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# GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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The long-delayed Michigan Homestead project may get the go-ahead if a controversial parcel exchange is okayed by the government ..... 3

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## Kolasa named new head of CMAA

By PETER BLAIS

The golf industry will find a knowledgeable ally in new Club Managers Association of America President Richard Kolasa.

"My experience with golf clubs is one of my main strengths. I've been involved with golf since 1963," said the general manager of Tucson, Ariz.'s Skyline Country Club. Kolasa will be elevated from vice president to the CMAA's highest office during late February's annual meeting in Nashville, Tenn.

One of the more interesting situations he's dealt with during that time involves the irrigation system at Skyline. While most Southwest U.S. courses have installed automated systems, Skyline still uses quick couplers.

"In the superintendent's mind, it's not a priority. If he came to me and asked for an automated system, I'd certainly consider it. But he's happy with the system he has. So we have two guys out there watering every night," Kolasa said.

Kolasa has been at Skyline since 1978. Before that he held similar posts at Blue Hills Country Club in Kansas City, Mo., Evansville (Ind.) Country Club and South Bend (Ind.) Country Club.

He graduated from Michigan State University in 1966, joined the CMAA in 1968 and became a certified manager in 1986. He

Continued on page 38

## Cape Cod study reinforced

New data confirms positive findings at sandy-soiled site

By PETER BLAIS

YARMOUTH, Mass. — Groundwater tests at a relatively new Cape Cod golf course substantiate many of the findings of the original Cape Cod study.

Stuart Cohen, director and author of the original Cape Cod study, said: "What the findings show is the minimum impact golf courses can have on ground water when an integrated pest manage-

ment program is used by an educated and experienced superintendent."

The initial Cape Cod investigation focused on four older courses. The feeling was that if pesticide contamination would be a problem anywhere, it would be on courses built long before today's strict environmental guidelines and in a place like Cape Cod, where sandy soil and a

Continued on page 23



**DEVELOPMENT DOWN UNDER**  
Asian-Pacific development is booming, as evidenced by no. 9 at the new Graham/Panks course, Turtle Point GC, in Repulse Bay, Queensland, Australia. For a report Golf Asia '93, see page 45.

## IR-4 Project offers doomed chemicals a second chance

By HAL PHILLIPS

NEW BRUNSWICK, N.J. — Scientists at the Interregional Research Project No. 4 (IR-4 to the initiated) are beefing up their public relations effort. The golf industry stands to benefit from this campaign, especially those manufacturers of specialized chemicals that might not survive the 1997 reregistration deadline.

"The turf industry may have pesticide needs that we haven't heard about from our normal contacts," explained Dr. Richard Guest, director of the IR-4 Project. "Lack of industry awareness of what we can do is one of our chief concerns."

Conducted from Rutgers  
Continued on page 48

Course-opening figures for 1992	Open	Under Construction	In Planning
Daily Fee	236	391	346
Municipal	51	91	92
Private	67	131	132
TBD*		3	10
<b>Totals</b>	<b>354</b>	<b>616</b>	<b>580</b>

\* Type of facility to be determined Source: National Golf Foundation

## Course openings up in '92: Experts see it as peak year

By HAL PHILLIPS

The National Golf Foundation has issued figures indicating 1992 was a record-setting year for golf course openings. Three-hundred and fifty-four is the tentative number — three more than the 1991 total, which had represented a 20-year high.

However, the 354 figure has generated little flag-waving in golf industry circles. Indeed, the general consensus among financial analysts, and the NGF itself, views 1992 as a peak year — after which a more reasonable, stable number of openings is expected.

"There's been a big, much publicized wave of activity, but the pipeline is a long one," said Don Rhodes, a vice president at Textron Financial Corp. "We're seeing the results of projects started in 1988-89. The

Continued on page 31



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## NEWS IN BRIEF

**ORLANDO, Fla.** — Arnold Palmer Golf Management Co., an international golf facility management firm, has moved its corporate offices to Palmer's Bay Hill Club here. Part of the Bay Hill Lodge was converted into offices for the APGMC staff.

**MARSHALL COUNTY, Iowa** — Proposals for two nine-hole golf courses will proceed now that they have won unanimous approval for special-use permits from the Marshall County Board of Adjustment. Local resident William Grewell said he hopes to open Country Drive GC by late summer or fall. Mike Eckhart, treasurer of the West Marshall Golf Course Association, said Lincoln Valley GC will open by June 1994.

**CHANDLER, Ariz.** — Construction of UDC Home's Foothills Club West GC resumed in January, and will be completed this summer. The course, designed by Kenneth M. Kavanaugh of Tucson, is scheduled to open next winter. Kavanaugh has also begun an extensive course renovation for the city of Tucson's Randolph South Municipal GC. Construction is scheduled to be completed in the summer of 1994.

**FLOYDS KNOBS, Ind.** — Not far from his Southern Indiana home, Fuzzy Zoeller is watching his eighth course come to life. Zoeller owns 51 percent of Covered Bridge GC, a \$7.5 million course and housing development he designed on 350 acres. It's scheduled to open by spring of 1994.

**ST. LOUIS** — Monsanto Co. has announced it has signed a letter of intent with Chevron Chemical Co. to purchase the assets of that firm's Ortho Consumer Products Division. Monsanto officials indicated the purchase price will be approximately \$400 million, including working capital employed in the business.

## Creative solution to unravel longstanding Homestead dispute?

By PETER BLAIS

**GLEN ARBOR, Mich.** — A citizens group has dredged up an old idea along the shores of Lake Michigan as a way to resolve the conflict surrounding the controversial Homestead golf course.

A 10-member steering committee, composed of leaders of groups interested in the project, has proposed a land swap between Homestead resort owner Robert Kuras and the National Park Service, administrator of nearby Sleeping Bear Dunes National Lakeshore.

The swap involves an exchange of 267 acres of Homestead land for a 258-acre Park Service parcel, according to committee spokesman Don Reddicliffe.

The Park Service would set aside the Homestead land, which includes the 3.68 acres of wetlands near the Crystal River that have tied up the development in regulatory red tape and the courts for more than six years.

*'This won't be easy. An act of Congress is difficult to get and will take time. But it's worth the effort if we can get this resolved.'*

—Don Reddicliffe, spokesman for citizens group

The Homestead could use the adjacent Park Service acreage, which Reddicliffe described as rolling farmland "without wetlands or creeks to worry about," to develop its long-sought golf course. A former owner once considered developing the site into a golf course.

Since it involves federal land, the swap would require an act of Congress, Reddicliffe explained. The group's goal is to gain local support that would hopefully generate resolutions and letters of support. Those would be sent to the district's Congressmen, who could introduce the needed legislation.

"A similar plan was considered five or six years ago," Reddicliffe said. "But it wasn't considered possible. Since then we've had six years of bitter debate. More people are looking at this as a way to resolve the issue and move on."

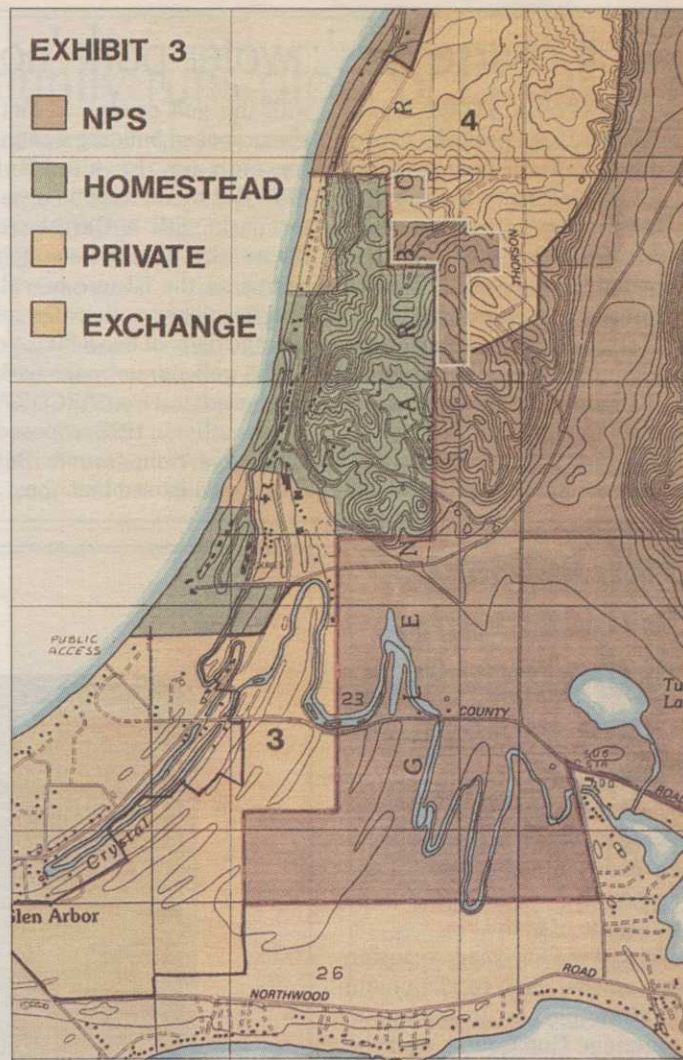
Some oppose the idea.

"The Sierra Club said it was absolutely against any exchange of Park Service land. That was predictable," Reddicliffe said.

But he was encouraged by the willingness of Kuras and the Park Service to "at least listen" to the idea. The swap gained an editorial

EXHIBIT 3

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The solution would involve swapping the parcel belonging to developer Robert Kuras (labeled #3) for a Park Service parcel, labeled #4.

endorsement from *The Detroit News* and was termed "a viable compromise" by the local *Traverse City Record Eagle*.

Reddicliffe is most optimistic because of the willingness of steering committee members to give up time from their busy schedules to seek a solution. Committee members include leaders of such influential groups as the Friends of the Crystal River, Glen Lake Association, Citizens Council of the Sleeping Bear Dunes Area and National Dunes Advisory Committee.

Reddicliffe is president of the Glen Arbor Coalition, a civic betterment group.

"This won't be easy," he said. "An act of Congress is difficult to get and will take time. But it's worth the effort if we can get this resolved."

Continued on page 9



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## Golf course 'yes'; water park 'no'

WEST NEW YORK, N.J. — Resident have no problem with a golf course project proposed for the nearby waterfront. But they aren't thrilled with ARCORP Properties' plan to include a water park. "It's like hanging a Rembrandt in McDonalds," resident Susan Flynn told the *Jersey Journal*.

Flynn, whose main complaint centers around noise pollution (falling water, traffic), said she didn't have a problem

with the golf course. In fact, she proposed building a country club on the site. But ARCORP wants to build a water park with a Caribbean theme and a nine-hole golf course on the 62-acre parcel. The developer anticipates an average daily of use 8,300.

The golfcourse/water park idea is the latest from ARCORP, which earlier in 1992 proposed building a campground. But residents opposed that, too.

## Concern for flight patterns hinders KC course project

KANSAS CITY, Mo. — Working under the belief that federal agencies "can never be too careful," the Federal Aviation Administration is examining the potential hazard of building a golf course next to Downtown Airport.

"There's a possibility, if the golf course is not constructed right, a golf ball could get in the way," Don Sechrest told the *Kansas City Star*. Sechrest has proposed an 18-hole public course on a 145-acre alongside the airport.

"You never know — there have

been some deadly bird strikes," said FAA Spokeswoman Sandra Campbell, in all seriousness.

Sechrest has submitted piles of paperwork aimed at easing the FAA's concerns. The studies ranged from a "pitching wedge trajectory height map" to a chart depicting "golf ball trajectory effect on air navigation," according to Todd Sechrest, a Sechrest vice president who helped prepare the data. The studies suggest that a golf ball, under ideal circumstances, could ascend as high as

100 feet, while flight paths over the proposed course could bring aircraft as low as 60 feet.

Campbell said the FAA should issue its decision by mid-February. But that's not the end of it.

Don Sechrest, whose group would design, build and manage the course, must still gain approvals from the U.S. Army Corps of Engineers and the Missouri Department of Natural Resources because the project lies in a flood plain and could be considered a natural wetlands area.

## Golf/housing developments all the rage in Idaho Panhandle

BLANCHARD, Idaho — While residential golf course projects have developed something of a bad name in some parts of the country, they are booming in the Panhandle of Idaho.

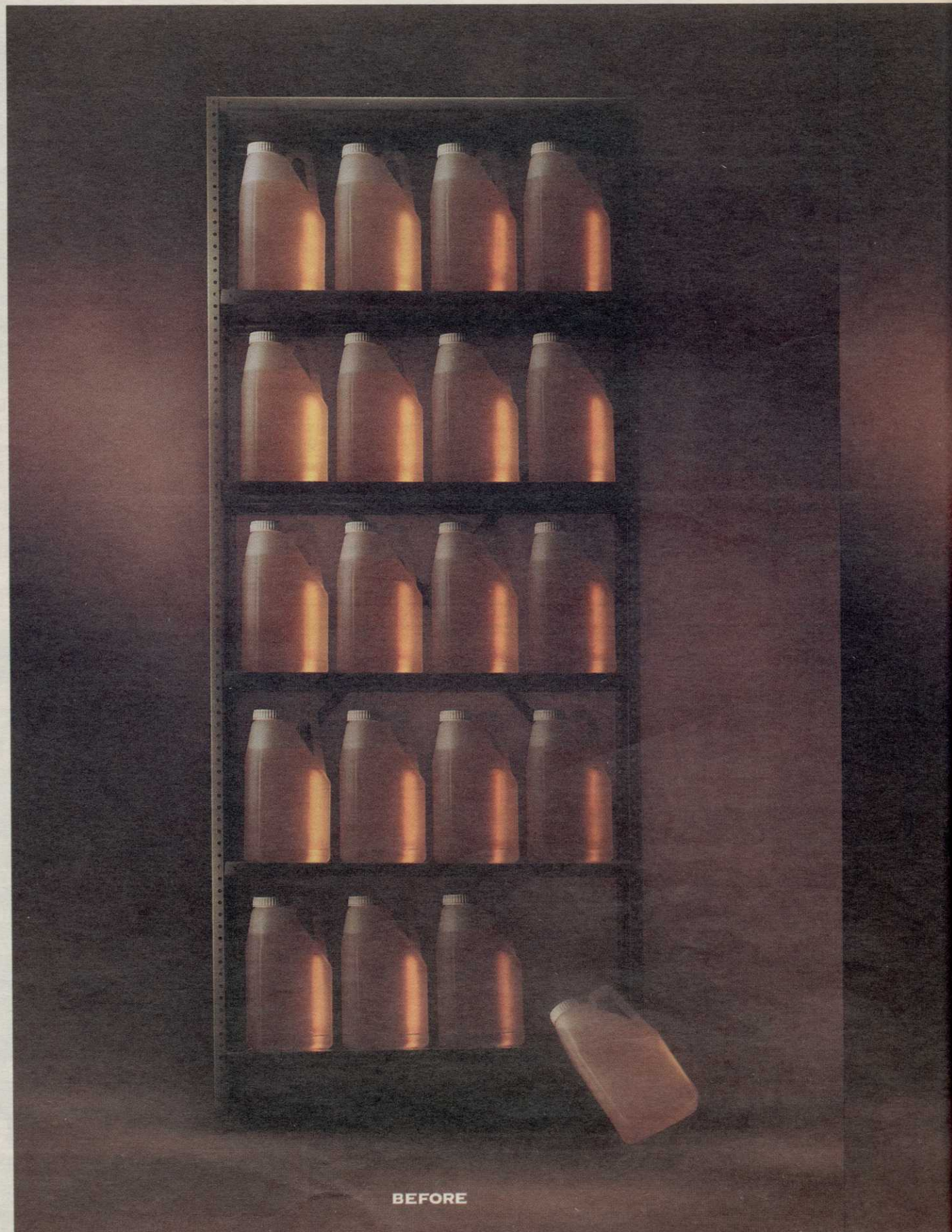
As part of a five-year expansion plan, an \$8 million condominium development is underway at Stoneridge Golf Course near the Bonner County town of Blanchard. Included in the expansion is the development of 200 residential lots.

Meanwhile, farther north in Bonner County, Priest Lake Golf Course has asked county planners to approve an expansion from nine to 18 holes. The proposed expansion would be financed by the sale of 80 or more residential lots. This spring, Post Falls developers plan to begin construction on an 18-hole golf course and 320-lot subdivision. A California developer has also indicated he plans to build a golf course surrounded by several hundred homes on the west shore of Lake Coeur d'Alene at Rockford Bay.

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## Hawaiian course rerouted to protect four endangered plant species

KEALAKEHE, Hawaii — The Kealakehe golf course, which will serve as a leach field for a new county sewage treatment plant, is back on track after being re-routed to protect four threatened plant species.

Eugene Ban, president of Trans Pacific Land Corp., said the golf course lake will be ready to receive effluent by May, when the plant is scheduled to begin pumping. That deadline was threatened

by the discovery of four aupaka plants, a native shrub last documented on Hualalai in 1870 and thought to have been extinct. The plants were in direct line with the planned course and a widening of Queen Kaahumanu Highway.

The Kealakehe project's master plan calls for single- and multi-family residential areas, affordable housing, small commercial areas, a public high school and the semi-public golf course.

## LPGA golf community runs afoul of NAACP

DAYTONA BEACH, Fla. — The local branch of the NAACP has added its voice to an effort that would require developers of the proposed 4,000-acre Ladies Professional Golf Association (LPGA) project to create affordable housing for low-income employees working at the golf course and housing development.

The golf community, planned for a parcel near the intersection of I-4 and I-95, is expected to create more than 21,000 jobs. Homes in the LPGA development are expected to cost between \$90,000 and \$250,000, which would put them out of reach for the maids, clerks and other low-income em-

ployees, according to Central Florida Legal Services, Inc.

The project developer, Consolidated Tomoka Land Co., has insisted there is adequate affordable housing near the proposed community.

Local NAACP branch President William Robinson said his organization intends to ensure that minorities get equal representation in the education and business opportunities connected with the LPGA development.

The 1990 census shows minorities account for 30 percent of the population in Daytona Beach.

## New land-use regulations in Oregon pose major threat to future golf development

MEDFORD, Ore. — Local officials say a state land regulation barring construction of golf courses on high-value farm and forest land could kill new golf development in Oregon — but they expect several proposed Rogue Valley projects to dodge the bullet.

The administrative rule, adopted in concept by the state Land Conservation and Development Commission last November, is designed to protect prime farm and forest land after 1995.

According to Ashland City Administrator Brian Almquist, most of the land available for golf courses in Oregon would be ruled out because the land classifications are so broad. Jackson County Commissioner Sue Kupillas agreed. "It shuts down options for tourist development," she said.

Bill Haas, executive vice president of the Medford/Jackson County Chamber of Commerce, said a recent study indicated the need for at least four more 18-hole courses in the southern Oregon region. Luckily, several golf course projects currently under consideration won't be affected.

- The long-delayed Clear Springs Resort proposal, including an 18-hole golf course south of Ashland, should be completed before 1995.

- Another 18-hole proposal, which is part of the Alta Vista residential development in Eagle Point, falls within city limits.

- An 18-hole project on open land in Medford's Whetstone Industrial Park remains a possibility because the land is zoned for industrial use.

- And an 18-hole project being considered by the city of Ashland for the 150-acre Billings Ranch, could be included within Ashland's boundaries, said Almquist.

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## Ala. city courts elderly players for Jones Trail

GLENCOE, Ala. — City officials are discussing ways to attract retirees to the area, now that a Jones Trail golf course is under construction here.

The Glencoe course is one of a number being designed across the state by Robert Trent Jones Sr. and Roger Rulewich.

Retirees moving into the city would bring great advances to the city's economy, according to Mark Fagan, a consultant for the center for economic development and business research at Jacksonville State University.

At a workshop for business owners and city officials, Fagan said Glencoe would benefit from revenue generated from ad valorem taxes, sales and use, utilities and fuel and liquor taxes.

Sunbelt Golf Inc. is developing Jones Trail for the state of Alabama using retirement systems financing.

## Nuclear power plant giving way to golf course?

SACRAMENTO, Calif. — Having nixed the idea of a racetrack, officials here are leaning toward expanding an existing park and building an 18-hole golf course on the site of a used nuclear power plant.

The Rancho Seco plant stopped producing power in 1989, when residents voted to shut it down. It sits idle, occupying 87 acres of the 2,480-acre property of rolling pastures owned by the Sacramento Municipal Utility District (SMUD).

SMUD's J.D. Stack said a golf course design is expected by March 1, and told the San Luis Obispo Telegram a course "could be a real successful enterprise."

The idea for a course appeared last October after the County of Sacramento decided it could not afford to continue operating the lake and park at Rancho Seco.

## Loomis design to open this autumn

TROY, Mo. — Construction has begun on Woodsfort Country Club and developers expect the upscale 18-hole public course to open by the fall. PBTC Enterprises, Inc. and Troy Development Co., Inc. are building the course, which was designed by Jerry Loomis. It will feature zoysiagrass tee boxes, Bermudagrass fairways and bentgrass greens.

Six local businessmen own the facility, while Mid-America Golf Management, Inc., of St. Louis has been retained for engineering, design, construction management and operation.

## Towns mull joint course venture

PEABODY, Calif. — Officials in the neighboring towns of Salem and Peabody are talking of a joint venture to build a municipal golf course serving both communities.

Environmental and financial concerns have stalled past efforts by the Salem City Council to add nine holes and a clubhouse to its existing facility.

Among possible sites for a new course is Salem Acres,

which the Environmental Protection Agency has added to its Superfund clean-up list.

An estimated \$9.1 million is to be used to make the land usable again.

No timetable has been set for proceeding with the discussions between Peabody Community Development Director Dennis DiZoglio and his Salem counterpart, William Luster.

## Going beyond the ornamental

LOVELAND, Colo. — Marian Butte Golf Course will soon feature the latest in avant-garde landscaping and beautification.

Loveland's Visual Arts Commission (VAC) has opened the bidding to local artists who would be paid to create original artwork for the golf course. The VAC has voted to look at two proposals from New Yorker Nancy Holt and accept three others from Colorado artists. Apparently, local artists were miffed that the VAC went to Holt without giving them a

chance.

The VAC is willing to pay up to \$50,000 for the commission. Loveland's art in public places program is funded by mandating that 1 percent of the total cost of major city capital projects be set aside for beautification. The golf course is the latest such undertaking.

The first of Holt's two proposals is a large but simple stone work. The other is more elaborate, with movable metal rings and fire pits.

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## Traffic study pays dividends

EAGLE POINT, Ore. — Developer Gregg Adams dropped \$8,000 on a transportation study and was rewarded when the Oregon Department of Transportation withdrew its opposition to a golf course and condominium project planned here.

The Oregon DOT had claimed the course would cause traffic problems. It

withdrew its objections after reviewing results of the study commissioned by the Medford-based developer.

The way is cleared for Adams to build the 18-hole championship course and single-family residences and condominiums on 230 acres.

Adams said the eight grand was "a small price to pay to satisfy the powers that be."

## City seeks outside management; employees cry foul

KENT, Wash. — After watching the bottom line fall below expectations for three years running, the city of Kent has been advised to find an outside director of all golf-related functions at Riverbend Golf Complex.

Riverbend is supposed to be a self-supporting operation. But in its first three years, the par 3 course has received subsidies from the city's general fund. "A lot of citizens feel the city shouldn't be in the golf course business at all," Councilman Jon Johnson told

the *Valley Daily News*. Johnson and colleague Jim Bennett, both members of the council-created Golf Advisory Board, recommended the search for contract course management services.

Parks Director Barney Wilson, who disagrees with the initiative, said Riverbend brought in \$2.9 million in revenues during 1992. Wilson has always disagreed with the city's practice of charging Riverbend \$140,000 annually to help pay back the general obligation bonds sold to purchase the

course in 1985. The operation needs fine-tuning, he said, not outside management. Helen Wickstrom, parks superintendent, noted the city's five-year forecast shows Riverbend beginning to turn a profit by 1994.

But Tony McCarthy, chief administrative officer, pointed out the \$2.9 million forecast doesn't include capital improvement expenditures; doesn't repay the general fund for previous year's transfers; and assumes revenue growth of 3.5 percent annually.

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## Developer strikes out with Eudora; waits on Lawrence

EUDORA, Kan. — The Eudora City Council has rejected a proposal to build a public golf course east of Lawrence.

The council unanimously refused to back developer Jeff Gazaway's request for the city to help finance a \$4 million, 18-hole course next to Twin Oaks Golf Complex driving range on Kansas Highway 10 at County Road 1057.

Gazaway wanted the city to enter into a lease-purchase agreement, leaving the city half-owner of the 185-acre development. A private investor would have paid for construction of the course, to be reimbursed by user fees over 15 years. Council President Ron Connor said the agreement would have tied the city into an unsure financial obligation because under it, the city would have been responsible for any shortfall.

Meanwhile, the Lawrence City Commission has yet to decide whether it will continue to consider a municipal golf course project. Gazaway has been pushing the idea since 1991.

The 18-hole course would be constructed on a site near the dam at Clinton Lake. Commissioner Bob Schumm said the city could lease the land for \$1 a year, use raw water from the lake or Wakarusa River, and keep costs down by using a compact course design.

## Burress opens consulting firm

MELBOURNE, Fla. — Former Cocoa Beach Country Club manager Gene Burress has opened his own public golf consulting business.

In addition to helping develop recently opened Cocoa Beach, Burress managed Cincinnati's seven municipal courses for 17 years, served as a Florida golf superintendent and spent a dozen years operating military golf facilities. Burress has also associated himself with Professional Turf Maintenance Co., a Jupiter firm. He can be reached at 407-253-5522.



## Private group takes over municipal project in Illinois

TUSCOLA, Ill. — Development of a proposed municipal golf course has been turned over to a private economic development group after the Tuscola City Council dropped its effort to build the course with a new residential subdivision.

City Attorney Mike Carroll was directed to work with the Tuscola Area Improvement Association (TAIA), which now will lead the development effort.

"We were hoping our role in the golf course project would be a support role," Bill Hancock told the Charleston Times-Courier. Hancock is

president of the TAIA. "Now our role has been changed and instead of assisting we will be leading."

Hancock said his group planned to have a full-time economic development director in place by Feb. 1.

The city could sell bonds to finance an upgraded sewer system, which was a part of the project the city very much wants, said Carroll. The city would also build roads and make other improvements if the TAIA can build the golf course and sell lots for the subdivision, he added.

## New Jersey course held hostage by sewage plant opposition

MOORESTOWN, N.J. — Opposition to a sewage treatment facility has so far frustrated a developer's attempt to sell the housing portion of a golf/residential project under construction here.

The township of Moorestown and the developers of the Laurel Creek project, known collectively as the Moorestown Foursome, are jointly seeking a sewage treatment plant permit. Under the current

plant, the Foursome would build the plant and then turn it over to the township to run.

The Foursome has already built an 18-hole course at Laurel Creek. Other parts of the project call for about 500 housing units and an office center.

The developers are asking the planning board to split the golf course from the housing project, so the housing component can be sold to another builder — rumored to be the Toll Brothers firm.

However, abutters to the proposed plant fear pollution from the plant would sully local waterways, like Rancocas Creek. At a public hearing held by the state Department of Environmental Protection and Energy, neighbors urged state officials to mandate the developers either drop the proposal or make the discharge of drinking-water quality.

## Colorado project left with three site alternatives

LONGMONT, Colo. — Leroy Schlager has withdrawn his proposal for consideration as property owner of a proposed 18-hole municipal golf course here.

Schlager's withdrawal leaves three men bearing alternative proposals and potential sites: John Darby, owner of a Terry Lake site; G.T. Land, owner of an area south of Colorado Highway 66 and east of Pace Road; and Art Hausman and Bill Irwin, owners of an area near the St. Vrain River.

Community Development Director Phil DeVecchio will submit final site recommendations this month.

Schlager originally submitted a proposal for the city to use his property in the Clover Basin area southwest of Longmont. But in a letter to DeVecchio, Schlager said requirements surrounding land use amendments and negotiations would have prevented him from proceeding quickly with his concept plan.

In addition, Schlager said "recent trauma has limited my ability to deal with vigorous negotiations and stress."

## Change of address for Rodgers Design

LAKEWOOD, Colo. — Larry Rodgers Design Group has relocated its offices here to 1978 South Garrison St., Suite 114.

The phone number is (303) 989-6995 and the zip code 80227.

Rodgers has been involved in 205 golf course consulting projects the past five years.

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## Dye says Indianapolis Speedway course might be his final stadium design

By MARK LESLIE

INDIANAPOLIS, Ind. — His renovation of the Indianapolis Speedway Golf Course is perhaps Pete Dye's final adventure into designing courses with stadium-type mounding.

Resting in the Dominican Republic after putting the finishing touches to the Indy layout, Dye said: "I don't want any more stadium courses... I want to do the dead opposite."

The Speedway course is seeded and expected to open in June.

"It is the biggest stadium course every built — the biggest people-mover in the world," Dye said.

"We built spectator mounds around the golf course 40 to 60 feet high and they go forever."

The 27-hole facility was turned into an 18-hole course and a mammoth driving range. Four holes are inside the oval track and 14 outside.

In the past, cars have been parked on the golf course inside the track, but Dye said lakes have been dug around those holes, making them inaccessible to vehicles.

Despite the course being the largest stadium facility on the planet, Dye said: "We could have 60,000 spectators at a tournament and the parking lot attendant could go to sleep. They're used to 700,000 people for the Indy 500."

## Homestead dispute

Continued from page 3

City Supervisor Ben Whitfield thinks the chances are good and that the course will eventually get local permits, especially since city voters approved a rezoning to accommodate the course by a 285-209 count in a 1987 referendum.

But that was long before the state Department of Natural Resources approved the course, the district Environmental Protection Agency was reportedly ready to reject it, the national EPA office approved it and a district court overturned the EPA's approval.

The June 1992 court ruling said the U.S. Army Corps of Engineers, rather than the EPA, had jurisdiction over the wetlands issue. That blocked Kuras' plans to finally start construction. The EPA is awaiting a decision on its appeal to the 6th U.S. Circuit Court in Cincinnati. The next judicial step would be the U.S. Supreme Court. Both sides have vowed to take their cases that far, if necessary.

Also possibly affecting the eventual fate of the Homestead course is the appointment of Carol Browner as President Clinton's new EPA director. Browner, Florida's former state environmental chief, is seen as more pro-environment and less a property rights advocate than her predecessor, William Reilly. She could choose to drop the EPA's appeal and let the district court's decision stand.

Kuras first proposed the course more than six years ago and estimates his costs at \$3.7 million.

Michigan is the only state with authority to regulate wetlands issues. The Homestead case is seen as a test of whether the federal government is serious about turning over wetlands regulations to the states as former President Bush proposed.

*'I don't want any more stadium courses... I want to do the dead opposite.'*

— Pete Dye,  
architect



The newly renovated Speedway course will feature 18 holes — down from 27 — with four inside the oval.

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# Development Letter designed to fill a need

One of the things I enjoy doing in this space is pointing out how far-flung, seemingly irrespective stories which appear in the current issue are actually connected by industry trends — some subtle, some not so subtle. Such is the case on pages 1, 3, 24, 30, 31, 34, 35 and 54 this month.

The aforementioned stories may seem disparate but, as some of our readers already know, they have everything to do with a new *Golf Course News* publication called the *Development Letter*, a newsletter which

tracks golf course projects from conception through gestation to their birth.

The *Development Letter* is designed to let builders, architects and their suppliers know exactly where the golf course projects are being considered, and by whom. This is becoming increasingly important because the mini-boom is over. Projects aren't about to fall into anyone's lap these days.

As the story on page 1 indicates, National Golf Founda-



Hal Phillips,  
editor

tion figures indicate a slow, steady dropoff in golf course openings over the next few years. Financing remains very hard to come by and this will be reflected in the number of golf courses christened during 1993, '94 and '95.

Those involved with the construction of golf courses will have to scramble for business — some are already scrambling. We believe the *Development Letter* will aid the effort.

The front-page story jumps inside to page 31, where a similar article (on page 30) talks about prospects in the golf range and alternative facility marketplace. The *Development Letter* will also track these projects because, as we learned at Golf Summit '92, these things are bonafide profit centers. The construction of golf ranges at existing 18-hole facilities, incidentally, is the fastest growing portion of this market.

On page 3, a story details the possible settlement of the Michigan Homestead project which — like the Canadian Three Sisters project described on page 24 — has been slowed by nagging environmental concerns. The *Development Letter* will routinely feature environmental news of note because anti-growth activism is a major hindrance to golf course construction — second only to the lending crisis.

Sadly, we must also turn to pages 34 and 35, where the trusty course charts appear this month. Because the *Development Letter* will issue updated charts every two weeks, these charts will appear in *Golf Course News* only on a quarterly basis. The twice-monthly *Development Letter* charts will be bigger and better — complete with more thorough contact information, i.e. more timely entries, better project descriptions and phone

## Do they really have ears for hearing?

Did you hear about Mack, the man who thought his wife was going deaf?

While his wife sat at the kitchen table one day, Mack walked to the far side of the room, turned his back to her and said, "Can you hear me?"

There was no reply, so he moved closer. "Can you hear me?" he repeated.

Still no answer, so he walked right up to her back and asked clearly, "Can you hear me?"

"For the third time, yes, I can hear you," his wife said.

Mack's problem seems pervasive in society today. And I'm not saying I'm immune. This human "condition" keeps people apart and at odds.

One group believes it hears perfectly, is totally tuned into "the whole truth and nothing but the truth," has its mind made up, thinks "the others" are deaf, yet itself refuses to hear opposing or alternative ideas.

Those on the other side of an issue are the same. Thus the twain shall never meet.

This appears the case with golf course superintendents and extremists in the environmental movement.

Even your proving a theory, exposing a misinterpretation, expounding on scientific data cannot turn the ear of some.



Mark Leslie,  
managing editor

"Better to meet a bear robbed of her cubs than a fool in his folly," Proverbs 17:12 tells us.

A millenia or so after Solomon penned that statement, at a time when politics had become even more

the shaper of culture, Henry Adams added a new dimension to this truth. He said: "Practical politics consists in ignoring facts." newsnewsFriends, believe this: There are many who do not want to have "ears to hear and eyes to see."

They prefer blessed ignorance and a cause.

Continued on page 42

Continued on page 12

## Letters

### EUROPEAN VISION LACKING

To the editor:

Congratulations for your guest commentary by Ronald Fream: "European development lacks long-term focus," in the November issue. He touched on several habitual problems which seem to be plaguing the European market. Most notably an absence of vision on the part of developers. As a previous resident and golf course superintendent in Europe, I couldn't agree more with Mr. Fream's analysis.

What Mr. Fream failed to note sufficiently, however, is the degree to which Americans are culpable in the creation and perpetuation of these problems. We as Americans have an inane belief that every country wants to be like America. We assume everyone speaks American and that they don't care if we naively launch into a narrative in English... because of course, everyone wants to speak English.

Accordingly, we assume that Europeans want American-style golf courses. Yet we don't stop to contemplate all the socio-economic factors involved. In France, for instance, golf is very much the game of the upper-class, virtually inaccessible to the average citizen. In fact, contrary to popular opinion, the average French person could care less about golf. It

follows then, that very few public courses are built. Without public courses to take the game to the masses, the game has no chance to develop and flourish. So here we find ourselves building exclusive, high-profile, private golf courses, constructed to American standards. Virtually unsustainable (and unmaintainable) from an economic standpoint, they stand little chance of survival. Hence this contributes to the stagnation of the game.

I witnessed more than one project doomed to oblivion by poor planning, bad advice, lack of sufficient forethought, and uncompromising architects possessing an infatuation with name-making. Still Americans are trying to force feed high maintenance designs to ravenous Europeans.

Mr. Fream noted the importance of using financial realism in the planning design and how it effects long-term maintenance. Bravo! Ron. I have seen Mr. Fream's work in France firsthand, and he has perhaps the best grasp for this long-range vision. He is to be commended on his desire for quality while maintaining some sense of the economic impact of the design.

Some clients admittedly demand U.S.-style courses at whatever cost. But a certain responsibility rests with the architect/

consultant to explain in depth the consequences of such impetuous behavior, even at the cost of forfeiting that "name golf course." Financial stability and longevity will benefit the architect, client, and the game of golf.

Steven M. Cook  
Golf Course Superintendent  
Wakonda Club  
1400 Park Avenue  
Des Moines, Iowa

### TOP 10 ANNOYANCES

To the editor:

Golfers are a funny lot. And sometimes they can really test your nerves. Not that I'm complaining! After all, I'm a golfer myself, and the game of golf is the source of my bread and butter (and sometimes laughter).

Since spending my teen-age years and present adulthood as a greenskeeper, I have noticed that there are certain questions and comments that consistently come from the mouths of players.

And you know what? I'm getting tired of hearing them.

Here they are:

The Top Ten Worst Questions and "Humorous" Quotes from Golfers

1. When moving the tee markers: "Just a little closer to the hole, fella."

2. When the crew is working in

the sandtraps, and a golfer's ball happens to land in it: "Why didn't you just kick it out?"

3. "These greens don't hold very well," says this one guy after hitting a low 1-iron into the green from about 250 yards out. He was a 21-handicapper.

4. After putting the buckets of drinking water out for the day: "You've got vodka in those things?"

5. After changing the cups, a golfer's ball dribbles on the green, and the guy points to his ball (which happens to be three inches from the old cup, and 50 feet away from the fresh one) and says, "Why didn't you leave it here?"

6. Another time while changing the cups: "You should make a trench that begins at the edge of the green and narrows down toward the cup." (I almost like that idea).

7. "Ooops! Sorry, I didn't think I actually came this close to hitting you," while picking the ball out of the grass bucket on the greensmower.

8. "What are those white stakes for?"

9. "These greens are slow," when the golfer has a bad day.

10. "You guys really have the course in great shape," when the golfer has an unusually good day.

Donald G. Urso  
Pond View Golf Course  
Westerly, R.I.

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# Golf industry needs to adopt standard methods of peat analysis

By TOM LEVAR

I would like to ask you some basic questions regarding the use of peat materials in the blending of root-zone mixtures. I intend to encourage you to view peat and its use more objectively — to ask yourself, “Why do I use this peat material in my root-zone mix?” and “How can I improve my use of peat?”

Peat is likely our best “organic option” if judiciously used. It can be processed to our specification with technical and economical efficiency for superior turf performance. It can be quality-controlled by a competent and cooperative industry, if that is what we require of them.

Our industry needs to adapt and implement standard methods of peat analysis. We also need to better understand the dynamics and function of peat in the root-zone environment.

We are responsible for providing specifications to our peat suppliers. We need to become a more discerning market. Over time, we will realize the benefits of peat in root-zone mixes, by literally seeing them on our courses.

Conversations with Dr. Norm Hummel, Wayne Kussow, Jim Snow (USGA Green Section national director) and other professionals have revealed issues and concerns in the forefront of our industry which are relevant to peat.

These include standardizing laboratory procedures, the use and performance of substitute organic materials, use of finer root-zone components, inconsistent properties of peat materials from the same supplier, and the rising costs of construction.

I contend that no universal or “magical” organic exists, but peat is likely the best of its kind to meet the physical needs of a root-zone mix. Peat is not a panacea, since its benefits are primarily physical. Gains other than these may be postulated, but are not well defined. Some may include the natural content of biostimulants (i.e., humic substances) and of beneficial microflora and microfauna, and sustained plant nutrient release.

One type of peat can not provide all the physical and mystical benefits in our root-zone mixture. That bill will be most difficult to fill with any organic material. Any such claim should be highly scrutinized.

*Thomas Levar is principal scientist with NorthWoods Organics, located in Duluth, Minn. He is a former research scientist with the University of Minnesota and holds an honors graduate degree in both soil science and horticultural science.*

GOLF COURSE NEWS

My foremost caution is this: The marriage of any organic material with the sand component in your root-zone environment should be considered carefully, especially in regards to capillarity and air-water economy.



Tom Levar

Root-zone mixtures can be designed to optimize air-water balance and water storage, but only with the right components and

basic information. Otherwise, we may be faced with unmanageable root-zone environments of short duration. The key is selecting the right peat type with your sand, and understanding how it works in the root-

zone over time. Peat type is descriptive of both the organic material’s “botanical origin” and its

“degree of decomposition.” “Botanical origin” refers to the identifiable plant remains of the parent material. This can be quantified using microscopic inspection.

“Degree of decomposition” refers to the natural extent of humification, that is, how “rotted” the peat appears. This is measured by various means, some of which are quite subjective.

Botanical origin and degree of

decomposition indicate the material’s biological stability in its natural state.

A practical beginning for us is to simplify “peat type” by grouping it according to botanical origin, as sphagnum moss, reed-sedge, hypnum, transitional, woody, grassy peat and peat humus. In each of these peat types a range of decomposition is found.

However, the identifiable

Continued on page 12

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## Soil blending, root zones

Continued from previous page

"namesake fiber" dominates its makeup.

This simplification serves us well for root-zone mixtures, since each of these general types differs markedly in basic physical and chemical properties, and in the peatland from which they originate.

I advise you to look at each peat type as a potential component in turfgrass applications. Since all have potential benefits, each will perform differently

and all are available from North American producers. But this grouping by peat type is only a beginning.

Why differentiate between peat types for use in turfgrass culture?

Locally available peat types may be initially inexpensive but may not be physically compatible, especially over time. Some peats are too decomposed or too coarse to match with the selected sand. This affects the root-zone mix's mechanical

stability, capillarity and structure — free air space and density.

An analogy would be the physical instability and density changes of mixing golf balls and marbles. With any surface activity, a mixture like this would be very unreliable.

Also, some coarse or raw peat materials may not be biologically stable over time, and decompose too quickly when exposed to turf practices such as fertility management. This may result in subsidence and surface irregularities, anaerobic conditions and formation of

impermeable residues. Proper selection of peat improves dependability and control of your root-zone media.

It is most important for our industry to contract laboratories which use USGA standardized test methods and services which fully characterize the root-zone components, including the peat. Our industry has made recent strides in the use of standard methods for organic carbon of the mix (using Walkley-Black, 1960) and ash content of the peat, but that effort is not complete.

Additional emphasis should

be placed on organic carbon, particle size distribution and the quality of the peat alone. The quality of the peat fiber can be described by its "biostability." The carbon:nitrogen ratio is one good indicator of biostability.

Where peat is used in top dressing or core aeration, the compatibility of these materials to those of the original root-zone media is also essential. Laboratory and blending services with peat expertise help us produce superior turfgrass media consisting of quality components for lasting performance.

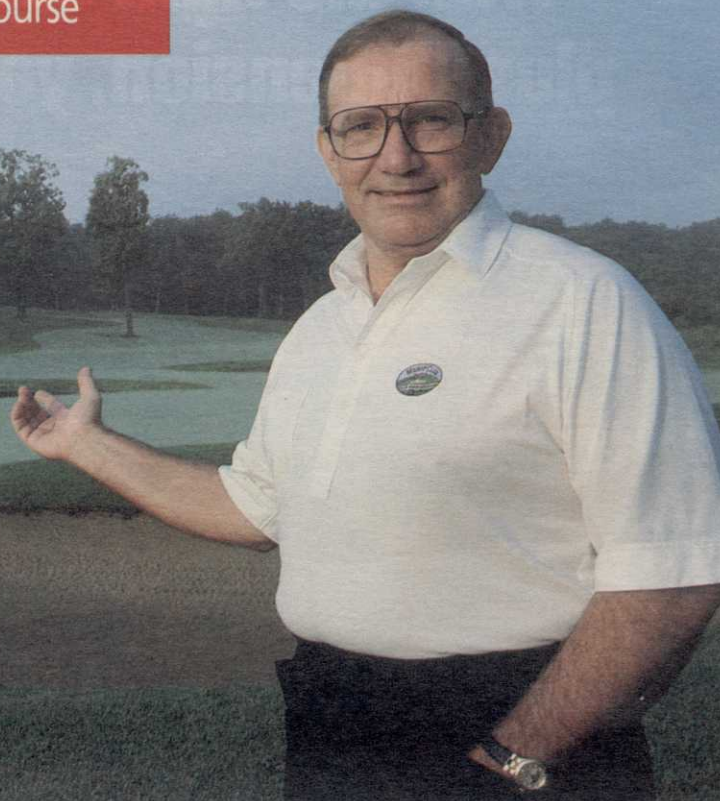
As a golf course superintendent or builder, you may ask, "What are the benefits of being more discerning in my use of peat?"

The use of a specification peat materials will ultimately result in lower costs of establishment, maintenance, renovation and general management of your turf. The peat should be consistent, compatible to the sand component in particle size distribution, and free of weed seeds, sticks and phytotoxic residues.

Through proper use of peat, you will realize some of the following benefits in your turfgrass culture and performance: improved green-up and establishment; better rooting stability and wear; reduced compactibility; improved stress resistance and overwintering; improved irrigation response and control; better nutrient management; improved gas exchange; increased microbial activity; and longer life of your root-zone media.

The many benefits and advantages of peat warrant our careful attention to its selection and use in turfgrass culture.

### The Penn Pals: Right on Course



Oscar Miles, CGCS, overlooks the 6th hole at the Merit Club, Libertyville, Illinois.

## PennLinks Greens. Penneagle Fairways. Penncross Tees. The 'Penn Pals' Are Picture Perfect At The Merit Club.

Superintendent Oscar Miles, with Club President Ed Oldfield's affirmation, specified all the grassing of this Robert M. Lohmann designed club. With a clean canvas and open palette, Oscar began with PennLinks greens, Penneagle fairways and Penncross tees, framing them with bluegrass/fine fescue/wildflower and prairiegrass roughs. You couldn't paint a more attractive picture.

Oscar chose PennLinks greens for its rapid establishment, marvelous root system, a crown and stolons that take topdressing, upright, grainless qualities and good, consistent color ... the best putting surface available.

He selected Penncross for tees because they recover from divot scars more quickly.

And the Penneagle fairways? Oscar chose Penneagle for its upright growth, reduced thatch development, low nitrogen requirement and good drought and dollar spot resistance. He seeded at 80 lbs. per acre for immediate turf development and

erosion control. The fairways were playable in 8 weeks. Oscar's crew usually mows fairways in the evening and leaves the clippings; recycling nutrients while reducing removal and fertilizer costs.

Oscar articulates it best: "The unique coloring of the 'Penn Pals' contrasts beautifully with the grassing around them, defining the target areas. And with the dew on the bents early in the morning, they're a marvelous work of art."

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*Oscar L. Miles*

CIRCLE #108

## Development Letter

Continued from page 10  
numbers.

We started mailing and faxing sample issues of the *Development Letter* in November of 1992, and the response has been overwhelming. Another sample audience should be receiving its complimentary issues any day now.

Frankly, the *Letter's* positive response doesn't surprise us because the news therein contained is clearly of use to golf course designers, builders and their suppliers. And because this information sometimes can't wait a month to reach its audience, we publish it twice a month, via the fax machine if you like.

Finally, on page 54 you will find an advertisement for the *Development Letter*, including information on whom to contact here at *Golf Course News* about subscriptions... It seems silly to have you turn 40 pages when I could do it right here... I may as well tell you: Associate Editor Peter Blais is handling the *Letter*. You can reach him at 207-846-0600.



BRIEFS



LANDSCAPE RESTORATION GUIDE

A comprehensive guide that demonstrates how to use naturalization as an alternative to more intensive management of landscape has been published by the United States Golf Association and New York Audubon Society. Landscape Restoration Handbook shows how to improve water quality, reduce erosion, lower maintenance, reduce chemical applications, protect the ecosystem and ecology, and promote diverse plant and animal species. The handbook is organized by regions. The 650-page, four-color book will be published in March and is available from Lewis Publishers, 2000 Corporate Blvd., NW, Boca Raton, Fla. 33431; 800-272-7737.

RUTGERS STUDENTS GET SCHOLARSHIPS

BOUND BROOK, N.J. — For 10 years, turfgrass students at Rutgers University have received scholarships from the Peter Selmer Loft Memorial Scholarship Fund. This year, 12 students each received \$1,000 awards. The fund, set up in 1983 in memory of Peter S. Loft, is subsidized by royalty contributions from Lofts Seed, royalties from the sale of Tribute tall fescue and through private and corporate gifts. This year's recipients are Karen Plumley, Mirta Guglielmoni, Tracey Bunting, James Campbell, Brian Feldman, Joseph Clark III, Dirk Smith, David Grande, Pedro Perdomo, Randall Prostack, Suichang Sun and Chan-Seok Oh.



READ SAND DONATING FUNDS

Joe Farina of Read Sand & Gravel has organized a fund-raising program in which Read will donate 25 cents per cubic yard of any material it delivers to any golf course or driving range from last September to next September. Funding will be decided by the Golf Course Superintendents Association of New England's Turf Research Committee, which allocates the financing to the universities in New Hampshire, Rhode Island and Massachusetts.

BLUE VALLEY ENTERS GOLF

MISSION, Kansas — Blue Valley Laboratories has expanded its services into golf course maintenance. The 20-year-old firm is concerned with all phases of water management, according to water specialist and horticulturist Joe Setter. Blue Valley performs water-quality testing for lakes, source water and potable water as well as aquatic plant management, and limnology studies for existing and planned golf courses.

# Supers give N.Y. diagnosis program seal of approval

By MARK LESLIE

It is a program whose time has come for golf courses: Monroe County Extension Office's integrated pest management turfgrass scouting and diagnostic program.

Numbered among its satisfied clients are the high-profile likes of Oak Hill and Locust Hill country clubs and the Country Club of Rochester (N.Y.).

Donors embracing it are the state of New York, Cornell University, and a baker's dozen golf courses.

It is new enough to have no official name, but successful enough that it has attracted copycat interest from other counties in New York and from northern New Jersey and Nova Scotia, Canada.

Superintendents using the Extension service attribute it with quicker diagnosis of turfgrass diseases, reduced pesticide use and budget savings.

Simply, the program consists of either weekly, biweekly or monthly visits to par-

ticipating golf courses by a plant pathologist "scout," and diagnostic laboratory work done at the Extension's nearby Rochester headquarters.

"The biggest successes of the program," said Oak Hill superintendent Joe Hahn, "are positive identification of the pests before you spray, spraying only when needed, and a definite savings in buying pesticides."

"Instead of a superintendent writing a preventive program and going out every nine or 14 days and spraying, with scouting they can prolong the time between sprayings."

Hahn said that in 1992 he saved about \$8,000 — or 10 percent — on his pesticide budget.

Country Club of Rochester Bob



Jim Wilmont

Continued on page 17

# Tips to match Tour conditions

By TERRY BUCHEN, CGCS

The most important aspect of any tournament, be it the club championship or a weekly tour event, is the condition of the golf course. The amateur or professional player can best display his or her skills as the condition of the golf course improves.

"Good playing surfaces tend to reward good play, and thus help produce a good winner. Excellent playing surfaces, properly maintained, are likely to attract strong fields of players," said Allan MacCurrach, senior agronomist for the PGA Tour.

I had the pleasure of working for the PGA Tour as an agronomist and advancement man, and it was the greatest experience of my golf career. Working with golf course superintendents on tournament-caliber conditioned courses was a tremendous learning experience. The following set of guidelines that MacCurrach, Dennis Leger and Jeff Haley work with each week on the PGA

Continued on page 14

# Superintendent saves Tillinghast club big bucks in bunker renovation

By W. PETE JONES

Always a concern to the older golf clubs is the need to recover architectural design factors in order to keep the integrity of a traditional layout. Most important is the cost of doing such a job.

In 1990, superintendent Jim Hengel of Binghamton Country Club in Endwell, N.Y., saved his club many thousands of dollars by refurbishing bunkers himself, using a little common sense.

The Binghamton CC course was designed by A.W. Tillinghast in the 1920s and was site of the 1950 New York Amateur. Writing his preliminary letter, Tillinghast stated: "The panoramic view from this spot is particularly inspiring and, altogether, I consider this site one of the very best which it has been my privilege to examine in a long time."

The feeling Tillinghast felt in his initial observation must have stirred an excitement in Hengel. Through the years the Tillinghast bunkers had lost their design features and a refurbishing was in order. Call Hengel's work "recovery with common sense."

By 1990, Jim Hengel and the green committee had already been presented several ideas on how to renovate the bunkers. However, some were radical and uninvited.

"Initially, our green committee and I went out to several builders for bids to restore our sand bunkers," Hengel said. "The quotes were anywhere from \$90,000 to \$125,000. Several builders



BinghamtonCC's 3rd hole before its trap renovation.

wanted to implement more bunkers to make the course better for today's golfer. One even wanted to bring in expensive earth-moving equipment just to tackle the job of altering 36 traps. But I didn't want them tearing up our course."

It must have been confusing to discover there were builders and designers willing to sign the Binghamton CC course as

Continued on page 23

# California, Florida spearhead use of effluent

Symposium to illustrate that golf courses can tap into major water sources

By PETER BLAIS

NEWPORT BEACH, Calif. — California and Florida are the leaders when it comes to effluent use on golf courses, according to the principal author of the federal Environmental Protection Agency's guidelines for using wastewater.

The country's two major golf states will be the focus of Dr. James Crook's discussion of Regulations Affecting the Use of Wastewater on Golf Courses at the United States Golf Association's Wastewater Symposium March 4-5 in

*Effluent is 'an untapped resource in many areas.'*

— Dr. James Crook



Newport Beach, Calif. Crook is an environmental engineer with Camp, Dresser & McKee Inc.

The EPA's Guidelines for Water Reuse were developed by Camp Dresser and first published in 1980. Crook helped update and expand the guidelines recently in view of technological advances in the past decade.

The guidelines are just that, guidelines. States control effluent use. About a third have laws, a third publish guidelines and a third exercise no control or influence at all, Crook said.

Consequently, effluent use varies from state to state. For example, while

Continued on page 22



# Consistency, fairness the objectives of PGA Tour guidelines

*Editor's note: This is the first of a three-part series on the PGA Tour's conditioning guidelines.*

The purpose of these Tour conditioning guidelines is to assist the golf course superintendent and the sponsors in providing a golf course that tests the players' skill, is fair to all contestants, and one that has consistent playing conditions in all areas of the course.

The following guidelines cannot apply to all courses because of grass types, design and the time of year certain events are played.

Yet, since players of all caliber enjoy and benefit from playing under tournament conditions, it is recommended that the following guidelines be adhered to as much as possible during the rest of the year as well as during the event. Some changes will of course be necessary because of weather and membership demands, but usually when this is done, the membership enjoys the improved playability of the course. Maintaining near-tournament conditions also makes preparation for the following year's event much easier.

## GREENS

In general most superintendents will be asked to provide green speeds of 10 feet the week prior to the tournament. This speed allows the Tour official to make a final determination of tournament speed which can be obtained quite easily. Arbitrarily achieving higher green speeds could eliminate prime hole positions for the tournament. The

USGA Stimpmeter should be used frequently prior to the tournament not only to check overall speed but also to check the consistency of all greens. This is very important to contestant reaction to the course.

Firm but not hard greens are to be the goal. This may require hand watering prior to and during the event. Key staff members should be trained to recognize areas of the greens that dry out needing supplemental irrigation, and those areas where overwatering should be avoided. The use of a hose end

canister containing a wetting agent has proven valuable in maintaining uniform moisture levels when hand watering is required.

If the greens drain uniformly there is certainly no reason why the greenside sprinklers cannot be used during the tournament. However great care should be exercised to make sure that overwatering does not occur, as it will increase spike marks, lessen the skill required to hold a shot, and possibly cause greenside bun-

ker sand to become overly wet.

Many superintendents believe that topdressing programs should stop weeks before the tournament. This is not true, and frequent light topdressing can and should occur right up to tournament week. Improved ball roll and reduced spike marks will result when a frequent light topdressing schedule is followed.

The following other items will help produce quality tournament surfaces:

- Use vertical mowing and

grooming equipment to reduce surface grain.

- Have aeration procedures to reduce thatch completed well before the tournament.

- Program fertilizer applications so that clipping removal rates are moderate; usually a rate of between 3/4 and 1 basket are optimal one week before the tournament.

- Review the previous year's hole locations and avoid these tournament areas for regular play

**Continued on next page**

## Conditioning tips

*Continued from previous page*

Tour, Senior PGA Tour and Nike Tour have changed over the years, going with the flow of the Tournament Policy Board.

These current guidelines differ mostly in that in the past the courses were set up to have the same playing condition each week. Today, the course condition guidelines must fit each course with its strengths and few weaknesses. Because of this development, current guidelines can be useful to superintendents preparing for any tournament, at any club.

In the past, the guidelines for fairway widths was 25 to 35 yards. Today, there are no standard fairway widths. They are determined by the Tour agronomists on their normal advance visits.

The following guidelines are for the PGA. All USGA guidelines come under the auspices of the of the regional USGA Green Section agronomists and championship agronomist, with their headquarters at Golf House in Far Hills, NJ. The LPGA has its own set of guidelines, also, and the LPGA can be reached at its headquarters in Daytona Beach, Fla. Likewise, the PGA specifications can be obtained from its headquarters in West Palm Beach, Fla.



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## New Jersey DEPE funds municipal solid waste study at Rutgers

TRENTON, N.J. — The state Department of Environmental Protection and Energy (DEPE) will participate in a multi-year study by Rutgers University, funded by a public/private partnership, to determine whether composted municipal solid waste can be used as a nutrient supplement on field crops and by the horticultural industry, DEPE Commissioner Scott Weiner announced.

"Composting is one of the components

in achieving our goal of 60-percent recycling of the total waste stream and in attaining solid waste self-sufficiency," Weiner said. "This research project will examine the availability of markets for compost products, look at the relative safety in the use of composted materials, and provide a basis for application standards."

The total cost of the project is estimated to be as much as \$1.2 million, depending on private sector contribu-

tions. The DEPE is contributing \$250,000 from the Recycling Fund, created by the Statewide Mandatory Source Separation and Recycling of 1987. A tax on each ton of solid waste disposed in landfills is used to provide monies for public education, research, and market development programs. Rutgers is contributing the in-kind research expertise of its agricultural experiment stations and staff. The field research will be done at Rutgers' Agricultural Extension

Service farms near Freehold and Pittstown and in North Brunswick Township.

The study also will include a four-year evaluation of the compost's effect on growth when it is applied to field corn and whether it enhances crop yields. The compost's suitability for growing turfgrasses, application to landscape plants, and creating topsoil from the disturbed soil at construction sites is also being studied, Gabel said.



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## PGA Tour guidelines

Continued from previous page

at least two weeks before the tournament.

- Ensure that all greenside sprinkler heads are at grade to prevent marking as "ground under repair," near the putting surfaces.

- Make sure that an adequate number of greens mowing machines (preferably single unit) are on hand and properly serviced.

- Have two skilled cup changers and necessary equipment, on hand for the placement of the holes during the tournament.

- Repair scalped or low plugs two weeks before the tournament.

- Mowing heights on both cold and warm season grasses should range between 1/8 to 5/32 of an inch during the tournament to obtain desired greenspeed.

### TEEING GROUNDS

Firm, level, closely mown teeing grounds are necessary for tournament play. The mowing height should be between 1/4 and 3/8 inch depending on grass type and time of year. A problem with many championship tees is thatch, mainly because of lack of use by the general membership. Where thatch is a problem, vigorous vertical mowing, topdressing and close monitoring of fertilizer applications, especially nitrogen should occur to eliminate sponginess well before the tournament.

Par 3 and short par 4 holes where iron shots are played should be protected in advance and extra efforts to fill and seed divots should take place. During practice rounds, these tees should be protected with plastic mesh so that unobstructed areas are available for use during the tournament.

Mowing patterns that exceed the flat portions of the tees, or those that do not point toward the landing areas should be corrected.

•••

In conclusion, the trend in Tour conditioning is away from standardization of playing conditions and toward a program of treating each course on an individual basis. This will protect the design intent and allow the course set-up to take advantage of each course's strong points.



# Monterey challenge sometimes less than heaven for Miller

By FRANK POLLARD

**Y**ou think of the Monterey Peninsula as heaven? How about as a superintendent's nightmare. Four golf courses with four different designs. Different soil and turfgrass characteristics. Varied climatic conditions. And a worldwide television audience ready to pounce on the superintendent for every blade of grass that has turned brown.

Want the job? Ed Miller got it two and a half years ago and he has tackled it with aplomb. Leaving Desert Forest Golf Club in arid Carefree, Ariz., Miller has handled the challenge of being responsible for four world-renowned resort golf courses with a combination of sound agronomic tools, common sense, communication skills and an ability to develop player friendly approaches to course management.

"We have been totally supported by the ownership and top management here at Pebble Beach," said Miller, "which has enabled us to staff our operations with high-quality personnel."

Therein lies the key, he said.

"I've always felt effective management is a direct function of good communication, equally delegating authority and responsibility, and a synergistic team effort when it comes to giving people credit for and using their ideas and contributions," said Miller. "The demand for superior course conditioning throughout the country has increased enormously over the past 10 years and, with it, is emerging a new breed of superintendents who are not only competent agronomists but people who are management-oriented."

"It is imperative that these people have the ability to communicate well at every level."

Miller spends some 60 to 70 hours a week on the job. If you can't find him in his office in front of the computer working on new plans and techniques,



Ed Miller, right, with Pebble Beach superintendent Brad Hines.

Frank Pollard photo

he's probably out on one of the Pebble Beach courses working with the superintendents, lending a hand when needed.

Just 35, Miller holds a bachelor degree in business administration from the University of Wisconsin; a certificate of completion in turfgrass management from Penn State University; and has worked at Desert Forest Golf Club; Cherry Hills Country Club in Englewood, Colo.; Medinah (Ill.) Country Club; and Walnut Grove Golf Course in Cochran, Wis. Along the way he learned that no two courses are alike, and can't be treated as such.

"We've tried to identify our long- and short-range goals for each of our golf courses [Pebble Beach Golf Links, The Links at Spanish Bay, Old Del Monte and Spyglass]. We also feel that basic soil and fertility management equates to healthy turfgrass — and other plants, for

that matter," Miller explained.

"If you take care of the soil properly, the soil will take care of the turfgrass plants. If we don't look below the surface, we sometimes find ourselves treating the symptoms of the problem. If we find and identify the cause of the symptoms when we have a problem, and then treat the cause rather than the symptom, we find in almost every case by using basic agronomic management techniques that, in the end, we apply fewer chemicals."

Miller said "effective management of soil and its fertility" should get a great deal more attention than it does.

"If you have a healthy, balanced soil it's going to support plants with less water and resist disease and insect pressure. This may be the single most important component of Integrated Plant Management.

"To have disease or insect infestation," Miller continued, "you need a pathogen,

*'We have been totally supported by the ownership and top management here at Pebble Beach, which has enabled us to staff our operations with high-quality personnel.'*

— Ed Miller

a host grass or plant and the right environment for the particular problem that may arise. If you can eliminate any one or two of these conditions naturally through good irrigation, soil and fertility management, the disease will probably not become a problem."

Miller feels superintendents will soon be using some new turfgrass strains that will answer and alleviate problems of water shortages as well as disease and pests. He is planning to introduce a new strain of buffalograss to conserve water in the primary roughs on the Old Del Monte Course and out-of-play areas at Pebble Beach.

This is another example of Miller's common sense approach. He feels the superintendent must be savvy and practical enough to "trust basic agricultural practices."

"Part of managing turfgrass programs, particularly with an existing stand of turf, is continually broadening the genetic base through overseeding. We totally re-grassed Pebble Beach this past year. And we're not going to stop this program."

"If you keep incorporating new grass plants that are young and aggressive growers, they have the ability to resist problems and are more competitive with weeds such as Kikuyugrass and other noxious plants. It's simple genetics. We tend to forget that grasses do have a lifespan and need replacement on a continuous basis."

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## South Texas GCSA elects Ihms president

Keith Ihms of Pine Forest Country Club in Houston has been elected president of South Texas Golf Course Superintendents Association Inc.

Ihms' fellow officers are Vice President Michael Wood of South Shore Harbour Country Club in League City and Secretary/Treasurer Don Cole of Greatwood Golf Club in Missouri City.

Elected to the board of directors were Randy Broyles of Westwood Country Club in Houston, Doug Browne of Steven F. Austin Golf Club in San Felipe, Mike Burris of Bay Oaks Country Club in Friendswood, John Freeman of Deerwood Golf Club in Kingwood, Mike Link of The Woodlands in Conroe, John Walker of Weston Lake Country Club in Fulshear, and John Cater of Turf Tech.

South Texas GCSA awarded lifetime memberships at the annual Christmas party to L.W. Dubose Jr. of Houston and Tom Leonard in appreciation of their continuous support since 1958.

Ihms also presented to \$500 scholarships to Daniel Fullelove and Todd Martin on behalf of STGCSA during the superintendents luncheon at the Texas Turfgrass Conference in Houston in December.



## N.Y. program

Continued from page 13

Feindt, who served as the guinea pig for the project in 1987, is a staunch supporter.

"A superintendent gets so busy. With a lot of things on his mind, he can miss things," Feindt said. "If someone is looking specifically for disease or insect problems, they can spot them easier... Using this scouting program and lab really helps."

Hahn added that the complexes of diseases today are more difficult than years ago. "It's much more difficult to identify the diseases and where they are today."

Scientists have also found that many diseases are caused by root problems that had never before been recognized and that are difficult to diagnose.

Speed in diagnosis is also a major advantage.

"Before the local lab, it could take between 30 and 36 hours to get a diagnosis of a disease — and that is if you drove the sample to the university," Hahn said. "Now we can get the turnaround in a matter of four or five hours. Plus, if you mailed the sample, its environmental conditions could change."

Feindt also said misdiagnosis is less apt to occur if using a trained plant pathologist.

"A couple of times I thought I had a turf disease, but the lab looked and found an insect problem," he said.

Program administrator Jim Wilmont said one discovery alone saved a course perhaps \$3,000 when he found the superintendent did not have to treat for summer patch but rather for black turfgrass *Ataenius*, a difficult-to-detect tiny white grub.

### EXPERTS ON LINE

An Extension agent, Wilmont holds a master's degree in plant pathology from Virginia Tech. His assistant, plant pathologist Maher Tawadros, is the scout/lab worker.

Both have worked on the program since its inception, and therein lies part of its success, according to Hahn.

"It's been very helpful. And it will be more so down the road because the more scouting we do, the more adept we are going to be at it. If you had doubt about the scouting you would spray regardless of what the scout said. But now, with more confidence [in Wilmont and Tawadros], people will hold off.

"This has to prove itself. As it does, the more involvement it will see. And the savings will increase. More clubs equals more pesticides not going on the ground."

Wilmont gives the credit to Dr. Eric Nelson of Cornell University, who suggested the program be started; and Feindt, Hahn, Steve Williams of Shadow Pines, Rod Karchner of Locust Hill and other superintendents who helped launch the program.

The idea was spawned in 1987 when Nelson met with Wilmont, fresh on the job, and superintendents and greens committee

chairmen of several country clubs in the Rochester area.

"I was seeing that superintendents needed quick answers to their questions," Nelson said. "We [Cornell] have one plant disease diagnostic lab, and in the summer it is swamped with samples. A lot of times the turnaround time would be one to two weeks. It made sense to regionalize labs so people could easily get to the lab and get a same-day answer."

Nelson suggested the local lab and the creature was born.

In the first year a part-time position was staffed, a bisecting microscope was bought and Cornell

contributed a compound microscope to discover causal symptoms of diseases.

"First year we scouted CC or Rochester and we demonstrated that Feindt was willing to treat on a curative basis," Wilmont said. "He got information from our scout and diagnostic lab and treated problems as they occurred.

"We showed a reduction of pesticide use at his course without losing a lot of turf. And he maintained quality."

In 1988 the group submitted a proposal to the New York State IPM Program — which is linked with Cornell — for funding to

scout golf courses and combine scouting with the diagnostic lab.

Wilmont said golf courses provide 40 percent of the financial support for the program. At the same time, they cause a little bit more 50 percent of the cost. The balance is made up by IPM support and homeowners, who can also bring in samples to the lab and pay a diagnostic fee.

Total annual budget is roughly \$30,000, which does not include Tawadros' benefits, paid by Cornell, or Wilmont's time.

### INTERESTED OBSERVERS

Hahn said a program like Monroe County's would help

any area.

"It's hard to say how you could break it down," he said. "Every county has to do it. In Far West, where counties are big, they may need to be divided up. Here, Monroe County could take care of Erie and other counties. It all depends on the size of the counties, their population and number of courses."

Wilmont said Erie and Westchester counties are interested.

The Chicago District Golf Association, meanwhile, has a similar program. An adjunct professor at the University of Illinois works in a problem-solving capacity but not as a scout.

# With All The Abuse Your Turf Takes, Who Needs Root Pruning?

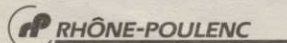


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**JIM McPHILOMY**  
Riviera Country Club  
Pacific Palisades, Calif.  
Nissan Los Angeles Open  
Feb. 25-28, CBS

As a youngster, Jim McPhilomy, 27, and his older brother spent summers and school vacations working for their father, who was head superintendent at Denver's Valley Country Club. "I spent a lot of time riding around the course with Dad, even in grade school," he remembered. Jim eventually graduated from Pennsylvania State University's two-year turf management program, spent a year as assistant at Glenmoor of Cherry Hills (Colo.) and became Riviera's head superintendent in 1989. His brother works for a Toro distributor in Denver.



Jim McPhilomy

**Things to look for:** Eradicated at Pebble Beach for last year's U.S. Open, kikuyugrass dominates tees, fairways and roughs at Riviera. "Kikuyu had taken over 50 percent of the course back in the 1940s, so members decided to encourage it," McPhilomy said. "It's very coarse with thick blades. It's great in the fairways, but questionable in the roughs. Until last year we were mowing it every day. But it was so thick, we scalped it a lot. Now we mow it three days a week in the spring and summer. Then we lightly verticut the fairways every other week and the aprons every week. That's reduced the scalping and we don't have to mow as often."

**Made-for-TV preparations:** During the summer when the kikuyu is thick, McPhilomy cuts roughs at 1-3/4 inches. But during winter he lets the thinner blades reach 3-1/2 inches for the tournament while the grass is still semi-dormant. "We haven't mowed the rough since early November," he said.

Greens are predominantly poa and will all be converted to bentgrass by next year's tournament. In the meantime, "we'll single cut then roll them every day during advance week and double cut them during the tournament, if necessary," McPhilomy said. "We'll try to get the speeds up around 9-1/2 or 10. But we'll concentrate on smoothness ahead of speed. If it rains and the greens get bumpy, we'll keep speeds down. We want the players to have a chance to make some putts."

## Tour of Duty

**JOHN WALTER**  
Torrey Pines Golf Courses  
San Diego, Calif.  
Buick Invitational  
Feb. 18-21, NBC

John Walter, 48, has been with the city of San Diego Recreation Department for 22 years, mostly involved with ballfield development and facility acquisition. He took over Torrey Pines 4-1/2 years ago on a temporary basis. As golf course manager, he oversees maintenance, pro shop and administration at the North and South courses as well as 27-hole Balboa Golf Course. His non-traditional turf background started with a bachelor's degree in history during the height of the Vietnam War followed by entrance to the Army's Officer Candidate School. A self-confessed "golf rat" since first setting foot on a course at age 11, his familiarity with the game landed him his first golf assignment, course manager at Fort Polk, La.

**Things to look for:** "We've spent a lot of money the past four years. We redid all the bunkers in conjunction with architects Halsey Daray Golf Inc. The clubhouse is new. We installed cart paths and a new irrigation system on the South course that will reduce water use 25-30%."



John Walter

**Made-for-TV preparations:** "The striping is the most noticeable thing. We were doing just the greens four years ago. Now we do collars, aprons, fairways and steep cut into the rough. We started using smaller mowers before the tournament last year to give the striping more definition. We have a 25-person crew and put in about

1,600 hours of overtime the two months before the tournament. The two courses get about 200,000 rounds of public play a year, meaning we have to do a lot of repair work — filling in ruts, overseeding areas, encouraging players to replace divots and working the bunkers."

**STEVE KUHN**  
Doral Country Club (Blue Course)  
Miami, Fla.  
Doral Ryder Open  
March 4-7, CBS

Last Labor Day weekend was the toughest test for Steve Kuhn, 43, during his 6-1/2-year tenure at Doral. That's when Hurricane Andrew ripped through the resort, taking out half the trees on the 770-acre property. Five days later, 18 holes were ready for play. Within two weeks, all 81 had reopened. "It was a pretty remarkable effort," the head superintendent said. Kuhn also hosted a PGA Tour event, the Tallahassee Open, while at Killearn CC during the early 1970s. He is a graduate of the University of Florida's four-year ornamental horticulture program.



Steve Kuhn

**Things to look for:** "Half the trees on the Blue course tipped over or broke off. We propped up as many as we could, but had to cut a lot back to make them less top-heavy. New leaves are already growing, but they aren't as thick as they used to be. We resodded the damaged areas of the rough and overseeded many areas with ryegrass to get things green again. But tee to green, there is little difference from before and after the storm. The Blue course is pretty wide open, anyway. The roughs and out-of-play areas were the most affected." Doral also has 6-foot-wide walkways from greens to tees that are mowed around 1/2-inch. "Some of them are 100 yards or longer. I hate those things," he laughed.

**Made-for-TV preparations:** The PGA requires an intermediate fairway strip extending from the edge of the rough 7 feet inward toward the middle of the fairway, Kuhn said. Fairways will be cut about 1/2-inch, intermediate strip 1-1/4 inches and rough 2 inches. "They don't like that harsh transition from fairway to rough," Kuhn explained. Doral also overseeds greens with bentgrass in November, slowly cutting them back to 1/8-inch by tournament time. "We're the farthest south course in the country with bentgrass greens," Kuhn said. "Speeds never dropped below 12 during last year's event. Some players said they were the best putting surfaces they'd seen all year."

**Editor's note:** "Tour of Duty" is a regular feature this year in Golf Course News. It is designed to celebrate the PGA Tour's unsung, underpublicized hero: The superintendent.

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# Weeds also love Hawaii's 'perfect' growing weather

By BRADD PAVUR

Hawaiian golf courses are generally considered to be a golfer's dream. And because of Hawaii's moderate climate and year-long growing season, it would seem these courses are also a superintendent's dream. But this is not always the case.

Hawaii's extended growing season means that weed seeds, just like grass seeds, can germinate at almost any time of year. High winds may transport seeds great distances, and seed reservoirs can develop and contaminate "clean" areas when least expected.

To complicate matters further, the heavy clay soil found on many Hawaiian courses inhibit deep root development. This problem with shallow root systems is compounded by the fact that the clay soil is compacted even further by a steady flow of foot traffic. Of course, the clay soils are also not the most desirable type to work with in an area that gets almost 100 inches of rain annually.

But for Hawaiian turf professionals, the key to success lies in knowing how to adapt to their courses' unique qualities. Still, even the best-laid plans can sometimes go awry.

Two years ago a massive renovation project was begun on the 27-hole Princeville Makai course on Kauai. When the ground was broken up, head superintendent Yoshi Harada and assistant superintendent Damian Baptiste found "an incredible amount" of goosegrass seeds in the soil.

They had been planning to put down sprigs, but did not want Bermudagrass to have to compete with highly viable weed seeds that thrive on compacted clay soils. Harada and Baptiste knew goosegrass seeds germinate at temperatures ranging from 65 to 85 degrees, and would, therefore, stand an excellent chance of rapidly establishing.

They also faced a dilemma because they feared that applying most pre-emergent herbicides too soon after sprigging might prune the delicate and already disadvantaged Bermudagrass roots. They finally arrived at the novel solution of applying an oxadiazon herbicide immediately after sprigging. The decision was based primarily on the fact that the herbicide has the unique quality of not pruning turfgrass root systems.

"In the past I had experienced problems with other herbicides," says Baptiste. "The dinitroaniline (DNA) products caused phytotoxicity, and pendimethalin pruned the roots. The oxadiazon caused some temporary, initial set-back, but the grass grew in just fine, and we didn't have much of a need to go back with a post-emergent."

"Knowing that a product will

not prune roots is critical in Hawaii because very often we're lucky if roots reach a length of even one or two inches. Except on greens, it is pretty rare for them to go down three inches.

In keeping with standard practices, Baptiste applied Roundup two days before sprigging to help reduce unwanted weeds in the areas. But he next took the innovative step of immediately following his sprigging with the oxadiazon application. "We're the

only golf course in Hawaii to do this," says Baptiste, "but it started better grass for us, and we didn't have hardly anything to spray when we went back later to apply post-emergents."

With the renovations now complete, Harada feels the approach they took gave their course a real edge.

"We applied the product on almost our entire course," says Harada. "I'd say we came out way ahead because we had our hy-

brid Bermudagrass come up without all the weeds."

Weeds on the Makai course have always been particularly difficult to handle, emphasizes Baptiste, because some have become resistant to post-emergent herbicides.

"Our weeds are so hard to get rid of that we usually just dig them out rather than counting on post-emergent herbicides. That's why we find we have to rely heavily on getting good pre-

emergent control."

In addition to being concerned with product efficacy, Baptiste stresses that he considers safety to plants absolutely critical. "We have tried a large number of herbicides, and what we found was that a lot of them caused burning on our heavily compacted soils. That's why we made the switch to a pre-emergent herbicide that we know works well, without our having to worry about it hurting the grass."



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Bradd Pavur is a public relations consultant with Rhone-Poulenc.



## North Central



### DATA WILL RECOMMEND WATER USE

Kansas State University has launched a plan to make turfgrass water use data

available daily to golf course superintendents and other landscape managers.

Using a computer and modem, managers will be able to access the information that will be posted on the KSU computer "bulletin board."

KSU will recommend water use for various locations in the state. Information may be specific enough to address water needs for warm- or cool-season grasses, tees, fairways, roughs and lawns.

### TURF WATER CONSERVATION STUDIED

Kansas State University has completed the first year of turf water conservation study that officials hope will help the state deal with water shortages.

Assistant Professor Jack D. Fry of the KSU Department of Horticulture reported that the work is aimed at:

- determining water use rates of warm- and cool-season grasses grown under fairway and lawn conditions in Kansas;
- evaluating tools that superintendents can use to monitor turf water use on-site; and
- evaluating drought resistance and water requirements of new warm-season turfgrass cultivars in Kansas.

Research covered the first two areas in 1992 and will target the third this summer.

The Wichita Public Works Department, which is demanding that less water be used on turf, is funding the research with a four-year, \$40,000 grant.

## Southeast

### SCHAAL, SEAY SPEAK IN S.C.

COLUMBIA, S.C. — Speakers from golf course architect Ed Seay to PGA of America President Gary Schaal will address a conference from 8 a.m. to 4 p.m. March 9 at Forest Lake Club, sponsored by the United States Green Section, in cooperation with the Carolinas Golf Course Superintendents Association.

Seay will keynote the conference. Other speakers joining Schaal are Dr. Robert Mazur of Clemson University, Dr. Leon Lucas of North Carolina State, Dr. Richard Dunn of the University of Florida, Dr. Leon Stacy, Larry Adamson and Nancy Sadlon of the USGA, Monsanto environmental manager Thomas Hoogheem, dermatologist Dr. Lee Jordan, and arborist Ken Knox.

Schaal's topic is "Cooperation Is the Name of the Game." Seay will talk on the unique architectural and construction activities at Old Tabby Links.

Lucas will review new turf diseases over the past 10 years, while Dunn will talk on enhanced microbial degradation in suppression of nematodes, Stacy on mole cricket control, Hoogheem on pesticide issues and the general public, Knox on preserving trees during golf course construction, Mazur on transitional management ideas for Bermudagrass, and Jordan on your skin and the sun.

Patrick O'Brien of the USGA will discuss the new revised USGA putting green specifications. And Adamson will give a behind-the-scenes look at championship administration.

Members of the Carolinas and Georgia superintendents associations, PGA and CMAA will receive state pesticide recertification credits for attending the conference.

More information is available from Roger A. Harvie, USGA's manager of regional affairs for the Southeastern Region, in Marietta, Ga.



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## South Central



### ENVIRONMENTAL CONCLAVE SET

BILOXI, Miss. — The Southern States Annual Environmental Conference, delving into topics from waste minimization to environmental regulations and hazardous and solid waste, will be held Oct. 26-28 at Mississippi Coast Coliseum and Convention Center.

Some 1,200 attendees and 100 exhibitors are anticipated for the event.

It will be hosted by EPA Regions IV and VI, the Mississippi Department of Environmental Quality, Department of Defense, and MS Technical Assistance Program/MS Waste Reduction Assistance Program (MISSTAP/MSSWRAP). States involved are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, North Carolina, Oklahoma, South Carolina, Tennessee and Texas.

More information is available from MISSTAP/MSSWRAP, P.O. Drawer CN, Mississippi State, MS 39762; 601-325-2482.

## Northeast

### STREETER CONNECTICUT PRESIDENT

John F. Streeter of Woodbridge Country Club has been elected president of the Connecticut Association of Golf Course Superintendents.

Streeter, who will also serve as newsletter editor, will head a slate of officers consisting of Vice President Peter R. Pierson of Pequabuck Golf Club in Cromwell, Secretary Philip Neaton of Black Hall Club in Old Lyme, Treasurer John Motycka, and Immediate Past President Steven Rackliffe of Willimantic Country Club in Lebanon.

David Stimson of Tumble Brook Country Club in East Hartford is head of the Scholarship and Research Committee, while Robert Chalifour of Shennecossett Golf Course in Groton chairs the Public Relations Committee, Michael Wallace of Hop Meadow Country Club in Unionville is the Education chairman, John Napieracz of Stanley Golf Course in New Britain is the Membership Committee chairman.

Also, Eric J. Cadenelli of H.B. Brownson Country Club in

Shelton is the golf chairman, Brian Skelly of Old Lyme Country Club leads the Social and Welfare Committee, and Peter Hull of Turf Products Corp. in West Hartford is the commercial representative to the board.

### N.H. VOTES IN ROWELL

The New Hampshire Golf Course Superintendents Association has elected a new slate of officers led by President Tom Rowell of Cochecho Country Club in Dover.

Rowell is joined by Vice President Bill Zuraw, Treasurer Jeff Brown of Green Meadow Golf

Course in Nashua and Secretary Mike Ross of Lake Sunapee Country Club in Andover.

Greg Misodoulakis, Mike Bryant of Amherst Country Club in Hollis and Joe Langley of White Mountain Country Club in Ashland were re-elected to second terms on the board.

First-term board members are Tony deBettencourt of Merrimack and John Clark, while Past President Dick Weeks will serve another term as director.

Rowell has been on the board for several years and served as vice president, treasurer and turf

conference chairman. Zuraw has been on the board since 1987 and has been editor of the association's Turf Talk newsletter.

Brown is serving his second term as treasurer and has been golf chairman for several years. Ross, also in his second term as secretary, has served on the turf conference committee.

## West

### EMPIRE STATE SHOW SET

SPOKANE, Wash — The Empire State Golf Course Superintendents Association is ready to

host its annual Inland Northwest Turf and Landscape Trade Show here Feb. 17.

The show, for the turf industry, landscapers, schools, park and recreation departments, will feature a wide variety of turf-grass equipment and supplies.

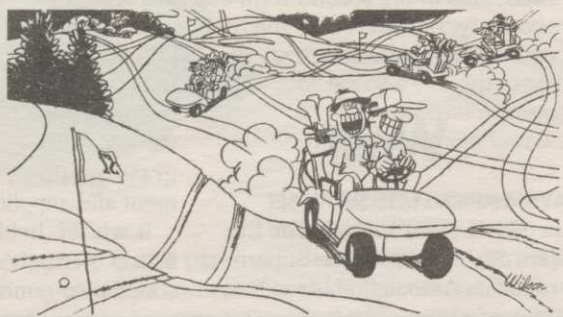
It will be held from 9 a.m. to 5:30 p.m. at the Spokane Interstate Fairgrounds.



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CIRCLE #112

## Effluent symposium to illustrate golf can tap into a water source

Continued from page 13

Florida requires the highest quality wastewater be used on all courses, California law mandates a higher quality effluent for facilities bordering residential areas than those standing alone, Crook noted.

Generally, states using effluent most frequently are the ones with the most restrictive laws, the environmental engineer said. Texas and Arizona are two additional states with fairly restrictive legislation.

Crook sees effluent as "an untapped resource in many areas." Its use will increase dramatically, especially in urban areas, as population grows and potable water surpluses diminish or disappear, according to the EPA guidelines.

The number of cities with populations exceeding 1 million increased from less than 80 in 1950 to 300 in 1990 and will reach 400 by the end of the century. Foreseeing the problems that would cause, the United Nations Economic and Social Council stated way back in 1958 that lower quality water should be substituted for potable water whenever possible. Turf irrigation is one of the best uses for effluent, according to the EPA guidelines.

Crook will speak the first day of the confer-

*Turf irrigation is one of the best uses for effluent, according to the EPA guidelines.*

ence. Other presenters include Dr. James Watson, vice president of The Toro Co.; Dr. Robert N. Carrow of the University of Georgia; Garrett Gill, a course architect; Anne Townsend Thomas of the law firm Best, Best & Krieger; Dr. Ali Harivandi, turfgrass specialist at the University of California.

Andrew Terrey, water resources specialist with Phoenix Water Services; Dr. Marylynn Yates, ground water specialist with the University of California/Riverside; Dr. Charles Mancino of the University of Arizona; James Moore of the USGA Green Section; Dr. Charles Peacock of North Carolina State University; and representatives from golf courses nationwide.

Field tours are planned to a sewage treatment plant and two area golf courses.

For more information or to register contact Dr. Kimberly Erusha at 908-234-2300.

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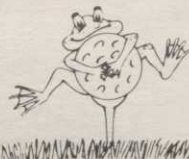
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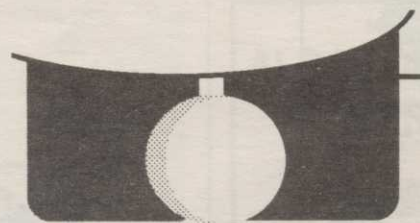
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CIRCLE #120



# Bayberry Hills tests add another feather to golf's environmental cap

Continued from page 1

shallow water table do little to hinder pesticide leaching.

The original study showed next to no contamination and has been one of the most important pieces of research in defense of the golf course industry.

Superintendent Edward Nash's Bass River Golf Club was one of the four older courses studied. Despite the findings, government officials were still leery of approving Bass River's sister course, Bayberry Hill Golf Club, when it was first proposed in the mid-1980s, he said.

Environmentalists were particularly concerned because course chemicals could potentially leach into the town's underground drinking water supplies.

Developers agreed to install 14 monitoring wells at depths ranging from 20 to 60 feet, the lowest depth being the same as the town's drinking wells.

Six underdrains, plastic pipe just two feet below the surface with collection ports for testing, were installed under three greens and fairways. The shallow-depth tests would represent a worst-case scenario, Nash said.

The State Pesticide Board has monitored the wells and underdrains four times a year — at an average annual cost to the course of \$16,000 — since Bayberry Hill first opened in 1988. The results?

"Excellent," Nash replied. "They've found nothing of any toxicological significance. And nitrate levels have been very acceptable. The results have been so good, we're asking the town to cut back on testing."

Added Cohen, "From what I've seen, Ed would be justified in requesting cutbacks on monitoring."

Nash said the original Cape Cod study researchers recommended forbidding use of many chemi-

cals at Bayberry Hills, including Daconil and Dyrene, because of the Cape's unique hydrological characteristics. Twelve chemicals were ultimately approved for use.

"The [town] board of health has been very complimentary," Nash said. "The members said they knew they made it hard on us originally and are happy we've done such a good job."

Interestingly, gas chromatography tests at Bayberry Hills revealed traces of 2,4-D, even

though Nash had never used the chemical, Cohen said. The same thing happened to superintendent Bruce Cadenelli at Caves Valley Golf Club in Bethesda, Md., he added.

"We're aware that labs can falsely report 2,4-D. Another chemical coelutes (gives similar readings) with 2,4-D in gas chromatography tests. Therefore, unless the presence of 2,4-D is confirmed by mass spectrometry, you can't be assured 2,4-D is present."

## Binghamton bunkers

Continued from page 13

"remodeled by." One committee member said it looked to him as if one builder wanted to "De-Tillinghast" our course.

Finally, Hengel said: "I presented a bunker recovery plan that would not only bring our bunkers back to the original Tillinghast look but proved to the committee that I could also hold down the cost.

"We started in the fall of 1990 with six of our crew and finished the project in the spring of 1991 using an additional five local workers to complete the job."

The final pricetag was around \$13,000 in base costs of trucking, sand preparation and equipment rental. Labor costs were approximately \$18,000.

Hengel's first step was to find a sand company willing to wash and clean the existing sand removed from the bunkers. A local sand company subcontracted for the job.

The bunkers then had to be narrowed to fit an older engineering plan.

This was necessary because the sand had spread far out into the grassy areas over the last 70 years and made the bunkers four or five feet deep with sand.

The third step was to place sod where the migrating sand had been.

"I determined that we could use areas of native fescue rough to fill in the void areas where bunker edges had to be redefined," Hengel said. "Our course bunker designs have been recovered and I feel as though we took every precaution not to waste the club's money."

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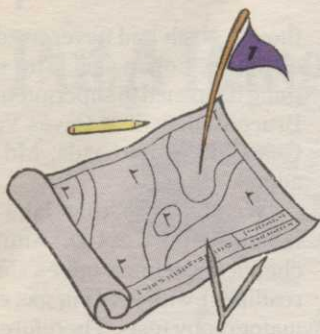
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## BRIEFS



## GILMORE GRAVES IN WIS., ARIZ.

Gilmore Graves Golf, Inc. of Phoenix, Ariz., and Spring Green, Wis., has completed several projects in Wisconsin. The design, irrigation and construction is near completion on the expansion of nine to 18-hole facilities in Evansville and Prairie Du Chien. These expanded projects will open for play this year. Gilmore Graves golf also has designed a new 18-hole complex in St. Germain, of which nine holes will be ready for play this year.

## FOSTER MAKES PEBBLE CREEK A FULL 18

MESA, Ariz. — Keith Foster and Associates will design the second nine holes at Pebble Creek, a master planned community west of Phoenix.



Keith Foster

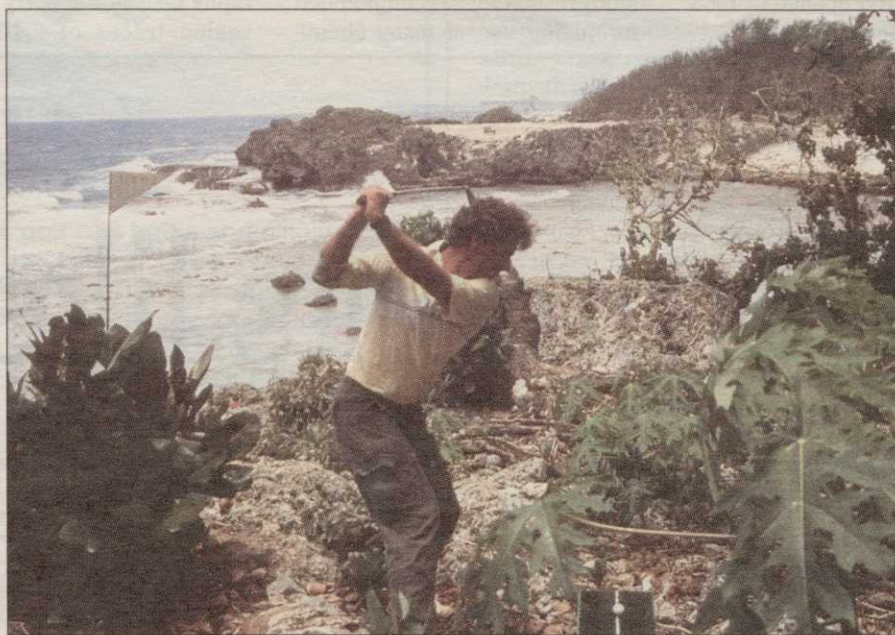
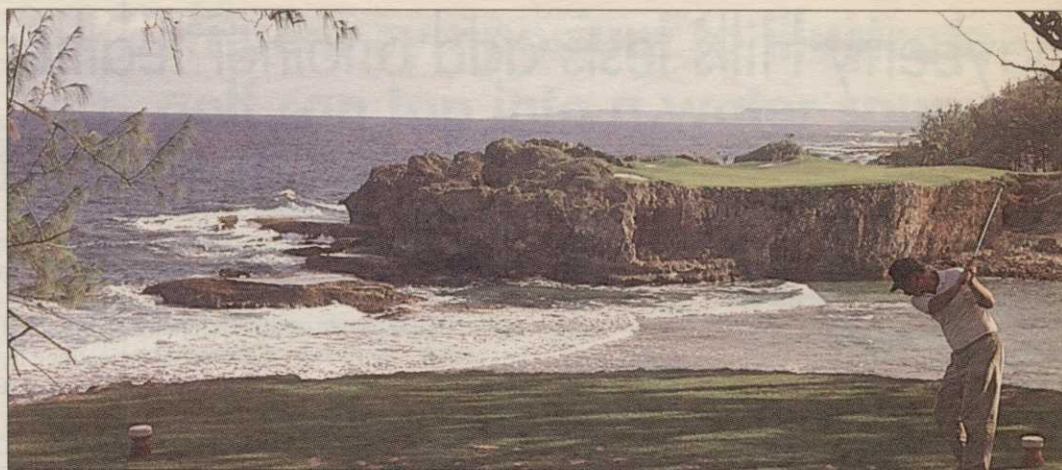
The local golf course architects also designed the first nine for the developer, Robson Communities. Foster also has been retained by Robson to begin work on another 18-hole course in Sun Lakes. Both projects are scheduled to begin construction in January. Foster will update and redesign City Park, the city's other municipal course, and will renovate the private Pueblo CC.

## CUPP, FOUGHT COLLABORATE IN OREGON

PORTLAND, Ore. — Golf course architect Bob Cupp and design associate John Fought, who operates the West Coast office here, will collaborate on Timbershores Country Club in Lincoln City and Meadowood at Sunriver in Bend. "It's dramatic terrain," Fought said of the Timbershores property which offers panoramic Pacific Ocean vistas, rolling and sloped terrain, and heavily wooded areas. The former PGA Tour player and 1977 U.S. Amateur champion added: "With the ocean view, the beautiful trees, slopes and natural creeks running through the property, it has everything you could ask for in order to build a really striking golf course."

## NICKLAUS FIRM CHANGES NAME

The design organization of Jack Nicklaus has a new look. It is no longer Jack Nicklaus Golf Services but Nicklaus Design. This change recognizes Jack's son, Jack Nicklaus II, taking his place within the organization, having completed several notable golf courses in the United States and Europe. The firm also announced it has modified its fee schedule "to try to accommodate the developers' needs" during times of economic pressures.

Mangilao:  
Then ...  
and Now

You may recognize the photo at left from our first Asian issue last March. It shows architect Robin Nelson of Honolulu at the tee station of the 168-yard 12th hole at Mangilao Golf Course in Guam. Above, Nelson's partner, Rodney Wright, tees off at the 12th hole after the course is finished. Golf Course News will keep track of Asian development with a quarterly publication beginning in March.

## Three Sisters developers: 'We've lost a treasure'

By PETER BLAIS

CANMORE, Alberta, Canada — Officials of the multi-million-dollar Three Sisters Resort project near Banff National Park have received permission from provincial officials to begin construction of three golf courses.

While pleased with the approval, the company is disappointed the National Resources Conservation Board forbid development of a fourth track in the environmentally significant Wind Valley area.

"It's a very unique piece of property," said Three Sisters President Rick Melchin of the 525 acres the NRCB said must remain forever wild. "The province said it will compensate us financially. But we've lost a

treasure."

The Wind Valley restriction forced developers to scale back the resort component slightly to about 1,000 hotel rooms, Melchin said.

Construction will resume on the first course this spring, the company official said.

The Scott Miller-designed layout was just 10 percent complete last spring when the government slapped a stop-work order on the project while the NRCB debated the resort's fate.

Weather permitting, he expects the first course to open in summer 1994 and the second perhaps a year later. Miller is designing both.

"We want to build the first 36 holes as

soon as possible and see what happens from there," Melchin said.

Barry Gunn, a reporter following Three Sisters for the Canmore Ledger, said making Wind Valley off limits to development silenced the project's most vocal critics.

Gunn said local residents and officials are relieved the controversy is behind them and expects the project to receive local permits with little difficulty.

Stuart Cohen of Environmental & Turf Services Inc., who was retained by Three Sisters to conduct an environmental assessment, said that while they did not get everything they wanted, developers were still fortunate to receive permission to build

Continued on next page

A Myrtle Beach  
original: Hamm

By MARK LESLIE

Combine a love of art and mechanical drawing with pro-caliber golfing abilities and the result can be a rare talent.

In the case of Gene Hamm, the result was the pioneer of a phenomenon of the 1980s: The PGA Tour player/designer. The 69-year-old Hamm, who earned his Tour card in 1958, has designed some 80 golf courses, including a dozen of Myrtle Beach, S.C.'s 70 courses.

The career designing golf courses wasn't planned. The PGA Tour was. Indeed, Hamm played in the first medal play, won by Dow Finsterwald in 1958.

But that was the same year pro and friend Al Smith approached Hamm to help rebuild greens, tees and bunkers at the Country Club of Danville.

Continued on page 36



The 18th hole at the Gene Hamm-designed Magnolia Course at Pinewild



## Lancaster CC resurrects Ross design

By MARK LESLIE

LANCASTER, Ohio — Donald Ross plans that were drafted but never implemented 70 years ago, have been completed on nine holes at Lancaster Country Club.

Ron Forse of Forse Design in Uniontown, Pa., carried out the 75-year-old plans on holes 10 through 18. Forse said he only added a few bunkers to the Ross design to keep balls in play, and "saddle-cut" the fairway on the 18th hole to make the green visible from the tee.

Lancaster CC Greens Chairman Tom Lally said, "We are extremely pleased with

*'We didn't want to try to make it tougher, just a fair test that would reward the good golf shot and penalize the bad golf shot.'*

— Tom Lally

Greens Committee chairman

"We didn't want to try to make it tougher, just a fair test that would reward the good golf shot and penalize the bad golf shot," Lally said.

Sounds very Ross-ian.



Lancaster (Ohio) Country Club's new 12th hole.

the job done by Ron and Sheldon Price [of Links Renovation and Construction in Mentor]."

Forse explained that the back nine holes were designed by an unknown club member or members and built in 1909. Jack Kidwell of Columbus designed the front nine, built in 1959.



Ron Forse

But back in 1926 one of Donald Ross's project managers, J.B. McGovern, was brought

on-site with a set of Ross plans to rearrange the back nine with Ross' special touch.

The plan denoted bunker schemes and changed the 18th from a par-4 to a long par-3 to make room for an expanded parking lot.

For a reason unknown today, club members decided not to proceed with the renovation... until 1988.

"We have a very active Greens Committee," Lally said, explaining that they found the old Ross design in the club museum, searched for a student of Ross, "who believed in his type of architecture," and proceeded.

While Ross' plans added a number of bunkers, Forse and associate Bruce Hepner built a few more, taking into consideration the greater distances golf balls are struck today.

Lally said members planned to spend \$500,000 on course and clubhouse renovations.

## Three Sisters proceeding

Continued from preceding page

in such a pristine area.

Still, Melchin sees some "alarming things" coming out of the NRCB process, a fairly new regulatory approval system that made Three Sisters "a guinea pig."

Developers have spent \$9.5 million and many years getting to this point, he added.

"That's a lot of time and money," Melchin said. "It would probably have been impossible for a smaller developer. Alberta is making a serious mistake. This could scare away a lot of potential development."

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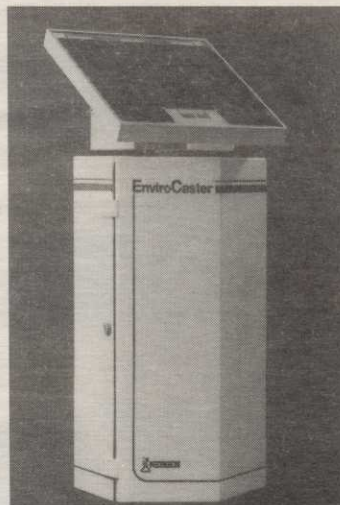
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CIRCLE #125

## Payne Stewart designing 1st course

FULLERTON, Calif. — Professional golfer Payne Stewart will act as design consultant on a new public golf course being planned for Fullerton's East Coyote Hills, according to Unocal Land & Development Co.

In his first-ever course design collaboration, Stewart will work with Costa Mesa-based golf course architect Cal Olson.

"I'm very excited about being involved with a company like Unocal that wants to do this right," said Stewart. "We are talking about designing a public course that is playable, challenging and fun."

Stewart said he and Olson will use the dramatic, natural terrain of hillsides and canyons in their design.

"Mother Nature really does the best job of designing golf courses," he said.

Stewart said it is too early for him to determine exactly how he'll put his signature on this property.

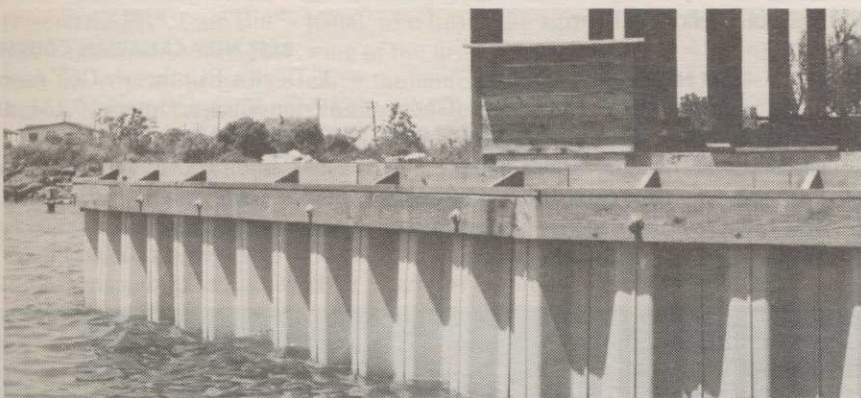
"I know some of what I'd like to see. For instance, I insist on seeing nice putting surfaces. We'll be experimenting with growing different kinds of grass that will create a good surface. And high maintenance standards are essential" said Stewart.

Olson has been involved with Unocal's plans for the site since 1985, and has developed a routing plan for the 18-hole, par-71 course that will play approximately 6,700 yards.

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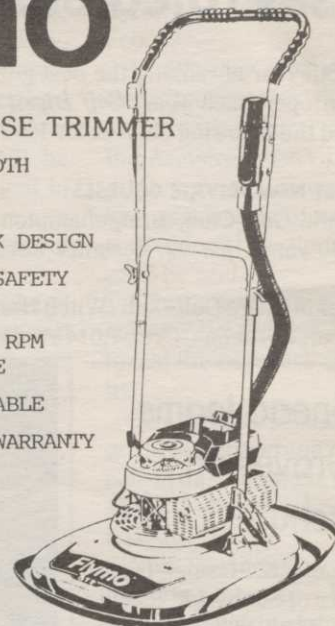
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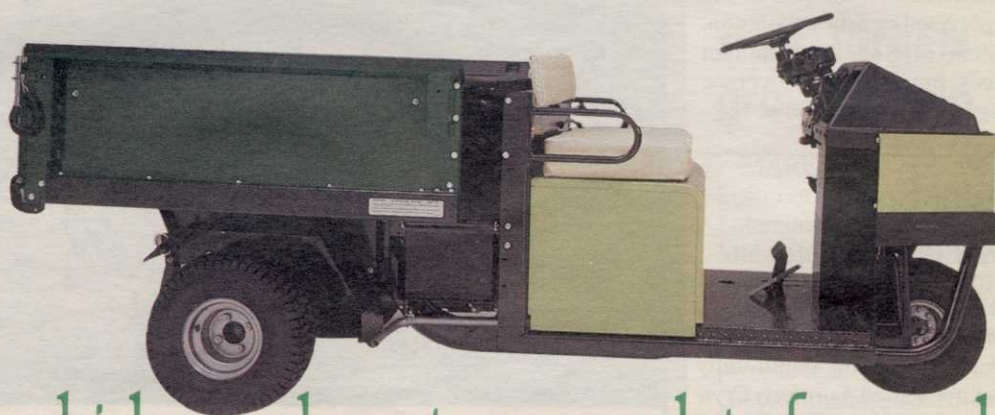
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CIRCLE #127



## Rees Jones, Cupp, Fazio, Hurdzan courses rated best

In its 10th year of ranking the best golf courses to open each year, *Golf Digest's* announced the following choices for 1992:

### BEST NEW PRIVATE COURSES

1. Atlantic Golf Club, Bridgehampton, N.Y., 6,940 yards, par 72, designer Rees Jones.
2. Pumpkin Ridge Golf Club (Witch Hollow Course), Cornelius, Ore., 7,014 yards,

par 72, designer Bob Cupp.

3. Caves Valley Golf Club, Owings Mills, Md., 6,942 yards, par 71, designer Tom Fazio.

4. Double Eagle Club, Galena, Ohio, 7,100 yards, par 72, designers Jay Morrish and Tom Weiskopf.

5. Conway Farms Golf Club, Lake Forest, Ill., 6,726 yards, par 71, designer Tom Fazio.

### BEST NEW RESORT COURSES

1. Pelican Hill Golf Club (Ocean Course), Newport Coast, Calif., 6,634 yards, par 70, designer Tom Fazio.

2. The Experience at Koele, Lanai City, Lanai, Hawaii, 7,014 yards, par 72, designer Ted Robinson.

3. Dunmaglas Golf Course, Charlevoix, Mich., 6,897 yards, par 72, designers Larry Mancour and Dean Refram.

4. Golden Horseshoe Golf Club (Green Course), Williamsburg, Va., 7,120 yards, par 72, designer Rees Jones.

5. Four Seasons Resort Aviara, Carlsbad, Calif., 7,007 yards, par 72, designers Ed Seay and Arnold Palmer.

### BEST NEW PUBLIC COURSES

1. Pumpkin Ridge Golf Club (Ghost Creek Course), Cornelius, Ore., 6,839 yards, par 71, designer Bob Cupp.

2. Shaker Hills Golf Club, Harvard, Mass., 6,850 yards, par 71, designer Brian Silva.

3. University Ridge Golf Course, Verona,

Wis., 6,825 yards, par 72, designer Robert Trent Jones Jr.

4. Wilderness Valley Golf Club (Black Forest Course), Gaylord, Mich., 7,044 yards, par 73, designer Tom Doak.

5. Talamore at Pinehurst, Southern Pines, N.C., 6,720 yards, par 71, designer Rees Jones.

### BEST NEW CANADIAN COURSES

1. Devil's Paintbrush Golf Association, Caledon Village, Ontario, 7,134 yards, par 72, designer Michael Hurdzan.

2. Camelot Golf and Country Club, Cumberland, Ontario, 6,813 yards, par 72, designer Thomas McBroom.

3. Greystone Golf Club, Milton, Ontario, 6,879 yards, par 72, designer Doug Carrick.

## Sam Snead teams with Graves on Massachusetts links

SOUTHWICK, Mass. — David Hall, owner of Sunnyside Ranch, plans to build an 18-hole championship golf course here. The course will be designed by Sam Snead in conjunction with architect Robert Muir Graves.

The course will be situated at the Sunnyside Ranch dairy farm, property that has been in the Hall family for four generations. The 400-acre farm is located 30 miles from Springfield.

According to Graves, the history and tradition behind this property will be of utmost importance when designing the course.

"Sam and I are planning on designing a championship course with a traditional design," said Graves. "This will offer a subtler compromise with nature. We will change no more of the land than is necessary to play the game. The land's natural beauty will be retained."

Construction of the course will be supervised by Edward Bignon, president of Golf Development Services, Inc., which will oversee management of the facility.

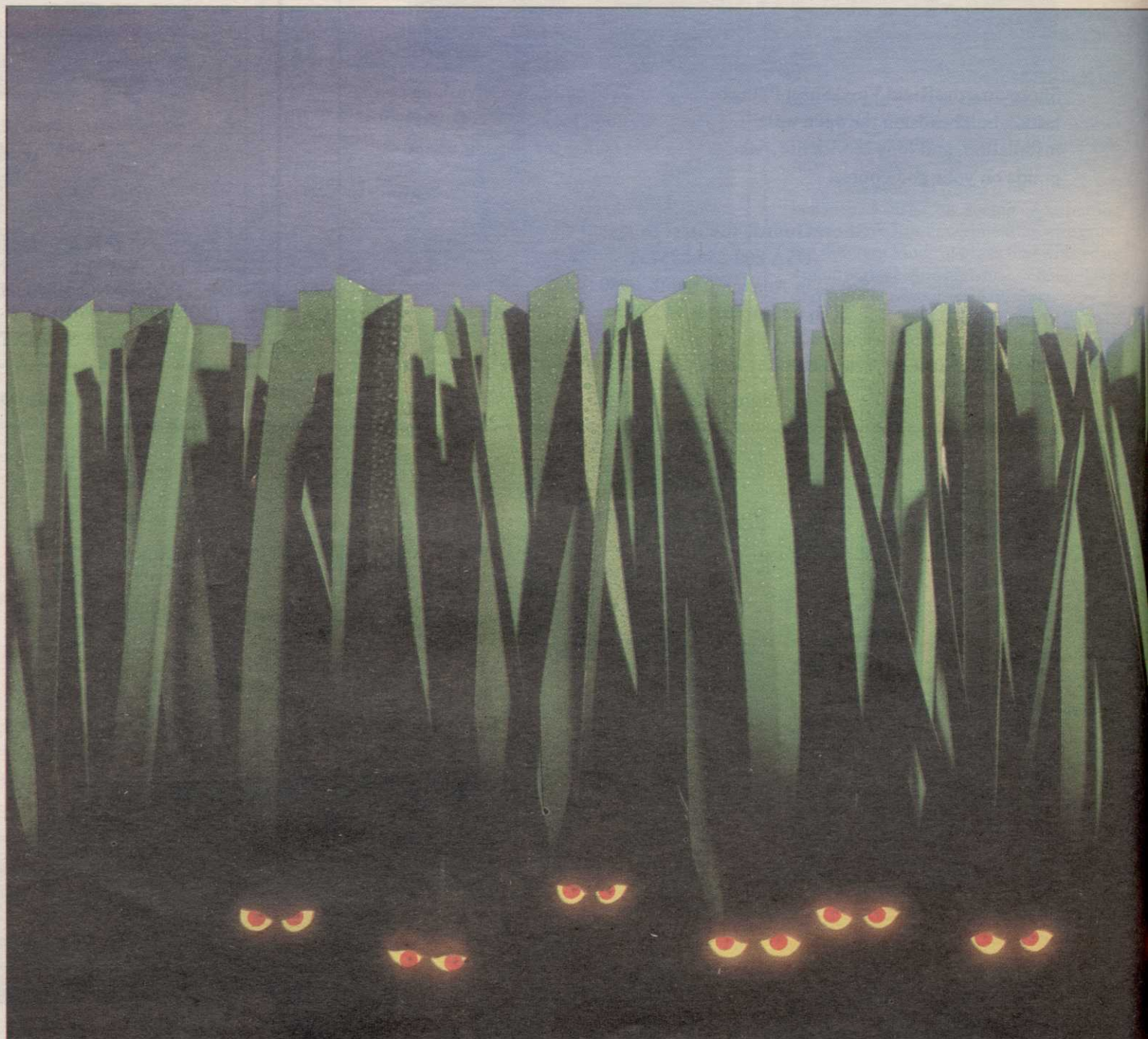
## Crystal Springs now Persimmon

PORTLAND, Ore. — A new eastside Portland golf course and residential housing community has been renamed. Formerly Crystal Springs Golf Community, the development will now be known as Persimmon Country Club Community. Featuring a 6,700-yard championship golf course and 210 single-family residential homesites, it is under construction. The community was purchased by CGC Inc. of Vancouver, Wash., last March. Its architect is Gene C. "Bunny" Mason.

## Hurdzan moves

COLUMBUS, Ohio — Dr. Michael J. Hurdzan and the staff of Hurdzan Golf Course Design have relocated to 1270 Old Henderson Road here.

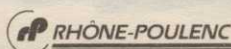
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# Nelson, Weibring, Sieckmann under one roof — Golf Resources'

By HAL PHILLIPS

What do Byron Nelson, D.A. Weibring and Tom Sieckmann have in common?

Yes, they've all distinguished themselves on the PGA Tour. But they've all collaborated with Golf Resources on course projects from Omaha, Neb., to Iwaki, Japan.

Golf Resources could bill itself as the golf course industry's one-stop shopping venue. The Dallas-based firm provides golf course architecture, management and

agronomic consulting services, all under one roof.

"We try to match the need of any client," said Don Armstrong, the former superintendent at Colonial, who heads the agronomic wing of the firm. "That's why we chose the name, Golf Resources."

Maury Miller, a former thoroughbred in Tom Fazio's stable of proteges, handles the architectural side, while John Hungerford and Dennis Shirley manage the five facilities currently under contract.

The idea is to provide all the start-up services any project might need, but the package can be diversified.

Armstrong, for example, has done agronomic consulting in Arizona for The Boulders and Troon North, not to mention The Kings Course in Waikoloa on Hawaii's Big Island, a new Tom Weiskopf/Jay Morrish design constructed entirely on an enormous bed of lava — a project ripe for agronomic consultation.

Sometimes it works the other way around.

Armstrong was tapped last year to provide consulting work at the nearby TPC Cottonwood Valley, site of the Byron Nelson Classic. Later, Golf Resources secured some design renovation work at Cottonwood — which will be ready before the tournament in May, said Armstrong.

The playing professionals, of course, are part of the mix.

Golf Resources just completed a "Tom Sieckmann signature golf

course" in Omaha. In planning is a 36-hole project in Palm Springs, "signed" by D.A. Weibring and Byron Nelson, who turned 81 on Feb. 4.

Purists may scoff at the inclusion of touring pros who have little or no architectural credentials. But Armstrong isn't apologizing.

"Quite frankly, some of the touring pros capable of working on a course don't have the time to commit," he said.

"These pros are still very involved in the projects. We're there to add the expertise and credibility.

"We think we're offering these guys the opportunity to participate in this side of the business — and providing the expertise to get it right."

Golf Resources has taken its formula to Japan, where it has three projects in various states of construction.

A course in Lepetaw, on the island of Hokkaido, has just been opened for play, while two more — one near Negoya and another on Hokkaido, in Asahigawa — are still in the planning stages.

Under construction is the 27-hole Byron Nelson Country Club in Iwaki, a resort town two hours north of Tokyo.

Armstrong said he hopes the Japanese project will lead to more work for Golf Resources in Asia. He said the firm plans to attend Golf Asia '93, the region's largest golf show, in Singapore from March 25-28.

"We feel like we'll get our best exposure there."

## Lohmann adds staff, targets grow-in help

MARENGO, III. — Bob Lohmann, president of both Lohmann Golf Designs, Inc. and Midwest Golf Development, Inc., has added Dan Murray to his staff.

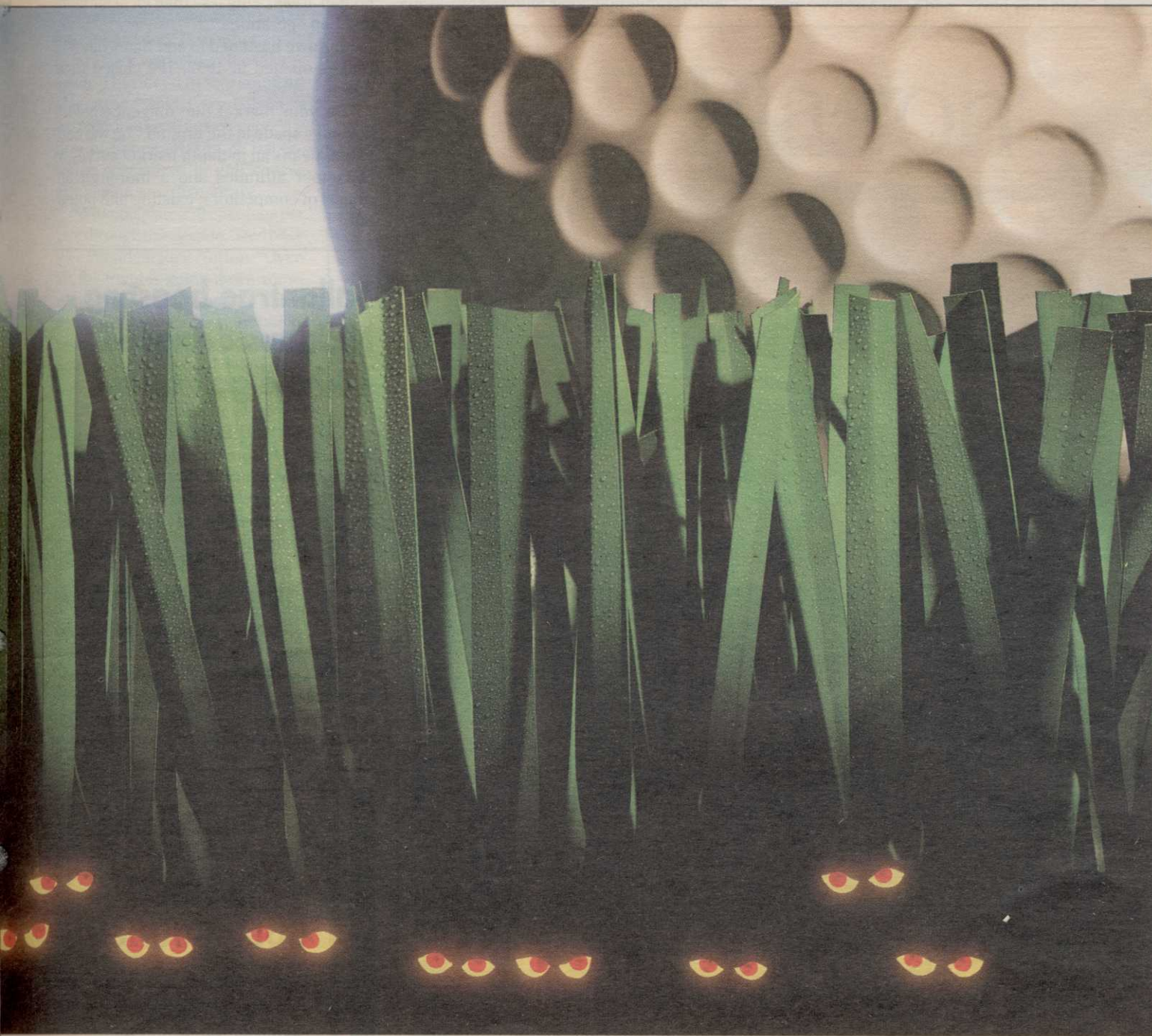
As construction manager, Murray will be responsible for project management, including cost estimating, scheduling and grow-in management.

As a golf course superintendent, he has extensive knowledge of golf course construction and grow-in procedures.

With Murray on board, Lohmann Golf Designs now offers grow-in management services to aid its clients in the demanding task of establishing turf on newly seeded courses.

Meanwhile, Lohmann has decided to provide services to the Denver, Colo., area and actively seek design opportunities in the Rockies and Southwest.

This effort will be headed by Phil Sage, who has been a designer and project manager with Lohmann Golf Designs for five years.



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# 412 golf ranges open in U.S. during 1992

By HAL PHILLIPS

Four hundred and twelve golf ranges opened during 1992, according to figures released by Forecast Golf Marketing & Financial Systems, Inc.

This figure represents a drop-off from the 768 ranges which opened during 1991. However, the news is actually less disheartening than it might appear, especially for owners of existing golf course facilities.

"Last year, we predicted that as existing courses recognized these ranges as viable profit centers, the openings would increase. And they have," said Scott Marlowe, presi-

dent of Richmond, Va.-based Forecast.

Of the 768 ranges which opened in 1991, 19.7 percent were constructed at an existing golf course facility (4.6 percent were indoor ranges while 75.8 percent were free-standing).

However, of the 412 which opened during 1992, 34.8 percent were built at an existing golf course (7.5 percent were indoor facilities and 57.7 were free-standing). In real numbers, there were 137 on-course ranges built in 1992, while 153 were constructed the year before.

New York State led the way last year with 34 range openings, followed by Florida

with 31 and Texas with 26. The Lone Star figure represents a 50 percent increase over 1991.

Unfortunately, supply may have already outgrown demand in Florida, New York and Texas, said Marlowe, who added that Washington, D.C., Dallas/Fort Worth and the New York suburbs are nearing the range-saturation point.

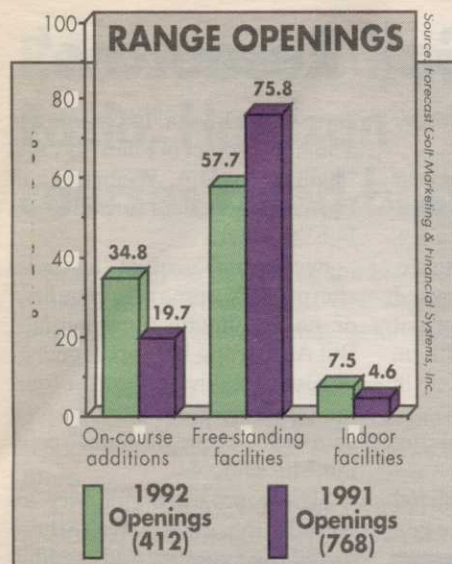
"What we're saying is, an alarming number of facilities are going up on top of each other," he said. "Further, the entry of [Jack] Nicklaus and [Lee] Trevino into the market has raised the specter of large metropolitan areas being less than ideal for mom and pop operations."

Marlowe hastened to add that while 412 ranges opened in 1992, 104 closed their doors.

"Do your market due diligence before you put a spade in the ground," he warned. "That means an in-depth market survey of consumer attitudes and a thorough appraisal of competitors, existing and potential."

## Ballantrae boasting Nicklaus-designed 18-hole golf course

PORTST. LUCIE, Fla. — Ballantrae Golf & Yacht Club, a new residential and recreational community on the St. Lucie River featuring a Jack Nicklaus-designed golf course, has broken ground and commenced construction on the community's inaugural patio homes with locations on golf fairways, lakes, nature preserves and the mile-wide St. Lucie River. According to Robert Comparato, president of Compson Development Corp., the projects developers, the carefully sculpted golf course will open early next year. It comprises more than 180 acres of winding pine and oak forests along the scenic St. Lucie River.



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CIRCLE #130



# NGF predicts 250 golf course openings a year through the 1990s

Continued from page 1

pipeline may be even longer than that."

Experts agree that local financing remains a viable source. But when larger lending institutions got skittish in 1990-91, the funds and corresponding construction abated. In essence, the approaching slowdown will reflect the lack of financing options during 1990 and 1991 — and the institutional lending community doesn't appear ready to get back on the horse.

"I'm afraid that lenders need to have some success in other areas before they warm to golf projects again. They need to feel comfortable again," said Gary Gilson, a partner in the Kansas City law firm of Shook, Hardy & Bacon, which specializes in golf course acquisition and divestiture.

"We anticipate 250 openings per year through this decade," said NGF Vice President Rick Norton. "Overall, the trend is going down somewhat. But I don't want to sound doom-and-gloomy because we're seeing golf much more realistically now — as a more publicly accessible, fiscally responsible unit.

"We're still going to see some pretty strong numbers in '93, but not like '92."

The NGF figures indicate that 236 daily-fee facilities opened their

doors during 1992. Fifty-one municipal courses were christened, while 67 private courses came on line. These figures, said Norton, do not include renovations or facilities gone bankrupt and subsequently reopened.

A more sobering figure might be the number of courses currently under construction, 616, which does not include projects that have been suspended due to lack of funding, said Norton. Once financing has been secured, it

takes about three years gain permitting for and construct a golf course. If you do the math, it's clear golf can't maintain a pace of 300-plus course openings per year.

It also appears that lower interest rates and a nation creeping out of recession are not enough to boost the dim financing picture.

"Golf is a funny business. It's not like putting up office buildings," said Rhodes. "It's not dependent on traditional market financing; never has been. You'd

think [the financing picture] would be getting better, but it isn't.

"Lenders tend to react with a lag. They will need institutional evidence for them to get back in. They're slow to get in and slow to get out."

"The RTC (Resolution Trust Corp.) needs to lighten up," said Gilson. "There isn't a lender out there who doesn't shudder when he sees a golf project in his portfolio."

Lending stagnation in the early

'90s has forced developers to seek all sorts of alternative sources. And while the Jones Trail in Alabama has intrigued many with its inventive use of state pension funds, industry experts agree that local equity financing will remain the most promising source of funds over the next few years.

"We tend to get caught up in the real sexy financing, pension funds, cooperatives and all that," said Norton. "But local financing is still the most dependable."

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## Jones Trail at halfway point in Alabama

BIRMINGHAM, Ala. — Alabama's Robert Trent Jones Golf Trail has reached the halfway point of completion, with nine of the 18 planned courses now open to the public.

Birmingham's Oxmoor Valley and Mobile's Magnolia Grove, two of the Trail's 54-hole facilities, are fully open, each with two championship courses and an 18-hole Short Course available for daily-fee play.

The Trail's other 54-hole facilities — Huntsville's Hampton Cove and Auburn-Opelika's Grand National — each has an 18-hole championship course open, with a second scheduled to open in 1993. Huntsville's Hampton Cove also recently opened its Short Course to area golfers.

"We are on schedule," said Bob Barrett, vice president of SunBelt Golf Corp. "With courses open at all our 54-hole facilities, golfers across Alabama can now enjoy a Robert Trent Jones-designed course. Since each course is distinctly different, golfers of all skill levels will be able to sharpen their game on the Trail."

In addition to four 54-hole facilities, the following three 36-hole facilities will open in 1993: Highland Oaks in Dothan, Silver Lakes in Calhoun County, and Cambrian Ridge in Greenville.



## Buckeye Creek proceeding, with eye for partner

MINDEN, Nev. — Buckeye Creek Corp. has announced that a tentative map has been approved for its 2,478-unit residential planned community in Douglas County.

The project will be developed on 958 acres in the Carson Valley. Among other recreational amenities, the development will include an 18-hole championship golf course and a 9-hole executive course. Both will be public daily-fee courses. The Buckeye Creek development also includes congregate care housing and 58 acres of commercial areas including a resort hotel/casino site.

Larry Walsh, vice president finance/market-

ing, stated that "ground breaking is scheduled for early 1993. Buckeye Creek Corp. is seeking a joint-venture partner to develop and operate both golf courses and possibly the resort hotel (casino) site."

According to Walsh, "The Buckeye Creek golf courses will be open almost all year. We fully expect to attract a great deal of play from the Tahoe area by offering the Lake Tahoe tourists an affordable alternative. The Tahoe courses are often crowded and expensive, and are limited by a much shorter golf season. Our market studies indicate a definite need for these golf courses."

## Cherry Valley opens back 9

### Jones layout has its own character

PRINCETON, N.J. — The Rees Jones-designed Cherry Valley course has opened its back nine.

The 18-hole layout measures 6,930 yards and serves as the centerpiece for Cherry Valley, a 644-acre master-planned country club community being developed by DKM Residential Properties Corp.

Unlike the front nine, which opened in the fall of 1991, Cherry

Valley's 3,483-yard back nine is more heavily wooded, features greater changes in elevation, and crosses picturesque Bedens Brook five times.

"The back nine has its own special character and topographical rhythm," said Steve Philbrook, director of golf. "Initially, the back nine will prove a distinct challenge to golfers who've only had a chance to familiarize themselves with the idiosyncrasies of the front nine, but it won't severely punish their games."

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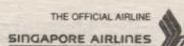
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## Clifton, Ezell let nature reign at Highland Creek

CHARLOTTE, N.C. — For the new Highland Creek Golf Club, mother nature made many of the rules.

The course, set to open in early spring, was planned by the design firm of Clifton, Ezell and Clifton, which took the meandering streams, lakes and ponds, dense tree cover, rocky outcrops, and rolling terrain and developed a course where the demands of play will be matched only by the layout's natural beauty.

The par-72, 7,000-yard course is the centerpiece of Highland Creek, a 1,770-acre master-planned community that offers a wide range of homes and recreational amenities. It is being developed by American Newland Associates.

Architect Ken Ezell said Highland Creek Golf Club will be demanding mentally as well as physically. Its use of the natural characteristics, such as the creeks and water features that come into play on 12 holes, and the abundance of bunkers will put accurate shot placement at a premium.

## Young signs on to design course in Ga. project

COLUMBUS, Ga. — Mike Young has been selected as the designer for a \$4 million golf development here.

The project is being undertaken by Developers-Investors Inc., a subsidiary of the Bradley Co. on 500 acres of undeveloped land owned by the W.C. Bradley Co. It will include an upscale, public 18-hole golf course, a 5,000-square-foot clubhouse and 450 homesites.

The golf course will be nestled among pines and lakes occupying 160 acres of the property. Young has designed a par-72, 6,900-yard course to challenge the above-average golfer and yet be enjoyed by the beginner.

Holmes & Co. of Orlando, Fla. will begin construction in August, with an anticipated completion date of Labor Day 1993.

GOLF COURSE NEWS



## Hale Irwin's Southern Woods opens in Florida

HOMOSASSA SPRINGS, Fla. — Southern Woods Golf Club opened Nov. 9. Southern Woods is a 293-acre master-planned community adjacent to the 7,500-acre Sugarmill Woods development near the Gulf Coast and the Crystal River.

The newest Hale Irwin Signature golf course is a 18-hole par 72 private country club.

The golf course is gently carved out of the ancient Florida wilderness. It was designed to preserve the rolling sand hills, towering pines and majestic oaks. "The site is unique with a variety of natural features," said Irwin. "I believe the design will become known for its sensitivity to the existing landscape and the fair challenge it presents to each golfer." The golf community, developed by Flovicc and Co., a Florida corporation, retained Sugarmill Woods Management, Inc. as the construction manager.

Architect Richard M. Phelps is providing the architectural support to the project.

## Hills Puerto Rico design 'dramatic'

LAS CROABAS, Puerto Rico — The region's first golf course designed by Arthur Hills is scheduled to open this fall, with a second 18-hole course under development.

Located 31 miles from San Juan, on the northeast tip of Puerto Rico near Las Croabas, the \$200-million, 926-room El Conquistador Resort and Country Club sits atop a cliff with a 300-foot drop to the Atlantic Ocean on one side and the Caribbean Sea on the other. They merge in a harbor below the resort.

The par-72, 18-hole championship course has dramatic views that extend across water as far as St. Thomas and over land to the mountains of the El Yunque rain forest.

Says Hills, "Without question, the El Conquistador golf course is breathtaking. It offers tremendous elevation changes and the views from the course are awesome. It is the perfect site for a world-class resort and golf course."

## Lake Nona gets World Cup selection

ORLANDO — Lake Nona Golf Club, a Tom Fazio design under the management of head superintendent Ken Glover, has been selected as site of golf's 1993 World Cup. Opened in 1987, Lake Nona has already been included in *Golf Digest's* list of America's 100 greatest golf courses.

This year's World Cup competition is tentatively scheduled for Nov. 12-14 and was sanctioned by the PGA Tour.



## DYE, STRANGE CONSULT AT KINGSMILL

Renowned golf architect Pete Dye, right, who 17 years ago designed Kingsmill's River Course in Williamsburg, Va., recently returned to consult with tour pro Curtis Strange, left, and Ed Seay of the Arnold Palmer Golf Design Group. Their mission was to make Kingsmill's River and Plantation courses even more challenging. "We need to keep up with the other, newer courses in the area," Dye said.

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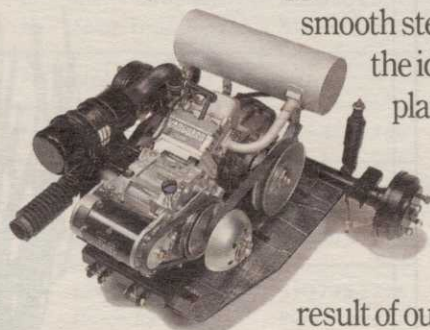
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CIRCLE #134

## Delaware program helps owners deal with underground tanks

### Fund a demonstration project for the country

In one of his final official acts, then U.S. Environmental Protection Agency (EPA) Administrator William K. Reilly joined Delaware Gov. Michael N. Castle in Wilmington to announce the beginning of a new program designed to help business owners, farmers, and homeowners reduce impacts to water resources from non-point sources of pollution.

The program will be a demonstration project for the nation.

Using the Delaware Water Pollution Control Revolving Fund, the Department of Natural Resources and Environmental Control will provide low-interest loans to qualified borrowers for such projects as cleaning up of underground storage tank sites.

Qualifying owners of underground storage tank sites will be eligible for loans to

assist small independent businesses in repairing underground tanks used to store gasoline and other products.

The Leaking Underground Storage Tank Loan Program will be used to remove old tanks, clean up contamination at sites, and install leak detection systems.

The DNREC estimates about 500 sites need further investigation or clean up.

This program complements Delaware's Early Compliance and Detection Incentive Program, established to reimburse some tank owners for their clean up costs.

Combined funds available for all three programs total \$2,060,000.

Under the program the EPA provides 80 percent of the funding with the state of Delaware providing 20 percent. In addition to these three programs, the Delaware Water Pollution Control Revolving Fund will be used to support wastewater improvement projects for municipal and county governments.

## Casper/Nash tracks open doors

Two new golf courses designed by Casper/Nash architects opened Nov. 30 at Del Webb's Sun City communities in Palm Springs, Calif. and Las Vegas, Nev.

The course in Palm Springs is designed around the new Sun City retirement community.

"It's a beautiful desert golf course," said architect Greg Nash. "The layout features sand dunes, 14 lakes, palm trees, ornamental flowers, water falls, and large greens. We've planted over 1,000 new palm trees, and have about 1,500 other trees on the course — 800 of those are mature date palms, and about 200 surround the 18th green."

The contoured greens average about 7,500 square feet, making putting very challenging and allowing for various pin placements, says newly hired pro Ken Stier.

"Some greens look like the back of a camel, but they play true and fair.

The course is 6,800 yards long, par 72, and is recessed, and so the housing looks down onto the greens and fairways."

The course in Las Vegas is on the northwest hillside.

"It's built on the highest point overlooking the city of Las Vegas. So we took advantage of the terrain," said Nash. "Most holes play uphill or downhill, with elevated tees and greens.

"We planted a lot of pine trees, so it doesn't look like a desert course. The greens are large, the pin placements varied, and the terrain rises and drops 500 feet. The last five holes are all downhill, and the view is spectacular."

It is 6,330 yards long and plays par 72, says golf pro Doug Anderson.

## U.S. courses newly approved

Location	Course Name	Type	Holes	Class	Work	Contact	Telephone
<b>Colorado</b>							
Denver	Kennedy GC	M	9	R	N	Dennis Wong	303-964-2562
<b>Hawaii</b>							
Hilo	N/A	N/A	18	R	N	Akahi Joint Venture	N/A
<b>Illinois</b>							
Quad Cities	Frye Lake West CC	N/A	18	R	N	The Goforth Group	312-280-0800
<b>Minnesota</b>							
Willmar	Willmar GC	P	9	R	A	Doug Hagemeyer	612-235-7915
<b>Nevada</b>							
Carson City	Lightning W Ranch	D	18	R	N	Robert Muir Graves	510-939-6300
<b>Virginia</b>							
McLean	Fort Belvoir	N/A	18	R	N	Ault, Clark & Assoc.	301-942-0716
<b>Wisconsin</b>							
Fond du Lac	Rolling Meadows GC	M	9	R	A	Dick Nugent	708-438-5222

Continued on next page



### BRAUER, LANDSCAPES UNLIMITED TEAM UP IN NEBRASKA

Champions Club sports fairway undulations, berms, water and plenty of sand. Designed by Jeffrey Brauer of Arlington, Texas, the course opened last June 19. It was constructed for Maenner/Horgan Development Co. by Landscapes Unlimited, Inc. of Lincoln, Neb., named Golf Course Builder of the Year in annual voting conducted by Golf Course News. Champions Club is part of a 200-acre residential development called Eagle Run West, which has 120 single-family lots. Bob Horgan said his firm is in the process of converting the course to a full-service country club with a 32,000-square-foot clubhouse and a tennis pavilion. It is aiming for 400 golf members and 300 social members, according to Horgan.

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CIRCLE #135



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CIRCLE #136

## U.S. courses newly planned

Continued from previous page

Location	Course name	Type	Holes	Work	Contact	Telephone
<b>Colorado</b>						
Woodland Park	Mule Creek	D	18	N	John Harbottle	510-735-2216
<b>Georgia</b>						
Jekyll Island	Oceanside GC	D	9	A	Betty Tomlinson	912-635-2236
<b>Idaho</b>						
Lewiston	N/A	D	18	N	Nez Perce Cnty Comm	208-799-3090
<b>Illinois</b>						
Hamel	N/A	D	18	N	Mayor Rich Boeker	217-633-2230
Mokena	Ashford Glens	N/A	18	N	Patrick O'Gorman	708-479-9620
Rock Island Cnty	Coal Creek	D	18	N	Hale Irwin	314-965-8787
<b>Kansas</b>						
Lawrence	N/A	D	18	N	J. Stewart	913-842-5263
<b>Kentucky</b>						
Louisville	Indian Springs	D	18	N	Kingsley Stratton	502-893-3516
<b>Missouri</b>						
St. Louis	Twin Hollow GC	D	27	N	Tom Rollins	314-894-3805
<b>Nevada</b>						
Minden	Buckeye Creek	D	27	N	Larry Walsh	702-782-5646
<b>New York</b>						
Canton	N/A	M	9/18	N	Mayor David Button	315-386-2851
Cheektowaga	Rehm Road Park GC	D	18	N	Spvsr. Frank Swiatek	716-686-3465
<b>North Carolina</b>						
Hillsborough	University Station	N/A	18	N	N/A	N/A
<b>Pennsylvania</b>						
New Garden	Hartefeld Nat'l GC	D	18	N	Charles Robinson	215-444-9465
<b>South Dakota</b>						
Huron	Meadowbrook GC	M	9	A	Mayor Merle Lewis	605-352-1660
<b>Utah</b>						
St. George	Plantations	P	18	N	John Harbottle	510-735-2216
<b>Washington</b>						
Kitsap Cnty.	Tallamac	D	18	N	John Harbottle	510-735-2216
Mountlake Terrace	Nile Temple CC	D	9	A	Howie Johnson	206-774-9611

These are the last monthly listings of golf courses newly planned and approved that *Golf Course News* will publish. The lists will be published quarterly from this point on. *The Golf Course News' Development Letter* will, however, publish the lists bi-weekly. People may subscribe to the newsletter by contacting by contacting Peter Blais, *Golf Course News*, P.O. Box 997, Yarmouth, Maine 04096; telephone 207-846-0600; fax 207-846-2292.

These lists were published monthly since 1989 — the last year with the

assistance of Forecast Golf Marketing & Financial Systems Inc. of Richmond, Va. They include courses that have been planned or approved around the country in the past month. We would appreciate your help in updating this section. Please contact *Golf Course News* 207-846-0600.

Under "Type" — D=Daily fee, P=Private, M=Municipal.

Under "Class" — R=Regulation, E=Executive, P=Par 3.

Under "Work" — N=New, R=Renovation



Turtle Bay's 140-meter, par-3 4th hole is a challenge of accuracy.

## Graham returns home with a splash

QUEENSLAND, Australia—Former PGA Tour pro David Graham and his partner, golf course architect Gary Panks, will unveil Australia's newest championship course — Turtle Point Golf Club at the new Laguna Quays Resort here.

"This is an exciting homecoming for me," said Graham, whose design office is in Scottsdale, Ariz. "This is where I grew up, fell in love with the game of golf and launched my career as a professional golfer."

The course is located in Repulse Bay near the town of Proserpine at the heart of the Great Barrier Reef on a part of Australia's northeastern coast known as the Whitsunday Passage.

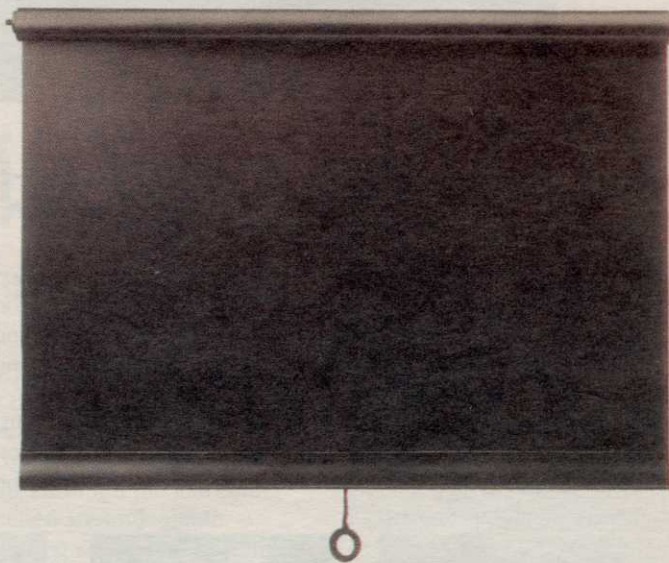
Because of new regulations, Turtle Point Golf Club will be the last course built in Queensland to feature ocean-front holes. Its 6th and 14th holes and 13th green overlook a cluster of small islands just off the coast.

The remaining 15 holes meander through a mature Australian bush setting with indigenous foliage such as oak, Black Boy (a type of Australian shrub) and eucalyptus.

The course features a 27-acre lagoon which has already attracted an abundance of native birds and wildlife such as wallabies and kangaroos.

"What we've created is a golf course of real beauty," Graham said.

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CIRCLE #137



# Hamm — a marquee commodity at famed Myrtle Beach

Continued from page 24

Goodbye Tour. Hello, golf course architecture. (Since then his victories include the North Carolina Open in 1966 and the North Carolina Senior Open in 1978 and 1979.)

Word spread about Hamm and his abilities and, before he knew it, he had remodeled and added nine holes at Forest Oaks in Martinsville, Va., and designed nine holes at Spoon Creek outside Martinsville.

After doing a half dozen golf courses on his own, Hamm began what became a long relationship with Myrtle Beach developers in 1966.

At that time only seven courses graced the Myrtle Beach. Hamm was about to put his fingerprint on it. Namely, Sea Gull Golf Course at Pawley's Island, Quail Creek, 36 holes at Burning Ridge, Eagle Nest, Beachwood Golf Club, Azalia Sands, Indian Wells,



*'I shaped every green on my courses at Myrtle Beach. On 10 golf courses that's a lot of greens.'*

— Gene Hamm

Pineland Country Club and Raccoon Run. His latest — in 1986-87 — was River Oaks.

No one alive or dead has had such an impact on golf design in

this golf mecca.

Why?

"I learned a lot with Robert Trent Jones Sr.," Hamm said. He had served in the U.S. Navy

during World War II and was an assistant to club pro Ellis Maples in Pinehurst, N.C., when Hamm took a job as construction supervisor of the Jones-designed Duke University Golf Course in Durham, N.C. After Hamm worked on a second Jones project — in Wilmington, Del. — his friend Smith entered the picture — and the rest is history.

Hamm said his three courses at Pinehurst were a perfect canvas on which to apply his skills. Pinewild Country Club's Holly and Magnolia courses — completed in 1987 — stand as his best work, he said.

"It was one of those rare pieces of property," he said. "I had 2,000 acres to work with and we did it as a development plan."

But he honed his skills in the other Carolina as well.

"I shaped every green on my courses at Myrtle Beach. On 10 golf courses that's a lot of greens," he said.

Is there a trademark of his work?

"I've done all kinds," he said, adding that budget and the site dictate a design's emphasis.

"You have to basically follow whatever topography and terrain you have to work with. After that, I try to do greens that have enough contour to keep them interesting and not get too severe," he said.

"Generally, you do what folks want to pay you for, with what kind of money they want to put into it. If they want a championship course, it takes a lot of money. If a group doesn't have the money, you build what they have the money for."

Hamm said developers in the last decade have spent more money on golf courses, and that means "you can design in a lot more mounds, larger sand traps, things like cross ties and landscaping."

"When we started years ago, there was no such thing as doing landscaping because the money wouldn't last that long. Now you can build amenities that make the course more picturesque. And you find a lot of landscapers working with golf courses, keeping the courses in flowers all year long. That wasn't done years ago."

A major improvement in golf, Hamm said, was development of the first hybrid Bermudagrass (328), which was used on the Duke course in 1956. Although it couldn't stand the cold winters, it led to more plant breeding and, shortly thereafter, introduction of Penncross bentgrass, a pioneering bentgrass for the South.

The future, Hamm said, includes son Gary "working with me in some areas. He has worked with me on four or five golf courses."



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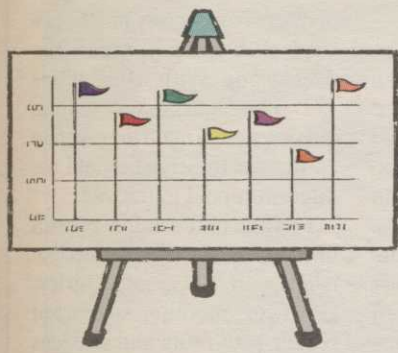
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BRIEFS



**BROOKS NEW VP AT CAROLINA GOLF**

Carolina's Golf Services Inc. has named David Brooks vice president of operations and development and J. William Hamilton vice president of golf operations. Brooks will oversee all construction, development and maintenance activities while Hamilton coordinates pro shop, grill room and clubhouse functions. Headquartered in Raleigh, N.C., Carolina's Golf operates four North Carolina clubs and is building a fifth.

**GOLF ENTERPRISES SIGNS 20-YEAR LEASE WITH PARADISE KNOLLS**

Golf Enterprises Inc. of Santa Monica, Calif., has signed a 20-year lease agreement to manage Paradise Knolls Golf Course in Riverside. The facility includes a pro shop, clubhouse and restaurant. New concrete cart paths and an upgraded irrigation system are planned. Golf Enterprises manages 24 public and private facilities.

**OAK TERRACE CC PURCHASED BY REALEN**

PHILADELPHIA — Delaware Valley homebuilder Realen Homes Inc. has purchased Oak Terrace Country Club. The property includes a private, 18-hole course and 178 acres of undeveloped land. Plans are to build nine new holes and rebuild nine of the old 18. The Resolution Trust Corp. had taken over the property and retained Legg Mason Realty Group to sell it.

**MERGER REUNITES EX-LANDMARKERS**

INDIAN WELLS, Calif. — National Golf Management Co. and Golf Pacific Group have merged under the National Golf name. The new company, which reunites former Landmark employees Buzz Gill, Joe Hough and Tony Campanaro, remains in Indian Wells. National Golf recently signed a consulting agreement with The Field Golf Club (formerly Desert Dunes) in Desert Hot Springs. It also operates Trappers Turn Golf Club in Wisconsin Dells, Wis.

**BROWN TO LEAVE INDY CLUB**

Former Club Managers Association of America President Kenneth Brown is leaving his executive vice president post at the Indianapolis Athletic Club March 1, and turning his attention full time to golf. Brown is co-owner of Twin Lakes Golf Club in Carmel and Sunset Hills Country Club in Pekin, Ill. He plans to form investor groups to purchase, lease and manage additional golf courses.



Kenneth Brown

Head to Head

Architects (and rounds played) rise to the challenge of "big name" competition

By MARK LESLIE

Notoriety, variety and fierce competition. They are common elements in the seven U.S. cities that boast golf courses designed by the Big Four: Pete Dye, Tom Fazio, Jack Nicklaus and Arnold Palmer.

While each designer aims for superiority in this good-natured rivalry, management at each course desires to draw the most golfers to its facility. Yet, instead of being hurt by top-notch competition, golf areas like Hilton Head, Myrtle Beach and Palm Springs thrive because of it.

"The great thing about all these architects is that each has his own unique style. From a marketing standpoint, it would be a great advantage to have a little bit of every-

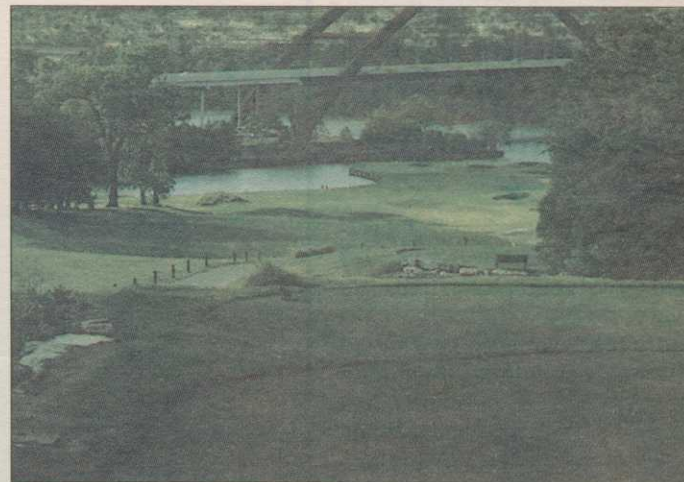
thing. Golfers would enjoy that," said Stever Harker, vice president of marketing for American Golf Corp.

"A client will ask us if we have a problem being five miles from a Fazio course or eight miles from a Nicklaus course," said Palmer design partner Ed Seay. "I say, 'Couldn't you get a piece of property right next door to them?'"

Design a course in a community that sports Dye, Nicklaus and Palmer tracks? "I'd rather do that than anything," agreed Fazio.

"When you come in [a town] behind them, you try to do something new. That's the fun of it," said Dye, adding that he returns to a number of his courses every

Continued on page 40



The city of Austin, Texas, can boast an entry from each of golf course architecture's Big Four. They are (clockwise from top left): The Hills of Lakeway designed by Jack Nicklaus; the Austin Country Club by Pete Dye; the Lakeside Course at Barton Creek Resort from Arnold Palmer; and the Barton Creek-Fazio course by Tom Fazio.

Marketing Idea of the Month

Breeding goodwill, new customers; all in the name of a worthy cause

By PETER BLAIS

SPRINGFIELD, Ill. — Imagine generating \$33,000 in late September from a course that, on its best midsummer day, makes around \$7,500. While you're at it, think about attracting a huge pool of new daily-fee players and gaining invaluable goodwill in your community?

That's what owner/manager Vince Alfonso did Sept. 28, at The Rail golf course. In the process he helped provide Christmas dinner for more than 2,000 needy Springfield families and candy-filled Christmas stockings for 1,900 children.

The Rail, in conjunction with Truck Centers Inc. of Springfield, raised \$33,000 (up 50 percent from a year earlier) at its second annual Friend-In-

Deed Appreciation Day held the last Monday in September. That represents almost 20 percent of the \$177,000 collected by *The State Journal Register's* fund-raising campaign for needy Springfield families.

Alfonso's motives were primarily philanthropic, although the marketing benefits attached are undeniable.

"I look at giving something back to the community as a responsibility," Alfonso said. "God gave us a beautiful piece of property. No one benefits if I can't make a profit. But it is also my responsibility as a conscientious steward to do something more with it than just make money."

"It would be difficult to take that Monday out of our June-July-August season. But

Continued on page 39

LinksCorp buys Missouri club

INDEPENDENCE, Mo. — LinksCorp, a golf course acquisition and management company headquartered in Northfield, Ill., has bought the 18-hole Rockwood Golf Club here.

Ben Blake, president and chief executive officer of LinksCorp, announced that Steve Ewry, 45, will be Rockwood's general manager. Ewry, a PGA member, comes to Rockwood from Kanawha Country Club in Charleston, W.Va. He has more than 20 years experience in the golf business.

LinksCorp plans improvements to the 6,000-yard, par-70 course that plays over 90 acres and also to the 12,000-square-foot clubhouse.



## CMAA expo to feature 400-plus booths

A record trade show, 90-plus educational sessions and the election of senior officers highlight the Club Managers Association of America's 66th Annual Conference, Feb. 21-25 at the Opryland Hotel in Nashville, Tenn.

Attendees will have two full days to visit the trade show. All space has been reserved for the 409-booth exposition, the largest in CMAA history. CMAA clubs generate approximately \$5.2 billion in revenue annually. Sixty-two percent of member clubs have golf courses.

Trade show hours are 8 a.m. to 4 p.m. on Sunday, Feb. 21 and 8

a.m., to 1:30 p.m., Monday, Feb. 22.

Seminars and roundtables of interest to golf club administrators include *Golf and the Environment*, *Elements of Golf Shop Operations*, *Master Facility Planning*, *Clubs in the Current Legal Environment*, *Personnel Policy Issues*, *Legal Liability Traps for Club Managers*, *Understanding Club Finances and Financial Statements* and *Fair Wage and Hour Regulations and Practices*.

In addition to the elections of

Richard Kolasa of Skyline Country Club in Tucson, Ariz. (see related story on page 1), as president and William Schulz of Houston Country Club as vice president, three candidates are vying for the vacant secretary/treasurer post.

They are George Carroll of Town & Country Club in St. Paul, Minn., Randall Gudanowski of Indian Trail Club in Franklin Lakes, N.J., and Norman Spritzig of Fort Wayne (Ind.) Country Club.

## NCA head foresees anti-club legislation

WASHINGTON, D.C. — From a legal/legislative perspective, private clubs faced a number of unprecedented challenges during 1992, said National Club Association Executive VP Gerard F. Hurley in a year-end report to members.

NCA's government relations efforts tackled issues ranging from the proposed denial of club dues deductions to attempts to deny private status, the definition of an inde-

pendent contractor, and the private club exemption in the Americans With Disabilities Act. The states' and federal government's need for revenue continues to drive tax and deduction-repeal initiatives.

Private clubs must remain braced for more anti-club legislation in 1993, said Hurley. However, member support of NCA's programs and services was reflected in a record renewal rate of 94.5 percent.

## President Kolasa

Continued from page 1

was elected to the board of directors in 1987, re-elected in 1989 and served as secretary/treasurer two years ago.

He has been appointed to numerous committees including budget and finance, conference, executive, liaison, strategic planning, magazine, member services, membership, student development and ethics and grievance.



Richard Kolasa

Kolasa's main goal as president is to help the club industry prepare for changes, particularly demographic and environmental, in the years ahead.

"People are retiring earlier all the time. That means more pressure on golf clubs to provide service to those people," Kolasa said.

"Older people are looking for places to meet new people, too. Clubs provide that and a lot more."

Skyline recently sold its irrigation wells to the city and began using effluent, even though it cost more.

"We're very conscious of the environment. Converting to effluent was the responsible thing to do. We overseed with rye so the course is green year round. And we grow turf wall-to-wall. We have to be environmentally responsible," Kolasa said.

Private clubs have taken heat for discriminatory practices in recent years. Kolasa sees no place for discrimination in private clubs and believes the practice has been weeded out of the industry.

"If someone is qualified and can afford to join, you can't discriminate," he said.

Kolasa is looking forward to taking over the reins during the CMAA's 66th Annual Conference and 16th Annual Exposition.

"It's going to be an excellent conference, particularly the trade show," he predicted. "There's so much available to improve how we do our job and make things easier."



## DIMENSION®. Crabgrass that doesn't lose sight

A good game of golf depends on an intricate combination of variables; it's a fragile thing. So is the environment.

Dimension® turf herbicide lets you complement both.

Its season-long control of crabgrass contributes to the kind of playing surface golfers need for a good game. Yet, as tough as Dimension is on crabgrass, it doesn't forget nature's delicate balance.

That's because the properties of Dimension include very low use rates. You only put down a fraction of the active ingredient needed with other turf herbicides. Plus, Dimension has low mobility in the soil. And it won't leave unsightly stains.

Dimension is also exceptionally safe on most turfgrasses. You can use it to control a variety of weed species on fairways, roughs, tees and greens\* — without causing root injury.



## Marketing Idea of the Month

Continued from page 37

September is still beautiful golf weather and has become a prime time for us."

This is how Friend-In-Deed Appreciation Day works. Anyone paying \$150 gets one of the 128 slots in the afternoon shotgun start; \$125 secures one of the equal number of morning tee times; and \$100 gets a round at any future date within the next year. The entry fee allows participants into all festivities, which include breakfast, lunch and din-

ner, a guaranteed-winner drawing for a \$22,000 truck, and tickets for thousands of dollars in additional door prizes contributed by local merchants.

The costs?

The course is tied up for one day and 256 rounds. Carts are included in the entry fee. Based on midsummer rates of \$32 and 250 rounds, that represents about \$7,500 of lost income. Rates are the same though rounds are fewer during the shorter daylight hours of early fall.

If all the \$100 rounds sold out, the course would be obligated to provide another 256 free rounds over the next year. The numbers, so far, have been well below 256. And those taking advantage of the \$100 offer frequently bring friends or clients when they cash in their round, generating additional revenue for The Rail.

Food is another expense. Most is contributed by vendors. The chef also donates his time and talent.

Then there are administrative expenses. Participating businesses in the Friend-In-Deed campaign are required to absorb any cost associated with fundraising efforts, allowing 100 percent of the money raised to be passed on to needy families.

"Administrative costs are the biggest — my secretary's time, paper, promotional materials, flyers. It adds up," Alfonso said.

But it's worth it for the sense of being able to give something back to the community, he added. The *Journal Register* promotes the event, generating publicity and invaluable goodwill for The Rail.

Interestingly, most players came from out of town. Alfonso attributes that to participants viewing the event as a golden opportunity to play somewhere other than their home course and to help a worthy cause. The \$100-150 is also much more than the \$32 local golfers are used to and may scare some off, he added.

Out-of-town participants often return because they liked the course. And those who paid \$100 to play at a future date often bring friends, who pay full freight, to fill out their foursome.

Alfonso said he was very happy with the \$33,000 raised, although it was \$17,000 below his originally stated goal. The afternoon slots sold out, as did most of the morning tee times. But the future rounds at \$100 apiece fell short of projections.

Organizers set the lofty \$50,000 goal after upgrading the \$12,000 truck for the 1991 drawing to a \$22,000 truck in 1992. But the more expensive vehicle didn't seem to make a difference. And participants found it difficult to believe organizers guaranteed someone would win the truck — donated by H. John Hopkins and Larry O'Connor at Truck Center — rather than giving it away only if a participant got a hole-in-one, Alfonso said.

"I wouldn't say we were disappointed we didn't make \$50,000," he said. "Surprised might be a better word. It just shows no matter how good you think an idea is, you have to allow for reasonable growth. We raised \$11,000 more than the previous year. That's pretty darn good. You have to set realistic growth goals."

Figuring past participants represent their best market, The Rail is already mailing promotional materials to those golfers and offering them first shot at preferred tee times. Past players are also being encouraged to sign up three friends. Remaining slots will be opened to the general public in June.



This was the festive scene last Sept. 28, at The Rail golf club in Springfield, Ill.



## control, from spring to fall, of the environment.

In addition to its environmental characteristics, Dimension gives you unparalleled flexibility. It's the only turf herbicide that can control crabgrass with either a preemergence or early post-emergence application. Or, with a preemergence application of new Dimension on fertilizer, you can keep fairways and roughs healthy and keep crabgrass away.

To do a better job of looking after your course, without over-looking the environment, call: 1-800-323-1421.



**DIMENSION**  
Turf Herbicide  
CIRCLE #139  
by Monsanto  
The toughest thing to emerge since crabgrass.



## The Big Four Breakdown

DF= public; PR= private; R= resort;  
RE= residential; SP= semi-private

### Atlanta, Ga.

Atlanta National (RE) — Dye  
CC of the South (RE) — Nicklaus  
St. Ives (RE) — Fazio

### Austin, Texas

Austin CC (PR) — Dye 1984  
Barton Creek - Fazio Course (R) —  
Fazio 1986  
Barton Creek - Lakeside Course (R) —  
Palmer 1988  
Hills of Lakeway (R) — Nicklaus 1981

### Charleston, S.C.

Kiawah Island-Turtle Point (R) —  
Nicklaus  
Kiawah Island-Osprey Point (R) — Fazio  
Kiawah Island-Ocean Course (R) — Dye

### Hilton Head, S.C.

Colleton River Plantation — Nicklaus  
Harbour Town Golf Links (SP) — Dye  
Moss Creek — Fazio  
Sea Pines Plantation GC's Club Course  
— Palmer

### Jacksonville, Fla.

Amelia Island (R/DF) — Fazio  
Plantation Club (Sawgrass) (RE) —  
Palmer  
Tournament Players Club at Sawgrass  
(DF) — Dye

### Michigan

Grand Traverse Resort - The Bear (R) —  
Nicklaus  
Shanty Creek — Palmer  
Treetops (R) — Fazio

### Myrtle Beach, S.C.

Debordieu Colony CC (PR) — Dye  
Pawley's Plantation (PR) — Nicklaus  
Myrtle Beach National GC (3) —  
Palmer  
Waschesaw (PR) — Fazio

### Newport Beach, Calif./ San Diego, Calif.

Aviara Golf Course (R) — Palmer  
Dove Canyon — Nicklaus  
Pelican Hill (R) — Fazio  
The Farms — Dye

### Orlando, Fla.

Eagle Pines (R) — Dye  
Grand Cypress (R) — Nicklaus  
Islesworth G&CC (PR) — Palmer  
Osprey Ridge (R) — Fazio

### Palm Beach, Fla.

Emerald Dunes (R) — Fazio  
Ibis G&CC — The Legend — Nicklaus  
Loxahatchee (PR) — Nicklaus  
Old Marsh (PR) — Dye  
PGA National - The General Course (R)  
— Palmer

### Palm Springs, Calif.

PGA West - Stadium Course (R) — Dye  
PGA West - Resort (R) — Nicklaus  
PGA West - Palmer (R) — Palmer  
Vintage Club (PR) — Fazio

### Pinehurst, N.C.

Pinehurst No. 6 (R) — Fazio  
Pinehurst National C. (PR) — Nicklaus  
Pinehurst Plantation — Palmer

### Tucson, Ariz.

Karsten GC (DF) — Dye  
La Paloma — Nicklaus  
Ventana Canyon (R) — Fazio

### Vero Beach, Fla.

John's Island Club (PR) — Dye  
John's Island West (PR) — Fazio  
Orchid Island — Palmer

### Wilmington, N.C.

Landfall — Dye  
Landfall — Nicklaus  
Porter's Neck — Fazio

## Nicklaus, Dye, Palmer & Fazio

Continued from page 37

year in an effort "to fix up to keep up" with the competition.

Variety and competition are factors to which golfers can relate, and the attraction of big-name architects is not lost on the people marketing these courses.

Myron Klement, head pro at the Nicklaus-designed Hills of Lakeway in Austin since 1987, said golfers get a kick out of playing and comparing the Nicklaus course with the Fazio, Palmer and Dye tracks in town. Barton Creek's Lakeside Course designed by Palmer in 1988 and Fazio Course, built in 1986, are resort courses, as is Hills of Lakeway, which opened in 1981.

For "destination resorts," having major golf names attached to several courses "strengthens the whole area," said Harker.

Seay calls it "the draw of notoriety."

"But it depends on the market," said Harker. "In Phoenix it's an advantage, but the challenge is that in some markets there is an oversupply of courses."

### DESIGNING HEAD TO HEAD

"I know good and well that Tommy and Jack feel the same way: Give us each a corner at a major intersection," said Seay.

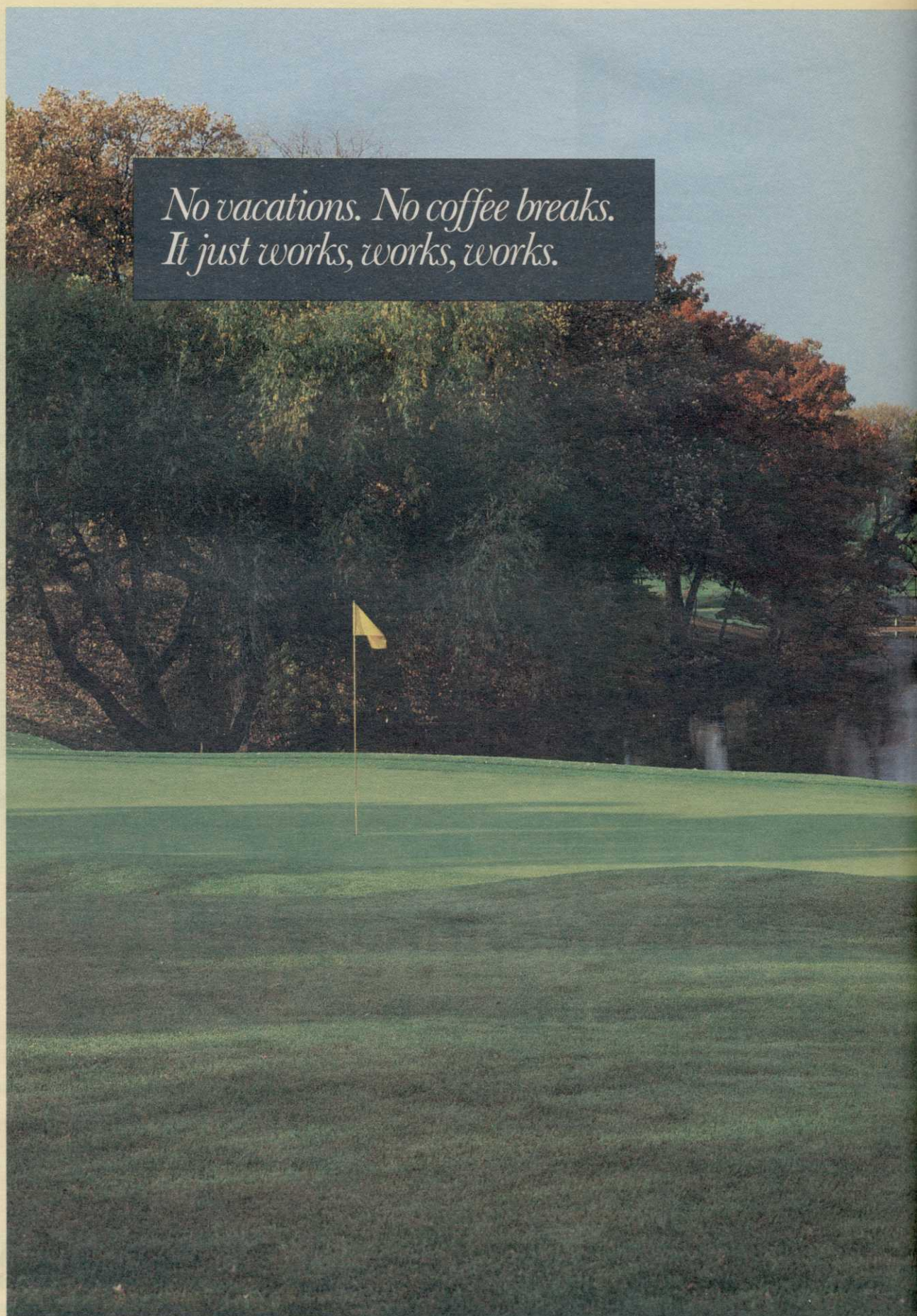
"I think everybody gets better and pays more attention. Everybody benefits, first from the way we approach the design. We want to make sure what we are doing is not seen on these other courses..."

Secondly, when you go into these areas with all these great golf courses, you'll probably never find better conditions... This exchange of variety is the healthiest thing that can happen to the development of golf."

"Usually a standard has been set if they've [other designers] already been there," Fazio said. "It makes you work harder. If you're the first one in, you have to set the standard because everybody's always comparing. It's a fun challenge, that excitement of competition — not only in making the product but competing against your peers."

It's difficult to say whose courses are the most popular to golfers. No one city has courses

Continued on next page



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## Golf course owners reach nationwide group buying agreement with Yamaha

CHARLESTON, S.C. — The National Golf Course Owners Association has named Yamaha Golf Cars as the primary golf car vendor company for its new national purchasing program, the first such agreement ever entered into by a major golf association.

Yamaha, a charter sponsor of the organization, is the first manufacturer to be involved with the program.

"This is a landmark agreement for the association and we are extremely pleased to have a quality company like Yamaha designated as our first primary supplier," said Michael Hughes, the NGCOA's executive director.

The NGCOA, a non-profit trade group, is made up of 1,200 member courses throughout the United States.

Yamaha was selected on the basis of product quality and value, ability to meet the needs of a national membership, and commitment to the golf industry, according to Hughes.

Under the terms of the agreement, the association's members will enjoy preferred pricing, parts discounts, national and dealer service support and exclusive NGCOA-member factory schools at Yamaha's manufacturing facility in Newnan, Ga.

Clayton Burrous, the NGCOA's director of purchasing, and Mike Muetzel, Yamaha's national accounts manager, will oversee the implementation of this first-of-its-kind national agreement.

For more information call 803-768-6540.

## The Big Four

Continued from previous page

by the four architects that are all open to the public.

And the meaningful number for course managers — profits — would have to include greens fees, which are seldom the same.

Dye's Austin CC played 38,000 rounds last year — an amazing number for a private club. The Fazio and Palmer layouts hosted 33,880 and 22,637 rounds, respectively, in 1992, while the Nicklaus course totaled 29,000.

PGA West hosted 40,000 rounds on each of the Nicklaus Resort and Palmer Courses, at \$80 greens fees, while Dye's Stadium Course played 50,000 rounds at an average greens fee of \$110.

Dye flatly said more rounds are played at his courses than at his colleagues'.

Does that mean people enjoy his courses more than the other designers?

"Either that or they're crazy," Dye said.

Yet Dye said many factors affect play at a course. An example is Kiawah Island in Charleston, S.C., with its Turtle Point by Nicklaus, Osprey Point by Fazio and Ocean Course which Dye designed in 1991-92.

"First, Nicklaus built his course when Kiawah was in its infancy. Tom's course was inland. But the whole world landed in my lap. No one's ever given 10 holes on the ocean [like that]."

The result: Last year there were 35,000 rounds at Turtle Point at an average greens fee of \$65 and another 35,000 at Osprey Point at \$63.50, but 37,500 rounds at the Ocean Course even at a whopping \$94.50 per round.

On the other hand, Dye built the first course at Kingsmill in the Williamsburg [Va.] area "and now everyone's better. So I'm charging them one dollar a year and working with them to get it better," he said.

Seay numbered people and play as the "common denominators of success for golf courses."

"The variety and challenge of different designers, a multiple selection of design in any given community is very, very healthy," he said. "The strength of golf is its variety. If we were all Donald Rosses, Ellis Mapleses, or Alister Mackenzies, it would start to get boring."

To that end, the word "emulation" is not even in the vocabulary of these men.

"It's like playing golf," Fazio said. "You play your own game and don't worry about the other guy. When you play golf, you're playing the course and not the other players."

"I don't look at it as like match play but total play. You base it on the budget, conditions, land. Don't worry about what someone else is doing. Do they have a better piece of land, more money? You don't want to make excuses."

"But it is fun to compare afterward."



The Workman's four wheels mean greater stability plus a full 2600 lb.\* capacity.

Nobody has

more jobs than a golf

course or park superintendent. But you can't do everything or go everywhere.

So here comes the Toro Workman™ 3000.

A totally new work vehicle with four wheel stability, three wheel maneuverability and incredible versatility. It not only hauls more cargo, but also lifts, tows, dumps, sprays, spreads, levels, conditions, saws, trims, washes, top dresses, and more. All with Toro reliability.

It's the latest product of our partnership with three generations of superinten-

dents. To create turf areas of stunning beauty and superb playability.

The Toro Workman 3000. It's a lot like you. It works, works, works.

\*One ton of cargo, plus bed, operator and passenger.



Many of your key existing attachments retro-fit Workman. And Toro has more to get the most from this versatile vehicle.



CIRCLE #140

Helping You Put Quality Into Play.™



## Hills: Ranges take pressure off golf course managers

Practice facilities are taking the pressure off golf courses by providing areas for golfers to improve their shot-making and for beginners to learn the game, according to Arthur Hills, president of the American Society of Golf Course Architects.

"Golfers who can't get a tee time can work on their game at practice facilities, which are usually more accessible than golf courses," said Hills. "In addition, golfers who don't have the time to play an entire round can practice

putting, driving and many other shots even if they have less than an hour to spare.

"Practice facilities allow beginner golfers to learn and enjoy the game without the pressure of playing on the course," he said. "New participants also can learn the etiquette and rules of the game, which will make for a more enjoyable experience once they actually play a round on a regulation course."

### DESIGN TRENDS

There are several types of prac-

tice facilities, including stand-alone driving ranges, extra holes on golf courses, and deluxe training centers that feature driving ranges, putting areas and bunkers. Large practice tee areas allow the golf course superintendent and golf professional to distribute wear over a larger area. Teeing areas are often one-half to one acre in overall surface area.

Target greens at designated distances from the teeing area are becoming more common. Lesson tees are often designed as sepa-

rate teeing areas at the end of the practice range or at the sides of the teeing area. If the lesson tees are located at the end of the range, an adequate buffer distance of approximately 350 yards (or greater) must be implemented.

Practice bunkers and practice greens are often implemented into designs by the golf course architect. Practice greens should be of ample size; 10,000 square feet plus is typically a desired surface area which allows for a variety of cup settings.

### PROVIDING ADDED VALUE

Practice facilities built in conjunction with golf courses help golfers develop skills, while providing an excellent location for testing new equipment before purchase.

In addition, these facilities offer an excellent source of revenue for golf courses.

"The additional revenue generated through lessons and from the driving range can be used for capital improvements to the course," said Hills.

### LEARNING CENTERS

A typical driving range has 40 to 100 tees, requires approximately 15-20 acres of land and can accommodate hundreds of golfers each hour.

Taking the driving range concept a step further, learning centers offer golfers the opportunity to work on a variety of shots. As an example of an elaborate learning center, Hills cites the Man-O-War Golf Center in Lexington, Ky.

"The 30-acre project features a three-tiered driving range, chipping area, putting green, realistic target greens and golf-swing video analysis," and entice them to return."

## New High Performance Turfgrass Blend formulated specially for the Sports Turf Professional



# Leaderboard

TURF-TYPE PERENNIAL RYEGRASS BLEND

### Go with the leaders! Saturn, Envy and Omega II

Leaderboard is a blend of outstanding perennial ryegrasses for winter overseeding, sports turf, and general cool season lawn renovations. Dark green color, wear tolerance, and lower growth habit are just a few of Leaderboard's attributes. Add improved disease resistance, endophyte enhancement for better insect resistance, and better heat and drought tolerance and you have

a sure winner! And why not? Leaderboard contains only the best: Envy, the exciting new release that's darker in color and cold tolerant; plus Saturn and Omega II, the number one varieties in the NTEP national ryegrass and overseeding trials. So, when your first shot has to be good, don't take any chances. Go with the leaders. Go with Leaderboard!\*

### First Choice for Golf Course Overseeding



### ZAJAC PERFORMANCE SEEDS

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Other Zajac Performance Seed Varieties include Omega II and Saturn Perennial Ryegrasses, Emperor and Jaguar II Tall Fescues, Vista Spreading Fescue and Liberty Kentucky Bluegrass.  
\*May contain an additional ryegrass in selected regions.

## Ears for hearing?

Continued from page 10

The problem is: Ignorance is not blessed — it's just absence of intelligence; and a cause can all too often be the sole embodiment of folly.

And to those who apologize for an environmental activist's distortion of certain facts or refusal to scrutinize or give credence to scientific findings, I say: An excuse is a only reason stuffed with a lie.

### NEW FINDINGS, NEW OFFICIALS

Does this all sound like we're fighting a lost cause in getting environmental activists and government officials to really pay attention to scientific research like:

- Dr. Tom Watschke's pesticide runoff studies;
- superintendent Edward Nash's tests at Bayberry Hill Golf Course which corroborated the Cape Cod Study figures; and
- University of Florida and Missouri State University practice golf green investigations?

Perhaps. Perhaps not.

President Bill Clinton and Vice President/self-proclaimed environmentalist Al Gore have brought with them a new chief of the Environmental Protection Agency — Carol Browner.

She is said to be tougher on people, easier on land.

The golf industry should be quick to find out if she has ears to hear and eyes to see. It will then know from the outset what, and whom, it is facing in this age of rewritten wetlands legislation and tree-cutting mitigation.

But at the same time, the golf industry should make sure it is not itself deaf to truths spoken by the new people on the block.



## New chipper line from Salsco, Inc.

The new line of Chipper Shredders from Salsco Inc. features two units capable of shredding and vacuuming leaves, and chipping brush and limbs up to 5 inches in diameter, intermittent.

The 13-horsepower Honda model will handle limbs, branches and pruning up to 3 inches in diameter, vacuum and shred leaves and small twigs, reducing this material to mulch eliminating the problem for the home owner and commercial user of where to dispose of yard waste.

A road-ready trailer is offered, as an option, providing easy transport for the rental store owner and commercial user.

The commercial unit comes standard with an 18-horsepower Vanguard engine and will accept odd shapes and sizes of logs and limbs up to 5 inches in diameter. Also standard is the road-ready trailer, light kit and jack. The truck loader chute discharge direction is adjustable and the 10-foot by 10-inch-diameter, heavy-duty commercial vacuum hose is mounted to the unit for ease of transport and storage when not in use. Call Salsco, Inc. at 1-800-872-5726 or 203-271-1682 for further information.

CIRCLE #203



Solu-plex Fe from R.G.B.

## Water-soluble iron from R.G.B.

R.G.B. Laboratories has introduced Solu-plex Fe, a dry, water soluble fertilizer with 15 percent iron, 13 percent sulfur and four percent nitrogen.

Solu-plex Fe is compatible with amine herbicides and readily dissolves in the spray tank.

It is designed to be especially useful on golf course fairways and fertigation systems.

Solu-plex Fe is now available in easy-to-handle 15-pound bags to minimize waste disposal.

For more information on Solu-plex, call 816-474-3342; or write R.G.B. at 1531 Charlotte Street, Kansas City, Mo., 64108.

CIRCLE #204

## New sweeper from Terracare

Terracare Products has introduced the Terra Pick Up Sweeper. The sweeper can be used to pick up anything on the turf from aerating cores on the green to leaves. It is small and very maneuverable, with a 20-cubic-foot hopper.

A towed model that can be pulled with 14-horsepower tractor, it is 47 inches wide and can sweep from 1- 1/2 to 3 acres per hour. The brush is pow-

ered by a 5-horsepower commercial Briggs & Stratton engine.

It features easy dumping with a hand or electric winch, and an easily adjusted brush. The operator can engage or disengage clutch from tractor seat, and wheels can be removed easily. For more information, call Terracare at 608-429-3402.

CIRCLE #201

## EP 2100 — High-powered aeration

GROVER CITY, Calif. — EP Aeration, Inc. is marketing the availability of its new high-capacity system — the EP 2100.

The EP 2100 can aerate, oxygenate and turn more than 80 million gallons of water per day.

According to Steven Green, president of EP Aeration, Inc., "Despite its high-performance specifications, the EP 2100 still represents the most cost-effective solution to golf course water-quality problems.

"It's easy to install and main-

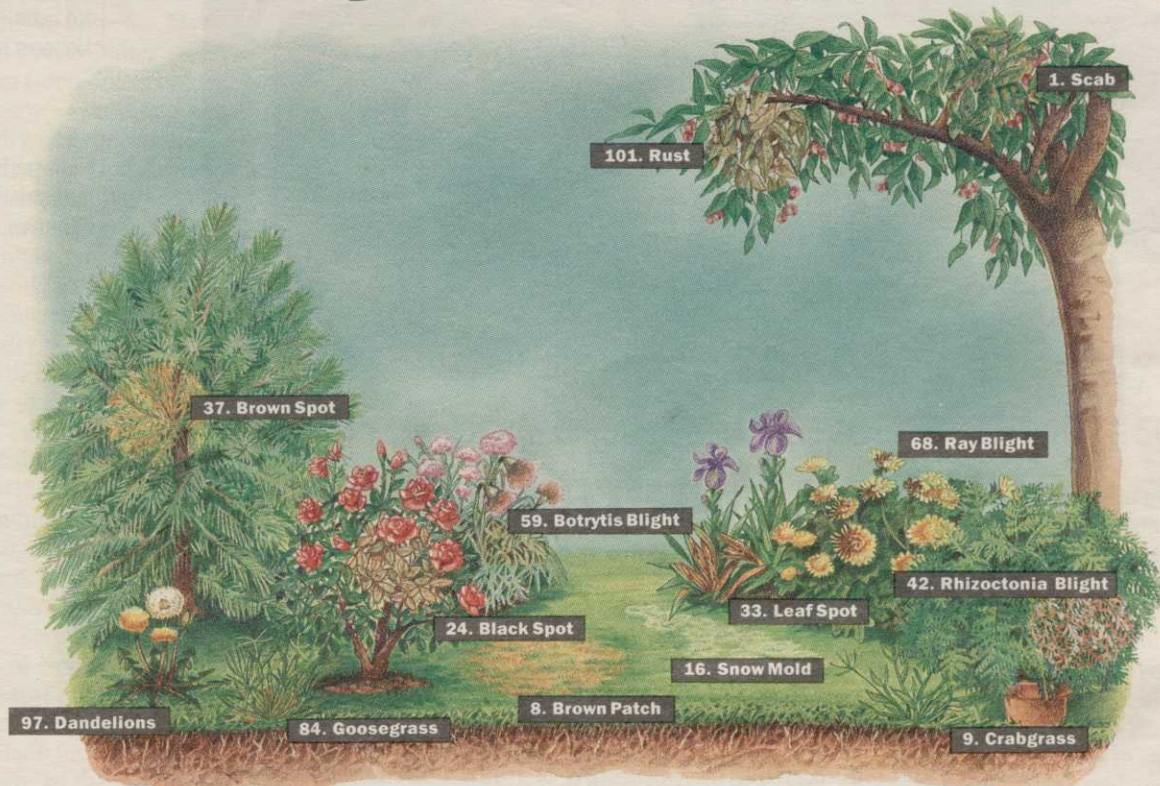
tain, and has a very low cost of operation."

As with EP Aeration's other models, the EP 2100 requires only a 110 volt, single-phase power source to run its dual 1-horsepower air compressors. All electrical components are housed on dry land. Operating power costs with EP Aeration's equipment can be as low as \$.07 (seven cents) per hour.

For further information, contact Steve Green at 805-489-4218.

CIRCLE #202

# Use the Turf Care® Pros for any number of growing problems. 138 to be exact.



Professionals count on the Turf Care Pros. To treat diseases, Daconil 2787® fungicide is the cornerstone of your management program. The broadest-spectrum fungicide on the market, it controls 18 disease-causing organisms on turf and 55 major ornamental diseases. And there's never been a documented case of disease resistance to Daconil 2787.

For pre- and post-emergent herbicide control of annual grasses and broadleaf weeds, it's Dacthal® and Daconate® 6. On pesky broadleaf weeds, use 2 Plus 2.



Always follow label directions carefully when using turf chemicals.

\*Roundup is a registered trademark of Monsanto Company.

And round out your program using Frigate® with Roundup\* to control perennial and annual weeds. Together with Daconil 2787, they all create a complete professional management program.

When it comes to turf and ornamental care, count on the Turf Care Pros. And count out labeled diseases and weeds — 138 to be exact.

**ISK Biotech Corporation, Turf & Specialty Products Division**, 5966 Heisley Road, P.O. Box 8000, Mentor, OH 44061-8000.

® Registered trademark of ISK Biotech Corporation.



## Earthwork software from Roctek

CHANDLER, Ariz. — Roctek has announced its latest release of Expose, a software package designed specifically for the earthwork contractor.

Expose accepts six methods of inputting data for existing and proposed information. Expose takes this data and applies it to a grid of 86,000 cells max. It performs all interpolations and calculations, reports quantities of cut, fill, and surface areas for total site as well as user selected sub-areas.

The package also generates a map indicating cut and fill locations by shades of colors for depth values. Expose allows 20 substrata layers and reports quantities accordingly. It also performs on-screen cross-sections from any location on the site.

Expose works with major brands of digitizers and uses IBM-compatible computers with EGA/VGA (color graphics). For more information, call 602-926-1705; or fax 602-926-0749.

CIRCLE #206

## Ringer's new hybrid fertilizer

The Ringer Corp. has introduced Turf 16•2•4, a new hybrid fertilizer for use on golf course fairways.

The new formulation combines the faster green-up action found in conventional fertilizers with the slower, controlled release nitrogen common to other Ringer products.

Ringer Turf 16•2•4 features three sources of nitrogen — urea, ammonium sulfate and

feather meal — combined in a patented system. The initial nitrogen release comes from urea, which is coated with a high-sugar, high-carbohydrate material. The remaining nitrogen is slowly released over the next six weeks through the degrading of feather meal and increased microbial activity with the ammonium sulfate.

For more information, contact Ringer at 1-800-654-1047.

CIRCLE #207

## Two new granulars from Lebanon

LEBANON, Pa. — Lebanon Turf Products has introduced two new granular fertilizer/preemergence control formulations — Country Club 18-5-9 and 7-3-22 with Dimension turf herbicide — for use on fairways.

Country Club 18-5-9, with 50-percent organic nitrogen and 5.5 units of WIN, is available with .09-percent Dimension turf herbicide. Country Club 7-3-22, with 100-percent sulfate of potash, is available with either .19-percent or .13-percent Dimension turf herbicide.

Dimension turf herbicide is designed to offer unsurpassed, season-long control of crabgrass and other annual grasses and broadleaf weeds. It will not discolor turfgrass or cause root injury. Country Club's homogeneous formulations are designed to deliver more particles per square foot for better coverage and superior preemergence control. For more information, contact Lebanon Turf Products, P.O. Box 180, Lebanon, Pa. 17042; 800-233-0628.

CIRCLE #208

## Hancor pipes now available in 42-, 48-inch models

Hancor, Inc. has unveiled its 42-inch-diameter Hi-Q pipe to be followed by 48-inch pipe.

Hi-Q pipe was first introduced by Hancor, Inc. in 1988. Hi-Q pipe is constructed entirely of polyethylene. It features a corrugated exterior for strength, and a smooth interior for high-capacity flow. Hi-Q pipe is lightweight for fast installations. It can also be easily and safely cut to length in the field for quick coupling.

It is available in 4- through 42-inch diameters, 20-foot lengths, with or without perforations. Regional availability may vary for 42 and 48-inch pipes.

For more information call 1-800-537-9520 (Ext. 260).

CIRCLE #205

## Regulation cups with Depth Gauge

Why rely on "eyeballing" hole depth when Standard Golf's new precision Depth Gauge assures consistently accurate hole depth every time?

It easily attaches to Standard Golf's Pro II Hole Cutter, which also accepts replaceable shells that can be changed for different soil conditions. Combined with the new Depth Gauge, this rugged turf tool is all you need to see exact USGA regulation cup depth.

For more information on Standard products and the names of nearby authorized distributors, call 319-266-2638.

CIRCLE #209

Made from bullet-proof Lexan® plastic.

Printed with UV stabilized ink that resists fading.

Subtle or loud colors: white on green or black on yellow.

Impact-resistant, solid PVC plastic stakes: 16" long.

The ideal size for maximum visibility: 6"x 11".

A wide selection of pertinent, concise messages.

No nuts. No bolts. No tools required.

High-performance industrial bonding adhesive.

## Tell 'em Where to Go and What to Do . . . Politely.

Do you want signs players will pay attention to? Signs that are:

- Virtually indestructible with easy-to-install stakes?
- Color-fast and fade-resistant?
- Contemporary and easy to read at a distance?

Well, you're looking at them. And the best news is they're from a company whose reputation for quality is unsurpassed, Par Aide.

Like all our products, these signs are built to meet the challenges of your course. They're a one-time investment that's almost like hiring a crew of Traffic Directors; the strong, silent type . . . and they'll report for duty within 48 hours. Just talk to your local Par Aide dealer.

For the name of the dealer nearest you, simply give us a call at 612-779-9851.



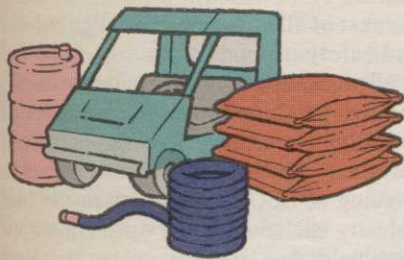
CIRCLE #143

Par Aide Products Company • 3565 Hoffman Rd. East • St. Paul, MN 55110 • 612-779-9851

GOLF COURSE NEWS



BRIEFS



**WILLIAMS NEW IRROMETER SALES HEAD**

RIVERSIDE, Calif. — Mark Williams has been named national sales manager at Irrometer Company, Inc., a Riverside-based manufacturer of soil moisture measurement and control systems. For the past three years, Williams has served as sales representative for the Southern California landscape market. Prior to that, he served as director of communications for the Irrigation Association.



Mark Williams

**BENNETT HEADS UP CELPRIL MARKETING**

Brad Bennett has been appointed CelPril's new marketing representative for the Southern United States. Bennett will serve as product coordinator for CelPril's new longer lived Rhizo-Kote XL Legume seed coating. Other responsibilities include working with vegetable seed and grass seed customers in the area of product support. Bennett was formerly with Pioneer Hi-Bred International. He will serve Texas, Oklahoma, Arkansas, Tennessee, North Carolina, South Carolina, Florida, Georgia, Mississippi, Alabama, Louisiana and Southern Missouri.



Brad Bennett

**NEW MARKETING DIRECTOR AT E-Z-GO**

AUGUSTA, Ga. — E-Z-GO Textron has named David L. Davis Jr. director of marketing. Davis was previously branch manager at E-Z-GO's Chicago facility. Davis joined E-Z-GO in 1985 as a sales representative for the Chicago branch. He was promoted to branch manager in 1986. Before coming to E-Z-GO, he was marketing manager for Public Risk Managers, Inc. in Atlanta.

**SMITH JOINS HYUNDAI**

SANTA ANA, Calif. — Barry Smith has been named Eastern Regional Sales Manager by Hyundai Golf Cars, U.S.A. Based in Atlanta, Ga., Smith is now responsible for overseeing Hyundai's Eastern regional sales division. In addition, he will coordinate Hyundai's manufacturing and distributor efforts to ensure that Hyundai fleets are promptly delivered and properly serviced. A graduate of Jones College in Jacksonville, Fla., Smith had spent the previous five years with Club Car.



Barry Smith

**Mergers & Acquisitions**

**Watertronics, Commercial Pump Service join forces**

Two manufacturers of packaged pump stations have joined forces in marketing their products and services.

Commercial Pump Service of Swanton, Ohio, and Watertronics Pumping Systems of Hartland, Wis., are integrating their sales, service and engineering capabilities. It will now be known as Watertronics-Commercial Pumping Systems.

The companies will continue to operate autonomously, integrating certain product lines and operations to better serve their customers.

This alliance creates a comprehensive line of pre-designed and custom-built pump stations and control systems available for golf courses, sports stadiums, turf growers and residential irrigation requirements, as well as a multitude of commercial, environmental and fire safety applications.

Continued on page 49

**Sandoz, O.M. Scott team up to develop Rizolex**

Sandoz Agro, Inc. and the O.M. Scott & Sons Company have signed a limited time, exclusive agreement for the development and commercial introduction of tolclofos-methyl fungicide (Rizolex).

As a stand-alone product or in combination as a fungicide premix, Rizolex will utilize a new chemistry developed in North America by Sandoz Agro. This unique chemistry is designed to provide superior cost-effective brown patch and snow mold control for both cool and warm season turf applications.

Scotts and Sandoz have been screening tolclofos-methyl fungicide since the mid-1980s. The exclusive agreement between Sandoz and Scotts leverages Sandoz' strong basic position in control technology and Scotts' applied R&D and marketing strength.

Continued on page 49

**Deere, Marsh Design sign on with Golf Asia**

By HAL PHILLIPS

SINGAPORE — Add John Deere Intercontinental the growing list of exhibitors scheduled to attend Golf Asia '93, the region's largest golf industry trade show, scheduled here for March 25-28, at the World Trade Center.

John Deere Intercontinental — Deere & Company's marketing arm in Asia, Latin America and the Caribbean — has been a participant in Golf Asia since its inaugural exhibition in 1990.

"Deere and Company's growth in the Asian golf and turf maintenance market, particularly within this past year, has been truly phenomenal," said Roy Wilson, territory manager responsible for Deere's development of the Southeast Asian turf maintenance market. "Much of this success we can attribute to the fine support that the Golf Asia Exhibition receives from all sectors of the Asian golf and turf maintenance community."

Also on board is Graham Marsh Golf Design, whose namesake — one of Australia's most noted touring professionals — recently christened the first nine holes of Negri Sembilan's Staffield Country Resort in Malaysia.

"Participation in Golf Asia once again is one I look forward to very much, knowing the core of the golf course development industry in Southeast Asia will be represented," said Marsh.

While Golf Asia '93 is designed to be a one-stop shopping venue — with playing and maintenance equipment under roof — the roster of maintenance, design and management firms continues to expand. Excluding manufacturers of clubs, balls and attire, here is a sampling of those company's that will exhibit at Golf Asia:

Agricultural Tractors Spares Pte. Ltd. (E-Z-Go Textron); American Golf Centers Ltd. (golf facilities); Austin Hills Country Club, resort wing; Australasian Golf Masters Pty. Ltd. (course design); Bay Bronze Industries (course accessories); Beaver Sports Pte. (course accessories); Berleburger Schaumstoffwerk GMBH (outdoor rubber tile); Bowie Weyerhaeuser Silver-Fiber Mulch (hydroseeding/hydrosprigging); Ditch Witch International (trenchers); Emerald One Golf & Country

Continued on page 46



Ground water at Fripp Island GC is naturally high in salt, which crippled many fertility programs.

**Combating fertilizer inefficiency by addressing pH levels and high salinity**

By FRED REHRMAN

When irrigation water is of poor quality due to either high pH or high salt content, nutrient availability problems can potentially result. Such is the case with many coastal courses in South Carolina.

Dr. Charles Peacock, associate professor in the Department of Crop Science at North Carolina State and chairman of the NCSU Turf Work Group, visited several coastal courses and believes the water being used

comes from aquifers of generally poor quality with high salt contents.

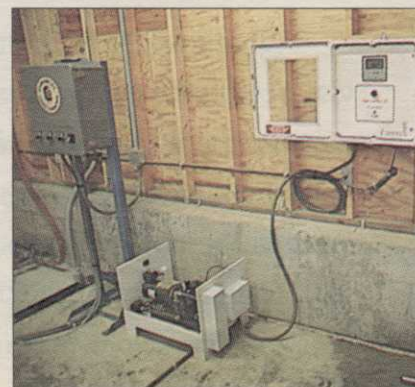
"The water used at Kiawah and Seabrook (both near Charleston) contains high levels of bicarbonates and carbonates that combine with high sodium levels to create soil pH problems," said Peacock, who added that pH is only part of the problem. "High sodium levels in irrigation water will displace calcium and magnesium in the soil, which are favorable for plant growth. Eventually, you start to develop nutritional problems."

Peacock said the excess of undesirable salts in the water create an osmotic stress within the plant that interferes with nutrient uptake at the point of absorption in the roots. If the salts are absorbed, then the plant has to deal with them internally.

South of Charleston, another course that perennially deals with these problems is Fripp Island Golf Course. Kevin Lashley, superintendent at Fripp Island, said well water and effluent used for irrigation is so high in salts that fertility programs have often been failures.

"With the water and soil pH so high, our fertility programs never really

Continued on page 50



After treating irrigation water, soil analyses showed salts dissolved and pH levels lowered.



# Ohio Turfgrass Conference headed back to Columbus in 1993

By TERRY BUCHEN, CGCS

COLUMBUS, Ohio—The Ohio Turfgrass Conference, this country's largest regional turfgrass conference and trade show, is moving back to Columbus on December 6-9, 1993. After a successful three-year run in Cincinnati, the Ohio Turfgrass Foundation signed a new 10-year contract to house the conference in the newly remodeled and enlarged Columbus Convention Center.

"We really enjoyed our three years in Cincinnati, but our attendance should grow even more having the conference located in the middle of our state," stated Ed Eaton,

chairman of the show and convention committee. "With over 4000 attendees, more than 300 exhibitors, and 32 speakers, the focal point is to have a different educational theme each year," Eaton noted.

"During our 26th Annual Conference in 1992, we initiated a job fair, hooking up prospective employers and job seekers to go through the interview process. We also continued our Silent Auction with over 30 companies donating a vast variety of items to further raise monies for the turfgrass industry," Eaton further explained.

John Street, executive secretary of the

OTF and Fred Bosh, chairman of the program committee, have done a great job in that department. The education workshops, in addition to the split and general session conference, have been extremely successful and they have only scratched the surface of the many future topics to be discussed.

The pesticide license training, testing, and re-certification has been well attended during conference week. Each educational speaker gives out a code word made up of letters and numbers at the "end" of each talk to maintain credibility while ac-

quiring re-certification points to keep abreast of all new pesticide regulations and safety procedures.

All proceeds go toward grants, research, and scholarships under the auspices of The Ohio State University Agronomy Department. Much of the research that is ongoing at OSU is shown off to the turf industry each September during their annual field day, headed up by Dr. Karl Danneberger.

For further information about any of the OTF activities please contact Phyllis Selby at 614-292-2601 or at OSU please contact Dr. Danneberger at 614-292-8491.



## Golf Asia '93

Continued from page 45

Club (resort developer); Farmers Marketing Corp. (turf); Forma Design Inc. (course design/planning); Gary Player Design Company; Gemas Golf Resorts (developer); Golfoto Inc. (course design); Golfplan-Ron Fream (course design); Golfscapes Asia (course design); Graham/Panks International (course design); Greenputt Corp. (course accessories); Guthrie Batam Resorts (developers).

Hardie Irrigation Pty. Ltd.; Hon Leong Corp. (Deere & Yamaha); Irrigation Hawaii (design); J. Michael Poellot Golf Design Group Inc.; Kato International Design Inc. (course design); Klages Carter Vail & Partners (course design); Kukup Golf Resort Management; L&M Fairway Pte. Ltd. (course construction); Nelson & Wright Golf Course Architects; New Zealand Tourism Board (developers); Nicklaus Design; OSV Engineering (golf cars/vehicles); Pacific Coast Design (design software); Pacific Golf (course construction); Palm Resort (developers); Palmer Course Design; Paradise Bay Golf Resorts (developers); Parks Supplies Co. Ltd. (rubber paver); Peter Dalkeith Scott & Partners (course design); Private Clubs International (management, design, developers); PT Intan Fajar (developers); Pulai Spring Resorts (developers); Rainbird Southeast Asia (irrigation); Raja and Associates (engineers, financiers); Resort Poresia Japan (course management); Richardson Nagy Martin (course design); Robbins & Associates Ltd. (course design, construction, management); Robert Trent Jones II International (course design).

Samwoh Engineering Pte. Ltd. (turf equipment); Sanders Hydruseeding Malaysia; Southern Turf Nurseries; Starhill Golf Resorts (developers); Techno Leisure Co. Ltd. (range equipment); The Scotts Company (fertilizer, pesticides, seed); Toro International Irrigation; Tractors Singapore Ltd. (turf maintenance equipment); Transworld Turf Inc. (course shaping, turf); Turf Feeding Systems Inc. (fertilizer, irrigation); Yuasa Shoji Pte. Ltd. (range equipment).

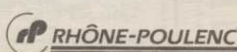


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# RISE honored for successful lobbying effort in Montana

By HAL PHILLIPS

WASHINGTON, D.C. — For lobbying groups, the ultimate compliment is a desired change in legislation. The next best thing is peer recognition.

Responsible Industry for a Sound Environment (RISE), a lobbying group representing the chemical pesticide industry, garnered its share of praise during 1992. Under the leadership of Executive Director Allen James, RISE has earned an Award of Excellence certificate in Government

Relations from the American Society of Association Executives for its efforts in defeating the Missoula, Mont. posting notification ordinance.

Missoula was the first city to propose an ordinance requiring sprayers to notify local residents about the pesticides being used within city limits. Just two weeks before the referendum, RISE officials went



to Montana and organized local pesticide firms.

After a battle with the Montana Public Interest Group over public opinion, voters shot down the ordinance, 57 percent to 43 percent.

"We found the particular ballot initiative to be one that the public did not understand," James told the *Legal Times*, a newspaper covering law and lobbying in the nation's capi-

tal. "So we built a coalition and helped educate the members of the coalition on the points. They in turn developed a local campaign to educate the public about the real issues."

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Before turning our attention from Capital Hill, take note of **Congressman Gary Studds' (D-Mass.) plans to introduce tax legislation in the 103rd Congress that would have a severe impact on pesticide applicators.**

Studds wants to establish a National Clean Water Investment Corp., whose purpose would be to fund state and local municipal sewage treatment plant construction and other clean water projects. Studds would finance this corporation with \$3 billion worth of taxes on "polluters."

According to the Washington-based Fertilizer Institute, \$2 billion would be assessed each year on wastewater discharges from industrial facilities. A full \$1 billion would be extracted annually from those who use pesticides and commercial fertilizer.

While the above proposal would greatly affect farmers, it would also take its toll on the golf industry. The Fertilizer Institute estimates that Studds' proposal, if passed, would result in a tax rate of 47 cents per pound of active ingredient in pesticides and a minimum of 1.7 cents per nutrient pound of nitrogen and phosphate fertilizer.

Stay tuned.

•••

A RISE meeting scheduled for early January has been rescheduled for early February. **The EPA Lawn Care Pesticide Advisory Committee meeting originally set for Jan. 6-7, has been rescheduled for Feb. 10-11, in Baltimore, Md.** For more information, call Elizabeth Lawder at the RISE office, 202-872-3860; or the EPA conference facilitator, Marilyn Millane, at 703-684-5588.

## Hydroturf now serving Florida

FITZGERALD, Ga. — Hydroturf, a Fitzgerald-based water injection turf aeration specialist, has announced expansion of its HydroJect service into Florida. Superintendents in the Sunshine State will be able to contract Toro HydroJect 3000 service through Hydroturf.

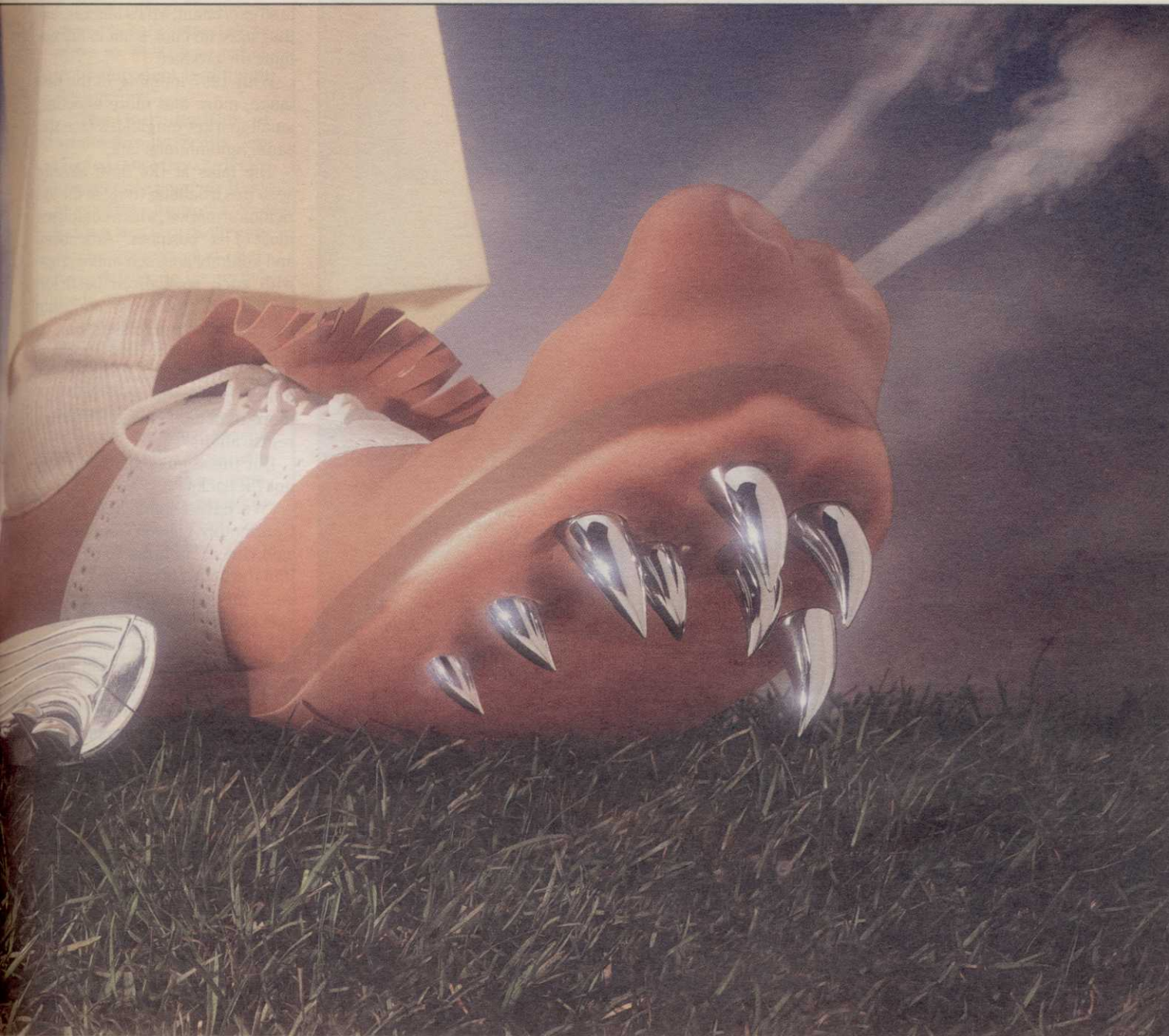
"Our service allows three or four contract aerifications annually, thus freeing capital for other, more frequently used equipment," said Hydroturf President Chris McIntyre. Hydroturf will continue to operate out of its Atlanta and Fitzgerald offices. The Atlanta office can be reached by calling 404-406-1494, while the Fitzgerald location can be reached at 912-423-6509.

## TATS joins the sports turf market

LUBBOCK, Texas — TransAmerican Technical Services, Inc., a new technical company, plans to serve the sports turf industry's needs for recent advancements in golf green soil building technology. Jerry Good is president.

TTS has developed a program to minimize green soil problems by systematic testing and analysis with tracking.

For more information, call 806-792-0072.



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## Northwest Turf Show Feb. 17

SPOKANE, Wash. — The sixth annual Inland Northwest Turf and Landscape Trade Show will be held here Feb. 17, at the Spokane Interstate Fairgrounds.

Aimed at turf industry professionals and landscapers, the show will feature a wide variety of turfgrass equipment and supplies. Admission is free and show hours will run from 9 a.m. to 5:30

p.m. on the 17th.

This show is sponsored by the Inland Empire Golf Course Superintendents Association (IEGCSA). According to show organizers, booth space is still available and can be reserved for as little as \$260.

For more information, contact Julie Boyce at the IEGCSA, 1708 North Lee St., Spokane, Wash. 99207; or call 509-534-4161.

## IR-4 Project: Another chance

Continued from page 1

University in New Brunswick, N.J., the IR-4 Project is a federally funded program that performs testing on chemicals used exclusively on minor crops — situations where manufacturers can't justify their own testing because of expensive regulatory mandates passed down by the Environmental Protection Agency (EPA).

"We pay for the testing, well, the government pays for the testing with funds provided by the USDA," said Guest. "We are avail-

able when industry can't pay for the test required by EPA because it is not economically feasible.

"We usually do residue studies — for food crops — as well as performance and crop safety studies. Tests such as toxicology and environmental fate studies are generally beyond the scope of our project, although we often work with others to get these tests done. We closely coordinate our program with both the EPA and agrichemicals industry. Most of our research is carried out by state

and federal scientists with help from private industry."

When it comes to the chemical industry, the mother of all mandates is the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Amendments to FIFRA in 1988 dictate that all chemicals registered with EPA before 1984 must be reregistered by 1997.

Dyrene, a long-used fungicide manufactured by Miles, is an example of a chemical that won't be reregistered because testing would cost in the neighborhood of \$6 million (*Golf Course News*, July 1992). Dyrene's market is very specific. Because the cost of reregistration is so exorbitant, Miles officials said they have no choice but to discontinue the product.

With 1997 looming in the distance, more and more effective, small-market fungicides face the same ignominious fate.

The folks at IR4 have already seen this troubling trend in the agricultural market, which comprises most of its "business." Artichokes and kohlrabi are such minor crops with such specialized pesticide needs, few producers can justify the cost of federal registration.

Since 1970, the IR-4 Program has developed data in support of more than 1,100 food use and more than 3,000 ornamental use registrations.

But these guys are scientists, not PR flacks.

"We have established an IR-4 Commodity Liaison Committee," said Guest, "in order to be tuned into the needs of our constituents — farmers, nurserymen and turf specialists. We want these people to know what we do and how we can help them get registrations for their specialty crops."

IR-4 is a self-described "broad-based, grass roots" organization, whereby pesticide-research proposals are directed to an IR-4 network of state and federal liaison representatives and coordinators. Each request for research assistance is reviewed internally and with personnel of EPA, or the appropriate federal agency.

Projects are then prioritized by regional and national review committees prior to being accepted as candidate research projects. The process can be lengthy, said Guest, but the 1997 deadline would work in favor of the chemical manufacturer.

"The process is lengthy," said Guest, "but with a beefed up program we will meet the reregistration deadline."

For more information, contact Dr. Guest at 908-932-9575.

### KOSTKA JOINS AQUATROLS

Aquatrols has named Dr. Stanley J. Kostka director of research. Kostka earned his Ph.D. in plant pathology from the University of Massachusetts. He also has 32 publications to his credit in national and international journals. Prior to joining Aquatrols, Kostka was research manager with a major agriculture bio-technology company.

GOLF COURSE NEWS



# Oregon Fine Fescue.

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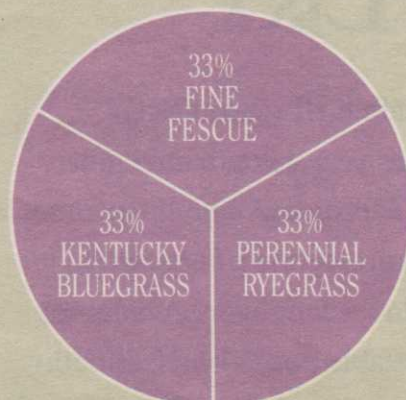
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Percentage by weight



**Oregon  
Fine Fescue  
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## O.M. Scott & Sandoz Agro pool resources

Continued from page 45

"We chose to enter into this exclusive agreement with Sandoz because the new technology provides customers with superior, cost-effective brown patch and snow mold control," said Richard Stahl, vice president and general manager of Scotts' Professional Business Group. "Rizolex is viewed as both a stand alone active as well as an excellent component in a fungicide premix."

"The introduction of Rizolex through Scotts," explained Dr. Bryan Delp, manager of Fungicide Business Development for Sandoz, "is a sign of our continuing dedication to effectively delivering innovative products to the turf industry in a timely and cost-effective manner."

Rizolex, whose registration is anticipated in 1994, is designed to be effective in both cool and warm season turf applications. It is seen as the active or as a component in up to six products within Scotts' current and future fungicide line.

Commercialization of products featuring the new fungicide active could begin as early as 1995.

Rizolex is a registered trademark of the Sumitomo Chemical Company.

## Jacobsen names Cutler new vice president of manufacturing

RACINE, Wis. — Jacobsen Textron officials have named James J. Cutler as the company's new vice president of manufacturing.

In his new position, Cutler is responsible for managing multi-plant manufacturing activities including quality assurance, materials management, manufacturing engineering and technical services. Cutler previously served as vice president of operations for Qualitrol Corp. of Fairport, N.Y. He has also held positions with



New corporate faces at Jacobsen Textron: James J. Cutler (above); Steven M. Ramig (top right); and Richard Mowry (right).

General Motors Corp. and Stone & Webster Engineering Corp.

He replaces Earl Klepel, who retired at the close of 1992 after 25 years with Jacobsen.

•••

In other Jacobsen news, Steven M. Ramig was named the company's new director of materials. Ramig's duties include responsibilities for the Purchasing, Production Control, Production Stores, Master Scheduling and Material Control departments.

Ramig previously served as

manager of distribution and marketing services at Jacobsen. He has been with the company since 1977 and has held management positions in sales, marketing, M.I.S. and finance.

•••

Richard S. Mowry was recently named Jacobsen's new manager of distribution and marketing services. In addition to market research, Mowry's duties include directing Jacobsen's computerized order entry system and customer satisfaction survey.

# LEAN MEAN PUMPING MACHINE

## Pump merger

Continued from page 45

The scope of services offered includes systems design and engineering, deep well pump service and restoration, repairs and retrofit upgrades, and station installations.

The combined national service organization will be headquartered at Commercial Pump's Swanton location, while all station-systems sales and marketing will be directed from Watertronics' Hartland offices.

Lee Dunbar of Commercial Pump Service and Richard Reinders of Watertronics are the principals. Their combined experience in the well, pump and irrigation industries spans more than 70 years. Robert Emmerich of Watertronics will direct the sales and marketing program.

"Customer service and satisfaction have always been key elements of both organizations," said Dunbar. "Now we feel we are able to make an even stronger commitment."

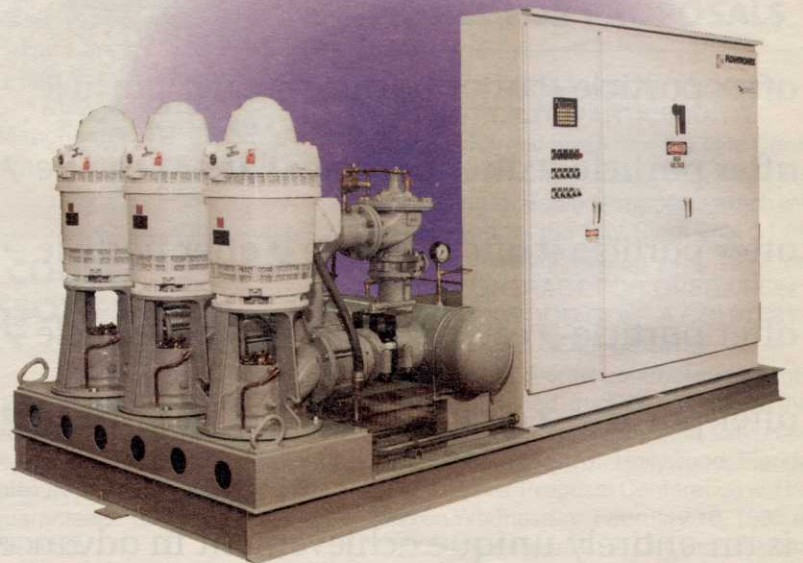
Added Reinders: "Individually, each company has been successful in its market area. Working together, our potential is unlimited."

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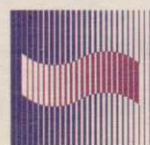
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## Sports Turf show at Cal-Poly Pomona set for March 23

POMONA, Calif. — California State Polytechnic University at Pomona will hold its 10th annual Sports Turf Institute and Exhibition on March 23. The Institute, sponsored by the Horticulture/Plant Soil Science Department and the Los Robles Club, will feature seminars conducted by experts in turf management and a trade show complete with field exhibit areas. For more information, call Dr. Kent Kurtz at 909-869-2219.

## Turfgrass Institute March 30-31

FALLBROOK, Calif. — The 34th annual Turfgrass and Landscape Institute, sponsored by the Southern California Turfgrass Council in cooperation with the University of California Cooperative Extension, is scheduled for March 30-31, in Buena Park.

Co-chaired by Fred Eckert and Raymond Davies, the Institute will present three primary seminars on basic turf and landscape (English and

Spanish sessions), advanced turf and landscape, and pest management.

Held at the Sequoia Athletic Club, the Institute is an educational opportunity for apprentice-level and top-level managers alike. Attendees can register in advance by mail or at the door for one or both days of the Institute. For more information or to receive a registration form, call Linda Knoche at 619-723-0255.

## Treating high salinity and pH

Continued from page 45

worked," Lashley explained. "We would add fertilizer and wouldn't see a difference. The water quality would overwhelm our fertility program and to overcome that would be expensive."

The pH of the irrigation water used on Fripp Island generally runs about 9.0. Additionally, high bicarbonate and sodium levels in the water build up in the soil with each irrigation. The result, according to

Lashley, is weaker plants with a shorter time to wilting.

Because Fripp Island currently has minimal storage capacity and sandy soils that drain rapidly, irrigations are needed daily and rain is necessary to supplement the storage. If rains are infrequent, the course dries out quicker.

"We end up with sort of a chemically induced drought," Lashley said. High winds also make the course prone to rapid periods of drying, which seem to concentrate the salts quicker, he added.

To combat the water quality problems on these courses, Peacock suggested applying flushing type irrigations, although he acknowledged that many of the courses don't have the drainage systems or the water availability to over-irrigate.

He also suggested the acidification of the water and soil to neutralize or dissolve salts, particularly sodium. "Some type of acid injection or acid-forming fertilizer can counteract the alkalinity at the source," he said. "Acidifying the soil would make the undesirable ions leach more readily."

Lashley recently began using pHairway, a water treatment additive from Unocal, that is injected into irrigation water and helps to dissolve salts and lower pH.

"Since we've started using pHairway, we've seen positive changes on our soil analysis reports," Lashley said. "By improving the quality of the water, our fertilization programs seem to work more efficiently and the plants look healthier."

Coosaw Creek Golf Course, an Arthur Hills design scheduled to open this summer in North Charleston, has also experienced poor quality well water: pH of 8.4 and high salt levels. John Betts, director of golf operations and Superintendent Tom Arneman have installed a pHairway injection system in an attempt to prevent nutritional problems from developing.

"We have the luxury of having a lot of storage capacity for good quality rain water," said Arneman. "But if we need to tap into the ground wells the pHairway will help offset the salt content."

While many superintendents regularly do water and soil analysis, Peacock also recommends doing tissue analysis.

"Soil analysis will tell you the potential for problems or plant response," Peacock said, "but tissue analysis gives an indication of what plants are doing at a particular time. "To get the highest visual quality, you must keep track of what's in the plants."

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Notice is hereby given that the City Commission of the City of Hollywood, Florida is advertising for Sealed Proposals which will be received by the City Clerk until 11:00 a.m., Wednesday, February 24, 1993 for: 3172 CONTRACT FOR OPERATION OF HOLLYWOOD GOLF & COUNTRY CLUB GOLF COURSE

Specifications & other contract documents may be obtained from the Office of the Purchasing Agent, Room 206, City Hall, 2600 Hollywood Blvd., Hollywood, Florida 33020. A Pre-Proposal Conference will be held on Wednesday, February 10, 1993 at 10:00 a.m. in Room 219, City Commission Room, City Hall to answer any questions posed, & a written addendum will be issued, if necessary, within two (2) days of that conference. It is suggested that those interested take a tour of the facilities prior to this conference. To set an appointment, call **Jerry Estep at (305) 921-3460.** Should you have any other questions, please contact **John L. Weyrauch, C.P.M., Purchasing Agent at (305) 921-3210.**



February

3-5 — *Mid-America Green Industry Convention in Kansas City, Mo.* Contact Olivia Golden, PLCAMA, P.O. Box 35184, Kansas City, MO 64134.

9-13 — *National Arborists Ass'n Annual Meeting and Management Conference in St. Petersburg, Fla.* Contact 603-673-3311.

17 — *Inland Northwest Turf and Landscape Trade Show in Spokane, Wash.* Contact 534-4161.

18-19 — *GCSAA seminar on Disease Identification and Control in Normal, Ill.\**

21-25 — *Club Managers Association of America Annual Conference and Exposition in Nashville, Tenn.* Contact 703-739-9500.

23 — *Irrigation Specialist Training Seminar in Fort Myers, Fla.\**

23-25 — *Western Pa. Turf Conference & Trade Show in Monroeville.* Contact 814-863-3475.

23-26 — *International Erosion Control Ass'n 24th Annual Conference and Trade Expo in Indianapolis.* Contact 303-879-3010.

24-25 — *GreenTECH 14th Annual Landscape Industry Show in Long Beach, Calif.* Contact 916-448-2522.

25-26 — *Advanced Turfgrass Management Symposium at Cook College, Rutgers University in New Brunswick, N.J.* Contact 908-932-9271.

27 — *Golfcourse Info Days '93 in Munich.* Contact 49 971 3024.

March

1-3 — *Massachusetts Turf Conference and Industrial Show in Springfield.* Contact 508-831-1225.

2 — *25th Annual Professional Turf & Plant Conference in Huntington, N.Y.* Contact 516-665-2250.

2-3 — *GCSAA seminar on Golf Course Restoration, Renovation and Construction Projects in Philadelphia.\**

3-5 — *Miniature Golf Ass'n of America seminar in Orlando, Fla.* Contact 407-321-6322.

4-5 — *USGA Golf Course Wastewater Symposium in Newport Beach, Calif.* Contact Dr. Michael Kenna at 405-743-3900.

9 — *GCSAA seminar on Computers in Turf Management in Indianapolis.\**

9 — *Irrigation Specialist Training Seminar in Jamesburg, N.J.\**

12-14 — *Orlando Golf Show in Orlando, Fla.* Contact 800-842-8832.

14-16 — *Prairie Turfgrass Conference & Trade Show in Saskatoon, Saskatchewan.* Contact Joe Bloski at 306-931-1982.

15-16 — *GCSAA seminar on Golf Course Design Principles in Minneapolis.\**

15-17 — *3rd Annual New England Landscape Exposition in Manchester, N.H.* Contact 800-639-5601.

17-18 — *Reinders 11th Turf Conference in Waukesha, Wis.* Contact Ed Devinger at 414-786-3301.

21-24 — *Forecast Golf Marketing golf range seminar at Kiawah Island, S.C.* Contact Scott Marlowe at 804-379-5760.

22 — *Ga. GCSA Spray Technician Seminar in Albany.* Contact Karen White at 706-769-4076.

23-24 — *GCSAA seminar on Golf Course Construction Techniques and Management in Palm Springs, Calif.\**

28 — *Golf Asia '93 International Golf Exhibition & Conference in Singapore.* Contact 65-2966961.

30 — *Irrigation Specialist Training Seminar in La Quinta, Calif.\**

31 — *Irrigation Specialist Training Seminar in Phoenix.\**

\* — For more information or to register, contact the Golf Course Superintendents Association of America education office at 800-472-7878 or 913-841-2240.

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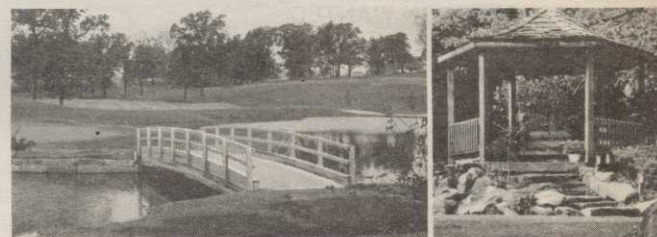
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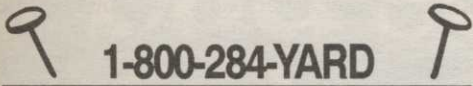
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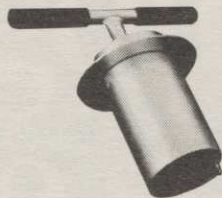
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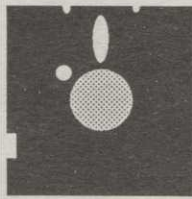
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\* Appears in regional editions.



# Mussel mud: More than an old farmer's tale

By MARK LESLIE

Before World War II, the lifeblood of just about every Prince Edward Island farm within carting distance of an estuary shellfish bed was "mussel mud," a mucky organic material and broken shells from generations of shellfish that died and decomposed under water.

Fifty years later, the almost-forgotten fertilizer is being resurrected with modernized harvesting techniques, and may be just what the superintendent ordered in Canada and the United States.

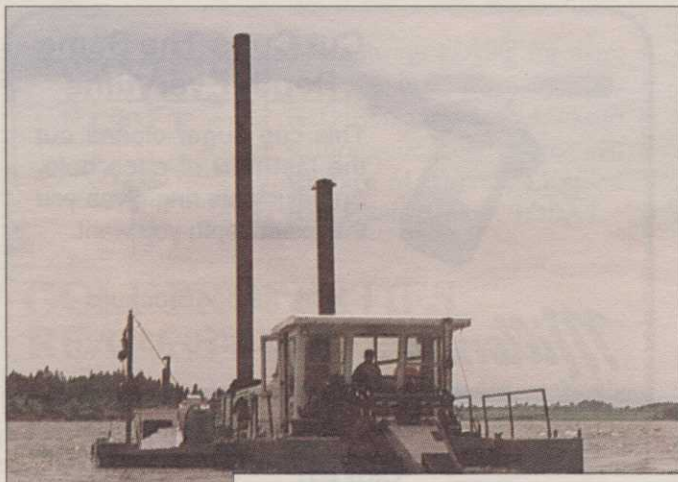
"It looks very promising," said Oswald MacEachern, who used the product P.E.I. Mussel Mud Plus last fall as top dressing and also in the root-zone mix for a green he rebuilt at his Clyde River Golf Course outside Charlottetown, PEI.

Farmer and golf course owner Delmar Currie said he decided to try the product because "years before my time in farming, mussel mud was used to help grow hay and pasture." Currie top dressed his Glen Afton Golf Club outside Charlottetown in late September 1991. After a deadly winter which caused a lot of winter kill on PEI courses, "we had none on ours," he said.

"I go out to a golf course, put down a bag that can do a 500- to 1,000-foot patch, then come back in 10 days. They [superintendents] can see the results. It doesn't take much more than that to sell it," said Gus Hillstrom, head of marketing and sales for PEI Mussel Mud Co. of Winsloe, PEI.

Hillstrom, who sold the product to two golf courses in 1991 and a dozen last year, said: "We're always going back to buyers to see what kind of results they've gotten. The end results have always been favorable. We tend to find that in a situation of a dry summer, the places with Mussel Mud Plus survive a lot better, and also after winter burnout. The reason is that it tends to develop a good root structure. You have a healthy root system that will hold more water. It turns a good rich color.

The growth isn't excessive in length — just greener, richer and thicker."



Harvested from the waters off Prince Edward Island in the Canadian Maritimes, mussel mud has proved useful to golf course superintendents. Its applications include fertilizer, top dressing and rootzone mixtures.

MacEachern, owner and superintendent at Clyde River Golf Course, said that in rebuilding his green, he added potato compost and Mussel Mud Plus and had "great results... I'm really pleased."

Back at PEI Mussel Mud Co., Hillstrom and owner Ron Sampson love to hear these testimonials. They add credence to old farmers' tales — stories about there being some 106 "mud diggers" on the Mill River alone in the 1920s when mussel mud was called a "miracle fertilizer."

Back then, diggers shoveled the heavy

muck out of the bay and sold it for 25 cents a load. Farmers still recall, with awe, the job mussel mud did for their crops in PEI's acidic soil.

PEI Mussel Mud Co. has brought the harvest into the 20th century.

Using a 350-hp pump, "we use a suction dredge that can suck up two tons [of mud] a minute," Hillstrom said. "In one week we dig 5,000 to 7,000 tons, enough for one year. If we had to dig more, there's millions of tons off estuarial waters in PEI."

Dr. Umish Gupta, a scientist at Agriculture Canada, has reported that packaged Mussel Mud Plus has performed as well as chemical fertilizers in agricultural plots.

What is this stuff, anyhow?

"Mussel mud is really a misnomer," Hillstrom said, explaining that 70 percent of its content is oyster and mussel shell. That provides the calcium.

"A lot of the nutrient content comes from the composting of the dead sea life — seaweed, fish bones, et cetera," he said. "After we get the pure mussel mud harvested we spread it out on land to dry, then add lobster, crab and fish meal as nitrogen sources.

"The product golf courses are buying is fortified mussel mud [thus the name Mussel Mud Plus] using the nitrogen additives, rock phosphate and sulphate of potash magnesia [trade name Sulpomag]."

All the contents are crushed into fine particles. Whatever the mix, superintendents are satisfied.

"Lime is much easier to work with and cheaper [\$40 a ton compared to \$200 a ton]. And I don't know any machine that could spread mussel mud over a large acreage," MacEachern said. "But, you have to use lime every two or three years. With Mussel Mud, you're getting a lot of nutrients and micro-nutrients you're not getting in lime.

"Plus, any time you can use a natural product, that's good."

MacEachern said he won't drop all his chemical fertilizers. "But I could see being able to use three applications versus six applications with chemical fertilizers.

"It's too premature to say we can only do it [on occasion]. As far as stress management... I want to see how it will stand up to modern-day golf courses."

Hillstrom is not recommending that superintendents replace their normal maintenance procedures. "It's like cooking," he said. "We just want people to try it and let them see for themselves."

He said testing at the research station shows a residual fertilization effect from year to year. "We're hypothesizing that after a length of time you will use less and less [Mussel Mud Plus] but still maintain the desired effect.

"In the long run, financially it will become feasible. And environmentally, which is the big issue, it is perfect. We're using byproducts that are being dumped and turning them into fertilizers."

Hillstrom estimated the cost of application at \$500 an acre or more — depending on the distance from the Mussel Mud Co.'s plant. "You could do all your greens and tees for \$1,000. And that's once a year," he said.

The product is marketed in the Canadian Maritimes, Quebec and Ontario and should be available in the U.S. in spring 1994. But Hillstrom said he can ship anywhere, right now.

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SUNBURST<sub>2</sub> in Otterbine's CONCEPT<sub>2</sub> line answers the challenge of producing a sparkling water display with minimal effect on pumping rates.

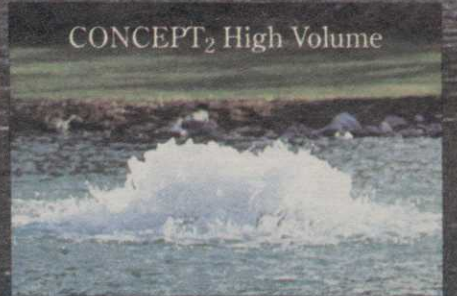
CONCEPT<sub>2</sub> and SUNBURST<sub>2</sub>, fulfill the Otterbine tradition of scientifically designed, highly efficient, compact, self-contained aeration systems. They are simple to install and economical to operate.

They need no foundation, external pumps, or other costly plumbing fixtures. All Otterbine Aerators are safety tested and approved by the Electrical Testing Laboratory.

Call or write, today, to find out how CONCEPT<sub>2</sub> can help you keep your water quality up to par.

SUNBURST<sub>2</sub>

CONCEPT<sub>2</sub> High Volume



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Superior greens start with superior greens mower features. And the all-new Greens King® 422 is loaded with them.

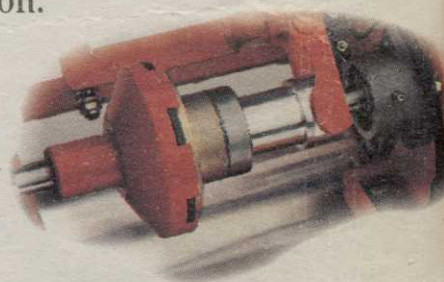
Exceptional side-to-side, front-to-rear balance and a more compact roller base help accentuate your greens' details, rather than your mower's limitations.

Our new 11-blade, electronically balanced reel delivers an unbelievably smooth cut, even down to 5/64." Plus, our exclusive Turf Groomer® option simply produces faster, truer, healthier greens than any imitator.

**Clutch performer.**

No other walking greens mower can touch the 422 for reliability. Our all-new clutch has been tested out to the equivalent of 70 years of operation, without any adjustment or lubrication.

The same eye for quality extends throughout this unique machine—from our space-age, long-life bearings and



bushings, to the most durable drive belts made, to the powerful, high-efficiency 4-hp, 4-cycle OHV Honda engine.

With features like drop out drive drum, reel and bedknife, and easy, slide-apart traction roller with built-in differential, the Greens King 422 cuts maintenance time as neatly as it cuts grass.

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