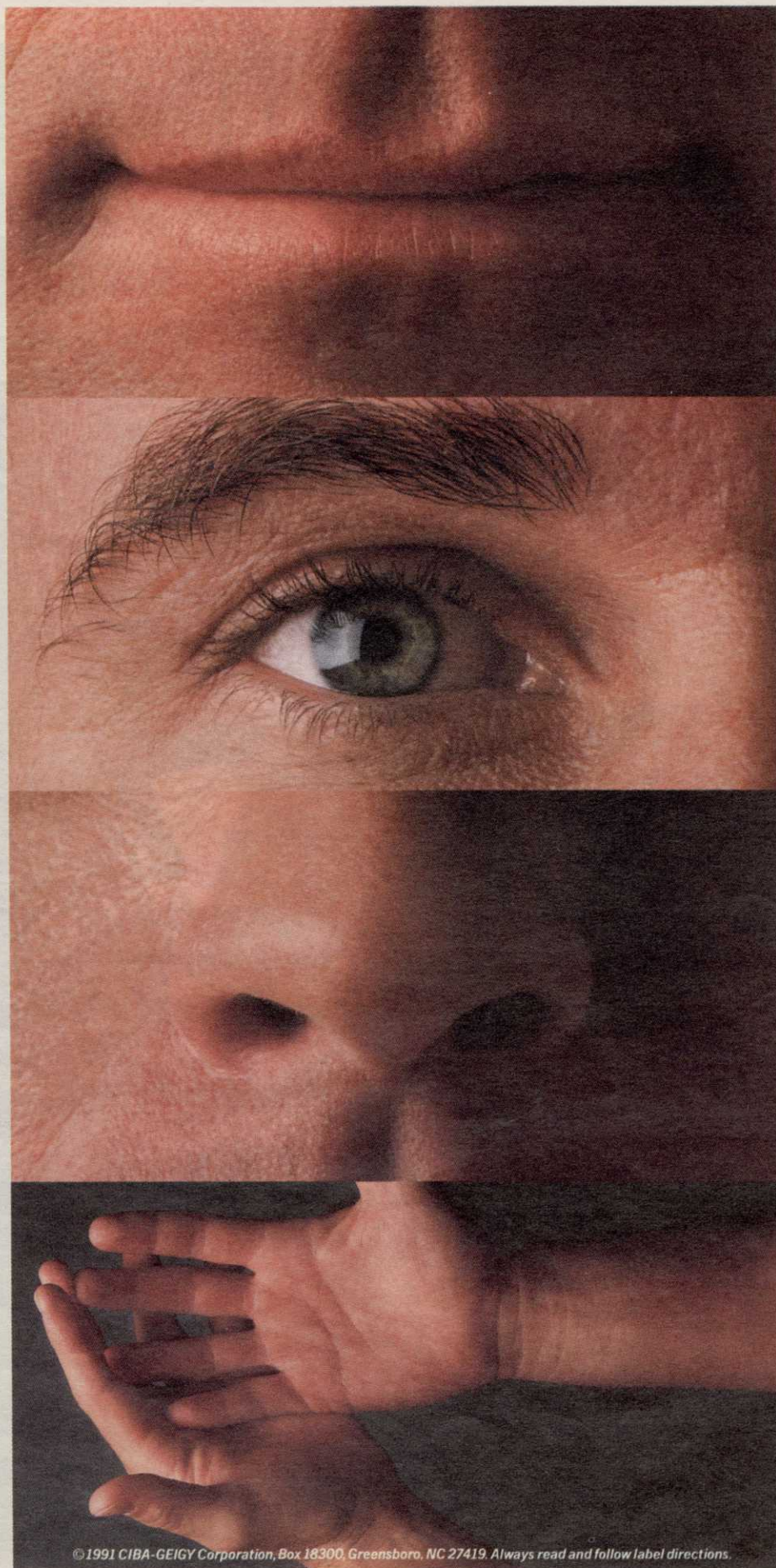
Continued from page 42
operate their facilities.

The company's most recent acquisition, in March, was Brandywine Country Club in Maumee, Ohio, which opened in 1962 as one of architect Arthur Hills' first designs. Brandywine has an 18-hole and a nine-hole course.

AGC also opened El Toro (Calif.) Community Golf Center, with four PGA golf professionals, on March 30. It is the firm's fifth practice area, joining others in Los Angeles, San Francisco, Chicago and New York.

Meanwhile, AGC signed an agreement with the County of Los Angeles to lease and operate Knollwood Golf Course in Granada Hills.

The 18-hole, par-72 public course will be directed by Kevin Roberts, AGC senior vice president of the Western Region.



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Trimming the budgetary fat in lean economic times

Continued from page 42

regular dues increases during bad economic times, then sock members with a big jump when things improve.

"Don't hold off on an increase for three years. Try to take a 3- to 5-percent increase every year so your members get used to it. Don't wait then bump it up 15 to 20 percent all at once. You run a bigger chance of losing members that way," she said.

Interest-bearing checking accounts. Make sure the club has a NOW or some other interest-bearing checking account. They usually offer 5- to 6-percent interest.

"Clubs frequently don't look into it and banks don't voluntarily offer it," MacDonald said.

Late payment penalties. If a club doesn't charge a fee for late payment of dues, it should. As a last resort, the club can post a list of delinquent accounts.

"But make sure the list is accurate and that permission to post the list is granted in the club's bylaws," MacDonald said.

Review pricing procedures. Charges should be reviewed in all areas — greens fees, restaurant prices, equipment rentals — to make sure they are competitive with area clubs and businesses.

"If you're too low, don't be afraid to jack them up," MacDonald said.

Service charges or surcharges. Many clubs charge an 18-percent service charge for waiters and waitresses. The money is credited back to payroll.

Other clubs have a minimum food and beverage charge of \$25 or more a month. "It encourages members to eat at the club at least once a month," MacDonald said.

DECREASING EXPENSES

This is painful, but often necessary during a recession.

Staffing and scheduling. This is usually the club's biggest single expense. Labor and related costs average 47.7 percent of total country club revenues. Anything between 45 to 50 percent can probably be reduced.

Time and management studies help point out problems. Consolidating the jobs done by two people into one is a possible cure.

"Employees who have been at a club for something like 17 years are hesitant to change the way they do things. It can take a manager willing to take a good, hard look at how things are done to change those functions," MacDonald said.

Insurance. An over-funded defined benefit pension plan can be terminated and replaced with a defined contribution pension plan. Employees are likely to be unhappy because the new plan allows the club to change its annual contribution and use excess contributions previously earmarked solely for employee pensions.

"There is an awful lot of money in some of these accounts. They can be drastically over-funded. It is a potential source of revenue, but these are the types of things we talk about when you're discussing the survival of your

club," said Kevin Reilly, a Pannell Kerr Forster attorney.

Refinancing. If the financial situation gets bleak enough, lenders may be willing to restructure debt to exclude interest payments for two or three years.

If a club is paying double-digit interest, it can likely refinance at a lower interest rate and save a considerable amount. Usually a 2-percent or more drop in the interest rate justifies refinancing.

Tax-exempt investments. Municipal bonds or any other tax-exempt

investment vehicle can help reduce the amount of money a club sends to Uncle Sam.

Real estate taxes. If a club thinks its local tax appraisal is too high, there is a way to bring it down. It usually involves a legal or administrative proceeding. Methods vary from state to state so contact the local tax collector.

"Get an expert working on your behalf, a member of the Appraisal Institute or certified real estate appraiser. At one time, Houston dropped the appraised value of

many properties by 50 percent," MacDonald said.

Keep inventories to a minimum. Keeping inventories down increases cash flow.

"Don't buy 36 of something if you can get by with 12," MacDonald recommended.

Avoid penalties for late filings of tax returns. Clubs may delay tax payments when they are in financial trouble.

"But the penalties can be very expensive. You're probably better off borrowing the money to pay the tax," she said.

SAFEGUARD ASSETS

There are two things a manager should do no matter how sour the economy.

First, maintain insurance coverages so the club can be replaced in case of fire, flood or whatever.

Second, maintain full Federal Deposit Insurance Corporation coverage by keeping no more than \$100,000 in any bank account. If the club has more than \$100,000 keep the money in separate accounts in separate banks or the funds might not be fully insured.



Ah, but there's good (and bad) financial news tonight

Continued from page 42

expenses up 288.3 percent.

As for operations, total sales and income (excluding dues) rose 3.8 percent in 1990, resulting from increases in minor-related departments, 6.6 percent; sports activities, 4.8 percent; food, 3.9 percent; beverages, 2.1 percent; and other income, 1.8 percent.

"The harsher DWI (driving while intoxicated) laws have really hurt the beverage business," O'Meara said. "It used to be clubs ran on dues and booze. Now beverage sales

are way down."

Total operational expenses rose 6.4 percent, led by an 11.3-percent jump in minor-related departments. Expenses for sports activities rose 8.1 percent and food and beverages 4.9 percent.

Total unapportioned expenses increased 5.7 percent, including a 6.4-percent hike in administrative and general expenses, a 5.9-percent jump in utilities and a 5-percent rise for both repairs and maintenance as well as entertainment.

While the net cost of operations

increased 10.1 percent, membership dues rose only 7.6 percent, according to the report. This, combined with the 4.5-percent jump in real estate taxes and insurance, resulted in a 35.8-percent decline in the balance of dues available for debt service and capital improvements.

The average \$35 in dues payments available for debt service and capital improvements in 1990 is down from \$275 just two years ago. But the lack of funds to pay down the mortgage or invest in new irri-

gation systems isn't a major concern, according to O'Meara.

"Special assessments are often used to pay for those things today," he said. "Big swings like that are minor considerations."

Dues are the major source of income at country clubs, providing 44.6 cents of every revenue dollar. Food provides 28.6 cents, sports activities 11.9 cents, beverages 9.8 cents and all other 5.1 cents.

Payroll is far and away the biggest expense, gobbling up 47.7 of every dollar spent. Operating supplies and

expenses account for 30.4 cents, food and beverages for 14.4 cents, real estate taxes and insurance for 6.6 cents and debt service and capital improvements for 0.9 cents.

"Payroll continues to be the big kicker and the one managers continually try to get under control," O'Meara said.

That's definitely the case on the golf course where 61.5 percent of the average maintenance cost per hole (\$27,226) consists of payroll (\$14,031) and payroll taxes and employee benefits (\$2,718).

Golf course maintenance expenses rose 7.8 percent in 1990, led by an 11-percent increase in payroll taxes and employee benefits. Payroll expenses rose 8.5 percent, slightly more than the 8.1-percent rise for course supplies and contracts expenses.

Increases in golf shop, caddy and committee expenses tied that of net golf expenses, 12.3 percent. Income from golf fees, golf cars, etc. rose only 5.1 percent.

Regionally, net golf expenses rose more in the Far West (13.6 percent) than in the other three regions — East and South (11.9 percent), Midwest (11.6 percent).

The Far West remains far and away the most expensive area to maintain a golf course at \$34,328 per hole. The South checks in at \$27,443, East at \$25,143 and Midwest at \$22,567.

Per-hole maintenance expenses have increased about 500 percent in the past 20 years, from just over \$5,000 in 1970 to more than \$27,000 today.

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NOTHING RUNS LIKE A DEERE®

Headhunters

Continued from page 42

Taking part in the discussion were Horace Duncan, vice president of Club Professional Outplacement, Inc.; Robert Southwell, vice president of John Sibbald & Assoc.; and Harvey Weiner, president of Search America.

WHY USE A SPECIALIST?

To get more money is the most obvious reason for using an employment specialist.

According to Southwell: "You usually end up making more money when you use a headhunter. The boards in these clubs are offering low salaries through ignorance rather than intent. They really want to be told what to offer."

The headhunter acts like an agent would for a pro football player, presenting the client's strengths and seeking the highest salary possible, Duncan said.

The objectivity of a third person also allows the applicant to get answers to questions it might be embarrassing to seek himself.

"For example, 'How much vacation do I get?' Do you want to ask that question before you start the interview process? You have a right to know that. But the headhunter might be the best person to find out," Weiner said.

The headhunter can also be the

Continued on page 46

Executive recruiters become increasingly popular

Continued from page 45

lightning rod, absorbing the anger over disagreements between club officials and the manager while a deal is being hammered out, he added.

The executive recruiter provides other services that assist the manager in the job hunt.

"A headhunter can provide appraisals and guidelines for self-improvement," Duncan said. "It helps a manager recognize his shortcomings."

"For example, a manager may be playing more golf than his members feel is appropriate. The specialist would point that up."

Many managers are technically qualified

for a potential job. But they may have personality faults that crop up during the interview process. Helping job applicants make better impressions during interviews is an important contribution of employment specialists.

Duncan uses video cameras so the applicant can view his own performance and rehearse questions and answers.

"If we can find a weakness in the manager's personality, we might go so far as to recommend a Dale Carnegie course or something to improve the way he comes across in an interview," he said.

An executive recruiter can help an out-of-work manager through the emotional turmoil of the job search.

"When you lose your job it's a lonely situation," Duncan said. "Having someone on your side looking after your interests is a great help."

Duncan's firm helps in contract negotiations between manager and club. Matching the right club with the right manager involves extensive background research on both parties.

"We try to find the best fit between the personality of the manager and that of a club," Duncan said. "The most important factor in helping a person find a job is finding the right club, a club where you would fit, function well, feel comfortable, and where your values parallel those of the club."

"For example, if you're the kind of person who would like to manage a traditional club, one with family members who have come down through several generations, you might fit in. But you might not fit in at one that is more contemporary in nature."

WHAT DO BOARDS LOOK FOR?

"To be frank, 90 percent of search committees don't know what they're looking for," Southwell said.

They may say they want someone who is a great accountant, cook or personality, but they can't be more exact, Southwell said. His company helps the committee focus on its needs by developing a job description. By asking members questions, the description grows and constantly changes over the three or four months it usually takes to hire a manager.

"We started with a club in Houston where the committee didn't want the manager to have anything to do with the golf pro or superintendent. But as they interviewed people and found out there were competent managers out there, they started to say, 'Hey, we better put the golf pro and superintendent under the manager.' They ended up with a full general manager with a two-year contract," he said.

"What I get a kick out of is that these committees listen to me. They may end up paying more, but they get a better person."

Clubs hope to get someone who will stay in a position for many years, Weiner said.

"Our industry has traditionally had excessive turnover and it's a serious problem," he said. "The fact managers change jobs every two years says something is seriously wrong."

Personal happiness within a community is very important, said Weiner. The managers he's placed have stayed at their jobs an average of eight years. If a manager is reasonably content with his job and community, apart from a personality conflict with a board member, Weiner recommended working through the personal problem and staying in the position.

But if it's time to move on, Weiner recommended first finding out as much as possible about the community where the manager and family would like to live. A good source is the local Chamber of Commerce, which can provide information about business, cultural and educational opportunities.

"Let's face it. You might work 12 to 15 hours a day, seven days a week. You might not get out into the community that much. But your family has to live there, and that's important," Weiner said.

Duncan also recommends the job seeker extensively research the job and community before the interview process. If position, community and manager seem to be a good fit, the manager will go after the job with more enthusiasm.

"You're not going to be as enthusiastic about a job if you discover the club has had 10 managers in 10 years. That's a good sign there are probably problems that you're just not going to be able to fix," Duncan said.

Search committees and managers may both be hesitant to discuss shortcomings. But it is much better for both to be honest about the past, Southwell said.

"Better to find out about problems during the interview process than six months after someone is hired," he said.

SELF APPRAISAL

Clubs often receive 100 applications when advertising a management opening, Duncan said. To differentiate oneself, a manager must analyze what characteristics he or she has that the competition does not.

"What are your marketable skills and tal-

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with club managers in search of new positions

ents for this position?" Duncan asked. "If it's a country club with a golf course, do you have experience in course management? If it's a city club, what's your experience in the food and beverage area?"

Fiscal management skill is one of the first abilities any club, even non-profit ones, look for, Duncan said. Equally important is the manager's image.

"When a member brings a guest, does the member seek you out to introduce you to his friends? Anybody can be a caretaker, but it takes more than that to be an executive. So that's what it comes down to. What are the marketable skills that you can sell to the club?" Duncan said.

The appraisal process includes determining what salary a manager should seek, Southwell added. Some managers overestimate their value. But far more tend to underestimate it.

Asking peers what they earn is one way to determine your value. But that can be embarrassing, Southwell said.

"An advantage of using a headhunter is that *he* can ask about salary. In many cases that's better than doing it yourself," he said.

Most hiring decisions are made in the first five minutes of an interview, Weiner said.

"The interview may go on for two hours or an entire weekend. But you usually make it or blow it in that first five minutes. The rest just confirms their decision," he said.

Boards are looking for several specific things during the interview, Weiner said. They are:

- **Taste.** How appropriate is your taste for their members.
- **Judgment/maturity.** This has nothing to do with age. Boards want someone who will be fiscally responsible and manage the daily activities. That frees the board to do its job of setting policy.
- **Stability of background.** Generally the fewer job changes the better. But someone who has changed jobs many times can argue that he or she was serving as a consultant, especially if he was successful in turning around several bad situations before moving on.
- **Technical skills.** Board members generally know little about the technical skills needed to run a club. They assume the applicant does.

Mainly they want a manager they can be proud of.

Once the board narrows its choice to five or so applicants, Southwell recommends interviewing them all in one day rather than over several days or weeks "so they can compare apples to apples." The two or three finalists should be brought back, with spouses if possible, he added.

"Boards know spouses have a great influence on managers," he said. "Mainly they are looking for negatives, but hoping they don't find any."

Added Duncan, "The board is looking for how compatible the two are together."

HEADHUNTER'S CONTRIBUTION

"The really successful people in this business don't look for 40- to 50-percent salary increases every time they change jobs," Weiner said. "Those are the people who change jobs every year or two."

Weiner recommends lower salary increases in exchange for security and potential salary growth.

Search committees usually take just salary into consideration when developing a compensation package. A headhunter is more familiar with a new manager's needs. He is

likely to suggest setting aside something like \$200 a month for a new manager to go to dinner at nearby establishments to evaluate the competition, Weiner said.

Duncan suggested a dry cleaning allowance since a manager is likely to spend considerable time in the kitchen.

Job security is an important consideration, even though it's somewhat of an illusion.

"Let's face it, if the board wants you to go, you're gone," Weiner said.

But the headhunter can help build

things into the contract the manager and board might not be aware of, Weiner said. For instance, if the manager gets sick, and the club pays the premiums for long-term disability insurance, the benefits are taxable. But if the board jacks up the salary, and the manager uses the extra money to pay the disability premiums, any benefits are tax-free.

The headhunter will also get involved in non-financial contractual matters, like instituting regular reviews. Weiner suggests quarterly reviews the first year and semi-annual

ones after that. One of the first quarterly reviews should concern salary. Another should require the president of the board to sit down and review the manager's performance.

"A lot of people never review the manager. You don't know anything is wrong until someone knocks on the door and tells you you're out of work," Weiner said.

Southwell recommended a transition committee be established that performs regular reviews and helps the new manager through the first 12 months.

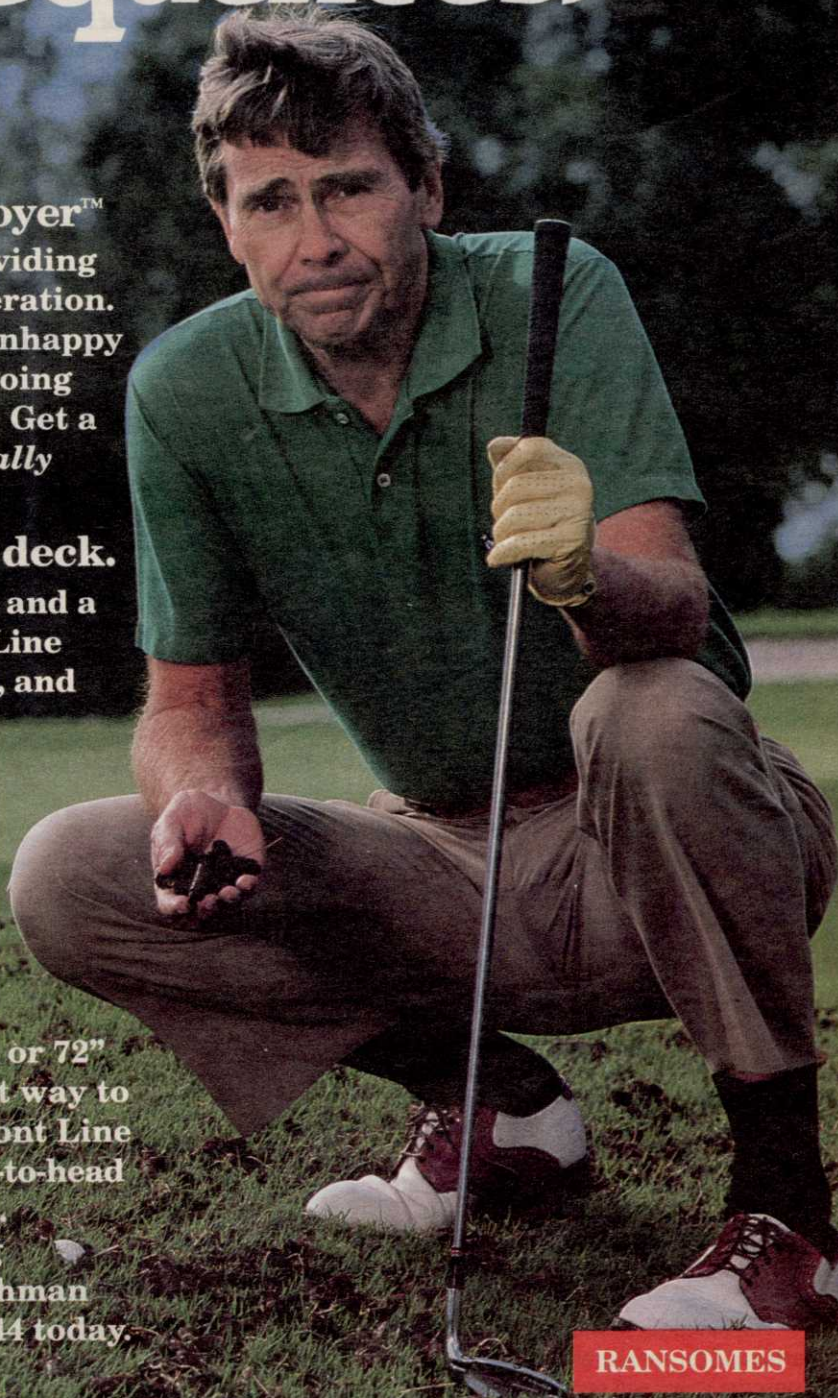
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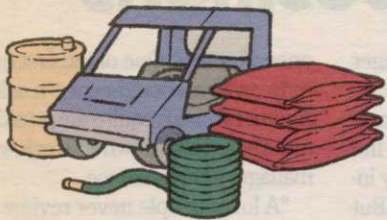
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Briefs



AMIAD PROMOTES SPRINGER

Amiad U.S.A. Inc. has appointed Steve Springer vice president of sales and marketing.

Springer will be responsible for all marketing and sales activities throughout North America.

Springer was previously associated with Luma Lighting as director of sales and marketing. He also has more than 15 years irrigation experience with Rainbird and Garden America.

He received a bachelors degree from Northern Colorado and masters in business from Claremont University. His office will be at Amiad headquarters in Reseda Calif.

Amiad distributes irrigation, filtration and fertigation products to more than 40 countries.

HUNTER OFFERS HOTLINE

A new Design and Technical Assistance (DATA) phone line has been initiated by irrigation equipment manufacturer Hunter Industries.

DATA is available to irrigation consultants, landscape architects, distributors, installers and end users. The number is 619-591-7034.

The line was set up under the direction of Jay Inglis, recently appointed company technical information manager.

Inglis has worked with Hunter Industries for more than five years, most recently as district manager in Australia and New Zealand.

SMITH APPOINTED PRESIDENT

FAIRVIEW HEIGHTS, Ill. — John R. Smith has been appointed president of the specialty products division of Vigoro Industries, Inc.

A graduate of the University of Notre Dame, Smith will be based in Winter Haven, Fla. Irv Stacy will remain as division vice president.

The division markets proprietary fertilizer products under brand names Par Ex and Woodace. This line of environmentally oriented products features exclusive IBDU and Escote slow-release nitrogen sources for the professional turf and ornamental industry.

SEARS NAMED IA MEMBERSHIP VP

R.C. "Bob" Sears, the Irrigation Association's executive vice president, has accepted the newly created position of vice president of membership and technical services.

Bob Emmerich, Irrigation Association president, said:

"This move will put our industry and the association in a much better position strategically."

"The cutbacks in water deliveries in California and the measures the state is taking to conserve water will serve as models for the nation."

"It's imperative that we become more active players."

Pedaling to par in the Northwest

Inventors adapt mountain bike technology to golf cars to provide exercise and fun

By Bob Spiwak

Mike Valentine of Everett, Wash., was golfing in Palm Springs, Calif., last year. The course was crowded, play was slow, and he waited at each hole, sitting in an electric golf car and stewing.

Then the 32-year-old Boeing Co. employee, a lead mechanic on 767 airplanes, had an idea: a pedal-powered golf car.

So-called "mountain bikes" with gear combinations allowing as many as 23 speeds have been the rage for several years. Valentine considered this technology for a golf car. It would provide exercise, speed up play and be environmentally sound. Golfers of all ages could propel the four-wheeled machine.

Valentine, who has several inventions under his belt, all the property of Boeing, got together with his younger brother in Everett and came up with the T₂t — Transportation to tomorrow.

The prototype vehicle is about five feet long and 30 inches wide. With chrome alloy tubing for the frame, it weighs 40 pounds. It has drum brakes on the front wheels and conventional brakes at the rear, with 1-1/2-inch tires.

While the prototype lacks them, production plans call for independent front suspension and adjustable seat stays.

"It has convenient access to the seat so the vehicle can be mounted and dismounted quickly and easily," said David Valentine, who is in charge of marketing.

The brothers, both golfers, acknowledge the machine has limitations. It is probably best suited to flat, dry courses. In the Puget Sound region, where they live, the turf might be too wet. But, east of the Cascade Mountains and across America, thousands of courses are less liberally watered by Mother Nature.

Ash Court, owner of Bear Creek Golf Club in Winthrop, Wash., expressed interest. "My only concern would be what effect it would have on the wetter areas of the course," he said. "Otherwise, it might be a good idea."

Said Tom Kimbrell, a 2-handicapper, mountain climber and owner of an outdoor equipment store (which also sells and rents mountain bikes): "It sounds terrific. If the tires didn't tear up the course, it seems like a great idea."



Pedaling golf car designed by Washington inventor Mike Valentine.

T₂t specifications

Weight:	40 pounds with conventional chrome-alloy tubing. With steel tubing unknown.
Length:	62 inches.
Width:	29.5 inches.
Height:	39.75 inches ground to handlebars, 33 inches ground to highest seat position.
Speeds:	9 speeds with 3-ring crankshaft and 3-speed rear hub.
Brakes:	Two front drum brakes, rear brakes.
Other:	Patent pending drawings include independent front suspension and adjustable seat stays to accommodate persons of every size. Also has removable rack.
Contact:	Valentine & Valentine T ₂ t 4615 West View Drive Everett, Wash. 98203 Telephone: 206-259-6782 or 206-339-8097

Continued on page 51

Aeration Industries to appeal federal court ruling

MINNEAPOLIS — Aeration Industries International Inc. of Chaska, Minn., will appeal February's federal court ruling that its pond aeration device patent is unenforceable, according to company President and Chief Executive Officer Daniel J. Durda.

"We believe the court made a grievous mistake and will definitely appeal," said Durda of United States District Court Judge Donald D. Alsop's ruling that Aeration Industries'

"Method For Treating Water" patent is not enforceable. Aeration Industries manufactures the Aire-O2 horizontal aerator for, among others, The Toro Co.

Alsop's decision involved Aeration Industries' patent infringement suit against Aeromix System Inc. of Minneapolis filed in November, 1989. Aeromix filed several countersuits. Alsop's ruling allows Aeromix to seek recovery of legal fees from Aeration and press

ahead with other suits that could total millions of dollars in damages.

Despite the ruling, Aeration Industries' patent remains valid, states a company news release. Judge Alsop did not invalidate the patent, nor did he make any findings on the issue of whether or not the patent had been infringed, it reads.

J. Randall Benham of Oppenheimer, Wolff & Donnelly of Minneapolis is Aeration Industries' legal counsel.



Aquatrols President Robert Moore (center) was presented a caricature of his retirement activities during a February cocktail party at the GCSAA Trade Show and Conference in Las Vegas. Moore announced his October retirement during the party for Aquatrols customers and distributors. Also pictured, from left, are Tracy Moore (Aquatrols next president), Cecil Kerr, Frank Lamphier, Tuck Tate, David Moote and Roberta Moore.

Protection certificates issued for turfgrasses

The U.S. Department of Agriculture recently issued certificates of protection to developers of new varieties of red fescue, tall fescue, annual ryegrass and perennial ryegrass.

Issued certificates were:

- Thoroughbred variety of tall fescue developed by Pickseed West, Inc. of Tangent, Ore.
- Rustmaster variety of annual ryegrass developed by Daehnfeld, Inc. of Albany, Ore.
- Pinnacle variety of perennial ryegrass developed by Normarc, Inc. of Tangent.
- Surprise perennial ryegrass developed by Cebeco Zaden, B.V. The Netherlands.
- Barrage variety of perennial ryegrass developed by Barenbrug Holland, B.V. The Netherlands.
- Stallion and Aquarius varieties of perennial ryegrass developed by KWS-AG, West Germany.

Certificates for Surprise and Barrage are being issued to be sold by variety name only as a class of certified seed and to conform to the number of generations specified by the owner.



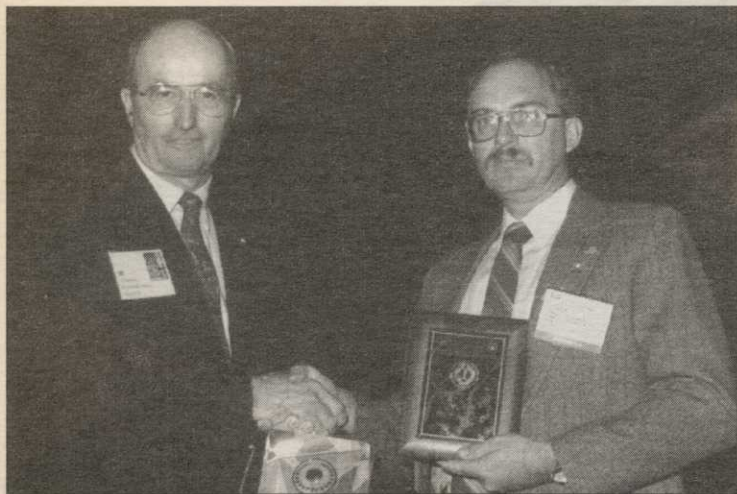
The Book That Inspired The Movie.



Our story takes place at a golf course. It's all about money. And how you can make more of it in the golf business.

In "Winning The Golf Car Game" we take you behind the scenes and demonstrate what you can do to significantly increase your profits. It's a must see. It's from Yamaha. And it's yours **free** when you return your reply card or call 1-800-447-4700.

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Steve Eisele (right) of Sprinkler Irrigation Corp. in Peoria, Ill. receives Salesman of the Year Award from Rain Bird Golf Division Vice President Ed Shoemaker

Eisele receives Salesman of Year Award

Rain Bird Golf Sales, Inc., named Steve Eisele of Peoria, Ill., its golf salesman of the year.

Eisele, a 23-year industry veteran, is golf sales manager at Sprinkler Irrigation Corporation of East Peoria, a Rain Bird distributor.

A former golf course superintendent for 18 years, Eisele has sold more than 70 percent of all golf products in the Midwest since 1989. He has served as chairman of the Peoria County Horticulture Society since 1987 and director of the Central Illinois Golf Course Superintendent Association for 10 years,

serving as president for two years.

Hydro-Scape Products of San Diego was named Rain Bird golf distributor of the year at the recent company annual meeting.

Since becoming the exclusive Southern California Rain Bird golf distributor three years ago, Hydro-Scape has tripled the company's market share from 20 to 62 percent.

"Hydro-Scape's outstanding record of service has been the driving force behind the company's excellent performance record in the extremely competitive markets of San Diego, Los Angeles, Orange

and Ventura counties," said Ed Shoemaker, vice president for Rain Bird's golf division.

Hydro-Scape has been active in many Green Industry organizations and is a driving force in the San Diego Golf Course Water Conservation group. The company has contributed more than \$20,000 to produce a water conservation video and public service announcements shown regularly on network television.

Also honored was Jim Frederick, winner of the Don Parker Service Award. Frederick, irrigation service manager of Conyers, Ga.-based Lawn & Turf, was recognized for his outstanding efforts to upgrade the industry via training of contractors and end users and in conducting high-level service schools.

A 13-year industry veteran, Frederick was formerly an irrigation technician for Snapfinger Woods Golf Club in Decatur. He is an active member of the Georgia Irrigation Association.

Recognized for outstanding owner involvement was Eddie Santalone of Atlantic Irrigation Specialties in Deer Park, N.Y.

In addition, 16 companies were honored at the annual awards ceremony for their excellent business practices. These "Right Stuff" award winners included Alamo Machinery, Austin, Texas; Irrigation Specialties.

Automatic Irrigation Supply, Fishers, Ind.; Boynton Pump, Boynton Beach, Fla.; Century Supply, Madison Heights, Mich.; G.L. Cornell, Gaithersburg, Md.; Evergreen Pacific, Bellevue, Wash.; Florida Irrigation Supply, Orlando, Fla.

High Tech Irrigation, Indio, Calif.; Normac, Sacramento, Calif.; Lawn & Turf; Paradise Supply, Honolulu; Robison's Lawn & Golf, Grandview, Md.; Sprinkler Irrigation Corp.; Sprinkler Irrigation Supply, Albuquerque, N.M.; and United Pipe and Supply, Eugene, Ore.

Headquartered in Glendora, Calif., Rain Bird is one of the world's leading manufacturers of irrigation control systems.

Brits judge Nat'l Mower the best

LONDON, England — Triplex mowers, made by National Mower Co. of St. Paul, Minn., were judged "Best Commercial Machines of the Year" at the recent annual banquet of the British Agricultural and Garden Machinery Association.

Groundskeepers from some of the most prestigious grounds in the world attend this event, much like the GCSAA Show or the landscaping/grounds maintenance shows in the United States.

The grounds of Wentworth Golf Club, Windsor Castle, Sandringham Castle, Hyde Park and all the Royal Parks in London have been mowed by a National.

**In side by side comparisons
no competitive greens mower
provides a higher quality of cut.**

The fact is that Ransomes new Greens 3000 picks up

where the competition leaves off. And the proof is

in a truer, closer putting surface. ■ We challenge

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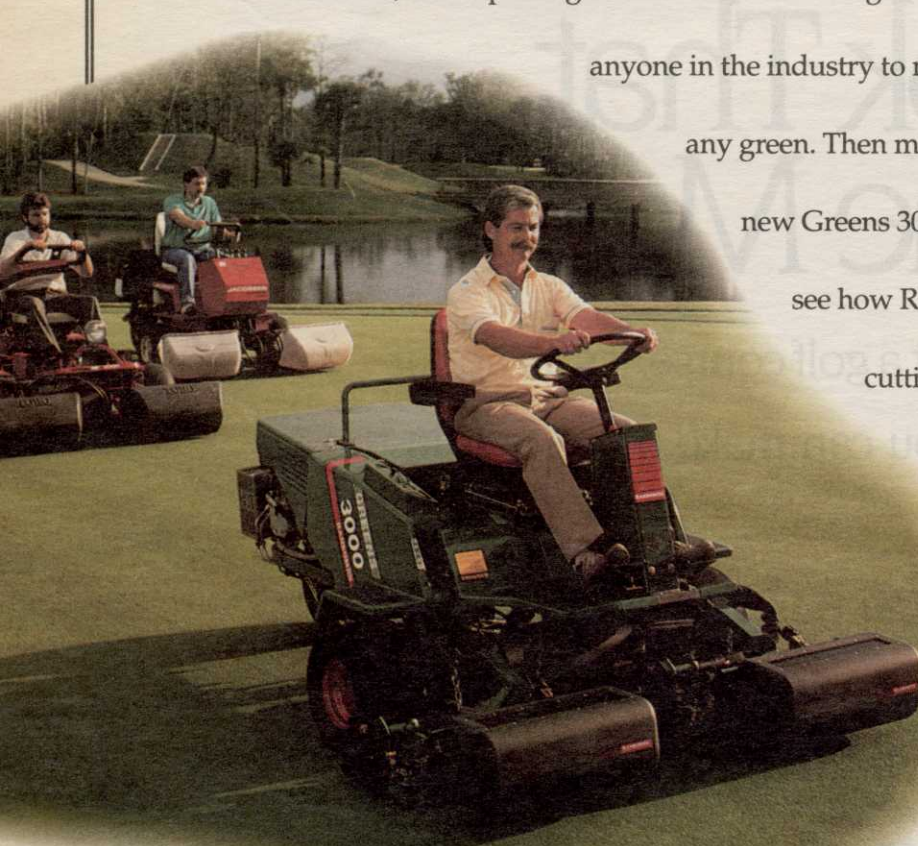
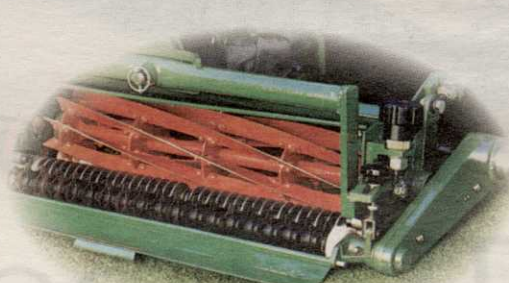
free demonstration. Or call us

direct at 414-699-2000. And see for yourself that when it comes to greens mowers,

anything less than a Greens 3000 simply won't cut it.

Where great ideas start.

RANSOMES



Sandoz to provide bilingual labeling on major products

Sandoz Crop Protection is providing bilingual labels on three of its major specialty products: Mavrik[®], Pentac[®] and Enstar[®].

"In many parts of the country, the primary language of applicators in the greenhouse, nursery and landscape maintenance industries is Spanish," said Ron Fister, director of specialty sales. "So we took the innovative approach of not only meeting the needs of our customers but also the needs of their employees."

This approach is especially welcome in California where, since January 1991, all applicators are required to be certified. With bilingual labels, Sandoz customers will not only save time and money in the transition process, but also avoid potential mistakes that occur through misinterpretation.

"As one of the larger growers of ornamentals in Southern Califor-

nia, the training program for our applicators is extensive," said David Patterson of Western Farm in San Marcos. "Since we use a lot of Mavrik, the new bilingual label is a big plus. It adds credibility to the product and shows sensitivity and respect for the user. Our applicators feel more comfortable with the product and do a better job."

Mavrik is a non-restricted insecticide, Pentac a broad-spectrum miticide and Enstar an insect-growth regulator.

Anderson named director of Toro commercial sales

Michael Anderson has been named The Toro Co.'s director of sales for commercial products.

Anderson will direct domestic sales activities for Toro's commercial products business including mowing, debris management and aeration equipment for golf, landscape/contractor and municipal products. These products account for 25 percent of the

company's total annual sales.

From 1988 until joining Toro, Anderson, 43, was vice president of sales for Waterous Co., a business group of American Cast Iron Co., suppliers of hydrants and valves to municipalities.

Anderson spent most of the previous 18 years with American Hoist & Derrick where he held many posts

including vice president and general manager of sales and marketing. In 1978, he left American Hoist & Derrick to become sales manager for Equipment Sales Co. of Phoenix, Ariz. before returning to American Hoist in 1981.

A native of Minneapolis, Anderson, his wife, Margaret, and their three children live in Woodbury, Minn.

Mobay buys production rights for granular DYLOX

KANSAS CITY, Mo. — Mobay Specialty Products Group has bought the federal registrations that pertain to the production and sale of

trichlorifon from Kaw Valley, Inc., Leavenworth, Kan.

Prior to the acquisition, Mobay offered an 80-percent soluble powder,

DYLOX. Mobay now can offer to the turf care professional under the Mobay label both the 80-percent soluble powder and DYLOX 6.2 granular.

Pedaling

Continued from page 48

Kimbrell had some question about the machine's suitability on hilly courses.

But the Valentine brothers maintain the T₂'s primary function is as a flatland vehicle. Actually, with an athletic enough person at the controls, they say the rig would do well on hills. But that was not their intent.

The car can be easily transported in the bed of a pick-up truck or even on a small trailer, the way most people transport conventional golf cars. And it would be easy to load and unload.

With the national emphasis on health and exercise, the Valentine brothers feel they have a winner. They've taken the machine to several bicycle manufacturers and found that, in all instances, "the tech people wanted to do it right now."

Management has been a bit more cautious, said Mike, citing the recession and tooling costs. But nobody has yet slammed the door.

"They are interested, but are holding off on any commitments until they see what happens with the economy," he concluded.

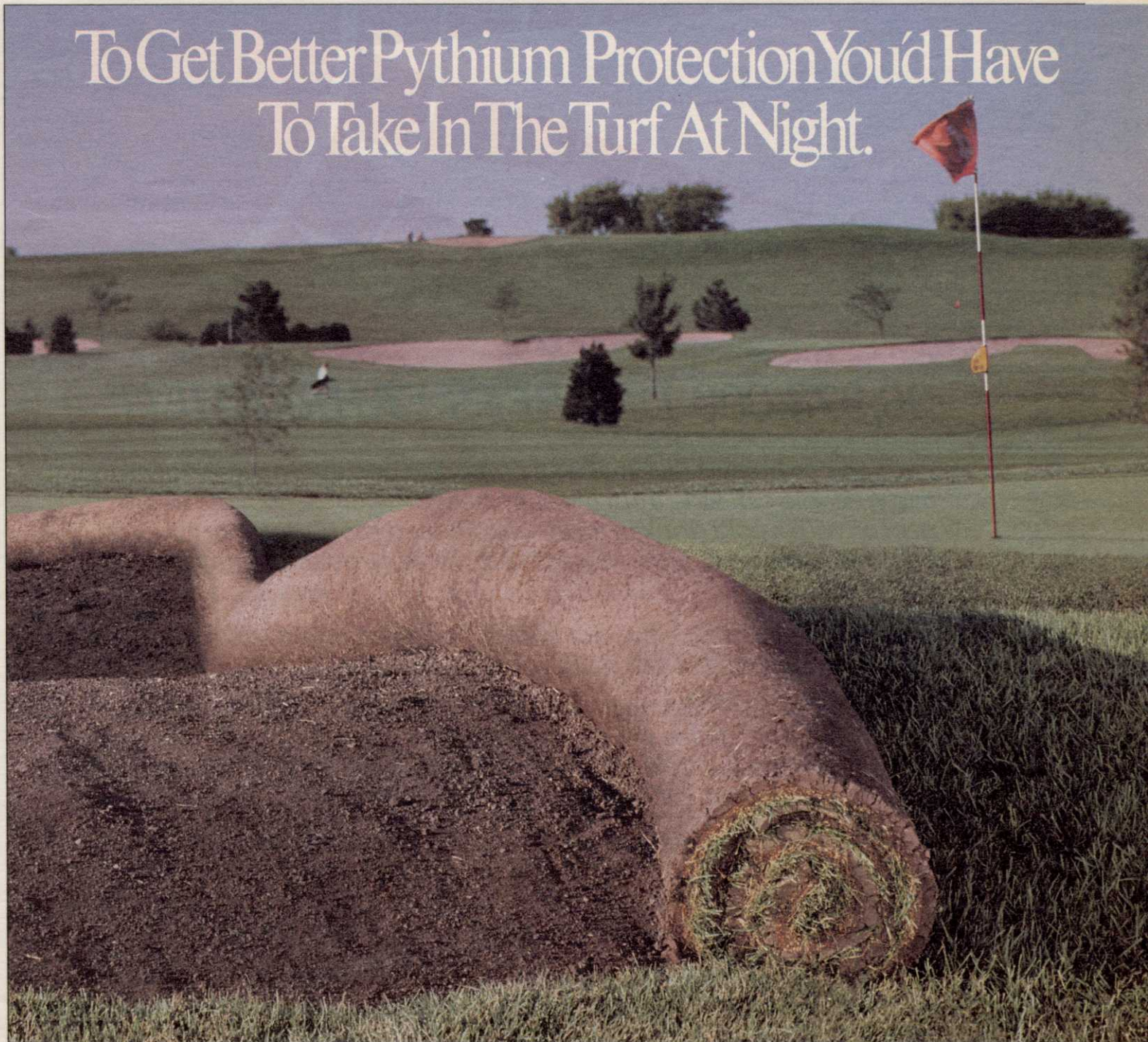
While the original inspiration was golf-oriented, both brothers cite the T₂'s adaptability. It is suitable for older children as well as the elderly. With a quick change of mountings over the rear axle, the car can carry anything from surfboards to groceries. No gasoline, no battery charges with the tradeoff being a healthier body.

They also see potential as rentals, less expensive than conventional cars, yet an income producer for the course.

Another golfer thought the creation was a wonderful idea. "My only concern," he said, "is where do you carry the beer?"

Bob Spiwak is a contributing editor based in Winthrop, Wash.

GOLF COURSE NEWS



To Get Better Pythium Protection You'd Have To Take In The Turf At Night.

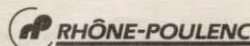
When Pythium conditions are right, you can either take in the turf or take out the best Pythium control money can buy: CHIPCO[®] ALIETTE[®] brand fungicide. CHIPCO[®] ALIETTE[®] brand is unlike any other Pythium-prevention fungicide. Its true systemic action spreads protection throughout every blade of turfgrass, including the roots. Protection that lasts up to 21 days from a single application. Plus, the unique chemistry of CHIPCO[®] ALIETTE[®] brand actually stimulates turf's natural ability to fight off infection.



So you get two-way protection that can't be beat. Now add to that the fact that a foliar application of CHIPCO[®] ALIETTE[®] brand prevents

Phytophthora and Pythium on a wide variety of ornamental and landscape plantings, and you've also got the most versatile fungicide on the market today. So when conditions are right for Pythium, don't roll up the turf, lay down CHIPCO[®] ALIETTE[®] brand fungicide.

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Rhone-Poulenc Ag Company, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709. For additional product information, please call: 1-800-334-9745. As with any crop protection chemical, always read and follow instructions on the label. CHIPCO and ALIETTE are registered trademarks of Rhone-Poulenc. © 1990 Rhone-Poulenc Ag Company.

Rohm & Haas emphasizes turf

Specialty chemical manufacturer Rohm & Haas Co. is placing more emphasis on the turf and ornamental market.

Long-time sales and marketing expert Robert Gordon has been named general manager of the new turf and ornamental marketing business. A team of regulatory, research and development people are working specifically on turf and ornamental needs.

The new group is focusing on rewriting labels, designing packaging, refining formulations and improving distribution. One of the

first projects is a flowable formulation of FORER fungicide for golf courses, offering better mixing and handling than a wettable powder.

The company offers convenient water soluble packaging for products like KERB herbicide for poa annua control in Bermudagrass and is working toward label registration within the year for a long-lasting systemic fungicide, EAGLE WSP, a new greens management tool.

For more information contact Robert Gordon, Rohm & Haas Co., Independence Mall West, Philadelphia, Pa. 19105, 215-595-3292.



Reinders Brothers 10th biennial turf conference in Waukesha, Wis.

Reinders Bros. conference a major success

More than 1,500 people attended Reinders Brothers 10th biennial two-day turf conference at the Waukesha Expo Center in Waukesha, Wis.

Approximately \$750,000 in equipment was on display. Educational sessions were given by University of Wisconsin researchers Gayle Worf, Robert Newman and Wayne Kussow along with Joe Vargas of Michigan State University, John Street of Ohio State University and Jerry Pepin of Pickseed West.

Hoover acquires Lube Cube, Inc.

The Materials Handling Division of Hoover Group, Inc. in Alpharetta, Ga., has acquired Lube Cube, Inc., of Severna Park, Md.

Lube Cube is one of the nation's largest manufacturers of above-ground rectangular tanks for petroleum products.

Lube Cube will operate under Hoover as the Containment Systems Division and will remain headquartered in Maryland.

Joseph P. Allwein will stay as president of the Containment Systems Division and will report directly to Rod Willnow, corporate vice president and Materials Handling Division general manager.

Hoover Group, Inc., manufactures steel and poly intermediate bulk containers for the liquid handling industry.

Andersen named NASM president

Ken Andersen, vice president of product service for Echo, Inc., Lake Zurich, Ill., is the new president of the National Association of Service Management (NASM).

NASM includes service professionals from the business equipment and appliance industries, other specialized areas, and outdoor power equipment.

Andersen developed and was president of the Atlanta, Ga., chapter. He has been Chicago NASM chapter president and national organization treasurer.

Rain Bird Sales promotes Ferron

GLENDORA, Calif. — David Ferron has been appointed national golf service manager for Rain Bird Sales, Inc., Golf Division.

Ferron's primary responsibilities focus on development and management of Rain Bird's new National Golf Irrigation Service Center Program.

Ferron joined Rain Bird five years ago as a golf application engineer.

26,978,000 DEGREES FAHRENHEIT.

The sun's scorching rays make an otherwise beautiful course downright nasty. People can hide from the sun's heat by taking a cool dip in the pool or with a cold drink in an air conditioned room. But your turf just lies there, unable to hide, subjected to the sun's pounding rays for an entire season.

The powerful summer sun can scorch your greens and ruin your fairways, not to mention what it can do to your reputation as a turf specialist.

Is there a defense? Yes. Arm yourself with NoburN™ natural wetting agent. NoburN™ helps your soil drink in the water it needs to prevent stress and burn-out. NoburN™ helps all types of turf (and turf specialists) handle the punishment inflicted by the sun's rays.

With NoburN™ you don't have to water in or syringe after each application. Since there is no phytotoxicity, you just wait until your irrigation comes on at night to water in. Besides having great looking turf—you save valuable time and money.

NoburN™ is not a quick fix product. If flocculates soil particles, loosening compacted soils for long term relief. Your heavily traveled tees and greens will benefit from the improvement in percolation.

Since NoburN™ is 90% organic, it is biodegradable in the soil and there is no problem with residue build-up. Come September when all is said and done, NoburN™ will make sure there was a lot more done than said.

So this summer don't let the heat get the better of you: beat the heat with NoburN™.

roots inc.

A Division of LISA Products Corp.
25 Science Park, New Haven, CT 06511 Please call us toll free at 1-800-342-6173 for further information
Headline = sun's interior temperature according to Encyclopedia Britannica (1974 edit.)

NOBURN
NATURAL WETTING AGENT
AND SOIL PENETRANT

*NoburN is a trade mark of LISA Products Corporation

Pennant improvements approved

GREENSBORO, N. C. — Several improvements to Ciba-Geigy's Pennant liquid herbicide label have been approved by the Environmental Protection Agency, increasing the number of desirable plants on which it can be used and weeds it controls.

Last year, EPA approved Pennant's first federal turf label, for control of yellow nutsedge and Mexican sprangletop on warm-season turf. This label allowed product use on commercial bahiagrass, Bermudagrass, centipede grass and St. Augustinegrass.

The revised label allows the herbicide to be used on zoysiagrass, an important turf species in much of the southern United States. In addition, annual sedges, smooth and large

crabgrass, and bearded sprangletop now are on its list of weeds controlled.

Pennant has provided broad-spectrum weed control in landscape plantings, ornamentals, conifers, non-bearing fruits and non-bearing citrus in nurseries for more than three years.

The product's new label includes more than 50 desirable plants not previously labeled, such as bulbs, bedding plants and annual flowers, as well as ground covers and woody ornamentals.

For more information contact Turf & Ornamental Products, Ciba-Geigy, P. O. Box 18300, Greensboro, N. C. 27419. (919) 632-6000.

Hunter names Kesterton to Australian post

Philip Kesterton, an irrigation industry professional with more than 20 years' experience in international sales and service, has been appointed the Hunter Industries managing director for Australia and New Zealand. He is based in Sydney, Australia.

Kesterton will be responsible for the sales and technical support of all Hunter product lines, including residential and commercial

sprinklers and golf irrigation systems.

His association with Hunter Industries founder Ed Hunter goes back more than 30 years. In the 1960s, Hunter headed the Hoist-O-Matic sprinkler company, and Kesterton distributed Hoist-O-Matic products in Australia. Kesterton also was managing director for Toro Australia from 1974 to 1987.

Fisher promoted to head Toro N'East district

RIVERSIDE, Calif. — Mike Fisher has been appointed district sales and specification manager for Toro Irrigation's northeast district.

Fisher served five years as sales and operations manager for Turf Products. He has

also won Toro's rookie and salesman of the year awards.

Fisher will oversee accounts for Grasslands, Philadelphia Turf, Storr Tractor and the Turf Products Corporation.



One that's dependable, yet economical. One that won't color you or your cart paths a sick

is Pennant®. And although it's brutal on stubborn weeds, your bahiagrass and Bermudagrass beautiful, your centipede grass and St. Augustinegrass stunning, and your zoysiagrass awesome.

UNLESS YOU MANAGE FAIRWAYS LIKE THIS, YOU NEED PENNANT HERBICIDE.

it won't stunt or otherwise harm the warm-season turfgrasses on fairways as well as non-

Apply Pennant by impregnating it on fertilizer or simply spraying.

Since weed protection lasts up to 4 months, all you'll have to worry about in the meantime is too much rain, too little rain, too many pests, and divot-digging golfers.

Weeds are to turfgrass what hot, sticky wads of gum are to astroturf. They're aggravating, unyielding, and downright offensive. So in order to keep weeds off of your turf, you need a tough preemergence herbicide.

shade of orange. And one that will take care of annual sedges, crabgrass — even yellow nutsedge. The only herbicide that meets all these criteria

So you can use Pennant to keep

PENNANT

© 1991 CIBA-GEIGY Corporation, Turf and Ornamental Products, Box 18300, Greensboro, NC 27419. Always read and follow label directions.



It doesn't get any better than this.

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So equip your golf course with the finest flags and poles made. Call for your free catalog today!

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Cushman spray vehicle reduces ground pressure

LINCOLN, Neb. — The Cushman Turf Master is a new spray vehicle.

Mounted on a 3-wheel Cushman Turf-Truckster with the exclusive Cushman pin-disconnect mounting system, the vehicle is equipped with special high-flotation tires that reduce ground pressure by approximately 50 percent.

The Turf-Truckster also is equipped with a new spring-over-shock absorber front suspension system with automotive-type rubber mounts at the pivot points. The new suspension system reduces wear and does not require lubrication.

The spray unit is available with either 15-foot or 20-foot spray booms, supplied by a 160-gallon molded fiberglass tank. The vehicle



Cushman Turf Master

operator can adjust spray pressure and on-off for each boom section from the vehicle seat. The vehicle's exclusive ground-driven PTO automatically stops the spray application when the vehicle is stopped.

For more information, contact: Cushman Inc., P. O. Box 82409, Lincoln, Neb. 68501. (800) 228-4444.

CIRCLE NO. 301

Tall fescue offers lower growth

Lofts' new lower-growing tall fescue, Rebel Jr., is distinguished by its darkness, according to Research Director and Vice President Richard Hurley.

Rebel Jr. also offers moderately low growth, excellent performance in full sun or moderate shade, and requires only low to medium maintenance.

Dense, persistent and slower growth as well as superior overall performance characterize Rebel Jr., Lofts says. It adapts to a wide range of environmental conditions (including heat, drought and cold), and resists damage from insects and disease.

It shares the fine leaf texture of extremely low-growing (so-called "dwarf") varieties.

Rebel Jr. is an offspring of Rebel and Rebel II.

For more information contact Lofts Seed Inc., Bound Brook, N.J. 08805-0146 or call 800-526-3890.

CIRCLE NO. 306

Wetting agent stops burning

ROOTSinc has introduced NoburN Natural Wetting Agent and soil penetrant.

NoburN is a steroid saponin extract from the desert yucca plant. Unlike synthetic wetting agents, NoburN does not have to be watered in after each application, and it will not burn or discolor leaf tissue when it is applied in hot or dry weather.

Steroids saponins are natural floccing agents that open the soil to air and water by aggregating soil particles. They are nature's wetting agents, increasing the movement of water through hydrophobic soils, improving water penetration and retention.

For research and technical information call 800-342-6173.

CIRCLE NO. 308

Sam Snead and Bunton Co. join forces

LOUISVILLE, Ky. — The Bunton Company recently announced affiliation with PGA and World Golf Hall of Fame member Sam Snead while introducing several new golf course maintenance products.

Bunton's expanded golf line embraces a lightweight 5-gang fairway mower, hydraulically controlled tow-behind fairway and approach mower, hydrostat rotary mower, and rear-mount rotary mower.

The 5-gang fairway mower cuts a precision 100-inch swath, and is equipped with all-wheel drive, grass catchers and power steering. Ninety

percent of the parts for the mower and Triplex greensmower are interchangeable.

The pull-behind mower, equipped with three nine-blade hydraulically-driven reels, lets the user give open areas a manicured look with substantially less labor. It is much safer to use in populated areas because the reels are designed to prevent debris from being thrown.

An auto-tracking feature allows all three reels to pivot and steer, eliminating scuffs and maintaining a uniform cut even in tight radius turns.

The rotary mower has a zero turning radius and infinite variable speed adjustment that allows for maximum maneuverability.

Finger-tipped levers at the handle grips independently control forward, reverse and power-turning.

The rear-mount mower has three blades that deliver up to a 71-inch cut on even the roughest open mowing areas. It attaches easily to a Category 1 hitch-equipped tractor.

Contact Bunton Co., 4601 E. Indian Trail, P. O. Box 33247, Louisville, Ky. 40232-3247. (502) 966-0550.

CIRCLE NO. 310

At 2.2 Redefines T

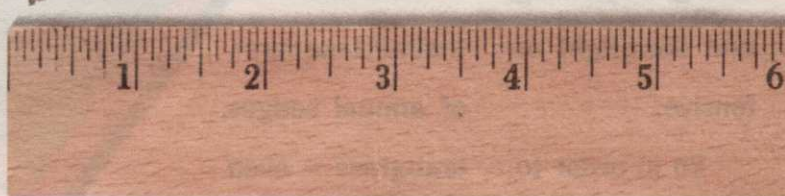
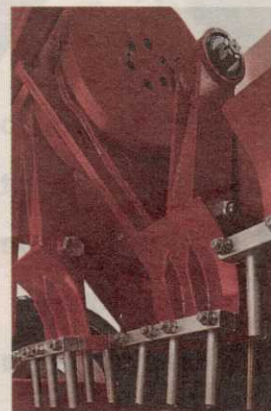
Whoever said you had to sacrifice aerating speed for hole quality must be working for the competition. Introducing the Toro Fairway Aerator. Now you can aerate 61,000 square feet an hour at speeds up to 2.2 mph with exceptional hole quality. That's about four times as fast as other reciprocating models. A wide swath pattern and fast speed put the Toro Fairway Aerator way out in front.

By trying to match Toro productivity, the competition sacrifices a tight coring pattern, and opens up their spacing.

The competition can offer you speed with their non-reciprocating models, but you'll pay for it with poor depth and hole quality.

The Toro Fairway Aerator gives you clean, consistent hole quality plus adjustable coring depth control. Up to 5" with the two-tine head and up to 3" with the six-tine head. All easily adjustable with brackets on each side of the unit.

When you do heavy-duty work, you need heavy-duty components. With an all gear drive and tapered roller bearings, the Toro Fairway Aerator is built to withstand the punishment of high capacity aeration. And there are no belts or chains to slip or break.



"Toro" is a registered trademark of The Toro Company. ©1989 The Toro Company.

New kit allows quick response to chemical spills

NORTHBROOK, ILL. — With the new spill response kit from Precision Laboratories Inc., workers can respond quickly and efficiently to small emergency spills in the field or at temporary work sites.

Equipped to handle up to a 5-gallon spill, the lightweight kit is an ideal tool for golf course maintenance, police, fire and emergency vehicles, hazardous waste haulers and lawn care companies.

The kit also is recommended as a

protective measure for those transporting or spraying pesticides or other hazardous or potentially dangerous materials.

The kit consists of a fluorescent nylon carry bag, three large chemisorb tubes to quickly surround and contain the spill, and two large chemisorb pillows to completely absorb and further contain the spill.

Chemisorb is a fast-acting, universal sorbent capable of picking up 21 times its own weight. Within 30 seconds, non-flammable chemisorb absorbs 80 percent of its capacity.

Contact Precision Laboratories, Inc., P. O. Box 127, Northbrook, Ill. 60065. (800) 323-6280.

CIRCLE NO. 302



Precision Labs spill response kit

Camera helps ID insect problems

RF Inter-Science Co has announced a new portable camera adaptable microscope instrument, the 25 "H" Kit.

This kit combines the Macroscopic 25 with the new battery-powered Hi-Intensity Illuminator and a padded carrying case making the system a self-contained field-useable microscope providing wide field magnification of 25X. By adding the optional Macromate I, camera adapter, field photography at 25X is possible without any elaborate set-up.

Macroscopic 25 units have been in use for several years in a wide variety of applications related to insect identification in horticulture. It is especially useful when insect control is practiced as it provides the user with a means to not only identify the insect but also its stage of development so that pesticide application may be optimized.

Weighing less than two pounds, the system is excellent for field work.

Macroscopic 25 incorporates an interchangeable reticle that can be used for measurements in inches and millimeters. Although Macroscopic 25 is designed to work with normal ambient lighting the Hi-Intensity Illuminator provides the extra illumination sometimes required to positively identify the specimen.

For more information contact RF Inter-Science Co., P.O. Box 505, Huntington, N.Y. 11743 or call 516-421-1342.

CIRCLE NO. 305

Combo kit prunes all size branches

LEWISTON, Idaho — A power pruner combination unit is being marketed by Technic Tool Corp.

The unit consists of the original power pruner telescoping drive shaft with a chain saw cutting head and a circle saw accessory.

The accessory, with its 5-1/2-inch blade, is designed to cut 1-1/2-inch and smaller limbs. The 10-inch bar and chain of the chain saw cutting head handles larger cutting chores.

The tools can be maneuvered between branches, and have special cutting shoes that ensure a clean, precise cut.

Weighing only 16 pounds, the pruner can be used from the ground or a bucket truck.

Both accessories quickly attach to the pruner's telescoping drive shaft. The length of the shaft — up to 11 inches — provides safety for the operator: the saw remains a safe distance away from the operator's face and the cut limbs will fall far from where the operator is standing. For additional safety, the safety guard moves the sawdust away from the operator.

Contact Technic Tool Corporation, 725 29th St. North, P. O. Box 1406, Lewiston, Idaho 83501. (208) 746-9011 or (800) 243-9592.

CIRCLE NO. 309

mph, It ne Term Fast.



For maximum width, the Toro Fairway Aerator has a coring swath of over five feet. That gives you an aerating capacity of 61,000 square feet an hour at maximum speed.

A choice of two coring patterns is available. For increased drainage and reduced soil compaction, select the 5.25"x6" coring pattern with depth of up to 5". For better control of thatch and reduced compaction, select the 3.5"x3.0" coring pattern with a depth of up to 3".

The Toro Fairway Aerator not only redefines the term fast, it also redefines productivity, depth quality and durability. Together they give fairways and other large turf areas the same quality aeration previously limited to greens. For a demonstration of the new Toro Fairway Aerator, call your local Toro distributor or write to the address below.

TORO

The Professionals
That Keep You Cutting.

The Toro Company, Commercial Marketing Services, 8111 Lyndale Ave. So., Minneapolis, MN 55420.

CIRCLE #154



Model 2200 Dakota Blender

Dakota blender specifically built for golf courses

GRAND FORKS, N. D. — Pioneer Peat and Dakota Blenders recently introduced the Model 2200 high-performance soil blender.

Specifically designed for golf course contractors, it has an output of approximately 200 tons/hr. This portable machine can easily be towed by a pickup. It also is PTO-driven with 100-percent mechanical drive, and has a built-in stacking conveyor.

Contact Pioneer Peat and Dakota Blenders, Inc., P. O. Box 5438, Grand Forks, N. D. 58206 (701) 746-4300.

CIRCLE NO. 303

Mower made for rough and fringe

The Micro-Mower Co. has reported an addition to its lineup of attachments for compact tractors.

With a cutting width of over nine feet, the Model 340 is specially designed to rapidly mow large areas such as athletic fields, golf course roughs and fringes, playgrounds, parks, and estates without creating a need for a large tractor or other power source just to mow.

The Model 340 has a nine-foot cutting width. It has the ability to follow the contour of the area being mowed. Three separate flail cutting heads are each free to flex both horizontally and vertically in order to maintain the fine quality cut expected by today's turf professional.

Contact The Micro-Mower Co., P.O. Box 28, West Jefferson, Ohio 43162-0028 or call 800-45MOWER.

CIRCLE NO. 311

Honda introduces mulching mower

DULUTH, Ga. — Honda Power Equipment has introduced the HRM21, its first dedicated mulching mower.

Available in push or self-propelled models, the HRM 21 employs a unique deck design and low-lift blade which creates the proper air pattern for efficient mulching.

The low center of gravity makes the mower easy to handle. It offers six mowing height adjustments between five-eighths of an inch to three inches, and features a 21-inch aluminum cutting deck powered by a commercial four-stroke overhead valve engine with zone start.

CIRCLE NO. 312

Cushman adds rotary mower

LINCOLN, Neb. — The "On-Demand" 4WD front-line model 1810 is the newest addition to the Cushman lineup of out-front rotary mowers.

This "fine-cut" rotary gives enhanced maneuverability on slopes or wet grass, with less chance of scuffing turf on turns.

This capability is due to the mower's all-hydraulic drive system, with individual hydraulic motors on all four wheels.

It enables the operator to mow around golf course berms, trees

and other objects on sloping terrain, using the "on-demand" all-wheel drive feature.

The front line can be equipped with a 60-inch or 72-inch side or rear-discharge cutting deck, and can mow up to 3-1/2 acres per hour.

Powered by a 22-hp, 3-cylinder Kubota diesel engine, the front line operator can engage the traction assist with split foot pedals, giving the mower zero turning radius in tight areas.

For more information on the Model 1810 or any other Cushman product contact Cushman Inc., P. O. Box 82409, Lincoln, Neb. 68501. 800 228-4444.

CIRCLE NO. 313

Smaller plow has additional power

PERRY, Okla. — Ditch Witch has introduced a new, compact, 45-hp-class trencher/vibratory plow, the Model 4500.

The 4-wheel drive unit, smaller in size than many 40-hp-class models, packs 50 percent more power and is ideal for work in confined areas.

The 4500 is available with a selection of all-hydrostatic digging attachments, center-line trencher, dual-position trencher, vibratory plow, and combo (combination vibrator plow and trencher).

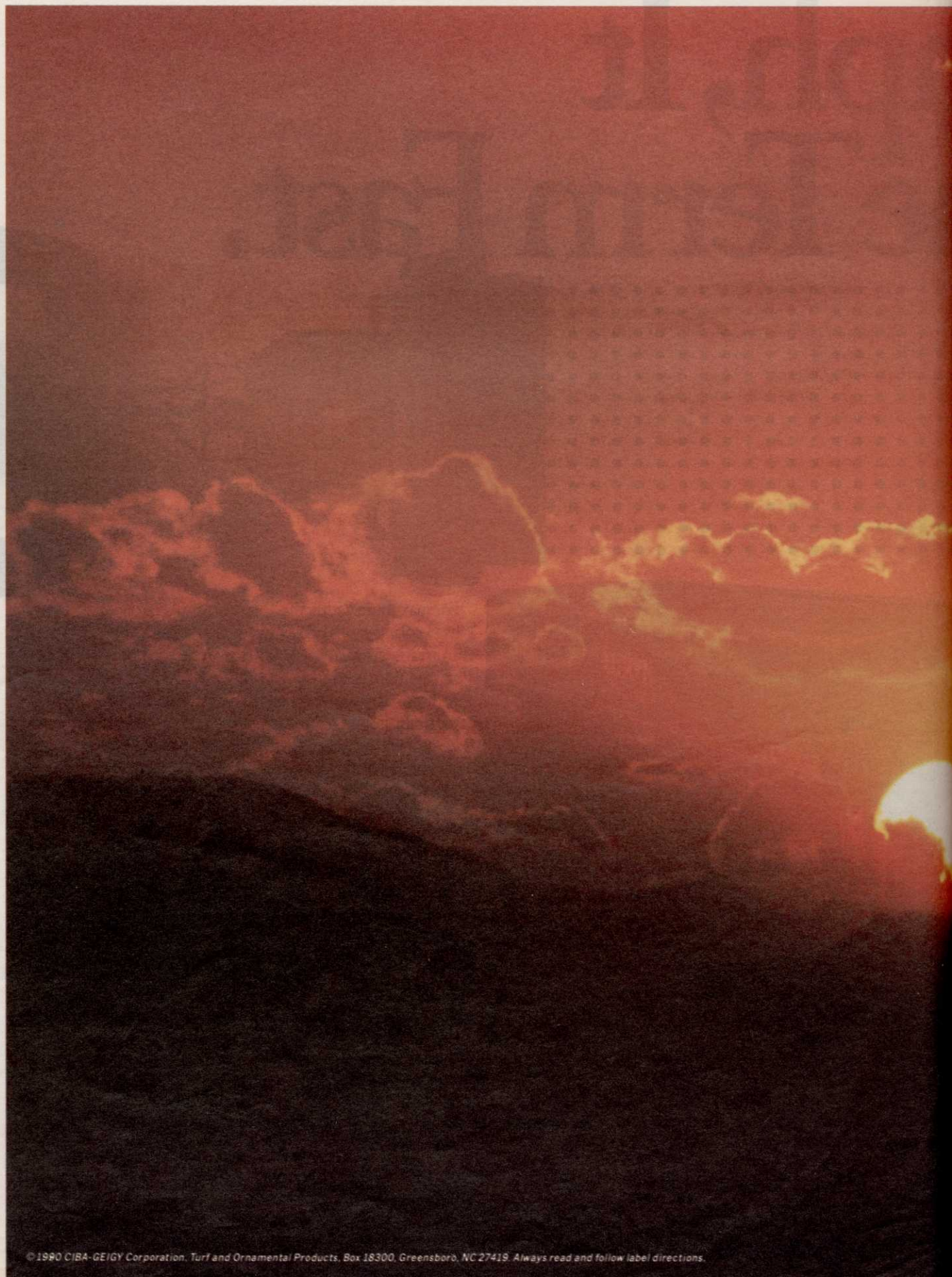
The 4500's size, plower, production capabilities and reliability are suited for underground service and distribution line installation.

The power-efficient hydrostatic digging drive motor and unique hydraulic oil cooling system makes the 4500 highly productive.

A two-speed ground drive gearbox increases drawbar pull and vibratory plowing performance.

For more information on the Model 4500 or any other Ditch Witch product, contact The Charles Machine Works, Inc., P. O. Box 66, Perry, Okla. 73077-0066. (800) 654-6481.

CIRCLE NO. 314



© 1990 CIBA-GEIGY Corporation, Turf and Ornamental Products, Box 18300, Greensboro, NC 27419. Always read and follow label directions.

Jacobsen unveils many new products

RACINE, Wis. — Jacobsen Division of Textron has unveiled the more powerful Tri-King 1671G triplex mower.

It now has a 16-hp gas engine for more power to cut tees, fairways and fringe areas. Addition of larger 20-inch front tires gives better ground clearance and traction.

The Tri-King has a 71-inch cutting width, and a choice of five- or 10-

blade, 7-inch reels. Cutting heights can be adjusted from 3/8-inch to 3 inches, and the cutting units can be set to follow ground contours for a close cut or fixed for higher heights of cut.

Jacobsen also is offering new aerators and utility trucks.

The new Aero King PT2448 aerator is said to revitalize tees, fairways and other large turf areas. Its tines work virtually straight up and down to minimize sidewall compaction and scuffing problems.

The pattern adjusts from 1-by-2 inches to 5-by-2 inches. With a 48-inch aeration swath, the PT2448 can cover from 8,550 square feet per hour with a 1-by-2-inch hole



Jacobsen Tri-King 1671G triplex mower pattern to 42,750 square feet per hour with a 5-by-2-inch pattern.

Standard 3/8-inch and 1/2-inch I. D. tines are available along with a 1/4-inch mini-tine assembly to aerate greens with minimal play inter-

ruption. A rear-mounted crank adjusts tine depth to 3 inches below the surface.

Jacobsen's new Aero King T1224 has five available coring patterns from 1-by-2 inches to 5-by-2 inches to aerate up to 21,000 square feet per hour. A mechanical drive system means consistent hole spacing. Tines work virtually straight up and down to aerate without sidewall compaction and surface scuffing.

New Express utility trucks, available with gas or electric power, haul up to 1,000 pounds of passengers and cargo.

The 810 has a 2-cylinder, 8.5-hp overhead cam gas engine. Electronic ignition, cast iron cylinder

linings and pressurized lubrication mean fast starts and trouble-free service. The 610 has a 6.5-hp, 36-volt electric motor.

Both trucks have steel bodies, stainless steel external hardware, wrap-around bumper and flexible rear fenders.

Both haul up to 1,000 pounds, with 8-cubic-foot loadboxes, and have extra-thick, foam-cushioned bench seats. Rack and pinion steering and an automatic torque converter on gas models ease driving.

Refinements have been made to Jacobsen's 19-inch championship and 22-inch walk-behind greens mower models.

Both have an improved clutch that needs fewer adjustments, and a new differential for truer tracking. Each has an improved throttle handle and cable assembly.

A brake has been added. Working with the power's pneumatic transport wheels, the brake gives greater control on slopes, helps prevent runaways, and holds the mower in place on a trailer.

Contact Jacobsen Division of Textron Inc., 1721 Packard Ave., Racine, Wis. 53403-2561.

CIRCLE NO. 304

Adapter improves aerator versatility

Feldmann Engineering has increased the versatility of its pull-behind aerator by designing an adapter for use with tractors possessing three-point hitch capabilities.

The adapter, sized for category "0"/"1", allows prompt adjustment of the aerator tines for soil penetration or transport.

Four bolts, included in the adapter kit, attach the aerator frame to the adapter. The bolts do not interfere with weight adjustment for core plug penetration.

Built of heavy-gauge steel, the three-point hitch adapter attaches to either the 2340-32 or 2340-48 models. Drawbar and wheel hanger assemblies are also available.

For more information contact Feldmann Engineering & Manufacturing Co., Inc., P.O. Box 908, Sheboygan Falls Wis. 53085-0908 or call 800-344-0712.

CIRCLE NO. 307

Screen prevents pump clogging

COPPELL, Texas—Greenscape Pump Services, Inc. has introduced Float-N-Screen.

It is designed to keep the irrigation pump system inlet screen off the bottom of the water source and prevent silt and other debris from entering the system.

Major benefits are reduction of pump wear and control valve failure due to clogged screens, prevention of sprinkler clogging due to debris, and prevention of silt build-up on greens from covered intake screens.

Phone contact is (214) 393-0346.

CIRCLE NO. 315

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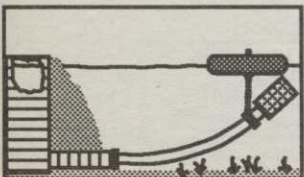
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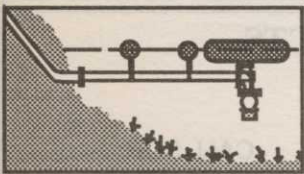
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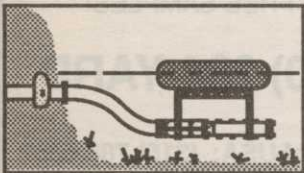
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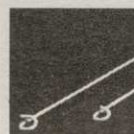
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CIRCLE #169

NEW LITERATURE

New guide book details int'l golf camps and schools

Golfers seeking to improve their playing skills and those pursuing careers in golf resort or club management will find the recently released "Guide to Golf Schools and Camps" useful.

The 142-page book is arranged geographically by 41 states and 10 countries and contains detailed descriptions of 137 schools and camps — including 63 programs exclusively for junior golfers, 27 programs for adults only, 38 programs for players of all ages and nearly 30 programs geared to intermediate and advanced players.

School and camp sponsors include colleges and universities, golf clubs and resorts, golf organizations and professional golfers who have earned recognition for their playing and/or teaching skills.

The guide also contains descriptions of seven two- and four-year college programs in golf facility management; two one-week schools in golf club fitting, assembly and repair; 10 national golf organizations; and contact information for 68 international organizations.

The listings in Section One, **Schools & Camps**, contain year established, length, dates, frequency of programs, level and scope of instruction, daily schedule, class size, student-to-teacher ratio, teaching aids utilized, description of golf and resort facilities, names and credentials of instructors, tuition, deposit and refund policies, and contact information.

Most programs range from a day to a week in length and many augment classroom, practice range and on-course instruction with videotaping and other teaching aids.

Section Two, **Organizations**, describes 10 national organizations' goals, objectives, activities, annual dues and member benefits. Those wishing to learn about facilities, activities and schools worldwide will find contact information for 68 golf organizations throughout the world.

"Guide to Golf Schools & Camps" is available in book and golf stores or by sending a check for \$18.95 to ShawGuides, 625 Biltmore Way, Coral Gables, Fla. 33134 or call 305-446-8888.

Wabash Valley Mfg. releases 1991 plastisol furniture catalog

The 1991 Wabash Valley Manufacturing product catalog is now available from the manufacturer.

Wabash Valley offers a complete line of plastisol-coated furniture. Permanently bonded to steel to a thickness of 1/4-inch, it is guaranteed not to crack, peel, chip, rust, warp or rot.

The 68-page catalog showcases Wabash Valley's product line in color with descriptions and prices listed. The line includes picnic tables, benches, litter receptacles and bicycle loops.

New for 1991 is the Contemporary Series of benches, available in wire or diamond mesh and three different lengths, ideal for public seating. New diamond-wire mesh planters and ash urns are also available.

To receive the free catalog or obtain additional information regarding the Wabash line, call 800-253-8619 or write Wabash Valley, P.O. Box 5, State Rd. 15 N., Silver Lake, Ind. 46982.

May

4-6 — *Turf & Ornamental Communicators annual meeting in St. Louis.* Contact TOCA President Jerry Roche at 216-243-8100.

15 - *North Carolina Turf and Landscape Field Day at North Carolina State University in Raleigh.* Contact R.H. White at 919-737-7615.

20-21 — *Pacific Rim Japan-America Resort and Golf Executive Conference in Hawaii.* For information call Executive Conferences at 800-873-9137.

21 - *GCSANJ monthly meeting at Metedeconk National GC.* Contact Steve Cadenelli at 201-928-4639.

24 - *Soil modifications seminar in Montreal.* Contact Canadian GSA at 416-602-TURF.

June

12 - *Lofts Field Day in Martinsville, N.J.* Contact Karna Godridge at 908-359-1100.

19 - *Lofts Field Day in Wilmington, Ohio.* Contact Karna Godridge at 908-359-1100.

21 - *Central Florida Chapter FGCSA Turf Field Day at Hunters Creek GC.* Contact 407-275-9287.

24-26 - *Golf course development and financing seminar in Las Vegas.* Contact Institute for International Research, Inc. at 212-826-1260.

27 - *Practical water conservation techniques seminar in Riverside, Calif.* Contact Hartley Bennett at 602-684-7308.

July

28-30 — *International Lawn, Garden and Power Equipment Expo 91 in Louisville, Ky.* Contact Expo Hot Line at 800-558-8767.

31 — *Griffin Field Day, Georgia Experiment Station in Griffin, Ga.* Contact Georgia GCSA at 404-769-4076.

August

7 — *Illinois Landscape Contractors Association Summer Field Day in St. Charles, Ill.* Contact ILCA at 708-932-8443.

8 — *MNLA Summer Meeting and Trade Show in St. Paul, Minn.* Contact Minnesota Nursery and Landscape Association at 612-633-4987.

16-18 — *TAN-MISSLARK Regional Nursery and Garden Supply Show in Dallas.* Contact Texas Association of Nurserymen at 512-280-5182.

22 - *Michigan State University Turfgrass Field Day, Trade Show and Equipment Auction in East Lansing.* Contact 517-353-2033.

25-27 — *National Lawn, Garden and Power Equipment Showcase in Toronto, Ontario, Canada.* Contact show producers at 705-741-2536.

September

1-3 — *International Garden Trade Fair in Cologne, Germany.* Contact show producers at 212-974-8836.

3-5 - *IoG Sports & Leisure World Trade Exhibition in Peterborough, England.* Telephone 0908 311856.

13-15 — *Florida Nursery and Allied Trades Show in Orlando, Fla.* Contact FNGA at 407-345-8137.

15-17 — *GMA Show-International Professional Lawn, Garden and Outdoor Power Equipment Exhibition in Kempton Park, United Kingdom.* Contact Andry Montgomery Group at 502-473-1992.

16-19 — *Northwest Turfgrass Conference and Exhibition in Couer d'Alene, Idaho.* Contact NTA at 206-754-0825.

25 — *25th Annual CGSA Fall Field Day at*

Continued on page 61

Golf Course Marketplace

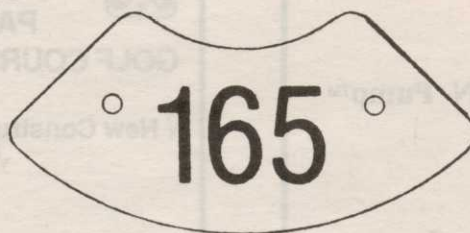
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Carling Lake Golf & CC in Lachute, Quebec, Canada. Contact Canadian Golf Superintendents Association at 800-387-1056.

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7 — Allied Association Meeting at St. Ives CC and Bend CC. Contact Georgia GCSA at 404-769-4076.

24-26 — Summit 91 Women in Golf in Daytona Beach, Fla. Contact LPGA at 904-0254-8800.

November

3-5 — Georgia GCSA Annual Meeting at Jekyll Island Club Resort. Contact Georgia GCSA at 404-769-4076.

5-6 — Indiana State Lawn Care Association Conference and Show in Indianapolis. Contact ISLCA at 317-575-9010.

5-8 — New York State Turfgrass Association Turf and Grounds Exposition in Rochester, N.Y. Contact NYSTA at 800-873-TURF.

7-10 — Golfworld 91 in Dusseldorf, Germany. Contact Monika Waraczynski at (0211) 45600-543.

10-13 — International Irrigation Exposition in San Antonio, Texas. Contact The Irrigation Association at 703-524-1200.

14-16 — Landscape Maintenance Association Meeting and Demo at a site to be announced. Contact LMA at 813-584-2312.

17-20 — Green Industry Expo in Tampa, Fla. Contact Associated Landscape Contractors of America at 703-241-4004.

18-21 — Professional Lawn Care Association of America Convention and Trade Show in Tampa, Fla. Contact PLCAA at 404-977-5222.

19-20 — 4th Annual Southern Grounds & Turf Maintenance Exhibition and Conference in Myrtle Beach, S.C. Contact S.C. State Board for Technical & Comprehensive Education at 800-553-7702.

19-21 — Inland Northwest Turf and Landscape Conference and Trade Show in Spokane, Wash. Contact show producers at 800-729-5904.

December

3 — New Hampshire GCSA Annual Meeting in Concord, N.H.

8-11 — CGSA's 43rd Annual Canadian Turfgrass Conference and Trade Show and 25th Annual Meeting in Toronto. Contact Canadian Golf Superintendents Association at 800-387-1056.

9-11 — 22nd Annual Georgia Turfgrass Conference & Trade Show in Atlanta. Contact Extension Conference Office at 912-681-5189.

9-12 — Ohio Turfgrass Conference and Trade Show in Cincinnati. Contact Ohio Turfgrass Foundation at 614-292-2601.

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January

16-18 — Mid-Am Trade Show in Chicago. Contact 708-526-3993.

February

10-17 — GCSAA Annual Conference & Show in New Orleans.*

* — For more information, contact Betsy Evans, education coordinator, Golf Course Superintendents Association of America, at 800-472-7878 or 913-841-2240. The seminars are dependent upon the availability of the instructors, and are therefore subject to change. One-day seminars cost \$100 for GCSAA members and \$120 for non-members; two-day seminars cost \$180 for members and \$210 for non-members.

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CIRCLE #184

Three strikes and you're out at Heather Hills CC

Electronic device lets golfer know when he leaves the cart path

By Mark Leslie

The Poholeks of Heather Hill Country Club had a problem and no solution.

Their problem: Maverick golfers were driving their carts onto the fairways, muddying them up, compacting the turf and generally raising havoc with playing conditions.

Their solution: None. That is, until the day Constant Poholek Jr., part-time lawyer and full-time son of the president and owner of Heather Hill, had a brainstorm.

With the ingenuity of Uncle Ernest Poholek, Constant Jr.'s idea is now a reality on Heather Hill's fleet of 41 gas-powered golf cars. And only the brave wander off the cart paths that span the 18-hole course, which will enlarge to 27 holes next year.

Each car is equipped with an electronic device that senses whether the car is on grass versus tar or gravel. As soon as the car veers off the path, an alarm sounds, warning the golfer to drive back onto the path.

If a golfer violates the restriction three times, the device shuts off the engine and the car goes nowhere. "The chronic violator is the person who is way off course in places

they shouldn't be with a golf car," said Constant Jr., who is assistant manager under general manager Normand Champagne.

"It has worked out very well," he said. "We developed it last year so we could have plusher fairways. People were muddying and tearing them up."

In six months of use, Constant Jr. said few have complained about the sensors.

"Most people are accepting it," he said. "The old and handicapped golfer may not like it, but we don't have any handicapped golfers right now. And the average golfer will appreciate the nice course that results from it."

Constant Jr. said the owners wanted the ability to manage the course with the least number of marshals.

"We do have two rangers, also, but this gives us efficient management of the cart path system," he said. "Also, we find that the wear and tear on our carts is minimal. We get

longer life out of the cart and have more control."

Ernest Poholek, an electronics engineer and inventor from Attleboro, Mass., who is the Heather Hill maintenance person, needed little time to turn his nephew's idea into a six-by-four-inch, weatherproof, electronic sensor that can be modified to buzz an alarm, speak a "Please return to the cart path" warning, or kill the engine.

Mounted near the rear wheel well, the sensor turns the engine off when tampered with. Also, a locking mechanism can be installed on the engine system so golfers can't access it and bypass the sensor.

Has it been worth it?

Definitely, said Constant Jr. The unit costs \$100 to \$150, depending on the alarm option chosen.

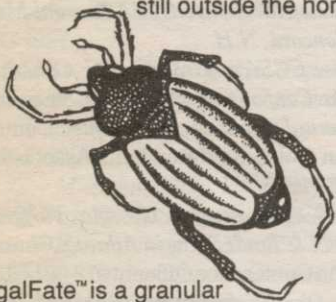
And the Poholeks say if anyone is interested in ordering some, they can have them built immediately.

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