

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

A UNITED PUBLICATION
VOLUME 6, NUMBER 2
FEBRUARY 1994 • \$4.50

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Analysis

Watershed findings: Pesticides test well

By STUART COHEN
& TOM DURBOROW

Thousands of water samples from golf courses have been subjected to more than 100,000 analyses in 13 projects since the Cape Cod Study was completed in 1988, and only five samples contained pesticides above health-based action levels.

In fact, only 30 to 60 samples had even quantifiable pesticides, substantiating indications that proper golf course maintenance does not endanger water supplies.

Most of these studies have been done as a result of permitting requirements, occasionally as a result of research projects. With a few exceptions, they have not been well publicized. The reasons are that most of the studies have not been completed, and, equally important, the results are mostly favorable for the golf industry. It is hard to use good news to scare people.

Continued on page 24



ECOLOGICALLY SOUND

This used to be a parking lot. Now it's Squaw Creek Golf Resort in Squaw Valley, Calif., perhaps the nation's most ecologically sound golf course. It's also the top mountain course to open during the last five years, according to an exclusive Golf Course News survey of architects. For story, see page 35.



ARCHITECTURE'S HOTTEST DUO

Ben Crenshaw (left) and Bill Coore are making news: Barton Creek, Kapalua, and now the much-anticipated Sand Hills. They spoke with GCN, page 35.

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State associations build/buy, manage their own courses

By PETER BLAIS

To provide improved member services and increase public play, a growing number of local golf associations are building and buying golf courses.

The Northern and Southern California golf associations along with the Oregon State Golf Association are developing their own facilities.

"Many other groups are talking about doing something similar," said Tom Morgan, executive director of the Southern California association.

The Northern California association started the golf ball rolling in 1975 when it acquired an option on 165 acres of Del

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No. 3 at Rancho California, soon to be owned/managed by the Southern Calif. Golf Association.

Arizona groups eye golf tax to benefit turfgrass research

By MARK LESLIE

PHOENIX, Ariz. — Following unproductive campaigns to raise research funds through volunteer donations, the Arizona green industry is taking steps in a new direction.

The newly formed Commodities Group is drafting legislation that would assess 10 cents per round on golf played in Arizona. The levy could potentially generate \$800,000 a year, according to Mark Clark, president of Cactus and Pine Golf Course Superintendents Association and superintendent at the Country Club of Green Valley.

Similar assessments reportedly have worked well for lettuce, citrus and grape growers, who all tax each crate of produce to fund research and development

Continued on page 21



William Schultz

Schultz to assume leadership role at CMAA conference

By PETER BLAIS

SAN ANTONIO, Texas — A resident Texan will be elected president of the Club Managers

Association of America when the group holds its 67th Annual Conference here Feb. 6-10.

William Schultz, general manager of Houston Country Club since 1990, will assume leadership from outgoing President Richard Kolasa.

Schulz has been on the board since 1988, serving on several national committees and community organizations during that time. He graduated from Milwaukee Area Technical College and is currently CMAA's vice president.

In addition to Houston CC's 18-hole Robert Trent Jones-designed layout, Schulz has overseen Twin Orchards CC in Long Grove, Ill., and Brynwood CC in

Continued on page 50



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NEWS IN BRIEF

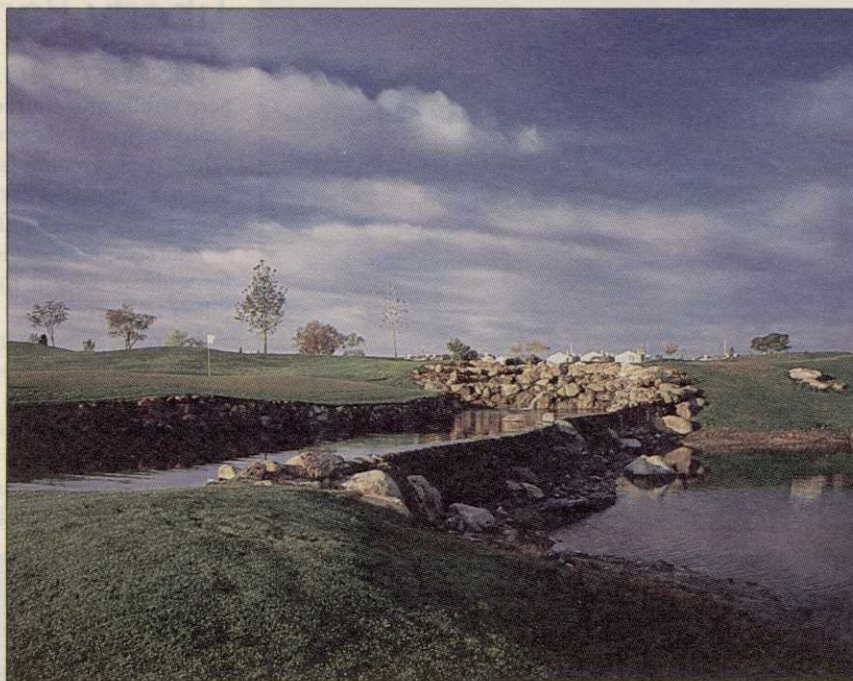
SHERBURNE, Vt. — This town is scheduled to get the state's first municipal golf course in 1996. Local voters last month approved a \$5.5 million bond issue. State and federal environmental permits must be obtained, and Vermont's rigid Act 250 regulations hurdled. Town manager David Lewis is confident of all necessary permits and expects construction to begin this spring. Gene Bates will design the 18-hole course.

LOS ANGELES — An 18-hole golf course will be prominent in the largest project under development — in terms of land area — in Los Angeles County. Ritter Ranch, a 10,625-acre master-planned community poised for first-phase construction, lists five separate residential villages. Encompassed will be 400 acres of parks, 85 miles of hiking, biking and equestrian trails.

RIVERDALE, Mo. — A 400-home housing development here, which will eventually include an 18-hole golf course, has been proposed by developer Dr. Glenn Turner, who said he couldn't estimate the project's expense. The golf course will not be completed until the final phases of the project.

CHICAGO, Ill. — Wittek Golf Supply Co. has appointed Charlie Garrett as regional sales manager of Wittek-West. Garrett will be responsible for managing all sales activity in California. Garrett and Wittek-West are located in Mission Viejo, Calif. The telephone number is 714-347-9007; in state, 1-800-365-0889.

LYNN TOWNSHIP, Pa. — The Old Homestead Golf Club, planned for 230 acres along Route 309, is a go after hurdling a minor cost holdup. The developer and Lynn Township agreed to split the cost for repair of a small road. Next step is a driving range, pro shop and parking lot. Second phase will be clubhouse, 18-hole course and driveway.



Royal Kenfield is one of the former Mizuno holdings up for bid at government auction.

Ex-Mizuno holdings on the block this spring

HENDERSON, Nev. — Two golf course properties, Indian Wells and Royal Kenfield, that were seized in the second largest non-drug forfeiture case in United States history, will be auctioned to the public in late spring.

First on the auction block — April 28, 1994 — will be the 18-hole Royal Kenfield Country Club located here, just outside Las Vegas. Formerly known as the Showboat Country Club, Royal Kenfield is a Clark Glasson design opened in 1959. It was later remodeled by Bob Cupp with help from Hubert Green.

The sale of Indian Wells properties, scheduled for May 19, 1994, will include the 155-room Hotel Indian Wells founded by Desi Arnez, approximately 6.2 acres of vacant land adjacent to the hotel, and the 27-hole golf course designed by Harry Rainville.

The two prominent properties were turned over to the federal government last October as the result of a guilty plea

in a landmark case connected to an international money laundering operation with ties to Japan. Ken International — a Japanese corporation headed by Ken Mizuno that developed golf courses and other properties in Japan — admitted that it fraudulently oversold memberships to the Ibaragi Country Club. Fifty-two thousand memberships were sold, while only 1,830 were actually available.

Approximately \$100 million derived from the fraud were used to purchase a number of properties in California, Nevada, and Hawaii, including Indian Wells and Royal Kenfield.

Proceeds from the auctions will cover U.S. Government costs, with the remaining distributed to the Japanese victims, U.S. Government, and U.S. creditors.

The sale is being conducted by EG&G Dynatrend of Burlington, Mass., and Larry Latham Auctioneers of Scottsdale, Ariz. For more information, contact Sales Manager John Saunders at 310-618-0164.

Pebble Beach Co. to co-sponsor Environmental Summit in 1995

By HAL PHILLIPS

PEBBLE BEACH, Calif. — Leaders from the golf course industry and the environmental movement will likely beat a path down 17 Mile Drive next year when the Pebble Beach Co. and The Center for Resource Management co-sponsor an "Environmental Summit" addressing the ecological impact of golf courses and resorts.

The summit is tentatively planned for Jan. 16-18, 1995, here at the Inn at Spanish Bay. According to Rich Patterson, program manager in the Planning Department at Pebble Beach Co., the attendee list should include representatives of the United States Golf Association (USGA), Sierra Club, Golf Course Superintendents Association of America (GCSAA), Environmental Protection Agency, American Society of Golf Course Architects (ASGCA), Professional Golfers Association (PGA), Audubon Society, National Golf Foundation (NGF) and the Nature Conservancy.

What will happen when folks from the Sierra Club and Nature Conservancy sit down at the same table with all these acronyms?

"I think people will realize there is a little more common ground than one might expect," said Patterson, one of the summit's architects. "The main point will be to get together and really discuss the issues that have been volleyed back and forth in the press."

"We also want to pass along some practical information to the audience. And hopefully, those who run golf courses and resorts will be in attendance."

The Denver-based Center for Resource

Continued on page 60



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Proposed Washington State layout would help bring community together

PORT ANGELES, Wash. — A golf course may be "common ground" for an aging fraternal organization and young people they're targeting for possible future membership.

The Tubal Cain Golf Club — the general partner incorporated by the Sequim Masonic Lodges — proposes to transform a 5,000-square-foot home into a clubhouse and 345 acres of pasture land into a nine-hole par-3 course this summer. The course looks to add an 18-hole facility a year or two later.

Construction of the nine-hole track is sched-

uled to begin this spring. A driving range and putting/chipping area will be part of the initial process.

Golf club Chairman Bob Patton said the local community badly needs another public golf course.

Hank Hopkins of Pacific Golf Development Inc. is the architect for the proposed par-3 layout.

Clallam County planners and state agencies are determining whether an environmental impact study is needed.

Liberty Park links recommended

JERSEY CITY, N.J. — A 150-acre public golf course at Liberty State Park is the best way to fund other park amenities and landscape a major portion of barren Jersey City waterfront.

That recommendation by a task force drew dissent from Marvin Silber of Bayonne.

A birder, Silber contends that habitat will be destroyed by the plan.

A similar golf course plan was rejected in December 1991.

The golf course contemplated by the task force would utilize 10

acres less than a previously rejected plan.

A golf course first was suggested in a 1977 park master plan and again in 1983, but the project has been opposed by Jersey City residents.

The state must approve the working committee's endorsement.

Because Gov. Jim Florio did not make a decision on the 18-hole course before leaving office, Gov.-elect Christie Whitman will likely have the final word on its fate.

Improvements planned for Colo. facility

ENGLEWOOD, Colo. — It's expansion and renovation for golf here.

A \$4.5 million project for the 18-hole municipal course also will include construction of a par-3, nine-hole layout. There will be an indoor teaching academy and improvements to the clubhouse and several holes.

Workmen will tee off on par-3 course construction in April. Hopefully, the entire project will be complete in the summer of 1995.

The 18-hole course hosted 68,000 rounds in 1993.

The City Council in December purchased 19.6 acres for \$684,300.

Second-class postage paid at Yarmouth, Maine, and additional mailing office. *Golf Course News* (ISSN 1054-0644) is published monthly by United Publications, Inc., 38 Lafayette St., P.O. Box 997, Yarmouth, ME 04096. Phone number is 207-846-0600.

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Reprints and permission to reprint may be obtained from Managing Editor, *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096. Back issues, when available, cost \$5 each within the past 12 months, \$10 each prior to the past 12 months. Back issue orders must be paid in advance either by check or charged to American Express, Visa or MasterCard.

Golf Course News is distributed in the U.S. without charge to qualified personnel of golf course facilities and to golf course builders, developers and architects. Subscriptions to Canadian golf facilities cost \$25 annually; other paid subscriptions to the U.S. and Canada cost \$45. All foreign subscriptions cost \$125 annually to cover air delivery. All payments must be made in U.S. funds drawn on a U.S. bank. **For subscriber services, please call 215-788-7112.** Send address changes to *Golf Course News*, P.O. Box 3047, Langhorne, Pa. 19047-3047.



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Jones Trail developers accused of property tax avoidance

BIRMINGHAM, Ala. — While golfers are poised to follow the trail of seven first-class courses funded by the state's Retirement System, some no-frills tax men are set to tee off on what they feel is property tax avoidance.

Tax assessors have been informed that because the Retirement Systems of Alabama is an "instrumentality" of the state, the Robert Trent Jones Golf Trail should be exempt from property taxes.

Ever alert to tax escape routes and dodges, assessors in Jefferson, Calhoun and Houston counties sus-

pect possible tax evasion. They believe the RSA is taking advantage of a loophole in state tax law meant to exempt schools, parks, government buildings and such from taxation to save money in what essentially are for-profit businesses.

This will cost the state, counties, cities and school systems a few hundred thousand dollars annually in property tax revenue, they contend.

David Bronner, RSA chief executive, gave this charge his best shot. "Ridiculous!" he said. "Some nitwits think they understand

taxes. The RSA is clearly a state agency entitled to such a property tax break."

Bronner didn't stop there in his return fire. "This is political showmanship of stupidity because the golf courses will bring millions of dollars to those communities."

Bronner terms the \$100 million Trail venture "the biggest public golf development project ever attempted." It is, he said, part of RSA's attempt to further diversify its investment of the state's \$13 billion pension fund for the state's teachers, government employees

and judges.

He added courses are essentially done in Jefferson, Houston, Lee, Madison and Mobile counties, and that courses in Butler and Calhoun counties are under construction.

While golfers are polishing their clubs, tenacious tax men are sharpening their pencils. Their scorecards are, not over and under par figures, but dollars and cents. The higher the numbers, the keener their interest. They may not be attuned to the sound of birdie, but the click of the cash register gets their attention.

USGA takes exception to Okla. shortcut

EDMOND, Okla. — Giving the nod to seed over sod, the United States Golf Association (USGA) criticized a shortcut taken last year at Kickingbird Golf Course when reconstructing putting greens.

Soil samples taken from reconstructed greens indicate potential draining problems, USGA official James Moore reported.

Moore added that, while some golf courses noticed immediate problems with sodded greens, this wasn't the case with Kickingbird. He noted that Kickingbird fared well last summer despite a rough season that plagued courses in the region.

Noted Moore: "While it is true that greens can be opened more quickly when sodded versus seeding, the long-term benefits of seed far outweigh the temporary inconvenience of having to wait a little longer to open new greens."

Sodded Arizona track taking shape

PHOENIX, Ariz. — Foothills Club West, the first totally sodded course in Arizona, has taken swift shape.

Sodding of 90 acres — located six miles west of Interstate 10 — took 100 days. On flat areas, up to two acres were covered in one day.

The sodding cost \$500,000, twice as much as seeding, but \$150,000 was saved on water and fertilizer. Harder to calculate are the green fees taken in during what would have been a grow-in period.

Brian Whitcomb, managing partner of FWC Golf Group, liked opening day price. The \$40 greens fee included cart.

The \$4 million course cost will be matched by a 7,000-square foot clubhouse due for February opening.

Nine-hole facility underway in Indiana

MADISON, Ind. — Bill Garrett is building a nine-hole golf course and driving range on his land here. It will be known as Cozy Acres Golf Links.

Garrett describes the course as a unique par-3 with holes ranging from 105 to 200 yards.

Gilbert England, Wheatley, Ky., golf professional and course designer/builder, will supervise the project.

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The Coeur d'Alene Resort Golf Course, Coeur d'Alene, Idaho.

Ore. course survives state regulatory challenge

PRINEVILLE, Ore. — Prineville's proposed third golf course has withstood a challenge from the Department of Land Conservation and Development.

As a result, Ochoco Creek Resort, a nine-hole layout surrounded by 75 townhouses, will be built on 215 acres along Ochoco Creek west of Prineville Golf and Country Club.

The state appeals court rejected the state DLCD's appeal of the county's course approval.

The state agency contended the county failed to follow the state's Goal 3 agricultural rule by converting agricultural land to non-resource

agricultural land without following proper procedures.

The county countered that the DLCD appealed the project too late by appealing at the second stage of the three-stage process.

Original course plans were filed in Crook County in 1991. In April 1992, the Crook County Planning Commission gave the project preliminary approval.

Tennessee Engineering Inc. of The Dalles is the engineer and architect. The nine holes could be incorporated with neighboring Prineville G&CC to make an 18-hole layout.

Mass. dump could become links

NATICK, Mass. — A town landfill may become the base for an 18-hole golf course here, near the town's boundary with neighboring Sherborn.

Local Town Administrator Fred Conley said it would take at least two years before the landfill is safely capped and the course could be developed.

Natick hired Amherst course architects Geoffrey Cornish and Brian Silva to probe ways to reuse the fill. The course would use about 100 acres.

Tentatively called Indian Creek Golf Course, about 60 percent would be town-owned land in Natick.

Conley said Natick could build a driving range or pitch-and-putt center on its part of the land, but would be unable to complete a full golf course.

The 5,000-yard layout would be a par 63.

Conley said the golf course could provide a recreation facility the area now does not have. Sherborn has no golf course.

Murphy nominated for USGA president

FAR HILLS, N.J. — Reg Murphy, who joined the Executive Committee of the United States Golf Association (USGA) in 1988 and served as vice president the past three years, has been nominated to serve a one-year term as president.

The election of officers will take place Saturday, Jan. 22, 1994, at the organization's Annual Meeting in Scottsdale, Ariz.

Murphy, 59, of Baltimore, was recently named executive vice president of the National Geographic Society after retiring as president and publisher of the *Baltimore Sun* early in 1993. His career in publishing also includes tenures at the *Atlanta Constitution* and the *San Francisco Examiner*.

If elected, Murphy would assume leadership of the USGA's 16-member volunteer Executive Committee, succeeding Stuart F. Bloch who served two consecutive one-year terms.

Murphy is a member of Caves Valley Golf Club in Owings Mills, Md., where he carries an 11 handicap and takes the game seriously — seriously enough to have played a round with President Bush and Arnold Palmer on the morning of his wedding day in 1992.

Minn. muni could be constructed early

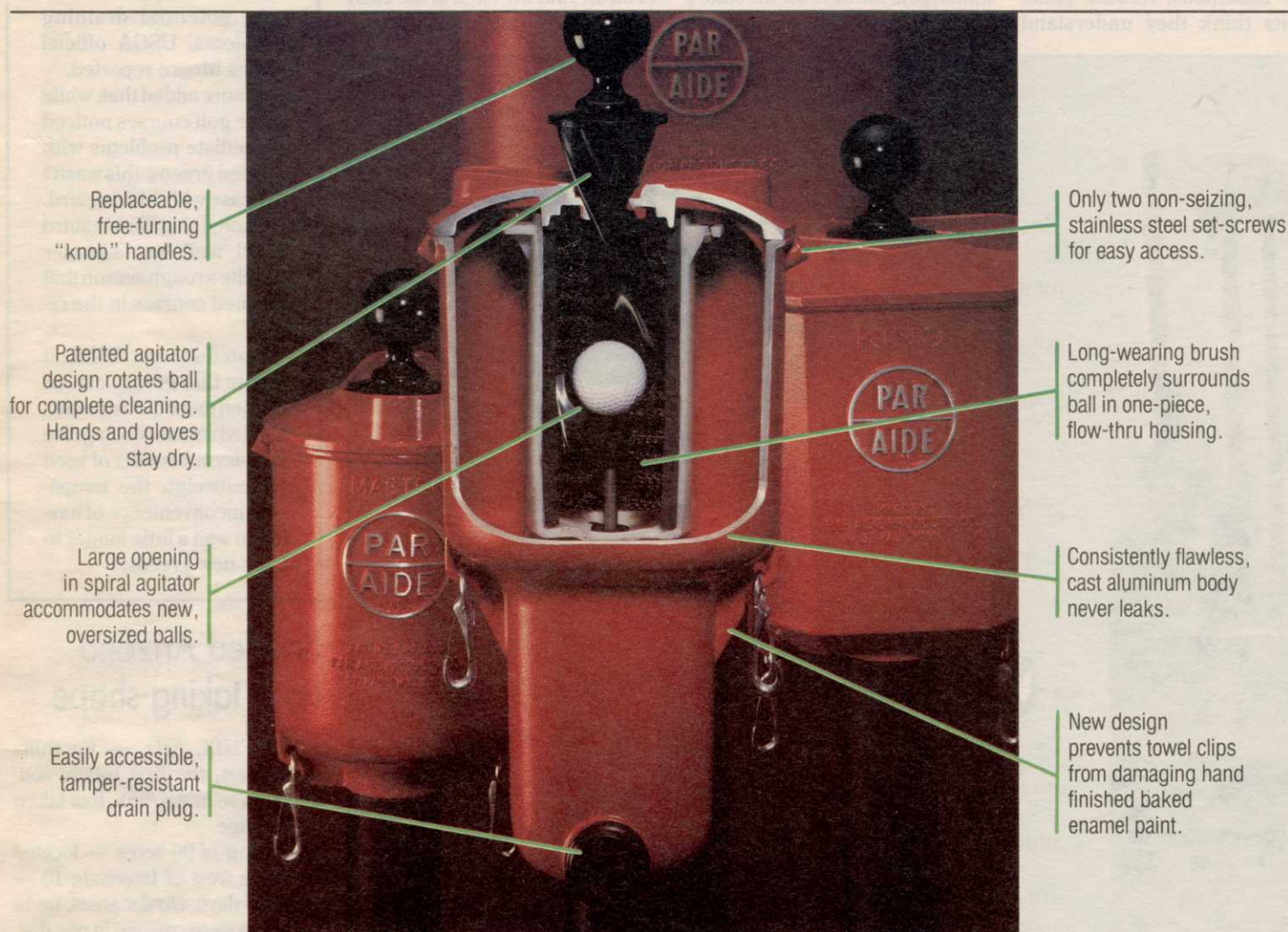
ROCHESTER, Minn. — This state, once famed for lakes and snow but now deeply involved in all sports, is accenting golf. The city's recreation department is pushing for a fourth municipal course three years earlier than originally planned.

The latest course would be built on 207 acres at U.S. 63 North and 48th Street Northeast.

The parks department recommended starting construction in 1995 and opening the upscale facility in 1996.

A driving range and practice holes also are envisioned.

Municipal bonds would finance the \$2.1 million project. Officials estimate 26,500 rounds annually.



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ARCO's coastal Calif. project hits troubled waters

NAPLES, Calif. — Atlantic Richfield Co.'s attempt to convert oil facilities into golf courses near Goleta has met with trouble.

County supervisors last August voted to allow Arco to build an 18-hole course on 250 acres of coastal land in the Naples area. The \$10 million development would include a separate nine-hole course, clubhouse and parking space.

Now, the Californian Coastal Commission wants to examine the project more closely.

Surfriders object to the project. They fear golf course operators will not permit them to cross to get to beaches near Naples Reef.

And, it was noted, errant golf balls might pose a threat to harbor seals.

Illinois track ready for June opening

WINFIELD, Ill. — The 18-hole public golf course and clubhouse here will open by June 1.

That's the latest word from Michael Beaulieu, land development consultant for Klein Creek golf course. Seeding and earthwork has been completed, as are ponds on the site that act as storm water management features.

The amount of water retention Klein Creek provided on the site exceeds by more than one-third the amount required under the DuPage County storm water management ordinance.

Pebble Beach sues over copycat holes

HOUSTON, Texas — The famed par-5 14th hole at Pebble Beach, Calif., stands alone in links lore. Owners wish to keep it that way.

They've filed a lawsuit charging Tour 18 officials with trademark infringement in copying the 14th — and advertising that fact.

Tour 18 officials don't deny such attempt at duplication. All their 18 holes are intended re-creations of a famed hole in the United States. They note the replica can't be totally true. For example, there is no ocean near Tour 18. At best, theirs is a reasonable facsimile, they say.

Sawgrass' 17th to be replicated in NY

NEW YORK CITY — Eighteen Construction Co. is replicating the 17th hole at The Players Club course at Sawgrass in the middle of Long Island's Hertenland Golf Park.

The hazardous hole surrounded by water is part of a nine-hole executive track, with each hole a replica of famous par 3's around the country, including the 7th at Pebble Beach and 12th at Augusta National.

Pennsylvania landfill could become site of golf links

HOPEWELL TOWNSHIP, Pa. — These days, mention of a proposed course is often accompanied by "site of a landfill," or "former garbage dump." The space squeeze seems to have forced golf courses into unenviable positions where sights — and smells — are involved.

This may not be as bad as it appears on — or under — the surface. The York County Solid Waste Authority is testing a process that eventually could open acres of county landfill for an 18-hole golf course.

Moreover, it may help solve nagging drink-

ing water problems still facing a few neighbors.

The process involves digging up long-buried trash, trucking it to the Lancaster County incinerator for burning, then burying the ash in an active part of the York County landfill here.

Dave Vollaro, an engineer with the Authority, said one of the benefits of removing the unlined section of the landfill is that it would allow development of a golf course on the site.

The golf course could include water haz-

ards that would actually help clean the remaining toxins in the soil, he said.

Water from the ponds would seep through the soil, taking contaminants with it. Underground pumps connected to filters would constantly filter the groundwater, as they do now. Eventually, all contaminants would be filtered out of the site.

"The golf course is the best idea as far as being made to look like it never was a landfill," said township supervisor William T. Streett. "It would make all property in the township more valuable."

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BECAUSE NO PRE IS PERFECT.

Gaming legislation could encourage Miss. layout

ABERDEEN, Miss. — If Mississippi state law can be changed to allow gaming on the waterfront, a \$75 million casino resort may sprout in this Northeast Mississippi city.

An 18-hole golf course is planned in the latter stages.

The resort would be called the Aberdeen Lodge and Resort Casino, along the Tennessee-Tombigbee Waterway.

Project opponents doubt the gaming casinos will be legalized during the current legislative session.

Currently, state law allows gambling only on the Gulf Coast and on navigable waters of the

Mississippi River.

Indian reservations, not subject to state law, also may opt to allow gambling.

Aberdeen isn't the only Mississippi community eyeing gaming as a method of introducing other non-controversial recreational pursuits.

The Mississippi Gaming Commission recently awarded a gaming license for Bally's Saloon & Gambling Hall in Tunica County. The "hook" for gaming companies is that they plan golf courses, hotels, water parks and restaurants in surrounding areas.

This poses interests attractive to the public apart from the moral question of gambling.

Oaks may fell Calif. project

SANTA CLARITA, Calif. — Devotees of the mighty oak and those favoring a golf course are at loggerheads in this suburban Los Angeles community.

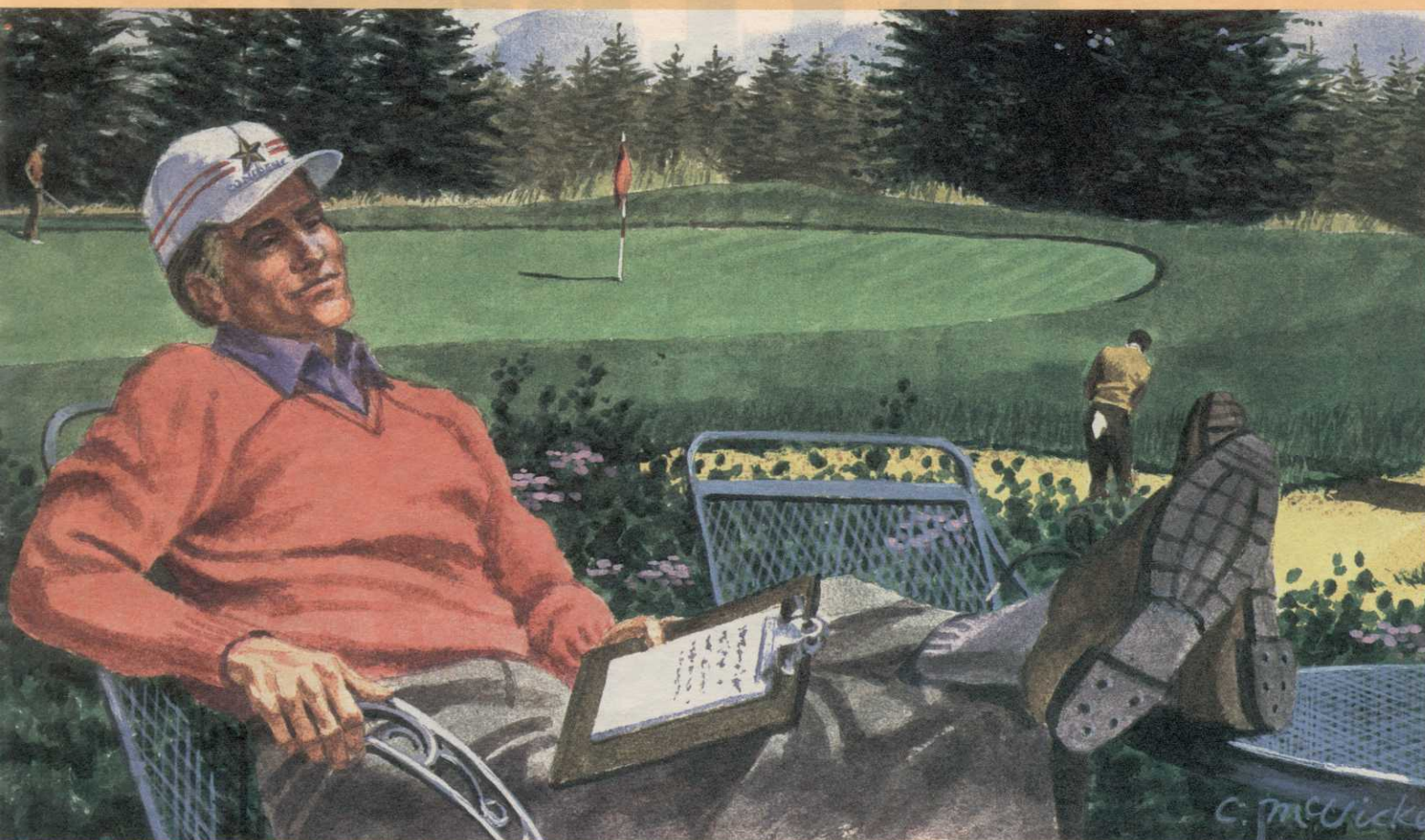
A proposed 18-hole golf course would consume 50 acres of an oak tree area termed significant environmentally.

The Newhall Land and Farming Co. has been at odds with a Santa Clarita environmental group intent on protecting "Santa Clarita Valley's last remaining oak tree savannah."

That Newhall Land intentionally moved planned homes out of the tree area and intends to re-plant 88 percent of the oak trees uprooted by the project hasn't appeased opponents of the project.

An alternative plan that would move the development north, completely out of the significant environmental area, has gained environmental group acceptance but would mean curtains for the golf course part of the development.

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CIRCLE #107/BOOTH #1217, 1219

Fla. country theme park may host golf

NEW PORT RICHEY, Fla. — No more fiddlin' around.

After surveying five Florida sites, country singer Charlie Daniels and developers have settled on this city for a \$300 million Western World Theme Park.

The 3,000-acre site would be 20 miles north of Tampa.

A 36-hole course would be included in the park, which would be similar to Dollywood in East Tennessee.

There would be country music theaters, 8,000-seat rodeo facility, retail shopping, residential sites and a 500-room hotel.

Western World is expected to attract 2.3 million annually. Target date for the grand opening is the fall of 1997.

Oz park would include golf holes

KANSAS CITY, Kan. — A golf course would play a prominent role in a proposed Wonderful World of Oz theme park.

Landowners whose property may be taken, either by negotiation or eminent domain, are looking askance at the proposed development that would incorporate hotel, lake and a recreational vehicle park.

The city council approved an ordinance giving the city power of eminent domain within the enterprise zone created for the \$440 million Oz project.

Developers have not raised the necessary financing to build the park.

R.I. developers zero in on new layout

BURRILLVILLE, R.I. — Backers of a proposed 18-hole golf course and clubhouse bordering Harrisville and Mapleville are a step nearer development.

The Northern Rhode Island Golf Investors Inc. and Steere Farm Associates have received zoning board approval.

State approval is the next step for the hoped-for course.

Calif. quarry owners hope to build golf course

SAN LEANDRO, Calif. — Owners of the former San Leandro Rock Quarry wish to develop a golf teaching center on about a quarter of the quarry's 58.6 acres.

Some say the golf project is "a back-door way to prepare for a housing project."

Retorts Barrie Lee, who with brothers Robert and Don own the property, "We cannot afford to just sit up here and provide open space for the community. We have to have something to offset our overhead."

A referendum campaign in 1991 against plans for a 121-unit luxury home tract on quarry land

succeeded.

John Bailey, the director of a group that gathered more than 6,000 resident signatures to oppose home development, fears that excavation done for the golf center and roads put in to accommodate it may turn out to be mere preliminary work for the sort of housing project his group resisted.

Alameda County forced the quarry to close in 1986.

If an environmental impact study is indeed needed, county officials may rule on the project this spring.

Links low priority on Ky. park list

FRANKFORT, Ky. — Golf may be rising in popularity with the recreation set.

But Gov. Brereton Jones takes a dim view of the game when linked to state parks system projects.

The costliest item on his \$100 million list of parks projects — a \$6.6 million, 18-hole golf course at Jenny Wiley State Resort Park near Prestonburg — received the lowest priority among a list of state park.

The park is near the home of House Majority Floor Leader

Greg Stumbo. Stumbo is an avid golfer.

Of 71 projects, priority went to existing lodges, cottages and other facilities.

Emphasis was on fixing up what is already in the state park system.

Jones did propose building an 18-hole course at Mineral Mound, a recreation area on Lake Barkley that now has only a boat ramp, parking lot, and a nine-hole course at Lake Barkley State Resort Park., which already has an 18-hole course.

Mich. project set to start building

PONTIAC, Mich. — Mayor-elect Charlie J. Harrison Jr. may have delayed a local golf course community project, but the course now is clear for construction.

Temporary financing terms resulted in settlement of Harrison's lawsuit.

His bid for a restraining order on further construction was prompted by concern about a city — running a \$3.3 million deficit — borrowing general fund money to begin work on the \$35 million golf course community project.

New financing strategy will put no drain on the general fund, said Acting Deputy Mayor K. Joseph Young. City officials said they had to start work on the course to avoid closing it for more than one season.

Wis. muni track moving slowly

BELOIT, Wis. — Much talk, little action capsules a proposed 18-hole public golf course on Beloit's east side.

Discussions concerning a second municipal facility have been going on for over three years.

City engineer David Townsend said if the city manager approves, he will seek funds from the City Council to update a feasibility study. An initial study was conducted in 1991.

Landowners recently met with Rock County officials because the council also is working on a proposed golf course near the Rock County Airport.

Utah layout finally underway

HURRICANE, Utah — The turf was frozen, but city officials warmed to ceremonial ground-breaking for a \$3.8 million, 18-hole municipal golf course that has been under consideration for six years.

Hurricane Sky Mountain Golf Course near the city's old industrial park is targeted for completion in November.

Four hundred single family homes and town homes should be developed around the Jeff Hardin-designed golf course.

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*As reported by the Center for Golf Course Management, a subsidiary of the Golf Course Superintendents Association of America.

CARRYALL

DRIVE IT TO WORK.

One more look back at 1993, the year in golf...

The only thing more irksome than a New Year's Day hangover is the glut of year-end retrospectives that clutter newspapers and magazines from December of the closing year straight through to June of the new one. But they're hard to avoid — just like the hangover.

I read these years in review. In fact, I read them all with relish. Polls, surveys, Top Ten lists, best of this, worst of that. I love 'em.

You may have noticed this from the contents of our past two editions. January was filled with our annual "Best of the Best" awards, and this issue names the Best Mountain Course to open since 1988 — Robert Trent Jones Jr.'s Squaw Creek (see pages 1 and 35).

I've included in this column the final, complete results of our Best Maintained Course on the LPGA Tour survey, as voted by LPGA touring professionals. Further, in honor of *Golf Course News*' fifth anniversary, Publisher Charles von Brecht (see below) has weighed in with his assessment of our first five years — complete with his Top Ten news stories of 1988-93.

Had enough? Well, slap me silly with a bag o' mulch, we're not done yet! Not without handing out my personal Golf Industry Awards for the calendar year, 1993.

Raquel, the envelopes please:

The John Bobbit Ridiculous New Product Award goes to... the golf club and urine receptacle in one. I've avoided using the brand name and manufacturer to keep a straight face and stay out of court. But somebody out there is actually trying to sell a hollow golf club (with screw-off top) into which one can relieve him (or her?) self to avoid "embarrassing" situations.



Hal Phillips,
editor

Continued on page 61

BEST MAINTAINED COURSE ON THE LPGA TOUR 1993

As voted by the players/Conducted by *Golf Course News*

Mission Hills (Old Course) CC, Rancho Mirage, Calif.	22
Columbia-Edgewater Golf Club, Portland, Ore.	10
Dupont Country Country Club, Wilmington, Del.	4
Moon Valley, Phoenix, Ariz.	3
Highland Meadows Golf Club, Sylvania, Ohio	2
Walnut Hills Country Club, E. Lansing, Mich.	2
London Hunt & Country Club, London, Ontario, Canada	1
Hermitage Golf Course, Old Hickory, Tenn.	1
Wykagyl Golf Club, New Rochelle, N.Y.	1
Killearn Country Club, Tallahassee, Fla.	1

Innovations in service and management at Public Golf

Just as greens fees drive profits at a golf course, so does innovative management and marketing steer the vehicle. Ideas that fit this scenario overflowed at *Golf Course News*' recent Public Golf '93 conference in Charleston, S.C.

From American Golf Co. Vice President Kenneth James' wisdom in filling tee times to National Golf Course Owners Association President Vince Alfonso Jr.'s admonitions to give to the community, attendees from Florida to Hawaii learned a spate of money-making ideas.

We share a fraction of them here, suggesting, as Lansbrook Golf Club General Manager Gregg Gagliardi did: "Every area has ideas that work. You have to find your own promotional opportunities within your market. If you're going to make money, you've got to push and drive business. Flexibility in your operations is a must. Service is number one."

To better serve the golf course industry, *Golf Course News* has expanded the annual Public Golf conference into a trade show and three-tracked educational symposium for superintendents, owners, managers and developers. It's called Golf Course Expo, and it's scheduled for Nov. 10-11, 1994, in Orlando, Fla. In addition to a management program, Golf Course Expo will offer educational programs in agronomy and development.



Mark Leslie,
managing editor

HAVES, HAVE NOTS

One theme that rang out at Public Golf '93 was that golf course operators *have* not because they *ask* not.

"People wonder how we got all this help. It's because we asked," said Elaine Fitzgerald of Fitzgerald Promotions, Inc. near Ft. Lauderdale, Fla. Not only has Fitzgerald obtained hundreds of thousands of dollars in free advertising for two golf courses by tying them into promotions of area hotels, she has gotten major mileage by placing brochures in visitors bureaus and chambers of commerce — at little or no cost.

Bobby Vaughn, president of Sunbelt Corp., which has opened the 18-course Jones Trail in Alabama, supported Fitzgerald's stance.

"We've spent less than \$150 per hole per year for the last three years promoting and marketing this concept," he said. "Much of our publicity was done for free because we asked. And now we have finally given people a reason to come to Alabama."

Among the Jones Trail's successes:

- As a major tourist attraction, it had the highway department put up 84 Interstate signs all over Alabama.
- It worked a deal with AAA in which it is featured on the cover

Continued on page 57

FROM THE PUBLISHER

Thanks for five years of news, views, people and places

Don't be alarmed! I'm not resuming my monthly column, which we "axed" a couple of year's ago when Editor Hal Phillips came on board. I am taking space this month to thank our loyal readers and advertising clients for supporting *Golf Course News* on what could be considered a minor milestone in publishing.

Five years ago this month, I showed up in Anaheim at the GCSAA Show with a couple thousand copies of *Golf Course News* filled with free advertising. Joining me were our chairman, Ted Gordon, and managing editor Mark Leslie. Also with us was an idea that this booming industry needed a news source that could offer wide-ranging information focusing on maintenance, development, management, design and supplier business.

I am pleased to say that, in

this short five-year period, this idea has become a full-blown, successful reality.

Shortly after the '89 show, Peter Blais came on board as associate editor and, of course, Vern Putney was hammering out stories until some health problems sidelined him (he's back, in fine "fettle," as contributing editor). Our editorial staff found a leader in Hal Phillips, who joined us at the New Orleans show in '92. All of the original staff is still with us and continuing to provide you news for the industry.

During these five years, there have been many interesting happenings in the industry. I'll never compete with Letterman, but with an assist from our editors, I've come up with a few "Top Ten" or "Best of" lists. I'm sure we've missed a few of your



Charles von Brecht,
publisher

favorite items or names in the *News*, so please send along any additions. Here we go:

Top Ten News Stories

- 10) Weather-related disasters affecting golf facilities: Hugo, Andrew, Iniki, quakes, floods, drought — and the incredible resilience of the nation's superintendents
- 9) Real attention paid to the speed-of-play issue
- 8) Emergence of golf course management companies
- 7) Rapid rise of the Asia-Pacific market
- 6) Major reorganization at top of GCSAA (for the better!)
- 5) Boom in daily-fee/public-access facilities
- 4) RTC liquidation of properties, Landmark foremost among them
- 3) Mergers and acquisitions on the supplier side, as the

industry continues to mature

2) EPA and state regulation, along with chemical reregistration under FIFRA

... And the number-one news story from the year 1988 to 1993...

1) More than 1,700 new golf courses open for play. The NGF was right: That's nearly one per day!

One of my lasting impressions from that first show in Anaheim was how personable people are in this industry. Along with the new leaders at GCSAA, a slew of personalities has emerged in the golf world over the past five years. Here's my list, in no particular order:

• Mike Hughes, executive director, National Golf Course Owners Association — the growth of the NCGOA speaks volumes

• Perry Dye, Dye Designs — single-handedly kept the

Continued on page 60

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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Langhorne, PA 19047
215-788-7112

United Publications, Inc.
Publishers of specialized business and consumer magazines.
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Show provides chance to gather, speak out

By GERALD FAUBEL

Each year at this time, golf course superintendents from throughout the world gather at the Golf Course Superintendents Association of America Conference and Show.

They learn new techniques to do their job better through seminars, educational sessions and interaction with fellow superintendents. They are able to see all the available products to assist them.

And they will have the opportunity to attend the GCSAA annual meeting, where they can express their desires on how the organization should operate for their benefit.

According to GCSAA's Articles of Incorporation, the association is intended: "To provide for and enhance the recognition of the golf course superintendent as a professional. To advance the art and science of turfgrass management; to collect and disseminate knowledge of golf course management with emphasis on efficient, economic and environmentally sound management of golf courses."

The membership will elect people who will have responsibility to insure this purpose is carried out to the benefit of the membership. Each president, vice president and board member should be acutely aware of the organization's purpose.

The membership expects many things from its national organization. Many of these expectations have been met due to support from industry through active participation in the show, scholarship, research and *Golf Course Management* magazine. Cooperation between allied organizations has enabled superintendents to actively participate in directing golf's future.

Being involved in this great game is a serious responsibility. Our national organization allows us to help develop our industry's future. Most superintendents depend on GCSAA to vigorously pursue any and all means of assisting them in accomplishing their managerial duties.

When you consider what other associations provide members, GCSAA has done a remarkable job throughout its history. In recent years, our organization has increased member services in meaningful ways — the conference and show, educational seminars, industrial relations, scholarship and research, government relations, technical resources, membership welfare and many others.

Gerald Faubel, CGCS, is head superintendent at Saginaw (Mich.) Country Club and past president of the Golf Course Superintendents Association of America.

GOLF COURSE NEWS

It is also our responsibility to make certain the individuals we elect as president, vice president and directors are qualified to provide the progressive leadership that is both in the best interest of the profession and meets the requirements of the Articles of Incorporation.

Members must put aside their own personal agendas to make certain the board acts in the



Gerald Faubel

best interest of the game of golf.

Events that transpired in the past are history now. It is vitally important to look forward to the many opportunities that are available to all of us and dwell upon the future; not what

might have been, but what could be.

The challenges which we as managers must face are serious and can only be addressed

through cooperation and commitment.

All the improvements have been made through the support and resources of everyone involved in the game. The superintendent is recognized as beneficial to the game. Golfers recognize the importance of maintaining a course in an efficient, economical and responsible manner. Superintendents must earn respect as responsible managers.

U.S. Environmental Protection Agency Administrator Carol Browner told us in last month's *Golf Course News* to reduce pesticide and fertilizer use and

find ways to utilize appropriate plant material. She perceives as fact that golf courses use four to seven times the amount of pesticide per treated acre as do farms. She calls that "unacceptable." Society demands a safer and cleaner environment. Yet the golfer demands even higher quality conditions, which seldom have a positive environmental effect.

What is the superintendent to do?

The answer is research and education — as it always has been. The need for specific research on turfgrass is vital.

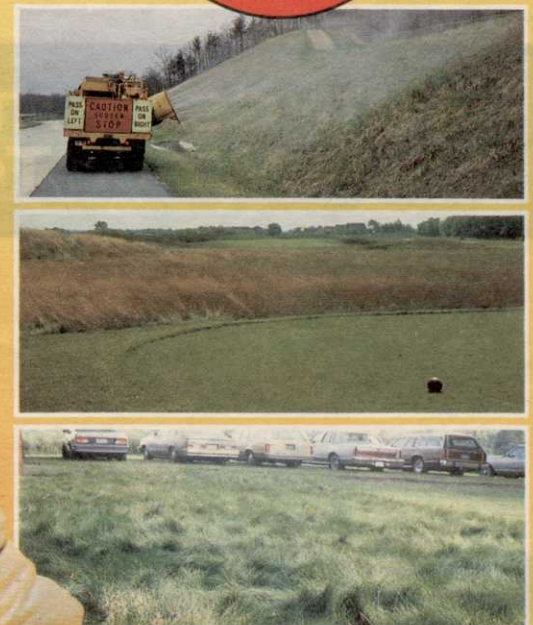
Continued on page 29

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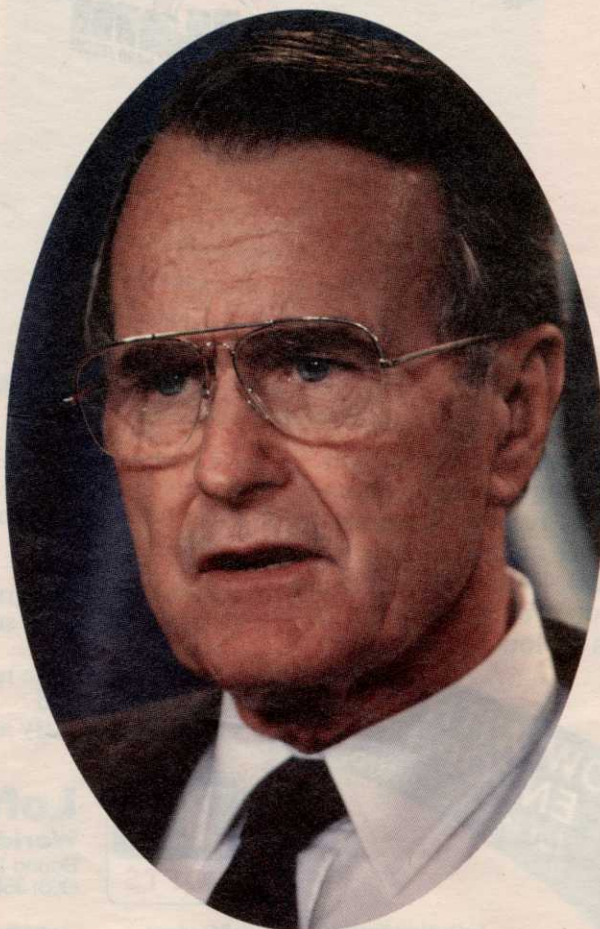
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THINGS THAT DON'T WORK WELL TOGETHER.



Some things just aren't meant to go together. For example, well-hit baseballs and windows, Bush and broccoli, postal delivery persons and neighborhood dogs. No matter how hard you try, they just don't fit together.

On the other hand, some things are meant to go together: beer and pretzels, football and Thanksgiving, peanut butter and jelly, kids and puppies.

When it comes to disease control on turfgrasses – especially brown patch, leaf spot, dollar spot, and summer patch – there are two products that go together pretty well, too.

Diseases Controlled By A Tank Mix Of Banner And Daconil 2787.

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Red Thread
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Spring Dead Spot
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So well, that it's as if they were almost created especially to be used in a tank-mix combination: Banner® and Daconil 2787.®

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When these two remarkable products are used together in a tank mix, they provide even more remarkable results on turf diseases. Such as:

- Broader control
- Longer control
- Lower rates

Banner and Daconil 2787, when used at their lowest labeled rates, provide excellent control of all major turf diseases (except Pythium) when used on a typical 14- to 21-day program.

Better control, in fact, than you can get with the highest rates of either product when used alone.

Use Less Active Ingredient.

These low rates minimize the amount of active ingredient that you have to apply to the turf, yet provide both longer disease control and a spectrum of control that would not have been possible with either one of the products alone.

Because this tank mix offers two different modes of action, there is less chance of disease recurrence. It also minimizes the development of insensitivity.

Results for the performance of this tank mix are based on extensive research conducted at universities and golf courses all across the country.

Stay Ahead Of Disease.

The results are conclusive: Tank mixing Banner and Daconil 2787 can let you stay effectively ahead of diseases – while allowing you to use the lowest labeled rates for more cost efficiency.

If disease becomes established, you often have to throw a lot of money at the problem to make it go away. This is because treating diseases once they are established usually requires using a lot of different individual products to control the various diseases.

Preventive Vs. Curative.

A preventive approach works better.

Using a preventive instead of a strictly curative approach to disease control has several advantages.

Turf that has not been weakened by disease is stronger, and better able to handle other stresses during the year. The turf generally stays healthier, as well.

But perhaps the main advantage of the preventive approach is that undamaged turf looks a whole lot better than turf that has suffered an attack by disease.

This alone is reason enough to try a Banner plus Daconil 2787 tank mix to prevent disease from ever getting a foothold on your turf. And it's available for use on both golf courses and residential lawns.

A More Practical Approach.

A tank mix of Banner and Daconil 2787 is so economical and effective, it makes taking a preventive approach to controlling turf diseases totally practical – whether on a private or public golf course, or on residential lawns being serviced by a lawn care professional. Even on a tight budget.

In fact, this new tank mix is so practical, we're sure you'll believe as we do that Banner and Daconil 2787 applied in combination are the greatest thing since sliced bread (and butter!).



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THINGS THAT DO.



Who would have thought this combination would revolutionize the fight against brown patch and dollar spot? Yet a tank mix of Banner® and Daconil 2787®, at their lowest rates, will give you superior control. More than either fungicide can alone at their highest rates. And with longer residual. Which means brown patch and dollar spot won't just go away. They will stay away.

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On a golf course a bad score should be the only thing that stinks.

Foul odors, algae and sludge in golf course ponds are enough to ruin anyone's game. The results of poor water management can be unsightly, smelly and costly.

Now Otterbine has developed CONCEPT₂, the new high-technology surface aerators that can revolutionize your approach to water quality management.

CONCEPT₂ High Volume aerators are built to last, made of stainless steel and tough, versatile thermoplastics, with a rugged, custom built motor and a virtually unbreakable stainless steel prop designed to handle large volumes of water.

And CONCEPT₂ offers almost unlimited versatility, with easily installed, totally interchangeable spray patterns.

SUNBURST₂ in Otterbine's CONCEPT₂ line answers the challenge of producing a sparkling water display with minimal effect on pumping rates.

CONCEPT₂ and SUNBURST₂ 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.

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BRIEFS



BRAME BREAKFAST SPEAKER

DALLAS — Robert A. Brame, a certified golf course superintendent working with the United States Golf Association Green Section's Mid-Atlantic Region, will speak at the annual prayer breakfast at the International Golf Course Conference and Show. Brame, ordained in 1984 by Carmel (Ind.) Baptist Church, has served as an interim pastor for several churches while working in course management. The event will be at 7 a.m. Sunday, Feb. 6, at Loew Anatole Hotel. The breakfast is open to all faiths.

GCSANJ DONATES \$20,000

The Golf Course Superintendents Association of New Jersey raised \$20,000 for Project FAITH (Fitness Activities in Therapy), an organization dedicated to providing physical fitness programs to children with cancer. The annual GCSANJ Championship, a raffle and a gift from Deal Golf & Country Club provided the money.

ON THE MOVE

Andy Bowen has left his assistant superintendent's position at Reynolds Plantation in Greensboro, Ga., for greener pastures. He has accepted the head superintendent's job at the Old North State Club in New London, N.C., about 50 miles outside of Charlotte. Old North State was voted the second best new private club for 1993 by Golf Digest.

Terry Vassey, formerly assistant superintendent at The Standard Club in Duluth, Ga., and instructor at Horry Georgetown Technical College, has accepted the position of golf course superintendent at Berkeley Hills Country Club, also in Duluth. Vassey is also an instructor at Gwinnett Tech.

Eagle Watch Golf Course in Stockbridge, Ga., has a new superintendent. Rich Franke has accepted the head superintendents job after manning the same position at the City Club of Marietta.

Ron Schaffer has accepted the head superintendent's position at Ponce de Leon Resort and Conference Center in St. Augustine, Fla. Schaffer had been assistant superintendent at the Golf Club of Georgia in Alpharetta.

TURF EVALUATION PROGRAM MOVES

National Turfgrass Federation, Inc. has moved its National Turfgrass Evaluation Program (NTEP) to BARC-West, Bldg. 002, Room 013, Beltsville, Md. 20705. The phone number remains the same: 301-504-5125.

Dr. Carrow's cultivation research to improve compaction, water use

By PATRICK O'BRIEN

Dr. Bob Carrow, researcher at the University of Georgia Experiment Station, significantly reduced surface and subsurface compaction and improved water uptake of a common Bermudagrass turf grown on a compacted clay soil.

As part of the \$5 million 1983-92 United States Golf Association (USGA) Turfgrass Research program, this discovery will help turf managers develop and justify cultivation programs for tees and fairways that will ultimately result in more efficient use of irrigation water.

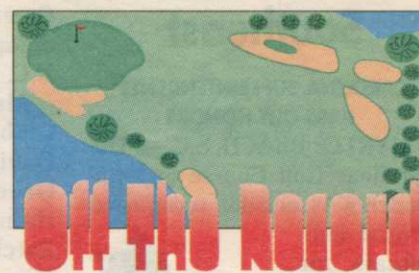
Numerous studies to evaluate different

Patrick O'Brien is director of the United States Golf Association Green Section, Southeastern Region.

cultivation techniques have been funded by the USGA Research Committee at the University of Georgia. This study was performed on a Cecil sandy clay loam with 55 percent sand, 18 percent silt, 27 percent clay and a 2 percent organic matter content. Each common Bermudagrass plot was compacted with a smooth power roller when the soil was near field saturation.

From previous cultivation studies, the Verti-drain was most effective in making physical soil improvements deeper in the profile, while hollow tine coring was best at improving soil surface conditions. The frequency of Verti-drain treatments, as well as the combination of Verti-drain and hollow-tine coring, were further explored in this new study.

Two annual Verti-drain and hollow-tine



coring combination treatments consistently reduced soil compaction and improved root water extraction. Penetration resistance reductions of at least 25 percent occurred in all zones. Root water extraction was improved from 33 percent to 71 percent within the soil profile.

In very hard soils, loosening the surface initially with core cultivation will allow improved Verti-drain penetration. With the upper three inches of the profile less compacted, the Verti-drain will expend maximum energy at lower depths. After the first year, the research demonstrated core aeration could be omitted once the upper three inches are softer.

A dense root system is often thought to be the most efficient for water extraction. The Verti-drain actually decreased total root length density and total root length in this study! However, the roots left behind were more viable and extracted water from the soil more efficiently than roots in the compacted control. Root data may not always correlate well to water uptake in cultivation studies. The Verti-drain also enhanced overall water uptake as demonstrated by evapotranspiration (ET)

Continued on page 23

SPRING START-UP

This is a healthy root system, thanks to the drill bit. Aeration has become a staple for spring start-up programs. For more on aerification and fertilizers, and innovative ways superintendents are tackling the challenges, see pages 30-33.



The right way is the cheapest way — Buchen

By MARK LESLIE

CHARLESTON, S.C. — While growing and maintaining quality turfgrass are critical to a golf course operation, groundskeeping costs can be cut in many ways, according to Terry Buchen, superintendent at Double Eagle Club in Galena, Ohio.

Speaking at Golf Course News' recent Public Golf Conference, Buchen said: "Do things the right way. That's the cheapest way."

He suggested a number of cost-cutting measures, including:

- Portable two-way radios for full-timers.

"They are the biggest efficiency tool I've seen in years. We save one hour per radio per day of wasted time just trying to find each other," said Buchen,

adding that speaker microphones are installed on Double Eagle's equipment.

- Do away with the buddy system: I usually don't like it.

"On some projects — like running a chain saw — it works. But you get much better production without the buddy system.

- Draft a labor flow chart, including every job done in the entire year, from

mowing greens to raking bunkers to aerifying. It helps you discover if the grounds crew has too many or too few people.

- Turn on the Weather Channel, and monitor it.

"It's saved a lot. We go out and fertilize when we see the storm coming. We save pumping, electricity costs and water," Buchen said

"I leave it on all the time. If a storm is coming we let everyone know. The local radar is shown every five minutes. It's for the preceding 90 minutes, so you can track the storm yourself, figure your cloud cover, precipitation..."

- Install several rain gauges on the course. ("I have one in my house.")



Terry Buchen



SUPER FOCUS

Joe Lightkep has gone from 18-year-old superintendent to owner at Fairway G&CC in Pennsylvania. See page 26.

Distinguished Service Award

New Jersey supers honor Kubik

The Golf Course Superintendents Association of New Jersey has presented its 1993 Distinguished Service Award to longtime supporter and Grass Roots turfgrass supply company owner Ken Kubik.

A member of GCSANJ since 1976, Kubik was involved in

starting *The Greenside* newsletter in 1980, then co-edited and wrote for it.

He is a past member of the New Jersey Turfgrass Association board of directors and serves on the board of the Alliance for Environmental Concerns.

Continued on page 28

Southeast

CAROLINA SUPERINTENDENTS PASS OUT HONORS

MYRTLE BEACH, S.C. — The Carolinas Golf Course Superintendents Association recognized several individuals for their outstanding service to the association and the superintendent profession, at the annual banquet held during the Carolinas GCSA Conference and Show here.

Dr. Landon C. Miller, professor and extension horticulturist at Clemson University, was honored for his 20 years of service as executive secretary of the Carolinas GCSA. Miller was chosen as executive secretary in March 1973 and has seen the membership grow from 261 to more than 900. Miller also serves as media editor and has seen 123 issues of the association's *Carolinas Green* newsletter published and mailed in his 20 years.

Dr. Carl T. Blake and Charles P. Willimon were each presented the President's Distinguished Service Award.

Blake has served the past 12 years as staff agronomist for the Carolinas Golf Association, visiting superintendents at CGA member clubs to provide support and assistance in solving turfgrass problems the superintendent may encounter.

He is retired from North Carolina State University where he served 31 years in the Department of Agronomy as a full professor, specializing in turf.

Willimon is the founder, owner, and superintendent of Bonnie Brae Golf Club near Greenville, S.C.

Willimon began building Bonnie Brae in 1959 on the site of his family's farm, with the front nine opening in July of 1961 and the back nine opening 3 years later. Willimon has been a member of the Association since 1965 and served as president in 1970, '71, and '72.

FABRIZIO TAKES OVER CAROLINAS GCSA

CLEMSON, S.C. — The Carolinas Golf Course Superintendents Association has elected Michael K. Fabrizio of Wild Dunes Resort in Isle of Palms, S.C., and Robert O. Farren of Pinehurst (N.C.) Country Club, as president and vice-president, respectively.

Charles Green III of Florence (S.C.) Country Club was elected treasurer, and John K. Williams of Keith Hills Country Club in Buies Creek, N.C., was elected secretary.

Board of directors for 1994 are Donald C. Garrett Jr. of Dataw Island (S.C.) Club, Gary H. Jones of Verdae Greens Golf Club,

Greenville, S.C.; Mickey McCord of Sapphire Lakes C.C., Sapphire, N.C.

Also, Jim Neely of The River Club, Pawleys Islands, S.C.; David L. Pulley of Topsail Greens Golf and C.C., Hampstead, N.C.; Joel A. Ratcliff of Sedgfield, C.C., Greensboro, N.C.; Kevin B. Redfern of Wildwood Golf & Polo Club, Columbia, S.C.; and Kris W. Spence of Greensboro (N.C.) C.C.

T. Stephen Sheets of Linville Ridge C.C. in Linville, N.C., remains on the board as past president.

West

CALIFORNIA OFFICIALS REVIEWING PESTICIDES LIST

The California Department of Pesticide Regulation is reviewing recommendations to add benomyl and chlorothalonil to the Minimal Exposure Pesticides List.

The two fungicides are sold under the names Tersan 1991 (benomyl) and Daconil 2787 (chlorothalonil), according to Pebble Beach Co. Vice President of Resource Management Ted Horton.

They are commonly used to fight dollar spot, brown patch and other turf diseases, he added.

Placement on the Minimal Exposure Pesticides List means applicators would have to wear respirators and full-body protection, said pesticide department research scientist Sue Edmiston.

"That shouldn't be much of a problem," said Horton, who oversees Pebble Beach, Spanish Bay, Cypress Point and Spyglass Hill golf courses.

"Most superintendents already

have workers wear full-body protection when applying pesticides. If they aren't, they should be."

Edmiston said she doesn't expect formal regulations to be adopted until late spring at the earliest.

Send in info

To keep superintendents informed of the goings-on in their own and other regions, individuals and associations are asked to send information to Regional News, *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.



The only test left for



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Test Course Supt.
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George Cook
Test Course Supt.
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Lyman Hanley
Test Course Supt.
Tempe, Arizona

"We scalped for overseeding last fall. I was amazed at how this machine went in and cut everything in one pass."



Mike Lentz
Project Manager
Horicon, Wisconsin

"We made a number of modifications based on what we learned in the field. The testing and feedback were critical to this project's success."

North Central



SIROKY PRESIDENT IN KANSAS

Randy Siroky of MacDonald Park Golf Course in Wichita has taken the reins of the Kansas Golf Course Superintendent's Association.

Siroky heads a new slate of officers including Vice President Paul Jonas of Crestview Country Club in Wichita and Secretary-Treasurer Mark Willmore of Shawnee Country Club in Topeka.

Directors are Cliff Dipman of Manhattan (Kan.) Country Club, Mike Hulteen of Cresview CC, Darren Lockhart of Lake Barton Golf Club in Great Bend and Past President Ron Reese of Marysville (Kan.) Country Club.

In his first letter to members in Kansas Grass Roots, Siroky said the board has met and decided "promoting ourselves through the media, using good conduct on and

off the field, along with educational ideas, will be two of our goals this year."

BYLAWS REVIEW IN KANSAS

Chairman Cliff Dipman, Mike Hulteen and Paul Jonas, who comprise the Bylaws Committee, will review the Kansas Golf Course Superintendent's Association bylaws to draft revision for the next annual meeting late this year. Members are asked to contact a committeeman with ideas, suggestions or comments.

NIGHT-TIME LOCK-UP SUGGESTED

PRAIRIE VILLAGE, Kan. — In

the wake of vandalism at Meadowbrook Country Club, superintendents are being asked if their tanks and pumps are locked and if they turn off electricity to the pumps at night. The Kansas GCSA reported that a disgruntled former employee had caused a fuel spill from the fuel pumps. It was a costly event for superintendent Jud Coester, who also had to deal with state and local authorities and the Environmental Protection Agency.

HEINZE HEADS KTF

Jim Heinze of Modern Dist. Co. in Kansas City has been elected president of the Kansas Turfgrass

Foundation. He is joined on the board by Vice President Tom Rogers, superintendent at Willowbend Golf Course in Wichita and Secretary-Treasurer Larry Leuthold. Among board members are superintendents Mark Willmore of Shawnee Country Club in Topeka and Don Breault of Clay Center (Kan.) Country Club.

South Central



FEARIS FEATURED BY CMAA

SAN ANTONIO, Texas — Head superintendent Dave Fearis of Blue Hills Country Club in Kansas City, Mo., will speak at the annual Club Managers Association of America's annual conference here, Feb. 6-10.

Fearis will speak on *How Proper Communication Can Improve the Common Pitfalls of Golf Course Maintenance*.

New York Audubon Society President Ron Dodson will talk on the *Cooperative Wildlife Sanctuary Program*, while PGA of America's Chris Hunkler will discuss *Elements of Golf Shop Operations*.

Northeast

MASS. HONORING COUCH

SPRINGFIELD, Mass. — Dr. Houston Couch will be honored at the Massachusetts and Lawn-grass Association's (MTLA) Conference and Industrial Show, Feb. 28 to March 2.

The association will pay tribute to Couch at the tee-off banquet at Sheraton Springfield Hotel, at which *Grounds Maintenance* magazine editor Mark Welterlen will speak.

Scholarships will also be awarded, and retired superintendent Camdem Pierce will talk on "Did This Ever Happen to You?"

Concurrent golf sessions are scheduled March 1 and 2 at Springfield Civic Center. A session on equipment maintenance will be held from 2 to 4 p.m. March 2.

The Industrial Show at the center will be open from 9 a.m. to 1 p.m. on March 1. On March 2, exhibits will be open from 11 a.m. until the turf conference closes at 4 p.m.

Pesticide recertification credit will be available.

More information is available from Dr. Joseph Troll, MTLA, P.O. Box, Hadley, Mass. 01035; telephone 413-549-5295.



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Dr. Noel Jackson on dreaded dollar spot: No sure cure soon

By GORDON WITTEVEEN

Dr. Noel Jackson, from the University of Rhode Island, is known as the most technically knowledgeable turfgrass pathologist in North America. What many don't know, however, is that Jackson has had a life-long love affair with dollar spot. It started as an infatuation at the Bingley Sports Turf Institute in England where Jackson gained his early experience. But, the love affair really took off when he came to Rhode Island and started visiting northeastern golf courses.

Noel Jackson has collected samples of infected turf from golf courses in the northeast for years. He has also received samples sent in by golf course superintendents. At the laboratory in Rhode Island the samples are analyzed, but strangely, Jackson has never been able to identify the causal organism. Only once in the history of dollar spot has the causal organism been identified and that was in England. Jackson collected several samples of infected turf in North America, packed them carefully, and personally took these to England. At the Bingley Sports Turf Institute, he followed the same procedures exactly as had been done before, but only the spores from the English samples could be identified.

Jackson, who can rattle off the Latin names of every fungi imaginable like a fast talking salesman, is lost for words when it comes to dollar spot. Dollar spot in North America has no Latin name! One would think that a no-name fungus would behave accordingly, and practice its dirty work in obscurity. Far from it. The dollar spot disease continues to be the most devastating turf pest from Maine to Illinois and from Ohio to Quebec.

The dollar spot organism, according to Jackson, is a remarkably resilient fungus. It quickly develops a tolerance for most any pesticide that superintendents have used over the years to combat this pest. At one time dollar spot was considered to be a poor man's disease. Only those courses that could not afford fertilizer were infected by the disease. A quick application of nitrogen, and the grass would outgrow the dollar spot. That is no longer the case.

Both Cadmiun and Dyrene were effective fungicides for the control of dollar spot at one time. The fungus developed a resistance in short order and both chemicals have fallen by the wayside. A number of years ago the Dupont Company brought out the systemic fungicide Benomyl 1991. The company claimed that dollar spot would literally be wiped off the face of the

earth, or rather the face of all golf courses, just like 2-4D had eradicated broad-leaved weeds before. For a little while it seemed that Dupont had discovered a wonder chemical. Benomyl 1991, applied thousand square feet, effectively controlled dollar spot for a few years at first. Then, heavier rates were required to obtain the same results. Eventually the fungus developed resistance for even this wonder drug. Benomyl 1991 is now totally useless for dollar spot control

and has been taken off the market.

The contact fungicide, Daconil, was at one time effective for three week periods, but now only provides control for an 8-9 day time span. A good shot of mercury will do the trick anytime, either in the form of Calo-clor, PMAS or Merfusan, but mercuries have been taken off the market as well.

Robert Feindt, superintendent at Country Club of Rochester in New York state, believes the dollar spot fungus attacks the turfgrass

over a longer time frame than it used to. According to Feindt, the fungus was once active only during the summer months. Nowadays, it is likely to show up in May, and there can be devastating outbreaks in September persisting into October.

Feindt advocates organics as a means of establishing healthy turf and preventing disease. Both Milorganite and Sustane are integral parts of his maintenance program. Like most superintendents worthy

of the name, he has practiced "integrated pest management" long before the phrase was invented and the practice became politically correct. Even Feindt finds it difficult to control dollar spot the organic way. He has had to resort to chemical methods and applies doses of Daconil at timely intervals.

"Will there ever be a cure for the dreaded dollar spot disease?" We posed that question to Noel Jackson and he laconically replied, "My bet is on dollar spot!"

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Superintendent
Dunwoody Country Club
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Pocasset, Massachusetts

"Barricade makes it easy for us to fine tune our control program, as the length of control is determined by the rate used. We've found that one application is all it takes to keep us crabgrass free until the start of cold weather."

Gordon Witteveen is superintendent at Board of Trade Country Club in Toronto, Ontario, Canada. The above story first appeared in *Mainly Green* and has been reprinted with the author's permission.

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Superintendents stretching budgets with plant growth regulators

By TRENT MEIDINGER

For superintendents with a tight budget and stretched labor force, there rarely are enough hours in the day to keep up with mowing.

To help stretch their budgets — and time — superintendents are relying more on plant growth regulators, or PGRs. By using

Trent Meidinger is a writer for Mona, Meyer, McGrath & Gavin, the public relations firm for Ciba Turf & Ornamental Products.

PGRs, they can save time and money for several reasons, including:

- less mowing,
- faster mowing,
- reduced need for extra workers,
- fewer clippings, and
- less wear and tear on equipment.

Although PGRs have been around since the 1950s, many early products were unreliable or costly. Today, PGRs are proving

to be cost-effective on every part of the golf course.

PGRs fall into two categories, Type I and Type II. Type I PGRs, which include older compounds such as Embark and Limit, inhibit plant growth by stopping cell division.

Type II PGRs, unlike Type I products, don't stop plant growth. Instead, they affect the biosynthesis of gibberellic acid. This plant substance causes cell or stem elongation. Cutless, Scott's TGR and

the newest product, Ciba's Primo, are Type II PGRs.

According to superintendents across the country, PGRs are cost-effective because of the benefits that accompany slower turf growth.

Some superintendents who use PGRs choose to cut down on the number of weekly mowings, while others maintain the same mowing schedule. Either way, the superintendent comes out on top.

"We don't reduce our mowings," says Ray Avery, superintendent at

Quail Hollow Country Club in Charlotte, N.C. "But with PGRs, we've reduced clippings and really improved the look of the course."

Dick Gray, superintendent at Loblolly Pines in Hobe Sound, Fla., does use PGRs to reduce mowing in bermuda fairways.

"While using a PGR during the summer, we reduced our mowing from five times per week to two or three times," Gray says. "When we did cut back on the mowing, we didn't run into a problem with leggy turf."

In addition to reducing mowing frequency, PGRs may extend the life of mowing equipment.

"We sprayed our PGR at recommended rates in the rough so we could reduce the growth and see if we could get by without buying a new rough-mowing unit," says Chip Martin, superintendent at Southern Oaks Golf Course in Easley, S.C. "It definitely worked, and we didn't have to buy a new unit."

Because less time is spent mowing, PGRs also free up time for workers to spend on other parts of the course.

For Loblolly Pines' Gray, it's an important benefit that his crew can get off the fairway mower and onto other projects around the course.

"We can keep the same number of people and use them elsewhere on the course," he says.

Other superintendents agree with Gray. After doing some arithmetic, they say that using PGRs saves them money because they have to hire fewer workers.

For Southern Oaks' Martin, using a PGR helped him reduce his labor costs in his roughs.

"The members, especially here, like a short rough. And all superintendents know that roughs really can be a headache, especially when you have a lot of rain," he says. "But with a PGR you don't have to worry about it nearly as much."

Dick Stuntz
Superintendent
Alvamar Country Club
Lawrence, Kansas

"With the amount of flooding and heat we've had this season, most preemergence herbicides would have fizzled out by now — but not Barricade. It's still giving us excellent control."

John Freeman
Superintendent
Deerwood Country Club
Kingwood, Texas

"Our preemergence weed control program was too expensive. Rather than cut back we switched to Barricade. Now, for the same dollars, we not only get excellent control, but also more coverage. Plus, we have the advantage of using multiple applications and getting better control of a broader spectrum of weeds."

Show: Record registration

DALLAS, Texas — Pre-conference registration for the 65th International Golf Course Conference and Show here Jan. 31-Feb. 7 totaled 3,117 as of Jan. 10. Last year's record was 2,996.

On the educational roster for members of the Golf Course Superintendents Association of America are: 58 pre-conference seminars; two "innovative superintendent" sessions; six concurrent educational sessions encompassing 35 state-of-the-art topics, and ten special-interest forums.

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On The Green



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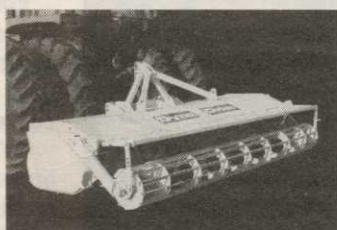
Maybe that's why Wadsworth owns five of them with more on

order. He adds that more people would buy Dyna-Drives if they could see them in action and that architects, engineers and designers should

specify them. We appreciate his honesty.

We can't add much to John's comments except its tines are self-cleaning, and it comes with no PTO, wheels, axles, tires or gearbox so it's truly low maintenance.

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CIRCLE #114

Canadians beat the cold

The greenhouse effect

By MARK LESLIE

TURNER VALLEY, Alberta, Canada — Contrast and compare: Turner Valley Golf and Country Club rebuilt three greens four years ago at a cost of \$250,000, and the greens were out of play the entire season. Last winter, during the off-season, it rebuilt and sodded two greens for \$80,000. And this winter it is resurfacing and seeding one green for \$3,000.

How? With specially built 10,000-square-foot tents that serve as mini-greenhouses, creating what superintendent Kent Plumer called "the perfect environment" in this cold environment in the foothills of the Canadian Rocky Mountains.

Plumer and assistant Gary Taylor are thrilled with the results of this innovation, which Taylor said, is "basically an expansion of the idea of turf covers." It originated at Bearspaw Country Club in Calgary, said Plumer, who couldn't explain why others aren't trying the method even though "a lot of local guys have come out to look."

"I'm sold on it. Rebuilding greens is a costly venture no matter what you do. With this, the propane costs are the most," he said. At a cost of \$4,000 apiece, Plumer had Calgary Tent and Awning Co. build the tents of semi-transparent, tough material similar to woven nylon seed bags.

The first experiment came during the winter of 1992-93 when Turner Valley rebuilt 8,000- and 6,500-square-foot greens to U.S. Golf Association specifications and sodded them with bentgrass.

The tents were installed over greens, staked down with 18-inch durable metal hooks every foot, and inflated with 1 million BTU propane-powered heaters. Once the tents were inflated to their 14-foot ceilings, the heaters were reduced

to 500,000 BTUs and the tents kept at 72 degrees, with 85 percent humidity.

The tents were inflated the first of April and the greens were playable on opening day, May 15.

Plumer put the cost of the 7,550 liters of propane used at \$1,729 for the two greens. He rented the two heaters, two fans and two tanks for \$1,400 a month. The cost of the two greens, driven by the high price of sod trucked from Vancouver, was \$80,000.

Unhappy with the sod, Plumer decided this winter to seed the final putting surface in his reconstruction program. On Oct. 15, crews tore out the old push-up green, reshaped it, added sand amendments, and put the tent pegs in. Come the first of March they will inflate the tent and fertilize and seed the green.

"Our goal is to open by June 1 and be ready for our Classic tournament on June 6," Plumer said.

Taylor said they will use the tents again and again, as part of a resurfacing program to rid the greens of poa annua.

To that end, they decided it was worth beating the rental fees by buying a \$1,700 generator to handle the fan and heater and hook into the propane tanks.

"We should be able to strip a green, reseed it and have it up and running for the opening day in the spring for \$3,000 plus labor," Taylor said. "We feel it is far more economical to do it ourselves and we won't lose that playing time. Playing on temporary greens for a season isn't acceptable any more, especially with the competition in this area."

In the resurfacing program, Plumer expects bentgrass, under a tent, will outcompete poa annua. And with good cultural practices, the Turner Valley crew will be able to keep the poa out permanently.

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Turner Valley timeline

Turner Valley Golf & Country Club superintendent Kent Plumer provided this timeline and cost rundown for resurfacing his 13th and 18th greens with sod under a tent during the winter:

March 1: Blew up tents to draw frost out for 24 hours. 1 million BTU heaters used.

March 29: After waiting for bad weather to subside, blew up tents. Shaped green surface.

March 30: Incorporated fertilizer into greens. Sodded 18th green.

March 31: Sodded 13th green.

April 7: Rolled greens.

April 13: Prepped surrounds of both greens.

April 15: Sodded 18th green surrounds.

April 21: Sodded 13th green surrounds.

April 25: Mowed greens to 7/16 inch.

April 26: Top dressed greens.

April 28: Mowed greens to 7/16 inch.

April 29: Removed the tents. Used Hydroject on the greens to encourage new root growth.

May 3: Mowed to 3/8 inch.

May 9: Mowed to 3/8 inch.

May 11: Top dressed greens.

May 15: Rolled the greens and cut to 1/4 inch.

May 22: Opened the holes for play.

COSTS

Tents: Two tents, purchased for \$4,000 each.

Heaters and fans: two 1 million BTU heaters, rental \$500 per month each; and two 5,000 CFM fans, rental \$150 per month each.

Propane tanks: Two 1,000-gallon tanks, rental \$50 per month each

Propane: 22.9 cents per liter.

Total propane used: 7,550 liters.

Cost for propane: \$1,729 for two greens.

GOLF COURSE NEWS

Arizona fund-raiser a pacesetter for the nation's golf industry

Continued from page 1

in their industry.

The Commodities Group was formed to generate revenues for the University of Arizona's Karsten Turfgrass Research Center and other projects. "Cactus and Pine, the Southwest Section of the PGA, the Arizona Women's Golf Association, Arizona-Nevada Club Managers Association and Junior Golf Association of Arizona are the main players, along with the Arizona Golf Association and some other highly visible people in the industry," Clark said.

The group intends to present a bill to the state Legislature sometime during its current session, which would normally run through March.

Past attempts to raise money for turfgrass research have generally fallen far short of expectations, Clark said. Most successful has been the Public Awareness and Research (PAR) Group. Former PAR President Bill Rodie, a member at Desert Forest in Carefree, developed the Commodities Group.

The brainchild of University of Arizona Assistant Dean of Agriculture Dr. Merle Jensen, the Commodities Group will accomplish one thing even if the Legislature pans the proposal. "If nothing else, we got everybody together," Clark said. "That's a first."

Clark said golf industry officials in several states are keeping close tabs on the action in Arizona, hoping it might be a recipe for success. "If it works, we will be inundated with people who want to know how we did it, so they can, too," he said.

Voluntary contributions to PAR helped develop databases for legislation and research at the University of Arizona, Clark said. "But the involvement was extremely limited. We knew the only way to generate substantial funds was to make it mandatory," he said.

...

Clark estimated the assessment would actually raise \$300,000 to \$700,000 a year. The money would be controlled by the Commodities Group.

The largest portion would help run the Karsten Center, which needs \$250,000 to \$350,000 per year to operate.

Another key area the money will be used in is to promote affordable golf.

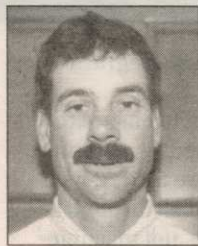
"In recent years the population of the state has grown dramatically. New golf courses are opening everywhere, but not a lot that offer affordable golf, and getting tee times is nearly impossible," Clark said. "We want to attract developers. We could even be partners in getting them started and then recover some of the moneys."

Another portion of the money will be used for "a campaign to show that recreation and the use of turfgrass in Arizona are economically beneficial — especially in the area of golf, but also for parks, schools, sports

GOLF COURSE NEWS

'We want to attract developers. We could even be partners in getting them started and then recover some of the moneys.'

— Mark Clark, president
Cactus & Pine GCSA



turf," he said.

Other money would help develop a database to "reveal the potential and amounts of water we use. So when the Water Resources Board puts together

figures for the year 2000 or 2010, they will have real figures," Clark said. "We think that's important and will help bring about friendlier legislation for us so that our industry has a voice, much like

mines and agriculture do.

"People don't realize agriculture uses 87 percent of the water in Arizona. Golf uses one-half of one percent. The impetus behind this is that we need money to fund the campaign to tell people golf is a very important commodity in the state," Clark said.

Clark cited Cactus & Pine's point men in the Commodities Group — Jim Key of The Pointe and Hilton Resorts and Kent Nevitt of Foothills Golf Course, both in Phoenix.

Heavy players in the Arizona golf industry — Bob Goldwater, Harry Kavanaugh and Russ Lyons included — "all say this is a slam dunk, why worry," Clark said. "But we know that is not going to be the case."

"We are putting together a video to sell the idea to the [golf course] owners, because that's where the hard sell is going to be. The Legislature thinks it's a good idea, especially the many pro-golf people."

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CIRCLE #116/BOOTH #3842

Tour of Duty

THOMAS BATY

Indian Wells Country Club
Indian Wells, Calif.

Bob Hope Chrysler Classic
Feb. 16-20, ESPN/NBC

How often does a turfgrass student fresh out of college get a chance to work on a major golf course project designed by a pre-eminent architect? Tom Baty did. A Michigan native who graduated from Michigan State University in 1986, Baty went straight to work on PGA West's (and Pete Dye's) Stadium Course in La Quinta, Calif. He was on the construction crew for two years. Receiving a promotion to assistant superintendent at the Stadium Course in 1989, Baty immediately picked up tournament experience by preparing the course for the Skins Game. He left for DeAnza Country Club in Parago Springs, Calif., in 1990, then joined Indian Wells in December 1992. It is both "exciting and fun" to gear up for a major tournament like this every year, he said.

THINGS TO LOOK FOR: "Detail," Baty said. "Everything is detailed out — from the evenness of the cuts of the grass all the way down to the cracks in the sidewalk and the cart paths, which are cleaned out and edged. Tee markers are edged. It is the most immaculate you can get it." In October, Baty's crew overseeded the

Bermudagrass with perennial ryegrass — wall to wall.

A lot of extra time is spent to ensure the bunkers are "firm and tamped — not fluffy at all," he said. "They require a 1-1/2-inch lip so the players can't run a ball through it. They have to be hand-raked, not machine-raked."

For the turf, height of cut is the biggest difference from normal playing conditions. Greens must be cut to 1/8 inch and rolled so they Stimp at 11. Fairways are cut to below 1/2 inch and tees to 3/8 inch. Intermediate rough, normally 1-1/2 inches high, is cut to 3/4 inch, 60 inches wide. And the PGA Tour requires a walk path from tee box to the fairway, "so the players don't get their shoes wet," Baty said.

Crews roll the greens the days of the tournament and double-cut during the event. He is also trimming trees that would be in the way of play, "basically looking out from the tee."

And crews are taking a lot of extra filling of divots to make sure there are no holes in the fairway.

MADE-FOR-TV PREPARATIONS: "I don't care about TVs. We're looking for ideal conditions for the players," Baty said.

He does, however, apply iron. Foliar applications were started in December, he said.

THOMAS ALEX

Grand Cypress' North-South Course
Orlando, Fla.

**LPGA's Chrysler-Plymouth
Tournament of Champions**

March 2-5, Sunshine Network/NBC

A 1981 graduate of the University of Massachusetts' Stockbridge School of Agriculture, Alex worked at the TPC of Jacksonville from 1981-83 as an irrigation technician, spray technician, assistant and acting superintendent. He not only got his feet wet, "I went swimming," he said. He joined Grand Cypress during construction of its first course in June 1983. Grand Cypress now boasts 45 holes.



Tom Alex

THINGS TO LOOK FOR: The course will be overseeded with perennial ryegrass wall to wall — "not a practice huge in Florida," Alex said. "When it's as green and striped up as it is, superintendents will know."

Alex's crew, which will grow to 30 by drawing on groundskeepers from the other two courses, won't rake the bunkers. "We'll broom them," he said. The greenside bunkers will be hand-broomed so there will be no furrows. A broom attachment will be dragged over the fairway bunkers. This is another practice not widely done.

The championship tees and the practice facility the pros will use are protected from play a month before the tournament and the agronomic programs were in place. Green cutting heights will be reduced from 9/64th to 7/64 or 1/8, depending on green speed. The LPGA wants the greens to Stimp at 10 to 11.

"Our overseeding will be mature naturally. We'll have to push the ryegrass a little more. But densities, cutting heights and things of that nature are close," Alex

Continued on next page

DICK ANDERSON

TPC at Tampa Bay
Tampa Bay, Fla.

**Senior Tour's GTE
Suncoast Classic**

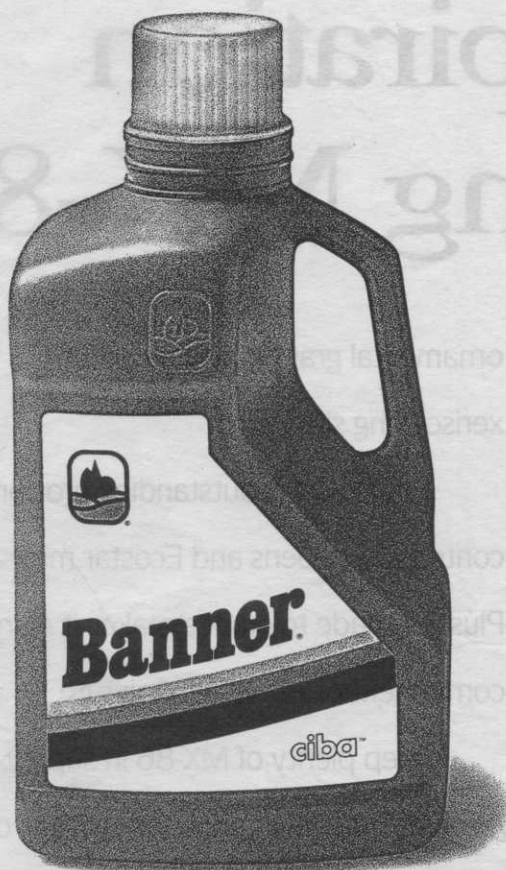
Feb. 10-13, ESPN

If hosting 136,000 spectators and a group of demanding Senior Tour players can be "just another day at the office" for anybody, it is for Dick Anderson. Anderson, 49, and his crew keep TPC at Tampa Bay at tournament conditions year-round. "We have stringent guidelines for maintenance operations and we must exceed them daily. Members expect this from us," Anderson said. "Not that much crash work we have to do for the Classic." A Rhode Island native and 1964 graduate of the University of Massachusetts' Stockbridge School with a degree in turfgrass management, Anderson "grew in" TPC at Tampa in 1990 and has hosted two previous Suncoast Classics. The superintendent at Burning Tree Club in Maryland for 12 years, Anderson moved on to Indian Wells and prepared for three Bob Hope Classics from 1978-80. He grew in Jack Nicklaus' Pawleys Plantation Golf Course on Pawleys Island, S.C., in 1986 and remained there before leaving for Tampa Bay.

"The tough part of this event is the nighttime maintenance," Anderson said, explaining that his course is one of few that has double shotgun (at 8 a.m. and 1 p.m.) both Wednesday and Thursday for area executives and the touring pros. "Most of our maintenance those days is done at night," he said.

THINGS TO LOOK FOR: Notice the severe mounding for spectators on every hole of this stadium course peppered with 16 lakes and 83 bunkers. Extremely cold weather in December and January pushed the roughs into totally dormancy, "making a striking contrast from the overseeded tees, greens and fairways," Anderson said. The

Continued on next page



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CIRCLE #118/BOOTH #902,904

GOLF COURSE NEWS

Handbook on IPM for turf released

Lewis publishers has released *Handbook of Integrated Pest Management for Turf and Ornamentals*.

With more than 40 recognized experts, the book details the rationale and benefits of employing an IPM plan, as well as providing technical information on each aspect of plan development.

This handbook integrates research work on pest problems with information on the practical implementation of the tools, and provides case studies of successful operations. Topics covered include the dynamics of the urban landscape, preparation for a healthy landscape, blemishes on the perfect landscape, integrated management of weeds, insects and disease, biological controls (current and those under development), and new generation chemical controls. Additional areas include special considerations for golf courses, and combining the pieces to develop an integrated pest management plan.

It is available for \$95 from Lewis Publishers, 2000 Corporate Blvd., NW, Boca Raton, Fla. 33431: 800-272-7737.

Tour of Duty

Continued from previous page

Tom Alex

reported.

MADE - FOR - TV PREPARATIONS: "This is our advertising," Alex said. "We want to make sure it's as pretty and playable as possible. We want it in some of the best conditions the LPGA will play on."

Since NBC will broadcast 3-1/2 hours of coverage, Alex expects "we'll have at least nine holes and cameras to worry about." In late January Alex had a walkthrough to discover where TV cameras would be set up. "We're going to be worried about TV angles — whether it be outside the course, or flowers. If a striping pattern is going toward a camera, we'll make sure it hits it right on."

Dick Anderson

Bermudagrass was overseeded with ryegrass on tees and fairways and poa trivialis on greens. Poa trivialis is a hardy and fine-bladed grass plant that putts well. Also, the course has 11 miles of cart paths crews have to keep edged and 6-1/2 acres of landscape beds that must be edged and re-mulched.

After the event it takes four to six weeks "to get back to normal" agronomically, Anderson said. "We aerify the trampled areas and add fertilizer to get the grass growing vigorously again."

"But, the biggest thing is the Monday morning after. You come out to the course and no one is here. It's a big let-down. It's like putting on a circus, I guess," he said.

MADE - FOR - TV PREPARATIONS: Starting the first of the year, crews every two weeks treat the overseeded areas with chelated iron and liquid fertilizer for consistent color throughout the course.

Also six weeks out, they start burning in the fairway striping and begin rolling the greens every third day. On tournament week they double cut and roll daily.

Off the Record

UGa data makes aerification decisions easier

Continued from page 15

rates of up to 96 percent greater than the compacted control.

Precautions are advisable to avoid injury to existing roots from the vigorous action of the tines of these cultivation tools. From this information, it would appear timing of Verti-drain treatments on a cool-season turfgrass should be done in the early spring and mid-fall just prior to the times of maximum root growth. Warm-season cultivation timing is less critical, but two weeks after spring green-up would be ideal for the most vigorous



Patrick O'Brien

treatment. Summer Verti-drain treatments did reduce root density in the upper 12 inches on Bermudagrass, although Bermudagrass can still continue new root development at this time.

Turfgrass managers now have data from this University of Georgia study to help with aerification decisions on fine-textured soil sites with surface compaction.

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to their unique fiber structure and high-performance, non-woven construction. Since they're compatible with all industrial cleaners, they're perfect for heavy-duty cleaning and general maintenance around the shop.

And because they can be used several times before discarding, they're economical, too. Best of all, Gem Wipes are non-abrasive and low-linting, so they're as safe as they are strong! ♦ If you're

currently using laundry service towels or ordinary disposables, you owe it to your hydraulics to give Gem Wipes a try. For

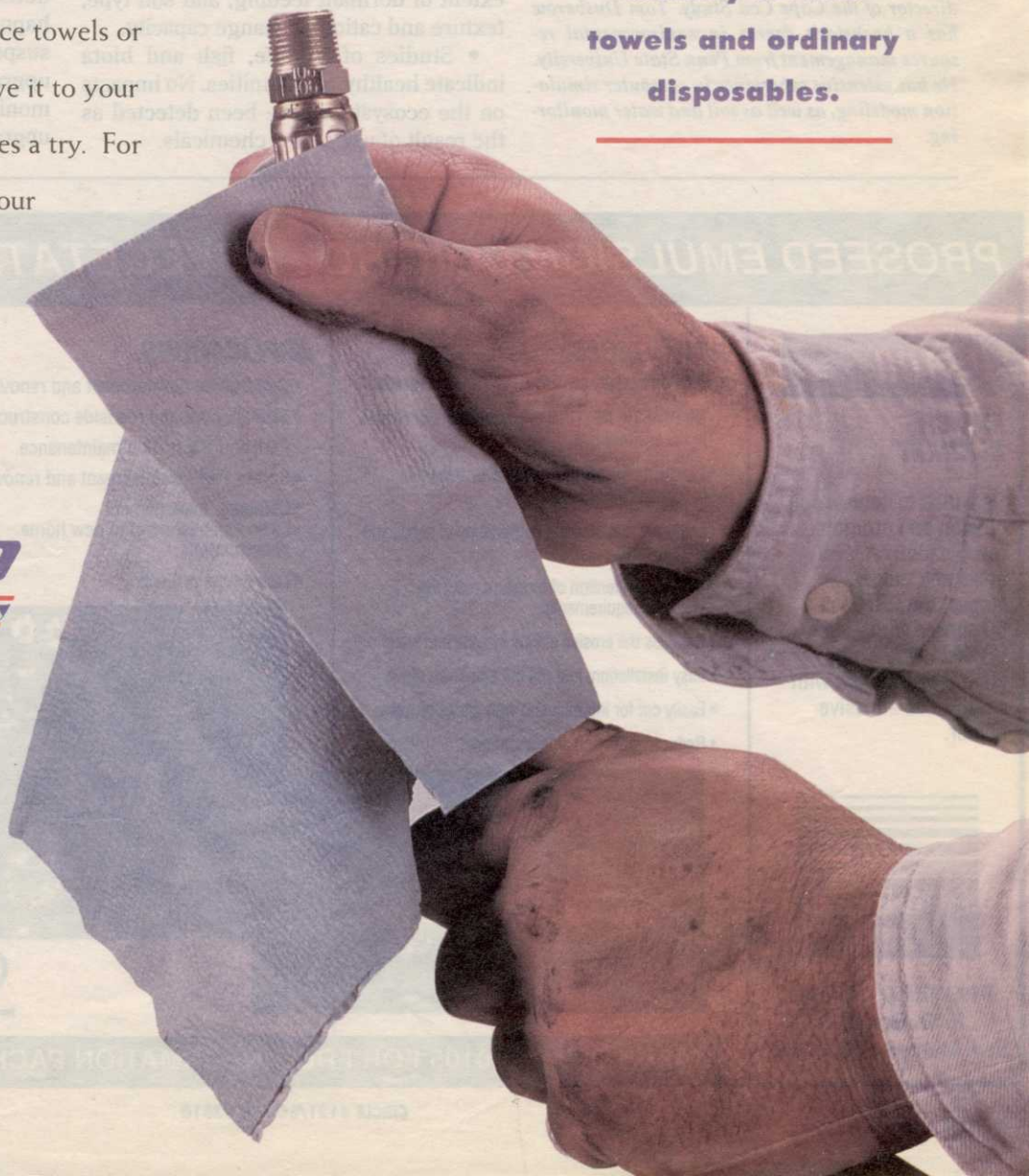
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Finally, scientific 'meat' supporting golf greenkeeping

Continued from page 1

Studies are being performed at dozens of golf courses around the country (see related story on following page). For this article, we reviewed interim results from 13 of the most important ones. Conducted at 25 golf courses in eight states and one territory, they have been done for various objectives, in a variety of climates and hydrogeologic settings (see accompanying table). Therefore, it can be difficult to compare results.

The extent of pesticide analyses has also varied widely. No pesticides have been analyzed in four (31 percent) of the projects. In some cases, the extent of pesticide analyses can be best characterized as overkill. More than 70 pesticides — many rarely used on golf courses — have been analyzed in at least one of the studies.

So what have we learned? Following is a summary of some of the general trends and conclusions we have been able to extract from these preliminary results. (Note the accompanying article on the Kiawah Island study, which is taking a comprehensive look at how the ecosystem is responding to turf management and a semi-enclosed irrigation/effluent water-recycling system.)

PESTICIDES FOUND

- Confirmed detections of turf pesticides in water are rare but they do occur. Of the more than 100,000 analyses that have been performed on thousands of water samples since the Cape Cod Study, we estimate that 10 pesticides in ground water have

Stuart Cohen has a Ph.D in physical organic chemistry and is a certified ground water professional. He is the president of Environmental & Turf Services, Inc. in Wheaton, Md. He was director of the Cape Cod Study. Tom Durbinow has a bachelor's degree in environmental resource management from Penn State University. He has extensive experience in computer simulation modeling, as well as soil and water monitoring.

Thirteen of the most important studies, and what those studies tested for, are listed here. They were conducted at 25 golf courses in eight states and one territory.

been detected above the practical quantification limit (PQL), and 11 have been detected in surface water above the PQL. The number of pesticide detections in the 13 studies is probably between 15 and 30 for ground-water and 15 and 30 for surface-water samples.

The detections have usually not posed a hazard. Only bentazon, arsenic and simazine have been detected in these studies at concentrations exceeding lifetime drinking water Health Advisory Levels or Maximum Contaminant Levels (MCLs). We are aware of only one other turf chemical — cadmium — detected in ground water at concentrations exceeding the MCL; that was in a study not included in this group. We are aware of no other surface-water violations (but see the discussion of modeling results below).

- Nutrient concentrations have occasionally increased above background levels. There have been some increases of nitrogen and phosphorus in receiving waters, but these increases tend to fall within normal ranges expected for these constituents in similar settings.

There seems to be no pattern to the increases based on a casual inspection of the data. A pattern could probably be elucidated following a complex analysis of all key parameters, such as the source of nitrogen, use of reclaimed wastewater, extent of dormant feeding, and soil type, texture and cation exchange capacity.

- Studies of wildlife, fish and biota indicate healthy communities. No impacts on the ecosystem have been detected as the result of use of turf chemicals.

Study Site	Ground Water	Sediments	Surface Water	Pesticides	Nutrients	Biota
Maui Kaanapali	No	Yes	No	Yes	No	No
Virginia Greendale	No	No	Yes	No	Yes	No
Maryland Avenel	No	No	Yes	No	Yes	Yes
New Jersey DEPE	No	Yes	Yes	Yes	No	No
Maryland Caves Valley	Yes	No	Yes	Yes	Yes	Yes
Florida USGS	Yes	No	Yes	Yes	Yes	No
Hawaii Waikoloa	Yes	Yes	Yes	Yes	Yes	Yes
Mass. Bayberry Hills	Yes	No	No	Yes	Yes	No
Florida Lake Worth	Yes	No	No	Yes	No	No
S. Carolina Kiawah	Yes	No	Yes	Yes	Yes	Yes
Texas Barton Creek	Yes	No	Yes	No	Yes	Yes
Guam Guam Muni	Yes	No	No	Yes	Yes	No

- Some of the detections are suspicious. There is always a chance for false positive detections, and we suspect that has happened in one or two cases. We also suspect that some detections are due to upgradient sources such as farms. Good monitoring studies should always include upgradient and/or baseline sampling.

- Golf courses seem to decrease sediment loading to surface water. Only one of these 13 studies examined this issue. But we have evaluated sediment loading extensively through computer simulation modeling and reviews of the literature. Turf can reduce sediment loads significantly during storm events, compared to all other land uses except urban-paved.

The results of these studies are consistent with simulation modeling we have done. Our only significant concern is about applying highly toxic pesticides in areas that drain to sensitive water bodies a few days before major storm events.

More studies are needed, but with careful thought given to the selected environments and analytical parameters.

On the one hand, expensive analyses are being performed for too many parameters in many cases.

On the other hand, several key types of environmental settings have not yet been represented in these studies, while others are over-represented. But that happens when such studies are driven by permitting authorities rather than research needs.

Overall, these results show that golf courses can be managed safely without impacting surface-water or ground-water quality. But there is a saying that "all politics are local."

The same can be said about risk assessment. The superintendent must consider his or her site-specific environment when applying turf chemicals.

So, to coin a new phrase, all risk assessments are local. As long as we all remember that fact, and know where to turn for expert guidance, golf courses and the environment can co-exist happily.

GOLF COURSE NEWS

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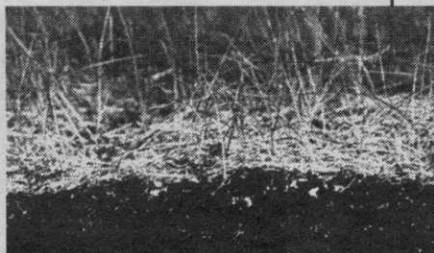
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- Sports Turf establishment and renovation.
- Cemetery management.
- Lawn establishment in new home construction.
- Landscape projects.



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Developer Beware:

Some agreements lead to spending big money on foolish tests, and for years to come

By STUART COHEN

Bruce Cadenelli, certified golf course superintendent at Caves Valley Club in Maryland, estimates his club has spent \$367,000 in five years for ground water and pond monitoring and three years of stream monitoring.

In less than 2-1/2 years, Guam International Country Club was required to spend \$1.7 million for a ground-water monitoring study.

Water-quality monitoring studies are more involved than just going out, grabbing a sample and sending it to a laboratory, requesting an analysis for "pesticides."

Time and again, golf course developers are agreeing to perform water monitoring for many pesticides that need not be monitored at all, and at extraordinary costs.

A protocol has to be written and approved, monitoring wells and/or stream monitoring stations have to be installed, a lab has to be found that can analyze the pesticides used, and a study director should be hired to manage the study and interpret the results.

Ron Meyer, New Jersey DEPE in Trenton, estimates a minimum cost of \$23,000 per year for lab analyses for a ground-water study, with the following conservative assumptions: four monitoring

wells, \$150 per pesticide method (cheap!), and analyzing two-thirds of the applied chemicals. This does not include costs for protocol development, well installation, or project management.

There are many reasons why costs run out of control like this. The most significant impacts usually result from unnecessary lab analyses. Oftentimes, regulators mandate that courses analyze for all pesticides applied to the site. Developers often agree because

See related story, page 27

their environmental consultants think of "pesticides" as DDT, chlordane, etc. — the old chlorinated hydrocarbons that constitute EPA Method 608. This analysis is easy and typically costs \$150 to \$200 per sample.

But superintendents are two to three generations past these chemicals. The new pesticides have

complex structures with a wide variety of structural classes. This means that 25 pesticides applied to a modern course may require five to nine different analytical methods, at \$150 to \$400 per method per sample. This translates to approximately \$20,000 to \$90,000 per year for quarterly analysis, depending on the number of sampling points. Add to this the cost for sampling, etc.

How can these costs be reduced? Try this:

- Develop an integrated golf course management plan, coupled with an environmental risk assessment. This can be a strong argument against doing any monitoring.

- Offer examples such as this to help demonstrate the generally low hazard potential of golf courses.

- Make a case to regulators that you only need to analyze for the pesticides with the highest mobility, persistence and toxicity.

- Pray.

What was tested at the 13 sites

Pesticides and Metabolites Monitored at One or More Golf Courses:

HERBICIDES

Alachlor, aldicarb, a.sulfone, a.sulfoxide, atrazine, bentazon, bromacil, 1,2-D, 1,3-D, (cis & trans), 2,4-D, 2,4-DB, dicamba, dichlorprop, dinoseb, diuron, glyphosate, hexazinone, linuron, MCPA, MCPP, metribuzin & metabolites (DA, DK, DADK), norflurazon, oryzalin, picloram, prometryn, pronamide, simazine, 2,4,5-T, 2,4,5-TP.

INSECTICIDES

acephate, gamma-BHC (lindane), bendiocarb, carbaryl, carbofuran & metabolite (3-OH carbofuran), chlordane, chlorinated hydrocarbon insecticides, chlorpyrifos & metabolites (chlorpyrifos oxon, 3,5,6-trichloro-2-pyridinol), DBCP, diazinon, disulfoton, EDB, ethion, ethoprop.

Also, ethylparathion, fenamiphos & metabolites (f. sulfone, f.sulfoxide), heptachlor & metabolite (h.epoxide), isazofos, isofenphos, methamidophos, methomyl, methyl bromide, methyl isothiocyanate, methyl parathion, mevinphos, MIPC, monocrotophos, naled, oxamyl, phorate, propoxur, terbufos.

FUNGICIDES

anilazine, benomyl, chloropicrin, chlorothalonil, fenarimol, iprodione, metalaxyl, thiram, triadimefon

GOLF COURSE NEWS

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weeds—including goosegrass, crabgrass and Poa Annua. You'll also appreciate the fact that CHIPCO® RONSTAR® G is labeled for use on a wide variety of ornamentals, and is now available in a new low-dust formulation that makes application even more convenient. CHIPCO® RONSTAR® brand G herbicide. It can't improve the quality of play on your course, just the quality of weed control.

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CIRCLE #122/BOOTH #2940

SuperFocus

Joe 'Alger' Lightkep beats the odds — and tradition — at his Fairways G&CC

By HAL PHILLIPS

The tale of Joe Lightkep has enough inspiring story lines to impress even Horatio Alger.

Beating the Odds — This 32-year-old superintendent almost single-handedly transformed an overgrown golf course, Fairways Golf and Country Club in

Warrington Township, Pa., into a viable public facility which handled 42,000 rounds in 1993.

Local Boy Makes Good — Born in nearby Horsham, Lightkep used to work at the course as a kid, picking sticks off the fairways. He took over superintendent duties in 1980 and now he owns the place.

A Penny Saved... — Lightkep purchased Fairways G&CC last Aug. 30. This changed his outlook forever: "It's hard to be a superintendent and spend your own money!"

In 1980, Fairways was literally a pasture, located 26 miles north of Philadelphia, just south of Doyleston in Bucks County. The course had opened in 1965 as part of a housing development. The shortish, 18-hole course was designed and built by William Gordon, architect of famed Saucon Valley in Bethlehem.

Shortly after the first 17 homes were built, the entire venture went under, though the course remained open in various states of disarray — until Lightkep showed up.

He arrived after stints at Limekiln Golf Course in Prospectville and Hidden Springs Golf and Country Club in Horsham. The young Lightkep was hired as course manager by owner Perch Hankin, who possessed a decidedly hands-off management style.

"Perch always told me to treat the course as if it were my own," Lightkep explained. "I didn't have much choice. In the first four years I was here, I saw the owner twice: The day he hired me and two days later when we went down to the bank to open a checking account.

"But there was a problem," Lightkep continued. "I was only 18 years old. I wasn't old



'It's mine,' says Joe Lightkep at Fairways G&CC.

As an owner, 'you also spend money more wisely.

You pay a lot closer attention to pricing and financing matters.'

— Joe Lightkep

enough to sign a payroll check. So I had to get my dad to sign all the papers."

The first few years were beyond lean. Because the course needed so much work, Lightkep didn't charge any green fees the first 18 months. He borrowed equipment from neighboring courses and made good use of his co-signer father, an equipment salesman.

During the 1980s, Lightkep

earned his bachelor's degree in agronomy from Delaware Valley College of Science and Agriculture. He installed an irrigation system. He also finished the access road, restored water and electric services, then watched the development fill up with housing.

"Open fields are nice, but the houses make the whole place feel more like a neighborhood," he said.

In 1990, Perch Hankin died, leaving the course to his son and daughter, whose father had advised them to consider a sale to Lightkep. After three more years of absentee ownership, the son and daughter followed their father's advice.

The deal went through on Aug. 30, 1993, and life hasn't been the same since.

"Too much paperwork!" said Lightkep with a laugh. "A lot of paperwork... You also spend money more wisely. You pay a lot closer attention to pricing and financing matters.

"Our biggest problem is, we're hidden off the main road. A lot of people who live in the Township didn't even know we were here until there was a story about us in the local paper.

"Of course, because we're a flat, short course, we get a lot of senior play. And they would like to keep it a secret."

Some thing's haven't changed. Lightkep said he plans to continue the long-term maintenance plan he started three years ago, which includes switching all 18 fairways over to bentgrass and developing a good Integrated Pest Management program.

He also plans to continue charging green fees, \$10 to \$22.

And yes, Lightkep does have some solid advice for any superintendent thinking of buying his or her own golf course:

"Get a good lawyer and a good accountant. That made it all possible."

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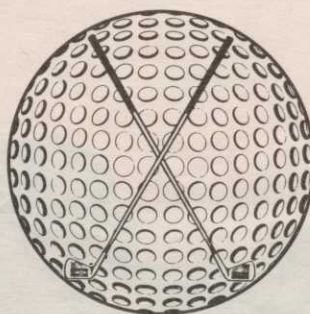
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Wildlife, water quality can thrive on golf courses, study indicates

By PETER BLAIS

CHARLESTON, S.C. — With proper management, plant and animal life can thrive and water quality remain unaffected on golf courses, according to the initial findings of a three-year study conducted by Clemson University researchers at Kiawah Island's Ocean Course.

Using state-of-the-art testing methods, the 12-member research team detected little chemical contamination, no significant ground water pollution, minimal surface water problems and instances of increased animal activity, according to project director Dr. Ron Kendall.

One minor instance of pesticide poisoning was reported. Kendall considered the small number very positive.

"We found evidence of bendiocarb in a seagull's body and on its feet," Kendall noted. "The bird recovered quickly and flew off. The Kiawah staff made every effort to minimize pesticide use and the results demonstrate that."

Researchers found no significant evidence of vertical movement of chemicals into ground water or runoff into surface water. The only exception was the irrigation pond.

Architect Pete Dye developed a unique underground drainage system consisting of 14 miles of drain tiles that recycle irrigation and rain water. High levels of eutrophication and dense algae blooms were noted in the recycling pond.

Kendall speculated that fertilizers making their way through the drainage system and into the recycling pond were responsible for the eutrophication. However, he didn't see that as a significant problem since only the recycling

pond was affected and all other surface waters remained pollution-free.

"Pete developed the drainage system in his head," Kendall said. "We don't have any drawings or anything that would give us a lot of information to analyze. They may have to use algicides at some point."

The investigators found no drop-off in species diversity. In fact, several new species moved onto the course. Kendall labeled

Related stories, pp. 1, 25

the 75 species of birds "a pretty high number" considering the lack of trees on the seaside layout.

"It shows that, with appropriate management, bird and animal life can actually be encouraged on golf courses," Kendall said. "[Golf and Tennis Director] Chris Cole and [Ocean Course superintendent] George Frye were very sensitive to environmental concerns. Their staff

was diligent in following their instructions."

The Clemson team, consisting of five faculty members and seven graduate students, will formally present its findings to the U.S. Golf Association board of directors in April.

The researchers, state agencies and the people of South Carolina consider the Ocean Course "a treasure deserving of further study and monitoring," Kendall said.

The new managers, Virginia Investment Trust, have assured Kendall the facility will be available for additional research. VIT is the parent company of AMF Inc., which is operating the course along with the owner, the Audubon Society of New York.

"We're delighted with the work Ron and his staff have done and are obviously delighted with the results," VIT Vice Chairman Beverly W. Armstrong said. "It's our intention that their work continue."



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Renovation help offered to supers

SAGAMORE BEACH, Mass. — A program to assist golf course superintendents with construction and renovation projects has been initiated by Massachusetts golf course consultants Richard and Associates.

Called Superintendent Design, the program is "a method to utilize in-house design talent with substantial cost savings," said Principal Ray Richard. "Many superintendents spend hours discussing design strategy and planning upgrade scenarios at their clubs."

"They are the best analysts of their own needs. We provide the technical support, making them the credited designers."

The program will determine the best strategy to help in the design/build process, offering drafting, presentation assistance, contract documentation and construction services, Richard said.

GOLF COURSE NEWS

New York turf expo attracts numerous experts

SUFFERN, N.Y. — Nationally known experts on subjects ranging from golf course planning and construction to turf maintenance and athletic field management will feature the expanded Turf and Grounds Exposition II at Holiday Inn here Feb. 16-17.

The New York State Turfgrass Association's conference will provide updates on current trends, procedures and the latest research results.

Products and services to be displayed include turf maintenance equipment, fertilizers, supplies, chemicals and seeds.

Stress management of turf will be the

opening topic.

Other subjects will be aquatic weed control, New York State aquatic regulations, pond and lake management, grounds management, grounds maintenance, turfgrass scouting, economics and agronomics of fertilizers, flowers in the landscape.

Also, athletic fields, turf stress of 1993, environmental future of turfgrass management and environmental risk management for the turfgrass industry, product registration; new herbicides for turf and landscape use, and golf course planning and construction.

Speakers will be Ms. Maureen Serafini, NYS DEC; Drs. Joseph Neal and Norm Hummel, Cornell University, Dr. Frank Rossi, University of Wisconsin; Donald Gabel; Dick Roberts, Goshen School District.

Also, James Horning, Pilot Field, Buffalo; Alain Grumberg, Grumberg's Gardening Service; Dominic Morales, SUNY Delhi; Robert Jones, West Point.

Robert Emmons, SUNY Coleskill; James White, White Engineering, and Stephen Cadenelli, Metedeconk National Golf Club.

GCSAA bringing big money to Big D

DALLAS, Texas — "Big D" will realize big dollars from the largest International Golf Course Conference and Show in the golf course management industry at the Convention Center Jan. 31-Feb. 7.

Area economy expects a \$15 to \$17 million infusion from expenditures by the projected 16,000 participants. Local hotel/motel, restaurant and entertainment markets will be chief beneficiaries.

More than 630 manufacturers and suppliers will display the newest products and services in the golf course management industry. Golf courses in the United States reportedly spent an estimated \$4.96 billion on golf course maintenance and capital expenditures in 1993.

Money-saving tips

Continued from page 15

"I can't tell you how many storms will water half the course and not the other half. We keep records of all four rain gauges. Sometimes we water half the course and not the other half," Buchen said.

- Install a rain switch, which costs \$100 to \$200, to shut off the irrigation — and save the pump as well — when it rains.

- Join a bulk purchasing program with other courses, such as the one available for members of the National Golf Course Owners Association.

- Guarantee a supplier you'll buy certain products exclusively from them if they give you a deal.

- If you own two or more golf courses, get a national account from manufacturers.

- Use Extension services. They offer expert advice free of charge.

- Plant native grasses and ornamentals where possible.

- Investigate use of a new creeping bluegrass from Europe called Supra Nova (poa supina), which is "the best stuff I've ever seen for heavy traffic or shaded areas."

"It does not wear out. It has some real potential for the transition and Northern climates," Buchen said. While Supra Nova seed costs \$50 per pound compared to \$7 to \$8.50 per pound for bentgrass, it can be mixed at 5 percent with other grasses.

Buchen also suggested that golf courses offer free golf to police and fire departments. "It can pay off in added security for your facility," he said.

The annual Public Golf Conference will be incorporated this year into the new Golf Course Expo, Nov. 10-11 at the Orlando (Fla.) Convention Center for superintendents, operators and developers.

When it Comes to Performance...



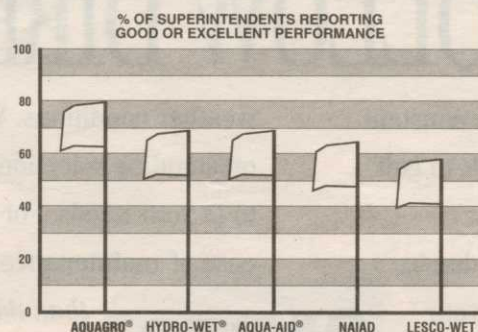
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CIRCLE #126/BOOTH #2341,2343



Scorecard boxes are cheap, easy to make, and helpful to the golfers.

A grand tradition — scorecard box

By TERRY BUCHEN

One simple pleasure golf course superintendents can provide their players is the scorecard box, a grand tradition never taken for granted.

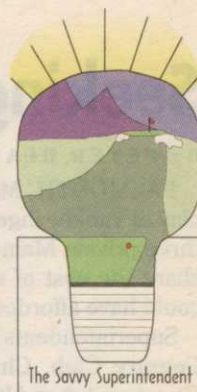
"The box" usually contains scorecards, pencils, wooden golf tees, ball markers and, sometimes, even matches. They are usually positioned on the 2nd and 11th teeing grounds to help the needy golfer with extra supplies, or the player who simply

forgot.

Most boxes are made of pressure-treated wood that is glued and then screwed together for added strength. A water sealer is applied before painting it the club's favorite color, or sometimes staining it. A hinged cover protects the supplies from sprinkler irrigation and the elements. Some are made of metal that can be attained from golf supply catalogues, but most superintendents want the natural look.

Superin-

tendents usually mount them on 4-by-4-inch posts, trees, ball washers, posts, fences, etc., in the normal traffic flow of golfers. If superintendents at newer courses carry on the tradition of installing this simple amenity, it will never become extinct.



Faubel comment: We must pay for more research

Continued from page 10

The U.S. Golf Association is pursuing ways to reduce water consumption, fertilizer and pesticide use and develop acceptable plant materials.

The USGA Turfgrass Research Committee has done an outstanding job identifying areas which need to be addressed to make golf courses an environmental asset.

The need for strong local and national associations has never been greater.

The problem is a decline in active participation on relevant subjects by superintendents at the local and national level.

Everyone needs to ask themselves how much they are working for the total benefit of their profession and overcome the internal political aspects.

It always seems easier to let the other person do it.

Well, the other person is probably overloaded also or may be unwilling to do it. Increased job demands and family are important.

But what is going to happen when the other person doesn't do it.

If we recognize the need for more research and development then we must be willing to pay for the potential benefits.

It is more important than ever to look toward the universities and recognize what they can do for us.

Our associations can make the difference.

It is up to us to make certain the associations know what the industry needs are.

Only then can a realistic plan of action be drawn and conducted.

Knowledge is the only way we will continue to deliver the quality maintenance we have led the golfer to expect.

Are we or own worst enemy?

Or are we willing to make the sacrifices that must be made by supporting the people who have the skills that allow us to meet society's demands?



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Seeking aerification, three clubs pool resources

By PETER BLAIS

FALMOUTH, Maine — In a novel display of Yankee ingenuity and cooperation, three private Maine clubs have agreed to share the cost of a fairway aerifier none could have afforded separately.

Superintendents Kevin Ross of Falmouth Country Club, Chuck Ravis of Augusta Country Club and Kyle Evans of Waterville Country Club agreed to spend roughly \$6,600 apiece on a \$20,000 Ransomes GA-60. A lawyer is drafting a contract covering when each course would use the aerifier and how repairs would be paid.

"Basically, I get it the last two weeks of September," Ross said. "Kyle has it the first two weeks of October and Chuck the last two. And we agreed that no matter where it breaks down, we'd share any repair costs equally."

"Spending \$20,000 for a piece of equipment I needed just two weeks a year didn't make sense. But getting it for less than \$7,000 made a lot of sense."

Ross, Evans and Ravis are all experienced superintendents. They have known each other for many years and are familiar with one another's staffs, especially the mechanics.

"I'm comfortable with their guys and they are with mine. When we presented the idea to our boards, they all jumped on it pretty quickly," Ross said.

Superintendents have a long tradition of lending equipment to fellow superinten-



Three Maine clubs have pooled their resources to purchase the Ransomes GA-60 aerifier.

dents at nearby courses. The spirit of cooperation among course managers, even those at competing facilities, is a source of pride.

But agreeing to share the cost of a new piece of equipment among several courses with different owners is unusual.

"It [jointly purchasing equipment] used to be done a lot in the 1960s, but clubs got away from it," said Terry Buchen, head superintendent at Double Eagle in Galena, Ohio. "It

sounds like it's starting to come back.

"Spelling out the details on a contract is a neat idea. A lot of people might be interested in that."

Sawtelle Bros., a Lawrence, Mass.-based equipment company, agreed to accept half the purchase price last fall and the other half this spring, making it easier on the three clubs involved, Ross said. All three should be able to share in the depreciation benefits as the aerifier ages, he added.

If the agreement works out, and Ross is confident it will, the clubs could share future costs of more-expensive equipment like fairway verticutters or greens aerifiers, he said. Other Maine clubs have approached Ross and the others about their agreement.

"I got a call from Steve Hoisington at Martindale [Auburn] the other day," Ross said. "He's interested in sharing the cost of a [Toro] HydroJect with Portland Country Club and Val Halla [Cumberland] Golf Course."

"The key is to reach an agreement with people you can work with. Chuck, Kyle and I have done that."

Deep drill aerators offer alternative

By PETER BLAIS

FALMOUTH, Maine — The condition of the greens on Falmouth Country Club's front nine has traditionally been a step behind the back nine. The roots, which averaged 10 inches in length five years ago, had shriveled to 4 to 5 inches by last spring.

That's when superintendent Kevin Ross decided to try the Floyd & McKay Deep Drill Aerofier on his front nine putting surfaces.

"By the end of the summer, all the greens were uniform," Ross said. "The roots were back to six to eight inches. I consider that a big improvement."

Verti-Drain and the Aerofier are the two major players in the fast-growing deep aerification market. Both bore past the hard pan that shallow aerators can compact 3 to 4 inches below the surface.

They fracture the soil to a depth of 10 or more inches, allowing air and water in and gas out. The loosened soil promotes better percolation, creates healthier root growth and delays or eliminates the need to rebuild greens.

"Thirty years ago, greens were cut at 1/4-inch, three or four times a week," said Pat Lucas, superintendent at Innis Arden Golf Club in Old Greenwich, Conn., and owner of Earthworks, a customized aerification company serving Northeast golf courses.

"Now they are cut at 1/8-inch every day. That's pushing the envelope and removed any cushion for error we used to have. Deep aerifying gives us back some of that cushion."

The 3,000-pound Floyd & McKay Aerofier uses variable-sized drills —

Continued on page 33

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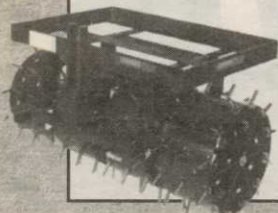


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Brand new crop of fertilizer technology debuts in Dallas

By PETER BLAIS

Several fertilizer manufacturers have introduced new products and technologies they intend to showcase at February's International Conference and Show in Dallas.

Scotts Pro-Turf division has spent millions of dollars in recent years on its **Triaform** and **Poly S** technologies.

Triaform encompasses a family of controlled-release fertilizers the company claims offers more efficient nitrogen feeding than traditional urea formaldehyde and IBDU fertilizers. The new technology replaces long-chain, highly water-insoluble nitrogen polymers with shorter chain, controlled-release methylenediurea (MDU) and dimethylenetriurea (DMTU).

The result, according to Scotts, is extended, controlled-release feeding (for eight to 12 weeks) with quick greening, uniform color response, and improved density without surge growth.

The Poly S technology offers the controlled release performance of an advanced polymer coating at a price comparable to traditional, sulfur-coated urea fertilizers. Compared to SCU fertilizers, Scotts says, Poly S offers a comparable price, better nutrient efficiency, environmentally compatible performance and user-friendly application designed for a broadcast spreader.

Poly S has been the fastest-growing fertilizer technology in Scotts' history, according to ProTurf Field Sales Manager David Heegard. Smaller fertilizer particle sizes will be introduced in 1994, allowing Scotts products to be used on bentgrass and hybrid bermudagrass greens cut as low as 1/4-inch, he added.

Lebanon Turf Products' research indicated a need for a homogenous line of fertilizers that lets superintendents choose their nitrogen source. The result was **NX-PRO**.

It is available in everything from greens to fairway grades, with either SCU or Nutalene as the nitrogen source. First introduced six months ago, Lebanon plans a major kickoff at February's show.

"It's sold beyond our most optimistic expectations," said Paul Grosh, Lebanon's sales and marketing manager for the Professional Group. "Superintendents like the spreadability and even nutrient distribution."

Pursell Industries will introduce its new TriKote slow-release technology. The process is an advancement on existing coating technology, according to Tim Lacy, director of sales of professional products.

As its name implies, TriKote

O.M. Scotts, Lebanon, Pursell and Vicksburg weigh in with new products

offers triple coating protection to safeguard against excessive granule cracking during handling. A thin layer of sulfur is coated over a fertilizer granule. Then, two separate, but reactive, monomers are sprayed on, creating a hard shield for added durability. The result is fewer broken coatings with a significantly increased amount

of SCU retained in slow-release form.

TriKote comes in three sizes, allowing it to be used on greens, tees and fairways, Lacy said.

"We've been manufacturing it for about two months now," said Lacy from his Sylacauga, Ala., office "It's been very well received so far by superintendents."

The family-owned company

also offers POLYON polymer coated fertilizers with true osmotic release properties.

Vicksburg Chemical Co. recently introduced **K-Power**. The Memphis, Tenn., company claims it is the first line of potassium nitrate fertilizers for turfgrass in controlled release forms. The K-Power line features **MultiCote**, a polymer coating designed to feed turf a steady and continuous supply of nutrients, according to Vicksburg Market Development

Manager Michel Larisey. This will help superintendents who have used soluble potassium nitrate to fertigate greens, but have been unable to apply it elsewhere.

K-Power includes four varieties of potassium nitrate fertilizers: greens and tees, fairways with Multicote, combination, and water soluble with selected micro-elements in a dry crystalline form.

Each one reportedly encourages stronger turf that is better able to resist fungus, insect attacks, extreme temperatures and various stresses.

FOR 10 YEARS, SUPERINTENDENTS HAVE BEEN USING IT TO RELIEVE HEADACHES.



Soil programs can help avoid renovation

By RICHIE VALENTINE

WEST PALM BEACH, Fla. — To rebuild or not rebuild. This is the difficult question confronting golf course superintendents across the country. Poor weather and a sharp increase in the number of rounds played every year have taken their toll on turfgrass that may have been less than ideal to begin with. There is a critical

Richie Valentine, CGCS, is superintendent emeritus at Merion Golf Club in Philadelphia.

need for long-term, cost-effective solutions to this problem, not temporary Band-Aids.

To avoid costly and time-consuming course reconstruction, many superintendents are going back to basics — implementing turf-modification programs to amend and improve the existing soil on their courses.

Jupiter Hills Country Club, designed by George and Tom Fazio, consists of the 25-year-old Hills Course and the 16-year-old Village Course. Ask Superintendent

Dave Troiano about playing conditions at Jupiter Hills when he was hired in 1990, and he'll say turf on both courses was "severely stressed out." Balls hit off the tees routinely plugged in the fairways, and players arriving at the greens found their approach shots covered with soil. Not surprisingly, complaints from club members on the playing conditions were increasing.

Jupiter Hills is unique in many respects. The Hills Course, for instance, is built on a sand dune

and has dramatic elevation changes. But like many other clubs throughout the country, Jupiter Hills in 1990 came face to face with the realization that two decades of heavy course usage had strained the turf to the point of near unplayability.

"When the two courses were built," Troiano explains, "no one anticipated how much play they would receive in future years. Even though the club has only 372 members, we are very busy in the winter months, averaging 250 rounds per day."

It quickly became clear to Troiano why shots were plugging

in the fairways. The soil's percolation rate was minimal and there were heavy organics on the surface. The decision was made to rebuild the fairways, tees and rough on the Hills Course, replacing the 328 Bermudagrass with 419 Bermudagrass. This new turf is more wear-resistant and cold-tolerant. Even so, it was a costly proposition that caused lengthy interruptions in play.

"We solved one problem," said Troiano, "but we were facing a similar dilemma of whether to rebuild the Village Course. In addition, we still had to address the worsening conditions of the greens."

Two years ago, Jupiter Hills decided against rebuilding. Instead, the club chose to modify the turf and leased a deep-tine aerator to treat the soil. The aerator has a unique lifting and shattering effect on the turf, similar to the action of a pitchfork. This technique allows water and other nutrients to penetrate deeper into the soil.

In an effort to reverse Jupiter Hills' soil profile, Troiano used the Verti-Drain 305 model in combination with 1-1/4 inch by 12 inch hollow-core tines. Hollow-core tines are especially effective or deep cultivation of subsurface soil layers for sand or sodium removal. Holes made by hollow tines also remain open longer, providing a good opportunity to add modified soil materials.

According to Troiano, the turf modification technique worked like a charm. "We brought up a lot of 'bad' sand, allowed the plugs to dry, swept them up, then applied new sand into the holes. By taking the plugs out, we released harmful gases that were killing the roots. Several treatments later, the root structure was significantly better. Today, the Village Course has plenty of grass in the fairways and a great roll."

Club members were so satisfied with the Verti-Drain's performance in its first year of use that they authorized the purchase of a 305 model in 1992. It was immediately employed on the greens of both Jupiter Hills' courses.

Using the same size 1-1/4" X 12" hollow-core tines on the greens, and filling the holes with a mixture of sand and Canadian peat, Troiano has marveled at the results achieved in less than two years.

"We have gone from 1/2 inch roots to four inch roots on the greens," he reported. "We've also seen an increase in percolation rates from three and five inches an hour to nine and 10 inches an hour."

The ability of the deep-tine aeration treatments to promote effective water absorption is particularly important in South Florida.

In the summer it's not unusual for to get two or three inches of rain in an hour, Troiano explained. "Previously, that meant there would be puddles on the course many hours after the rain stopped. Now, after a big rain, players can go back out in 15 minutes."

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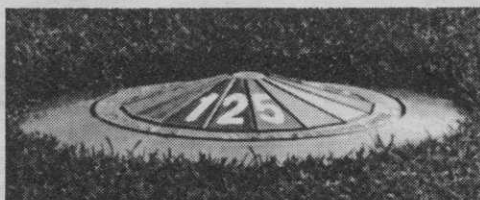
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SPRAYER TUNE-UP WEEK, FEB. 21-25

Keeping in mind that a pre-season tune-up can avoid downtime and frustration caused by breakdowns, Feb. 21-25 has been declared Sprayer Tune-Up Week, said Dr. Stephen Pearson, technical services manager for Spraying Systems Co.

Fifty agricultural and turf organizations are endorsing Sprayer Tune-Up Week, suggesting that mechanics normally check hardware and plumbing for signs of wear and tear; calibrate and replace worn nozzles; and review safety supplies and procedures. Calibrating and tuning up equipment can yield big financial dividends, saving as much as \$5 per acre on each chemical applied, according to the organizations.

Deep drill aeration

Continued from page 30

1/2-, 5/8- and 3/4-inch — for different soils and times of the year.

Drill depths are adjustable from zero to 10 inches and capable of doing a 6,000-square-foot green in 30 minutes (5 inches deep) to an hour (10 inches deep).

The big advantage over the Verti-Drain is the quicker green healing time, according to Ross and Lucas.

The Verti-Drain's lifting and shattering action disturbs the putting surface, often requiring 10 to 14 days to heal.

Floyd & McKay's Deep Drill Aerofier spins the compacted soil out of its holes (located 5 inches apart) causing less disruption to the green.

"In one or two days, you don't even notice the drill holes," Ross said. "The members love it."

Added Lucas: "It does the same thing as the Verti-Drain, but without the after-effects."

The problem, at least for Northern courses that might use the machine twice a year, is the cost — about \$30,000. For them, leasing the Aerofier might make more sense. Southern courses that aerify six to eight times yearly are more likely to consider purchasing a unit, Ross and Lucas agreed.

Ross subcontracted his greens out to a turf management company. The charge was 3.5 cents per square foot. The total cost for Falmouth CC's nine greens was \$2,200.

Lucas has a thriving business, leasing his equipment to golf courses and athletic fields throughout the spring.

"We're pretty quiet in July. Then things get busy again from mid-summer through early fall," he said.

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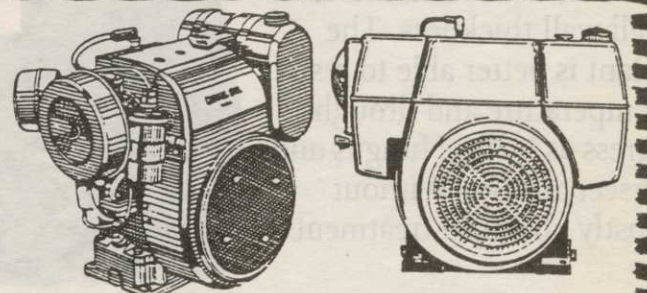
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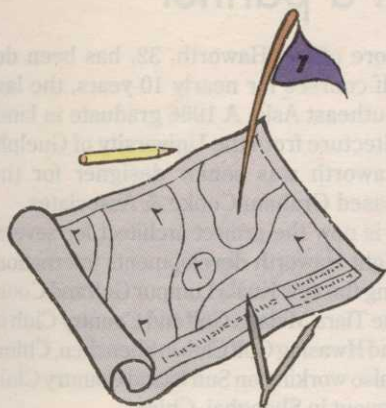
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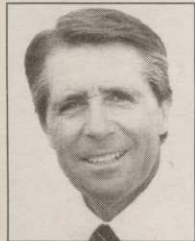


LAFOY EXCITED ABOUT N.C. SITE

CLAYTON, N.C. — Carolinas Golf Group has opened The Neuse Golf Club along the Neuse River outside Raleigh. "The tract of land is absolutely gorgeous," said course architect John LaFoy. "I did not think a piece of land like this existed east of Raleigh. Its features—rolling hills, hardwood trees, rock outcroppings and the Neuse River." The semi-private/daily fee facility opened to members Dec. 1, 1993 and opened for non-member play Dec. 6.

PLAYER DESIGN OPENS IN TEXAS

BAY CITY, Texas — Rio Colorado Golf Course, a new Gary Player-designed project here, has opened for play. The 18-hole, 6,824-yard, public golf course is operated by Houston-based Golf Services



Gary Player

Group. Rio Colorado Golf Course challenges golfers with two types of golf scenery. The front nine holes of the course plays thorough the native coastal prairies common to the Texas Gulf Coast. The second nine features Rio Colorado's signature holes which are situated on the wooded bluffs of the Colorado River.

GILMORE GRAVES ADDS FEICK

Dan Feick, landscape architect and irrigation specialist, has left the firm S.D.A., Inc. of Fargo, N. Dak., to join Gilmore Graves Golf, Inc. (GGGI) of Spring Green, Wis. GGGI operates offices in Spring Green, Phoenix, Ariz., and Pierre, S.D. Feick has been designing and supervising irrigation projects throughout the Midwest and will be involved in expanding the golf services of GGGI nationwide.

WATER, WATER AT BARDMOOR NORTH

LARGO, Fla. — Bardmoor North Golf Club has added 3 1/2 acres of water on four holes of the front nine. A portion of the lake begins between the 6th fairway and 4th tee, wraps around the 3rd green and then extends along the other side of the 3rd and even dips into the fairway, creating a feeling of an island green for the 3rd hole.

SULLIVAN, CORNISH WORK TOGETHER

VALHALLA, N.Y. — Sullivan Architects of Valhalla has been retained by Westchester County as the project architect and Cornish and Silva Inc. as course architects for the expansion and rehabilitation of Mohansic Golf Course. They are hoping to have golfers playing the expanded facility by the spring of 1997.

GOLF COURSE NEWS



Robert Trent Jones Jr.'s track Best New Mountain Course

By MARK LESLIE

Robert Trent Jones Jr.'s "environmentally correct" Squaw Creek Golf Course in Olympic Valley, Calif., was named the Best Public Mountain Course to open in the last five years, according to the nation's golf course architects.

Tom Fazio's Champion Hills in Hendersonville, N.C., was voted the Best Private Mountain Course, in the poll, conducted by Golf Course News.

In other results, the poll illustrated the scarcity of large-scale public golf developers despite the high percentage of public facilities among openings the last few years. No single developer received more than a handful of votes —



After being used as a parking lot for the 1960 Winter Olympics, Olympic Valley was noticeably improved by Squaw Creek Golf Course.

and, so, no winner was chosen. Even Sunbelt Corp., which over the past three years has opened the 18-course Robert Trent Jones Trail in Alabama, did not receive heavy support. Arvida, which last year was named Best Developer of Communities, and First Golf received similar support.

Perhaps the most memorable vote for Best Developer came from Maury Miller

of Golf Resources, Inc., who caustically cast his ballot for the Resolution Trust Corp., which took over the Landmark Land Co. properties and began auctioning them off.

Meanwhile, Jones's design team won accolades in the *Golf Course News* balloting. Between Don Knott and Bruce Charlton, the Jones International crew

Continued on page 40

Wetlands creators point men for future

By PETER BLAIS

BEAUFORT, S.C. — Steve Beaman's chest no doubt swelled a bit when Spring Island and Old Tabby Golf Links received the South Carolina Wildlife Federation Developer of the Year Award in late January.

Beaman's firm, Ecoshores of Port Orange, Fla., planted large stands of cordgrass, pickerelweed, duck potato, golden canna, arum and other native plants to develop and stabilize wetland areas

around the Arnold Palmer/Ed Seay-designed layout.

That work helped Spring Island secure the coveted award, given by the local chapter of the National Wildlife Federation, according to Spring Island staff naturalist Bruce Lampright.

"We're very pleased with the work Ecoshores has done here," Lampright said. "The plants and grasses are doing very well."

Continued on page 38

Q & A Crenshaw, Coore team hot property

With the GCSAA tournament being played on Barton Creek, the PGA Tour having just played the Lincoln-Mercury Kapalua International on Princeville's Kapalua, and the widely anticipated opening of Sand Hills, golf course architects Ben Crenshaw and Bill Coore are in the news. Managing editor Mark Leslie tracked them down in La Costa, Calif., where Crenshaw was competing in the Mercedes Championships.

Golf Course News: It seems the word is out. Do you get the sense you're a hot architect team and people are after your services more than before?

Crenshaw: No. We really don't think of ourselves that way. If anything, we try to stick to our original philosophy. We have a small organization and we want to remain that way. We enjoy spending time on our projects. I think we're always going to be an organization known for doing a few projects and doing them well and going at



Ben Crenshaw, left, and Bill Coore stand in a natural "blowout" — to them, a bunker — at Sand Hill Golf Course. See story page 41.

a pace at which we're comfortable.

Coore: Do we think we're a hot item? Certainly name recognition is of inordinate value from a business perspective. There is a philosophy that says, 'Do a great deal

Continued on page 42

Weiskopf, Morrish ending partnership

By MARK LESLIE

SCOTTSDALE, Ariz. — Having generated a legacy of renowned golf courses from Arizona to Scotland, Tom Weiskopf and Jay Morrish are "winding down" their golf course design partnership.

"We're not splitting. We really are just phasing out," said Morrish, parrying any talk of a feud with Weiskopf, with whom he has designed 20 courses. Among their gems are Forest Highlands, Troon and Troon North in Arizona, Double Eagle in Ohio, and Loch Lomond Golf Club in Scotland.

In a statement, Weiskopf said: "Competition and design complement each other and after working on the design of 20 golf courses, I find that golf course design is just as stimulating for me as competition. I will continue to utilize my design expertise and competitive experiences to build and design outstanding golf courses, in addition to playing on the Senior Tour."

Weiskopf and Morrish are working on a handful of unfinished courses, along with some long-range projects. And Morrish added, "We will honor any agreements we've made with people with whom we have spoken, if they desire to press forward. In fact, we have not ruled out working together, say, five years from now. If a past client were to call and say, 'I

Continued on page 36

Burns readies Hawks' Nest and ventures into Mexico

WOOSTER, Ohio — Two hundred acres of rolling terrain, streams and ravines provide the easel for architect Stephen Burns' new Hawk's Nest Golf Club here.

A upscale daily-fee course owned by Earl and Betty Hawkins, Hawk's Nest opened its first nine last July 13. The second nine will open this year.

Lakes or streams influence play on nine holes, although there are few forced carries. Tended by superintendent Tim Smith, formerly of Acacia Country Club, the track measures from 4,650 to 6,600 yards.

Central Florida Turf of Avon Park, Fla., built the course with the Fernandina Beach, Fla.-based Burns Golf Design. The two firms have broken ground on The Club at Ravenswood Lake, a development course in nearby Medina.

...

Meanwhile, in San Sebastian de Amola, Mexico, the Burns-designed Club de Golf Malinalco has opened.

The par-72 track was built by Kenova Construction of West Palm Beach, Fla. An upscale weekend home community for Mexico City residents, it is be-

lieved to be the first large project of its type in the country.

The course stretches from 5,074 to 7,094 yards from several sets of tees, but will play shorter because of its 6,700-foot elevation.

Laid in a scenic valley and surrounded by mountains, it has a 180-foot elevation change. Water, including a large waterfall, enters play on 10 holes. But there are few forced carries.

Concentrating on Asia-Pacific

Nelson, Wright make Haworth a partner

HONOLULU, Hawaii — Robin Nelson, president of the Nelson & Wright, has appointed Neil Haworth to the position of partner, and has changed the firm's name to Nelson Wright Haworth, Golf Course Architects.

Based in Honolulu, the team of Robin Nelson and Rodney Wright is well known in Hawaii and throughout the Asia-Pacific region. Nelson Wright Haworth has designed, remodeled or planned 72 courses in 17 countries.

In 1990, Haworth joined Nelson & Wright to establish the firm's Singapore operations, and was recently named partner and managing director of

the Singapore office. Haworth, 32, has been designing golf courses for nearly 10 years, the last three in Southeast Asia. A 1986 graduate in landscape architecture from the University of Guelph, Canada, Haworth was senior designer for the Montreal-based Graham Cooke & Associates.

Haworth is now the project architect for several Nelson Wright Haworth developments internationally, including the new Kuala Lumpur Golf and Country Club, The Tiara Melaka Golf and Country Club in Malaysia, and Hwasung Golf Club in Shenzhen, China. Haworth is also working on Sun Island Country Club, an 18-hole layout in Shanghai, China.

Weiskopf and Morrish 'still good buddies'

Continued from page 35

really need you two,' we would get back together.

"Tom and I are still buddies. We will be fishing and hunting together and working together for the next two or three years on projects we've begun," Morrish said. "It's time for me to go in another direction. He's got interests, too. He is playing on the Senior Tour. So it was just a good time to do it."

"Another direction" for the 57-year-old Morrish is working more with son Carter, 27, "to get him in a position to take over if he wants to... When Tom and I do a job together, people are paying for Tom and me — not Carter."

Carter, a graduate in landscape architecture who worked with Wadsworth Golf Construction Co. before apprenticing with his father, has agreed to collaborate as a design consultant for Tour pros Howard Twitty and Mark Brooks.

As for Morrish himself, he said: "At 62 or 63, I would like draw some plans for my son, kibitz with people and not get out there on the road 300 days a year. For 25 years I've been on the road."

Morrish attributed the success of the Weiskopf-Morrish team, formed in 1985, with "attention to detail."



Bruce Matthews III busy on Mich. sites

RICHMOND, Mich. — Richmond Forest, a 6,600-yard Bruce Matthews III design featuring seven lakes and a variety of woods on 170 acres, will open in June.

Wiegand Nursery, a partner in the golf course, will be planting a variety of plants and trees ranging from the wetland species to flowers; shrubs to large trees. The arboretum will be labeled for the golfers and school tours. Trickle irrigation is being run to every tree planted. Each hole will have a different planting theme, ranging from the willows on the third hole to the mature oaks and maples on the 18th hole. Elegant landscaping adjacent to tees will showcase a variety of shrubs and ground covers.

The daily-fee course is a partnership of the Kaltz family which has been in the golf industry over 40 years, and the Wiegand family, which has been in the nursery business for as long a time.

Meanwhile, Brookshire Inn & Golf Club, a 6,360-yard course situated on the Red Cedar River 15 miles east of Michigan's state capitol, will open a new 9 and renovated 9 in July. The original 9 designed by W. Bruce Matthews, grandfather of W. Bruce Matthews III, in 1959. The existing golf course is being renovated with additional tees and fairway and green bunkers. The additional nine holes are situated on rolling meadows and adjacent wetlands.

First Indian heritage course planned on Wis. tribal land

GRESHAM, Wis. — The Stockbridge-Munsee Community has retained Gilmore Graves Golf, Inc. of Spring Green, to design and build the state's first Indian heritage golf course. It is an 18-hole project on newly expanded tribal lands here.

The golf course is the former Pine Hills Country Club, a nine-hole facility, recently purchased by the tribe. The project will interpret

the Stockbridge-Munsee heritage in its use of land forms and design themes that are integral to the tribe's culture. Tribal President Leah Miller Heath sees the project as a further expansion of the economic and job base of the tribe.

"The tribe looks to the golf course as another potential development which will not only provide additional revenue for people, but as a project the tribe and members can create and nurture from beginning to end as a total community effort," she said.

The golf course is one phase of a comprehensive land use master plan being developed by the tribe with the assistance of Gilmore Graves. The plan includes commercial development, community service infrastructure, conservancy areas, and a multi-use recreational trail system.

Breakers West remake means more home lots

JUPITER, Fla. — The recently completed renovations of the back nine holes at the Breakers West golf course will allow more lots to be sold in the luxury golf community, translating to \$6 million in potential sales.

"There were two goals for the redesign," said John Sanford of Sanford & Associates, the Jupiter-based golf course and landscape architectural firm responsible for the renovation. "We wanted to bring the course up to date, providing greater playability as well as additional strategy and shot-making options, and we wanted to accommodate development of more single-family residences."

Six holes were reconfigured and three holes completely remodeled. The redesigned course features include positive drainage of all play areas, additional shot options, more water hazards, and increased visual dynamics.

The renovations, which started last spring, teamed Sanford on the project with PGA tour player and design consultant Ken Green. Hole #15 is Green's "signature hole."

"It's potentially drivable par 4, giving the player an option to lay up for safety or gamble on driving the green," Sanford explained. "The hole plays predominantly down wind with 315 yards from the back tees, 295 yards from the regular tees and 230 yards from the forward tees."

Va. has new track

BRISTOW, Va. — Bristow Manor Golf Club, Virginia's newest daily-fee golf course is now open. Measuring more than 7,000 yards, this par-72 layout is set in the lush, rolling hills of northern Virginia.

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Creating wetlands — a whole new ballgame

Continued from page 35

Ecoshores' contribution to Spring Island's success demonstrates the importance of companies that help golf course developers weed through the regulatory process by creating and preserving wetlands.

"We don't view environmentalists as stirring up the pot," Seay said. "We want to preserve natural areas wherever possible. Sometimes we have to create wetlands that resemble natural areas. We want to

reconstruct that natural look and function. I like what companies like that [Ecoshores] can do with us."

Ecoshores President Steve Beaman said his firm has worked on more than 100 courses over the past 15 years. Projects have ranged from providing a course with a few hundred dollars worth of plant material to the \$1.2 million of vegetation and labor invested at 36-hole Grand Harbor in Vero Beach.

The company is working on

mitigation plans for the LPGA layout being built in Daytona Beach, Fla. Most of the plant material for that facility, and other projects in the five Southeastern states Ecoshores serves, comes from the 2,000-acre plant farm the company maintains in Central Florida.

Ecoshores guarantees its work, meaning it will replace vegetation that dies. Beaman is proud of the 90 percent success rate his plants enjoy. But since plant survival is dependent on

the accuracy of engineering studies analyzing the rise and fall of water levels, Beaman works closely with architects and the wetlands engineers they employ.

Williamsburg Environmental Group Inc. is such a company. The Williamsburg, Va.-based firm provides ecology, planning, regulatory support and engineering services to help architects and developers minimize impacts on existing wetlands.

"Basically you have two types of companies involved in the wetlands process," said Williamsburg Vice President Mike

Kelly. "There are firms, like ours, that work closely with architects to get the permits and do the preliminary and detailed drawings. Then there are the contractors who bid on the projects and do the actual planting."

Kelly's firm has worked on 50 golf projects over the past four years, including wetlands delineation and regulatory permitting jobs at Ault, Clark-designed Kingsmill and Tom Fazio-designed Governor's Land at Two Rivers, both in James City County, Va.

"The architects usually bring us in early," Kelly said. "It's very much a networking type of business."

The American Society of Golf Course Architects noted the importance of wetlands preservation and creation in its guidebook *An Environmental Approach to Golf Course Development*. Several case studies of golf projects included examples of wetlands issues.

Architect Don Knott of Robert Trent Jones II International credited Larry Seeman & Associates of Berkeley, Calif., with selecting the vegetation used in the creation of a six-acre wetland and several other smaller wetland areas at The Links at Spanish Bay in Pebble Beach, Calif.

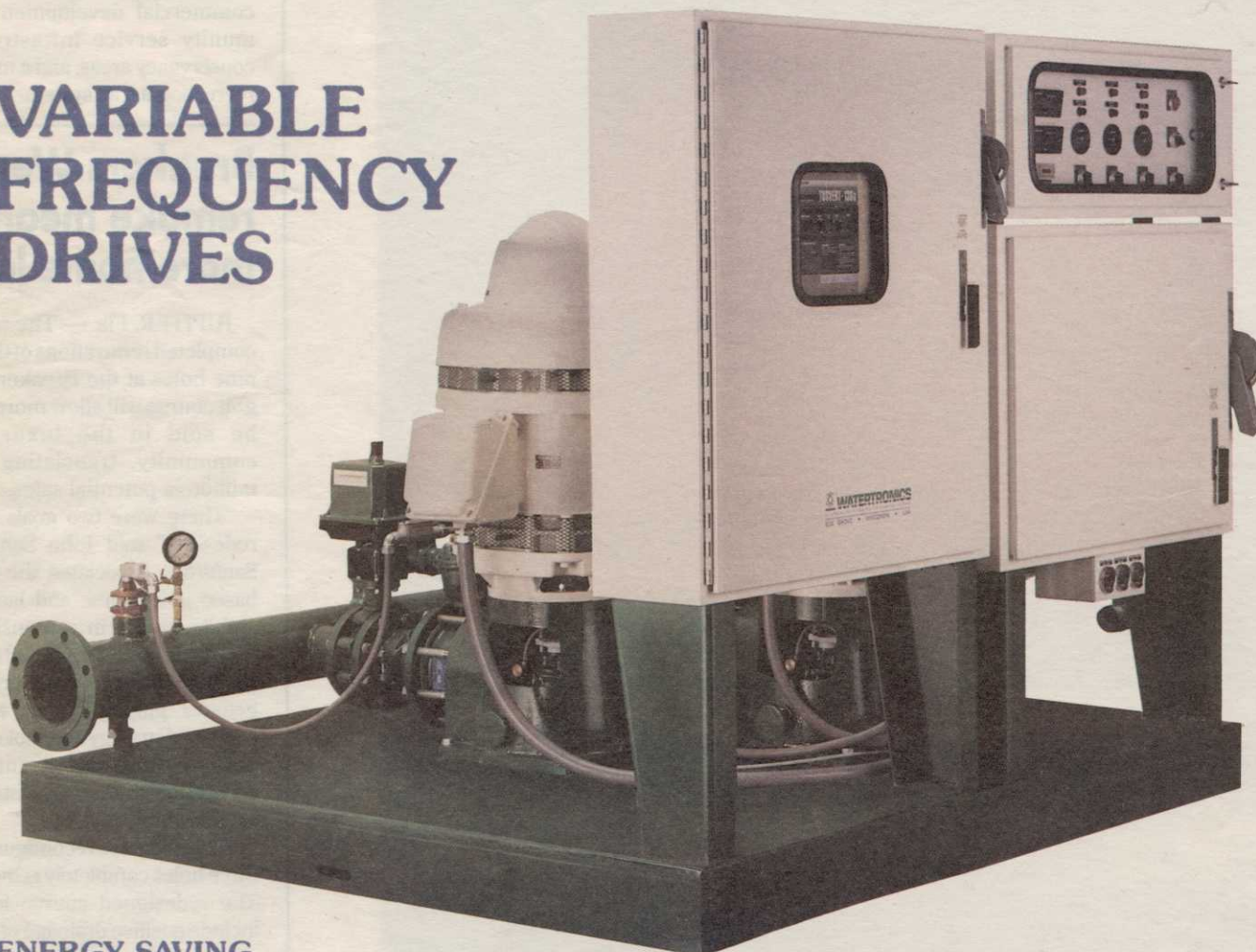
Johnson, Johnson & Roy of Ann Arbor, Mich., assisted with wetland stabilization and creation efforts at Jones Orchards course north of Detroit, he added.

Jones' construction firm performs the actual excavation work in constructing most wetland areas, Knott said, but leaves the revegetation work to companies like LSA and JJ&R who specialize in that area.

"It's getting more difficult to obtain permits all the time," Knott said. "We try to find sites where we can avoid wetlands altogether. But that isn't always possible. That's when wetland firms can be a big help."

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Graham, Panks start N.C. project for '95 opening

GREENSBORO, N.C. — Former U.S. Open and PGA Champion David Graham and partner Gary Panks, of Graham & Panks International, have begun construction on their 18-hole golf course design in Guilford County, part of an 1,100-acre master planned community under development by the Koury Corp.

The heavily forested and rolling terrain offered Graham/Panks natural contours, existing water courses and protected wetlands in routing the course.

From the back tees, the 7,014-yard layout is a par 72.

Weather permitting, seeding should begin in June 1994. The grand opening will be held in late spring 1995.

Wetlands are championed at Columbus' Medallion Club

By MARK LESLIE

GENOATOWNSHIP, Ohio—In a costly show of goodwill, Champions Development Group has fashioned a wetlands preserve and learning center on 85 acres of its new golf course, opening a nature area that beforehand was inaccessible to the public.

Allies, not antagonists—that describes the relationship Hoover Nature Preserve and Champions Development Group developed as they progressed on The Medallion Club.

"They've given us a lot of freebies. I've always preached that conservationists and developers have to work together for joint goals. This is a good example of that," said Mike Bailey, who founded the Hoover Nature Preserve and is chairman of its advisory council.

Besides the terms of wetlands mitigation, Champions also "gave us a nature trail, an earthen overlook of the marsh, and they bulldozed the base for a parking lot and the fill for a turnaround," he added.

"They're tickled with what they have. We're happy because we got what we needed to make the project work," said Richard S. Brogan, director of site development for Champions. "We went to great lengths to do it and do it right."

"Champions were interesting developers," said Larry Hawkins, president of Geoscience Golf Development Services, which was involved in the project. "They were very environment-conscious and wanted to do a showcase property and cooperate with the city. The nature preserve was one result."

When Champions bought the 600-acre site, it inherited about 85 acres of protected wetlands and a blue heron rookery. Working with local, state and federal officials, and the Nature Preserve, Champions preserved the 85 acres including 25 acres of highest quality wetlands. Each acre of wetlands that was disturbed was replaced by 1.5 acres of wetlands.

Besides that, the developers improved an area fraught with flooding problems. Runoff from surrounding land had flooded subdivisions.

The Army Corps of Engineers required that Champions divert 70 percent of the water to the Hoover Reservoir, the city of Columbus' water supply. Working with Hawkins and



Champions Development Group not only created wetlands, but also a way for nature-lovers to walk to them.

Dave Tyndall of EMH&T engineers in Gahanna, Champions built a 15-foot-deep, 40-foot-wide channel that runs from a major lake excavation in the middle of the site, through the Hoover Nature Preserve and into the reservoir.

That rerouting, Hawkins said, "created the opportunity to develop the nature center."

"We asked that they build a marsh instead of a drainage ditch," Bailey said. The resulting eight-acre Mud-hen Marsh was designed for coots, a species of bird that lives in a hemming marsh complex—which is half emerging vegetation and half open water.



Bailey put the cost of his marsh complex at \$300,000.

Hoover Nature Preserve has become "our biggest supporter," Brogan said. "They've seen that we've tried to do our best and they've worked very closely with us. It's been a benefit to us both."

The golf course? Brogan believes it is a winner, too, gaining the goodwill of area golfers.

Designed by Jack Nicklaus II, 18 of the 27 holes are complete. The third nine will be built this year and is scheduled to open in July 1995.

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Jones International's Squaw Creek a winner on all fronts

Continued from page 35

finished second to Fazio Golf Course Designers, Inc. in combined votes for Best Design Associate. And, said Jones: "People haven't seen half our work. [Lead designer] Kyle Phillips has done a lot of work in Europe, and Gary Linn has done a lot of work in Asia."

...

For Jones, who said he does "a lot of my work in the mountains," Squaw Creek follows renowned designs of Keystone Ranch and

Sheraton Steamboat Springs in Colorado, Elkhorn and Sun Valley in Idaho, and Sugarloaf in Maine.

Even before it opened July 4, 1992, Squaw Creek received notoriety not only for its design but the fact that, after an eight-year-long approval process, it opened as "chemical-free."

"Squaw Creek is a '90s golf course in that it is very much designed from an environmental point of view, both protecting and restoring the environment," Jones said. "It is also avant-garde and

very different from a design standpoint. The course has two characters: the pine forest edges at the bottom of the mountain; then a transition into the meadows where you play more target golf. The contrast from a player's point of view is delightful."

Eight years of tedious negotiations with government authorities and the public led to 100 routing plans, and, finally, an improved property, Jones said.

Part of the property had served as a parking lot for the 1960

Olympics, "built by none other than the Army Corps of Engineers," Jones said.

Also, Phillips, the project's lead designer, said environmentalists "wanted to protect this 'pristine mountain meadow.' Well, we found that what was feeding this 'pristine' field was leachate from old septic tanks from neighbors. You couldn't give your property away there when this all started in the early 1980s. Values have probably quadrupled."

Meanwhile, Phillips said: "We

have to irrigate a lot of the 'wetlands' to keep them wetlands."

"The process itself," Jones said, "became a very, very important addition to the environmental pool of golf courses, which started at [Jones-designed] Spanish Bay in California and courses along the Carolina coast. This is the first time it had been done in a mountain setting."

Jones praised superintendent Carl Ryggs, who left environmentally sensitive Spanish Bay to join Squaw Creek halfway through construction.

"Carl declined to use any herbicides on the grasses, which was extraordinary. And yet he maintains the course very firm but hard and true," said Jones. "This can only be done in mountains. You can't abandon herbicides and pesticides where you don't have a very cold-snap season that controls the insects naturally."

ENVIRONMENTAL DESIGN

Saying he agrees with much of the "ecotopian philosophy of California," which calls for cleaner air, fresher water and better golf courses, Jones added: "I have adjusted our design philosophy to accommodate that point of view. I think Squaw Creek is a mountain example of that genre, which we will see more of in the '90s. It's an environmentally correct golf course."

THE JONES INTERNATIONAL TEAM

Jones praised his design team, saying: "I think we have a marvelous atmosphere within our office... We have open discussions on what makes a course better. We do cross-referencing, cross-designing, alternative plans, alternative thinking in the field. There is no ego involved. We have very skilled individuals who want to design better golf courses and to make better architects of each other. They're always willing to learn and listen, and to teach younger people. Our philosophy is very collegiate."

John Cook, Hurdzan on Palm Desert project

PALM DESERT, Calif. — Michael Hurdzan and PGA touring pro John Cook are designing two championship 18-hole courses for the city of Palm Desert.

The 540-acre property will include construction of an additional 576 villas for Marriott's vacation ownership program, 40 acres for a combination of single family houses and condominiums on the golf courses, two hotel sites, a conference center and a sports park. In addition a 10 acre office/medical site is also proposed. The plan also includes the 26-1/2 acre Desert Springs Marketplace, the first phase of which is under construction.

Course construction is expected to begin this spring.



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Coore-Crenshaw Nebraskan track stirring whirlwind of speculation

I've always thought Pine Valley was it. This blows Pine Valley off the charts. Within 10 years, it will be No. 1 in the world.

— Dana Fry
golf course architect

By MARK LESLIE

SOMEWHERE IN THE SAND HILLS OF NEBRASKA — Here lies the ultimate example of the motto: "Build it and they will come." It is a golf course. It is an hour's drive from a city that is an hour's flight from anywhere. And it was "just there" — fashioned by the hand of God. They call it Sand Hills, and golf purists who have heard tales of it are itching for its gates to open, sometime around Labor Day.

Less than 4,000 cubic yards of dirt is being moved in construction of Sand Hill Golf Course. Yes, that is 4,000 — not 400,000.

"I had a great natural piece of ground and wanted a natural, traditional golf course," said Dick Youngscap, whose "other" course, Firethorn, is the number-one rated track in Nebraska.

Golf architects Bill Coore and Ben Crenshaw obliged Youngscap, weaving 18 holes between and around breathtaking sand dunes in this country known for its prime grazing land, but certainly not golf.

"There were only two places where we knocked a knob [of dune] off maybe three feet," said Crenshaw, who took week after week off the PGA Tour to complete this project.

"It's as British- or Scottish-like as I've ever seen in North America... It is sandy. It has undulations. It has contour. In its natural state it is very, very close to how the game was born.

"It's the piece of property that we will have to work the least on. It's very, very difficult to know what to leave out. It is there in its native magnificence. We're really only trying to prepare it for golf, which is not very much."

Coore said the only work done on fairways was grading by a D4 bulldozer — "and that was done within a week."

"It is the best golf course we have ever done—or will ever do," Crenshaw declared.

"It will be one of a kind," agreed Bill Kubly, whose Landscapes Unlimited built the course. Kubly needed only three people on site and nearly all his work was installing the irrigation.

"Most of the course was simply leveled out and seeded," Kubly said. "The greens were just smoothed out with a Sandpro or small tractor and planted with bentgrass.

The soil is pure sand, so there is not a drainage problem."

Youngscap bought 8,000 acres (Nebraskans sell land by the thousands of acres) in July 1991 and began construction last June. "In the intervening time, Ben and Bill walked it, day after day after day," Youngscap said.

Their struggle was not finding 18 holes of golf on the property, where dunes are 30 to 40 feet high — and higher. It was narrowing the holes down to 18.

"We found 131 holes," Crenshaw said. The final 18 are spread over 500 acres.

"The routing is fantastic," said Dana Fry, a lead architect for Hurdzan Design Group in Columbus, Ohio, who visited the project. "They have the greatest shapes of golf holes and the views are unparalleled."

"This land is probably one of the biggest secrets on the face of the earth," Youngscap said. "It is the most tranquil — kind of like a beautiful lady. She's fickle. Most of the time she's exquisite and you're entranced by her beauty. And then there are times where she gets mad and slaps you around... wind and storms. It's a very fascinating



The sand hills rise up 30, 40 feet and higher at Sand Hills Golf Course.

Photo by Ron Whitten

place. It will be a real challenge for people to play golf there."

...

Not everyone will play Sand Hills, stuck out in the wilderness of Nebraska. Non-natives will have to fly into North Platte, then drive 50 minutes due north to Mullen.

Once the course opens, possibly by Labor Day, "We anticipate 60 to 70 rounds a day," said Youngscap. "It's a purist golf

retreat."

To that end, Youngscap is building housing along the nearby Dismal River to lodge 48 people.

Youngscap is an architect by profession and has done the design work of the clubhouse and lodges. He personally supervised all the deep main irrigation. "To say he's 'hand-on' would be the understatement of a lifetime," Coore said.



Redhawk Golf Club, Temecula, California, Hole #12, 168 yard, Par 3

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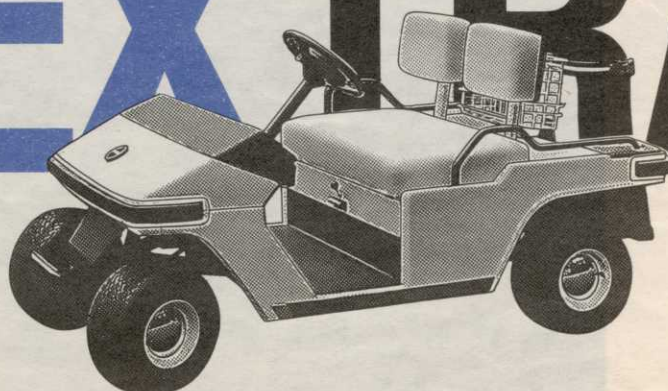
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Q&A: Crenshaw and Coore

Continued from page 35

of work while in the spotlight.' There is nothing wrong with that. But we are a very small company. We realize what we do is business, but our philosophy is to treat it as a hobby. We try to have fun and do only one or two courses at a time that accommodate the style we're comfortable with. We don't shy away from projects, but to pick situations that allow us to express ourselves.

GCN: Is it the traditional aspects of your designs that is drawing attention to you?

Crenshaw: I suppose. We are no different than some people who think the work that was done in the '20s was done by the best artists and we try to learn from them. Those traits and qualities are the lasting ones. There's a great bit of art in fine work. It's subtle but at the same time it's something we feel lasts and is there for every golfer.

GCN: You're a real student of classic design. You go out of your way to see courses designed by the old masters. How have they influenced your work?

Crenshaw: I view it as an art student going into a museum. You're drawn to different works. Bill feels the same way. Whenever we can, we visit a course on which you can see a great stamp of individualism and the blending of art.

GCN: Who has had the most influence on you, Ben?

Crenshaw: Certainly, Mackenzie has a flair for art that I think was totally unique. His bunkers and mounding, his green contouring — strategic architecture is so well depicted in his work. There is a route for everyone. His bunkers are very eye-catching. They have different levels in them sometimes. They have fingers, bays and tongues. They frame and orient the shot as well as anyone's.

On the other hand, on a [Donald] Ross bunker you don't see much sand, but they still have a lot of feel. I prefer to see a little more sand. Not to say we're not magnetized by Ross. His green contouring is brilliant.

GCN: Explain why you think we went from these classic designs to a dearth of them, and now they are making a comeback.

Crenshaw: There are a lot of reasons, but I think it really boils down to the implements we move earth with. To do delicate work you have to have a small apparatus. It's been difficult to do that with the advent of the bulldozer.

GCN: Do you think Ross and the others would have had more movement and earth-moving if they more modern equipment than horse-drawn blades?

Crenshaw: They had to be drawn to certain pieces of land. They knew they couldn't move mass quantities of earth, so they

truly went for getting a rolling site. The delicate undulations around the green reflects the drag pan.

GCN: What is your favorite golf course and why?

Crenshaw: I've always been inclined to go with Pine Valley, Marion and Royal Melbourne, in no necessary order. A lot of the variables and traits we know make great golf come together on those particular sites. There are 10 others I could mention in the same breath.

Coore: Quite candidly, I don't think there is any such thing. There are groups of

extraordinary courses around the world. One thing that makes golf so fascinating is the variety. It's the heart and soul of golf. I grew up playing Pinehurst #2 and adore its subtlety and the crowned greens. By the same token, I love the imagination of the National Golf Links (on Long Island). It is one of my absolute favorites in the world. And certainly no two courses could be more different.

GCN: The last couple of years the industry's collective voice is "we're returning to classical design." Has the pendulum really swung back?

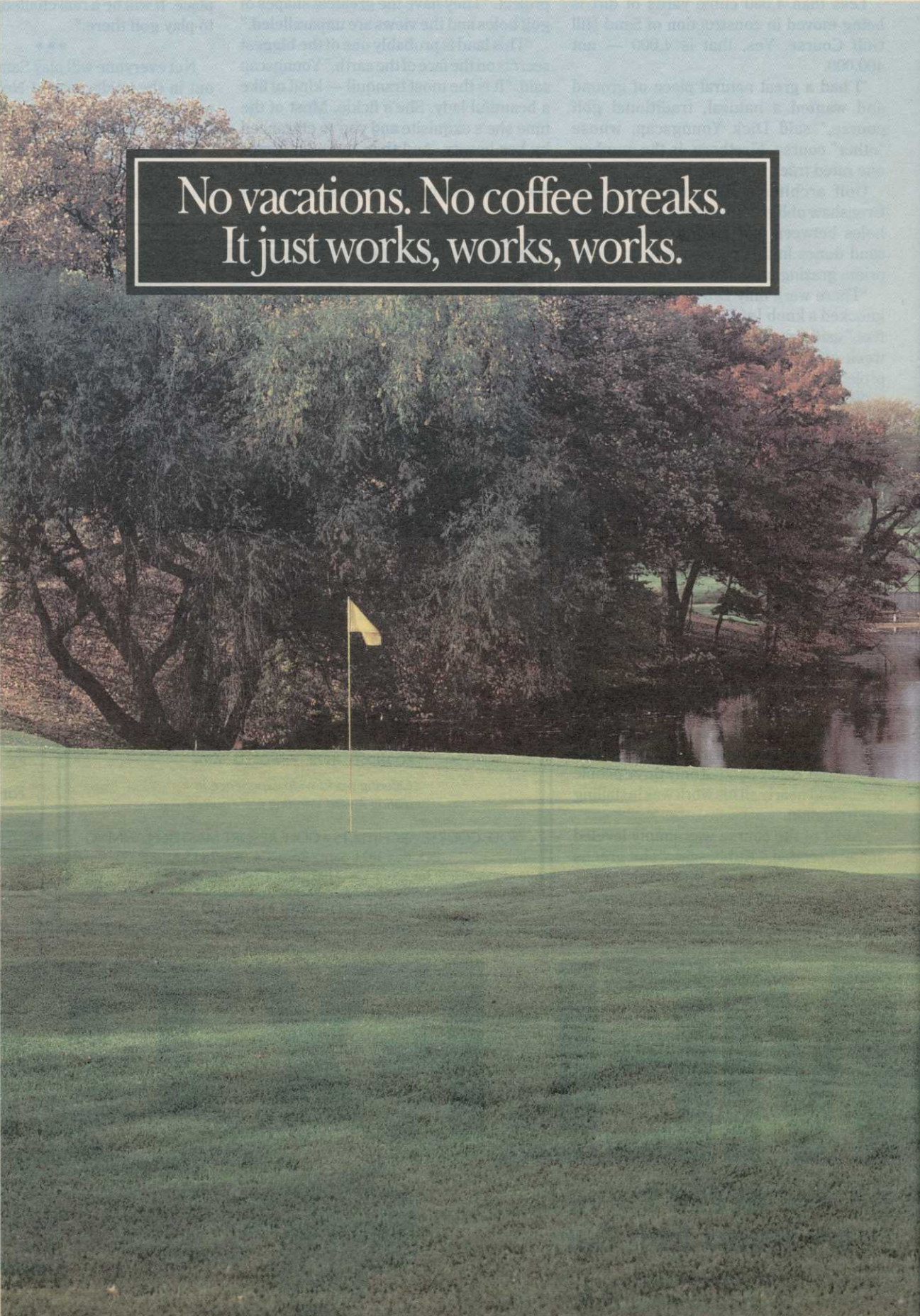
Crenshaw: The first depictions

of golf architecture — other than seaside golf — was in the latter 1800s when man actually started working with earth artificially. From that point on, it has gone through tremendous swings and fluctuations in style, depictions, earthworks and all kinds of different presentations. I think the last 15 to 20 years is almost a natural reaction to what golf technology and implements and balls are giving us. Let's face it, the clubs and balls we use today are far surpassing anything we ever thought of 25 years ago. When I hear Pete Dye trying to devise different ways to combat

that, I am very much in concert with his philosophies on how to test the best players. That point given, there are masses of golfers coming to the game who on television have seen golf courses laden with water and all different types of visual presentations. When you mention a course — like Oakmont and Royal Melbourne which don't have bodies of water — I'm sure they scratch their heads and say 'Where is the pizzazz? Where are the bells and whistles?'

We've gotten beat over the head by magazines, television, all types

Continued on next page



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Q&A: Crenshaw and Coore

Continued from previous page

of things that show waterfalls everywhere, flowers, all kinds of things. But Bill and I are conservative in that way.

GCN: Some golf course design teams have been notoriously short-lived. Most recently, Tom Weiskopf and Jay Morrish are ending their professional relationship. How secure is Coore and Crenshaw?

Crenshaw: There are no guarantees for long-term personal

relationships of any type — marital or business. If any two people ever set out not to be partners, it was us. We're partners because we respect each other. We have learned immensely from one another. My personal opinion is that we will continue for a long time.

Coore: I learn from Ben every day — particularly subtleties, shot values and things of inordinate value in the quality of a golf course that might be overlooked by someone without his talents. He is extremely well versed in golf architecture. This is the furthest thing imaginable from the situation common in the last 10 to

12 years of players consulting.

This is an ego-oriented business as well, and sometimes — particularly from the lesser-known person's perspective — some guys may have a problem doing work when their partners get the lion's share of the credit. We don't have that problem. Ben even tends to downplay his role, which is not fair to him. We try to show up together as much as possible.

GCN: Your involvement in buffalograss seems to be such a departure from the Tour and course design, Ben. What got you interested?

Crenshaw: I have been

interested in how a course should be maintained and what awaits us in the future. Buffalograss is an alternative — nothing more. It's not a wonder grass. You can use less water with it...

Superintendents have such a difficult existence these days. There's so much demanded from them. A lot of times things are asked of them that are impractical. And they are very much maligned in a lot of different aspects. I have a lot of admiration for them.

GCN: Are you watching any other grasses in particular?

Crenshaw: Lots of new Bermudagrasses are coming out

that are extremely heat-tolerant and use less water. There's a tremendous surge of new bentgrasses. We're at a very, very nice situation and time where we can offer these grasses in the future. And it's fun to watch and apply them.

GCN: How will water use and grasses affect course design?

Crenshaw: In a lush situation, there's a limit to what the ball can do and what its outcome will be. In a lot of areas and a lot of our courses in America, what happens to the ball when it hits the ground becomes a non-thinking proposition. It's an air game. Why is it that people worked so hard on [greens] approaches in the '20s? That's where the game has shifted and is presented to different classes of players. The old architects preached all the time about the approach. It can be just as important as the green itself, and so can how it's maintained because it allows lesser players a chance.

GCN: Bill, what does the element of your five years of work as a superintendent bring to this aspect of your career?

Coore: It's a great asset. I never started out to be a course superintendent. I worked with Pete Dye in the early '70s. Golf course design had been a hobby of mine. I appreciated Pete's finesse. I got the chance to learn construction from the ground up. At one of his courses I inherited the superintendent's job, which, quite frankly, I was not trained for. I was forced to learn about maintenance. I knew what a well-maintained course was like, but how to get it there was foreign. Dick Psola, a well-known soil scientist out of Ohio, held my hand for a year and taught me.

I learned, it worked well and it was a fruitful beneficial experience, because having done that I am at least aware of superintendents' concerns — and whether those concerns are legitimate.

Sometimes they are and sometimes they are a personal objection.

Byron Nelson, Weibring team up

PALM SPRINGS, Calif. — Byron Nelson and PGA pro D.A. Weibring have teamed up with German developers to plan The Palm Springs Classic, a 368-acre mixed-use project featuring a championship 27-hole golf course.

The development will also feature a hotel with as many as 400 rooms, corporate offices, commercial space and up to 400 vacation ownership units. The project is financed by Hypo Bank of Munich, Germany.

Project developer is D.T. Palm Springs Inter-Continental Golf Center Enterprises, Ltd., headed by Rolf Deyhle of Stuttgart, Germany.

City Manager Rob W. Parkins said city staff stand ready to process the application as a high-priority development.



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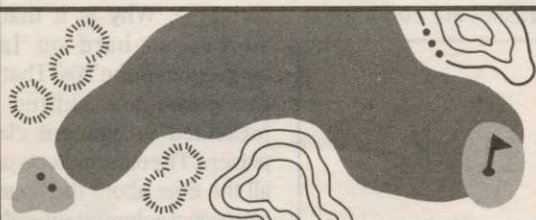
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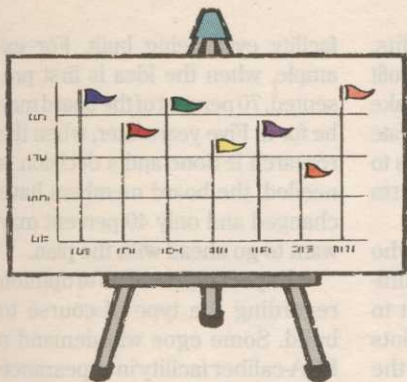
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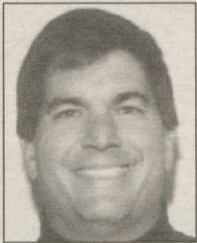


NGP GOES INTERNATIONAL

WOOTTEN BASSETT, England — National Golf Properties has acquired Wootten Bassett Golf Club near Swindon. The price was \$1.875 million. This is NGP's fourth acquisition since its initial public offering in August, and its first international investment.

GPA RECRUITS SEVERAL COURSES

Golf Property Analysts of Harrisburg, Pa., has been selected to perform appraisal and/or analysis services for several clubs including South Hills Golf Club in Hanover, Pa.; Laurel Creek Golf Club in Moorestown, N.J.; several Florida golf clubs represented by the law firm of Cummings & Lockwood in Naples and Collier counties; and Hiland Park Golf Club in Queensbury, N.Y. It will also perform a feasibility analysis and valuation services for a proposed municipal course in West Manheim Township in York County, Pa.



Laurence Hirsh,
GPA president

CHANTILLY HIRES MARTTY

FAIRHOPE, Ala. — Martty Golf Management has signed a consulting agreement to oversee the marketing and operations of Chantilly Manor Country Club in Rising Sun, Md. Chantilly Manor includes an 18-hole course, clubhouse, banquet hall, restaurant, swimming pool and tennis courts.

NCGA TABS GOLF VALUATION

Golf Valuation Consultants of Madison, Wis., has been selected by the Northern California Golf Association to appraise its Poppy Hills Golf Course in Pebble Beach, Calif., and proposed Poppy Ridge Golf Course in Livermore, Calif. The appraisals will be used to help secure financing for 27-hole, Rees Jones-designed Poppy Ridge.

ROBERTS JOINS ST. ANDREWS

LAWRENCE, Kansas — Former Golf Course Superintendents Association of America President William Roberts has joined several other past GCSAA staffers at St. Andrews Corp. Inc. Roberts joined the firm Feb. 1 as vice president. He will serve as a resource for agronomic and golf course operations consulting. A graduate of Penn State's turfgrass management program, Roberts has 18 years experience in the golf industry. He will maintain a Michigan office at 1652 Severn Rd., Grosse Pointe Woods, Mich. 48236; (313) 884-8207.

GolfCorp becoming big player in public market

ClubCorp connection proves mutually beneficial

By PETER BLAIS

JACKSONVILLE, Fla. — GolfCorp's purchase of the Royal Golf Course at Queen's Harbor Yacht & Country Club demonstrates the flexibility its parent company — Club Corporation International — possesses now that it operates in the private, public and resort markets.

The private course was not doing well financially when GolfCorp, CCIs public course arm, purchased the 18-hole layout in late November. The company retained access to the best tee times for members while opening the course to public play.

"We're promoting it as a limited-access facility," explained Executive Vice President Beryl Artz. "We're supplementing the bottom line with additional rounds of golf until we have enough members to make it strictly private again."

"We hope that happens in five or six years. Then we'll turn it over to our private subsidiary, ClubCorp. That's the second of the four acquisitions [Oakmont Country Club near Dallas was the first] we made last year that we plan to keep public for several years then turn over to ClubCorp."

January marked the beginning of GolfCorp's ambitious three-year, 6-8-10 acquisition program. The Dallas-based company plans to buy six courses in 1994, eight in 1995 and 10 in 1996. That will nearly double the 32 golf properties the company currently owns or operates.



Continued on page 49

GolfCorp recently took over management of Royal GC at Queens Harbor.

Cole resigns as Kiawah Island golf director

By PETER BLAIS

CHARLESTON, S.C. — Kiawah Island Golf and Tennis Director Chris Cole resigned last month after five years at the coastal resort and 17 years with former owner Landmark Land Co.

"I had a ball on the front nine of my career," said Cole, 44. "I want to pick where I play and with whom on the back nine."

Cole's resignation comes on the heels of Landmark's bankruptcy sale of Kiawah to AMF Inc. AMF brought in a new management team, but had hoped Cole would stay to run the golf and tennis operations.

"We were very surprised about Chris'

leaving," said Beverly W. Armstrong, vice chairman of Virginia Investment Trust, AMF's parent company. "We thought he had done an excellent job. But he said he simply wanted to do something different."

Cole said he had some minor differences with the new management regarding the long-term business philosophy at Kiawah. But, he added, that was not the reason he left. He described the breakup as amicable and wished the new management "the best of luck."

Cole was Landmark's first golf professional, joining the Oak Tree Country Club staff in Edmond, Okla., in 1976. He re-



Chris Cole

mained there 10 years, rising to president of Oak Tree, before a three-year stint as project director at Palm Beach Polo & Country Club in West Palm Beach, Fla.

Cole was actively involved in the development of Kiawah's Ocean Course and was general chairman of the 1991 Ryder Cup held there.

"I'm not in a big hurry to find a new position. I'm leaving my options open. But I want to stay involved in golf," Cole said.

Armstrong said the search for Cole's successor at Kiawah had not begun.



World Woods used a mass discount program to attract business.

Marketing Idea of the Month

Mass discounting program puts Fla. course on map

By PETER BLAIS

Picture, if you will, a small town midway between Tampa and Orlando. As the early-morning sun rises, three buses pull into a golf course parking lot and disgorge 120 bag-toting bargain seekers intent on playing no less than 48 holes before half-past dark. The price — a paltry \$50 per head. You've just entered that shady area between necessary promotion and giving away the store. You've entered — The WORLD WOODS ZONE.

Sound nightmare-ish?

At times, it did to World Woods Golf Course General Manager Stan Cooke, the man who came up with a massive group discounting plan to promote this Tom Fazio-designed facility located in isolated Homosassa, Fla.

"But it worked," Cooke said one late-

Continued on page 48

Years of frustration come to an end for Southern California Golf Ass'n

By PETER BLAIS

If anyone knows the frustrations a golf association can encounter in developing its own golf course, it's Newell Pinch.

Pinch joined the Southern California Golf Association as executive director in 1965. He advanced to chief executive officer in 1987. Since retiring late last year, Pinch has consulted for the SCGA as it closes in on its 13-year search for its own course.

Pinch was there in 1981 when the SCGA board of directors decided to follow the lead of the Northern California Golf Association—which was building Poppy Hills—and build its own facility, too.

He sweated through the three-year dance with the Irvine Co. Their joint attempt to build a course in Laguna Beach ended in 1984 when they failed to overcome protests from environmentalists concerned about preserving the area's woodlands.

He got burned during the five-year flare-up over Boy Scouts of America-owned Firestone Ranch in Brea. The SCGA and scouts had agreed to a 99-year lease for an 18-hole course to be constructed on scout property. But environmental groups again spiked the deal, this time bemoaning the loss of oak trees and making access to the property so costly the project simply became too expensive.

"We had \$750,000 in hard cash tied up in those two projects," Pinch said.

When Firestone Ranch withered on the vine in late 1992, the board decided to turn its attention to *acquiring* rather than *building* a golf course.

The board looked at a dozen sites before settling on Rancho California in Murrieta. The Robert Trent Jones Sr. design first opened in 1970. It was a quality layout that had fallen into some disrepair because of the financial difficulties of the previous two owners.

"It was a fixer-upper," Pinch said, "but the quality was still there. We negotiated for enough land to eventually build another nine holes. And someday we'll construct a new clubhouse to replace the double-wide trailer there now. That's not a big priority, though."

The SCGA was scheduled to close the Rancho California deal in late January. The long-sought acquisition will fulfill the group's two major goals—providing a site for association tournaments and an additional source of income.

"Golf associations operate 99 percent off dues," Pinch noted. "Any additional revenue is a big help."

Pinch has learned much from the 13-year effort to land an association course. And he has increasingly been asked to share that knowledge as more state and regional golf associations look at

developing courses of their own.

Following is a summation of the more important lessons, Pinch said, he has learned:

- First and foremost, find someone to perform an objective financial analysis of the association and how owning a golf course would affect it.
- Perform a feasibility study on any proposed construction or acquisition. It can't be put in a place that suits everybody. So put it in a place where it will make money.
- Don't expect someone to pro-

vide funding simply because golf associations are big and do good things. Most associations raise dues to fund a course. But that isn't always easy to do.

- Buying is easier than building. Building is a tremendous risk. The SCGA spent hundreds of thousands of dollars in Laguna Beach and Brea, but has nothing to show for it.

- Member courses will likely be upset about competition from a nearby association facility. Don't be surprised to lose a few of those members. Chances are they will

return once they see the benefits.

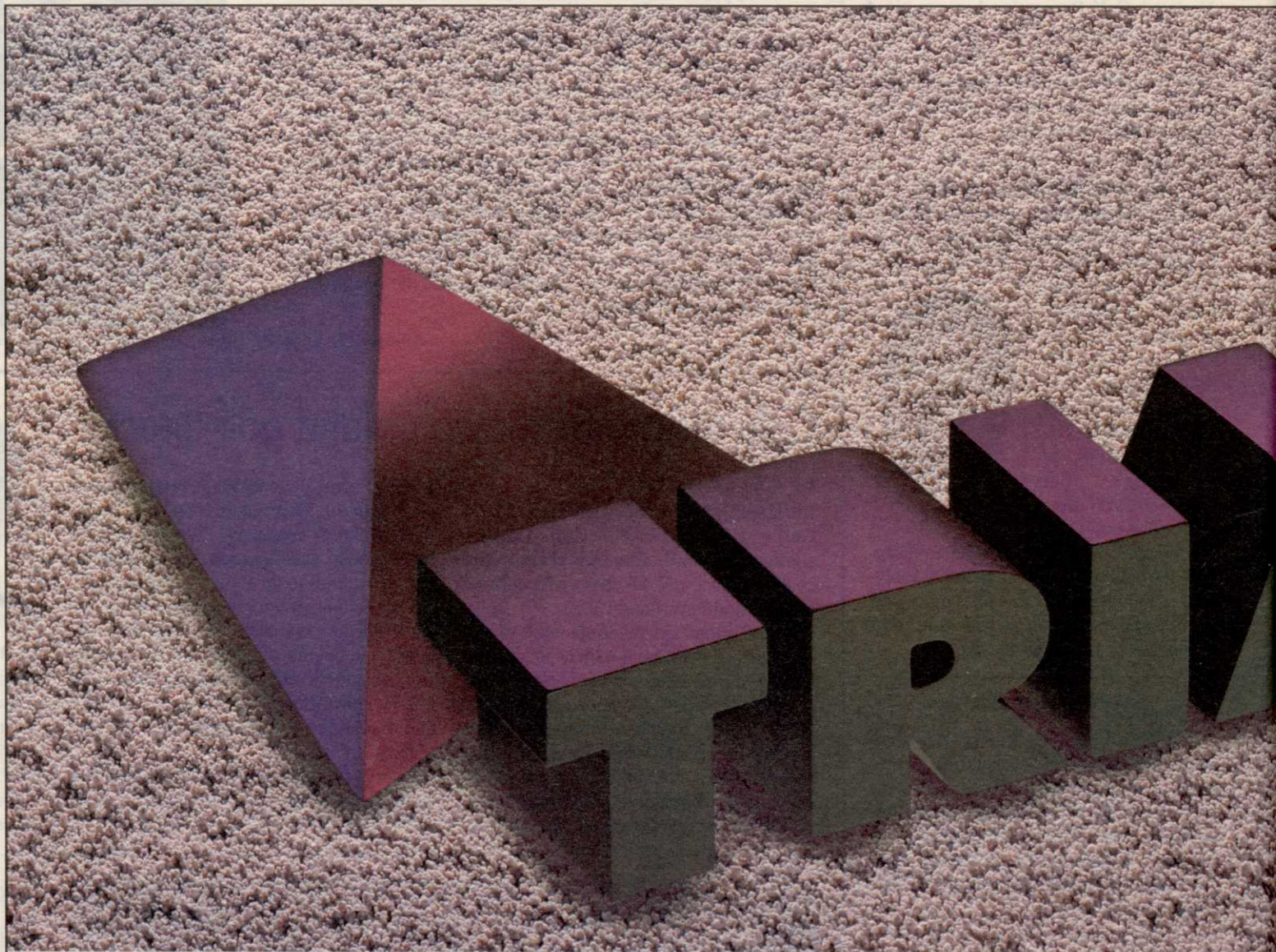
- Golf associations are non-profit organizations. Golf courses make money. That combination will create problems if the association hopes to keep its non-profit status. So expect to spend a lot of time with lawyers.

- Working with developers who want to donate land can be difficult. Developers usually want to keep the best land for house lots and give away what's left for the course. Poor land can make for a costly course.

- Time can work against a golf

facility ever being built. For example, when the idea is first presented, 70 percent of the board may be for it. Five years later, when the research is done and a decision is needed, the board members have changed and only 40 percent may want to go ahead with the plan.

- Expect differences of opinion regarding the type of course to build. Some egos will demand a PGA-caliber facility in appearance and difficulty. But, remember who will play the course. Golf association members. Amateurs.



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Golf Ass'ns buy

Continued from page 1

Monte Forest land on Monterey Peninsula. It bought the \$7,000-per-acre property in 1982 and opened Robert Trent Jones Jr.-designed Poppy Hills in June 1986.

"The course provides a place for us to hold our tournaments [22 days worth annually] and provides a source of public golf for our members," said Executive Director Bill Paulson.

For their \$20-per-year dues, SCGA members can play Poppy Hills for just \$45 a round. Guests of members pay \$65 and non-

members \$95.

"Eighty-five percent of Poppy Hills is membership play," Paulson said. "It's another service [in addition to tournaments, handicap services, news updates] we can provide them. We have 165,000 members, larger than any other state or regional association."

Poppy Hills has been so successful the association is negotiating for a 283-acre parcel in Livermore, an hour's drive northeast of San Francisco. Rees Jones has done a preliminary design for 27-hole Poppy Ridge.

The seller agreed to first obtain

all necessary building permits. Financing will come from a combination of membership dues, residual income from Poppy Hills and some form of debt serviced by the NCGA's holding company.

Paulson hopes to start construction of Poppy Ridge this summer or fall and open the NCGA's second layout by summer 1996.

"Because of the success of Poppy Hills, we're committed to building golf courses from scratch [rather than buying existing facilities] and staying away from residential real estate," Paulson said.

"But the other two are going

different ways. Southern California is buying an existing course and Oregon is working with a real estate developer."

The SCGA went the acquisition route after confronting countless roadblocks along the construction highway.

"The SCGA has wanted to build a golf course for almost 20 years," Morgan said. "We were spurred on by the NCGA. We wanted to build one from scratch. But we kept having environmental permitting and entitlement problems. We just couldn't get it done."

The SCGA decided to change course in mid-1992 after the pro-

posed Firestone Ranch project in Brea fell through because of environmental and access problems. The board decided acquiring a course would be easier. Permits would be unnecessary and the slumping real estate market meant bargains were available.

The board settled on Rancho California in Murrieta, an 18-hole, Robert Trent Jones Sr. design first opened in the early 1970s.

"The owners had financial problems and we are trying to acquire it through the bankruptcy court," Morgan explained in early January. "We hope to finalize the paperwork and open the course in the next few weeks."

The board had several reasons for buying Rancho California, Morgan added. First, it would provide an alternate site for the association's 70 annual tournaments currently spread among the SCGA 324 member clubs. Second, the 140,000 SCGA members would receive reduced green fees at a top-notch facility. And third, projected profits would help hold down member dues.

"We looked for a quality design that, with proper maintenance, could become a first-class course," Morgan said.

"Rancho California was one of Jones' first California courses. It had a good reputation. But it was hard to keep up while the course was going through bankruptcy. We want to bring it up to SCGA standards. We plan some pretty extensive renovations, mainly bringing the irrigation system up to speed and rebuilding many of the greens."

Morgan said if Rancho California is "half as successful" as the NCGA's Poppy Hills, the board would consider buying or building more courses.

The Oregon Golf Association has taken a third tact. Tukwila Partners gave OGA land for an 18-hole layout in Woodburn while retaining surrounding acreage for house lots.

Working with architect Bill Robinson, OGA will open the driving range this March. The first nine is under construction and should be ready for play by mid-summer. The second nine will be financed by a dues increase and should begin construction within the next five years, according to OGA President Tim Stetson.

The OGA board had the foresight 19 years ago to realize an association course would be necessary to take pressure off member courses to host tournaments, Stetson explained.

OGA began assessing a \$1 annual fee on its 45,000 members to establish a golf course usage and acquisition fund. Ten years ago, the levy doubled to \$2. By last year, the fund had grown to \$1.2 million, allowing the association to build the first nine holes and driving range with no debt.

The annual fee was bumped up to \$5 this year, which should allow OGA to pay cash for the second nine, also.



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Harrison named director of Fla. golf association

DESTIN, Fla. — The Emerald Coast Golf Association (ECGA) has named Nancy Harrison as its new director.

Harrison is a native of Destin and has literally grown up with the modern Emerald Coast. She has an extensive background in advertising sales and special event management. Her bachelor's degree is in communication arts with an emphasis in public relations from the University of West Florida.

Prior to returning to UWF to pursue her degree, she worked three years in the Golf Operations Department at Sandestin Resort.

The ECGA is a marketing/advertising/public relations organization with golf course and lodging establishment members.

The objective of the association is to promote the Emerald Coast and ECGA members as a major golf vacation destination.

Current members include: Abbott Realty, Holiday Inn/Okaloosa Island, Bluewater Bay Resort, Emerald Bay Golf Club, Seacape Resort, Sandestin Resort.

Sandestin Beach Hilton, Santa Rosa Golf and Beach Club, Edgewater Beach Resort and the Hombre Golf Club.

World Woods

Continued from page 45

December morning, the relief apparent in his voice. "We spent no money on advertising. None. We returned to a regular, 18-hole price schedule this month. And you know what? This weekend we're sold out."

A full house was only a dream when World Woods first opened last spring. Fazio designed a massive facility consisting of two regulation, 18-hole courses named Pine Barrens and Rolling Oaks; a 22-acre practice range; a two-acre, 36-hole putting course; a nine-hole, short course; and three prac-

tice holes — a par-3, par-4 and par-5.

But Cooke knew quality and the Fazio name alone weren't enough, initially at least, to attract golfers to a facility located 90 minutes from any large metropolitan area, in a state many believe is over-saturated with golf courses.

What Cooke did was offer generous group discounts for *unlimited* play at all World Woods facilities. The larger the group, the bigger the savings for individual golfers. Prices included range balls and golf carts and were as follows:

- Groups of 13 or more — \$50 per player.
- Groups of nine to 12 — \$60 per player.
- Groups of four to eight — \$80 per player.
- Groups of one to three — \$100 per player.

"We felt if golfers experienced all the different areas for a single day, they would want to come back. This was designed to give them that opportunity," Cooke explained.

World Woods tried the promotion from April through November, typically the slow season in West Florida. Anywhere from 100 to 1,200 golfers took advantage of the program every month, yielding thousands of dollars in added revenue.

"We had 14 groups of 120 or more," he said. "The only thing we asked of the largest groups was they come on our slow days — Monday and Tuesday. The others fit in whenever they wanted to play."

Cooke spent nothing advertising the program or the course. Faxes were sent to people inquiring about the group discount. Word-of-mouth did the rest.

"A new facility like this could easily spend \$250,000 to \$1 million on advertising," Cooke said. "Golf Digest gets something like \$30,000 for a quarter-page ad."

The only problem arose when groups neared cut-off points, Cooke said. For example, if four people intended to play at \$80 apiece, but only three showed up, they were charged \$100 apiece. The extra \$20 set off occasional fireworks.

"We had to make sure they understood that when they made the reservation," Cooke said. "We tried to be very clear about that up front."

Now that the busy season has arrived, World Woods has instituted an 18-hole price of \$60 weekdays and \$75 weekends at both regulation courses. The price includes range balls. An additional 18 holes is \$25.

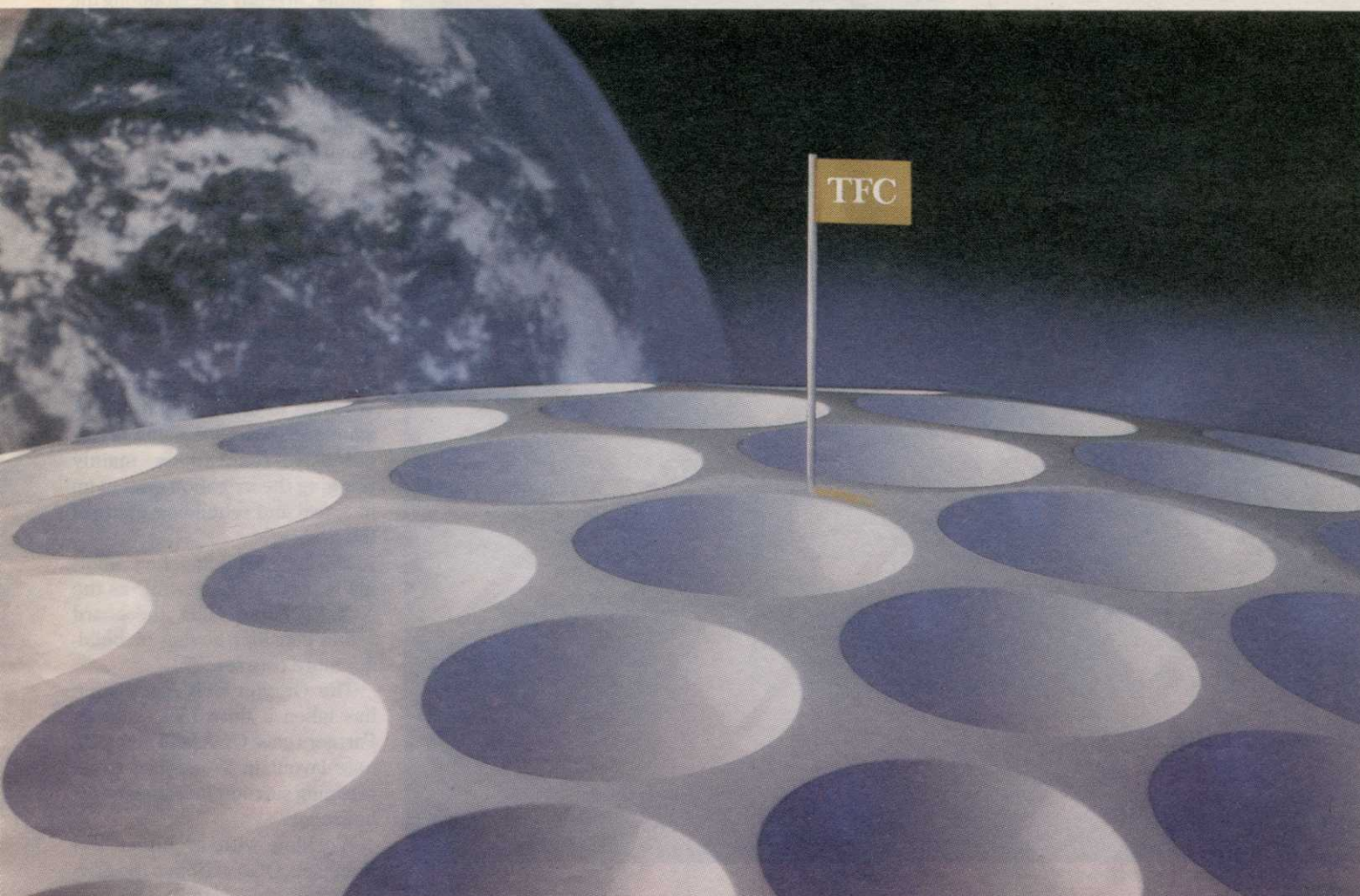
"The discount program helped us gradually test the market and establish the 18-hole fees," Cooke said.

Would a similar discount program be effective in other, non-urban areas?

"The fact that we have a world-class facility here was the key," Cooke said. "Tom Fazio has created something special here. That's how we were able to get by."

"If we were in the middle of the country with a mediocre golf course, it wouldn't have worked. I give all the credit to Tom Fazio."

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GolfCorp

Continued from page 45

"We're not interested in getting into a bidding war for properties," said Artz, noting CCI has traditionally avoided paying exorbitant prices for highly visible properties.

"We know what a property is worth. In the 1980s ClubCorp went two or three years without making any acquisitions. High-priced Japanese investments were simply making prices unrealistic."

What sort of golf facilities will GolfCorp be seeking?

Financial viability is the first concern, Artz said. The company also prefers metropolitan Sunbelt areas where it already has or could quickly establish a cluster arrangement that would allow the sharing of management expertise and expensive equipment across courses.

"When we buy a course, we are in it for the long term. So we want to see potential for future growth in rounds, too," Artz said.

Like parent CCI, GolfCorp will shy away from building courses.

"We've consulted with many companies on building," Artz said. "But finding [traditional] funding to build a new course is virtually impossible. Banks view commercial investments on a cash-flow basis. Banks are rarely willing to loan money based on projections that a project should make money."

"We see the development business picking up. It makes sense for developers to include golf courses because it adds value to the rest of their property. More towns will use their bonding capacity to construct courses. That will present opportunities for us."

In fact, GolfCorp traces its roots back to the municipal market.

Jeff Silverstein and Bob Husband founded California-based Silband Sports Corp. in 1979. ClubCorp purchased 80 percent of Silband in 1986, Artz said. Until then, Silband primarily held service contracts with municipal layouts, operating the driving range, pro shop or some other facet of the facility, but never the entire operation, Artz said.

Shortly after merging with ClubCorp, CCA/Silband acquired its first master lease arrangement (giving it control of the entire operation) at Diamond Bar (Calif.) Golf Course.

The firm continued to lease municipal and privately owned facilities and acquire high-end courses.

Renamed GolfCorp when ClubCorp purchased 100 percent of the firm in 1992, it has grown to the point where it now calls itself the nation's second largest operator of daily-

fee courses.

Agronomically, GolfCorp takes its lead from CCA, Artz said. Vice President Dave Johnson oversees course maintenance at all GolfCorp facilities. He joined CCA in 1983, serving as regional superintendent and East Coast director of agronomy before moving to GolfCorp.

A PGA golf professional/manager heads up most GolfCorp facilities.

The company has "Class A" superintendents at all but a handful of facilities and tries to promote from within, Artz said.

GolfCorp course property list continues to grow

Following is a listing of GolfCorp properties.

Airways Municipal Golf Course (GC), Fresno, Calif.; Bellflower Golf & Tennis, Bellflower, Calif.; Upland Hills CC, Upland, Calif.; Diamond Bar GC, Diamond Bar, Calif.; Eagle Crest GC, Escondido, Calif.; Eureka (Calif.) Municipal GC; Golden Era GC, Gilman Hot Springs, Calif.; Harding Park GC and Lincoln Park GC, San Francisco; Paradise Valley and Rancho Solano GC, Fairfield, Calif.

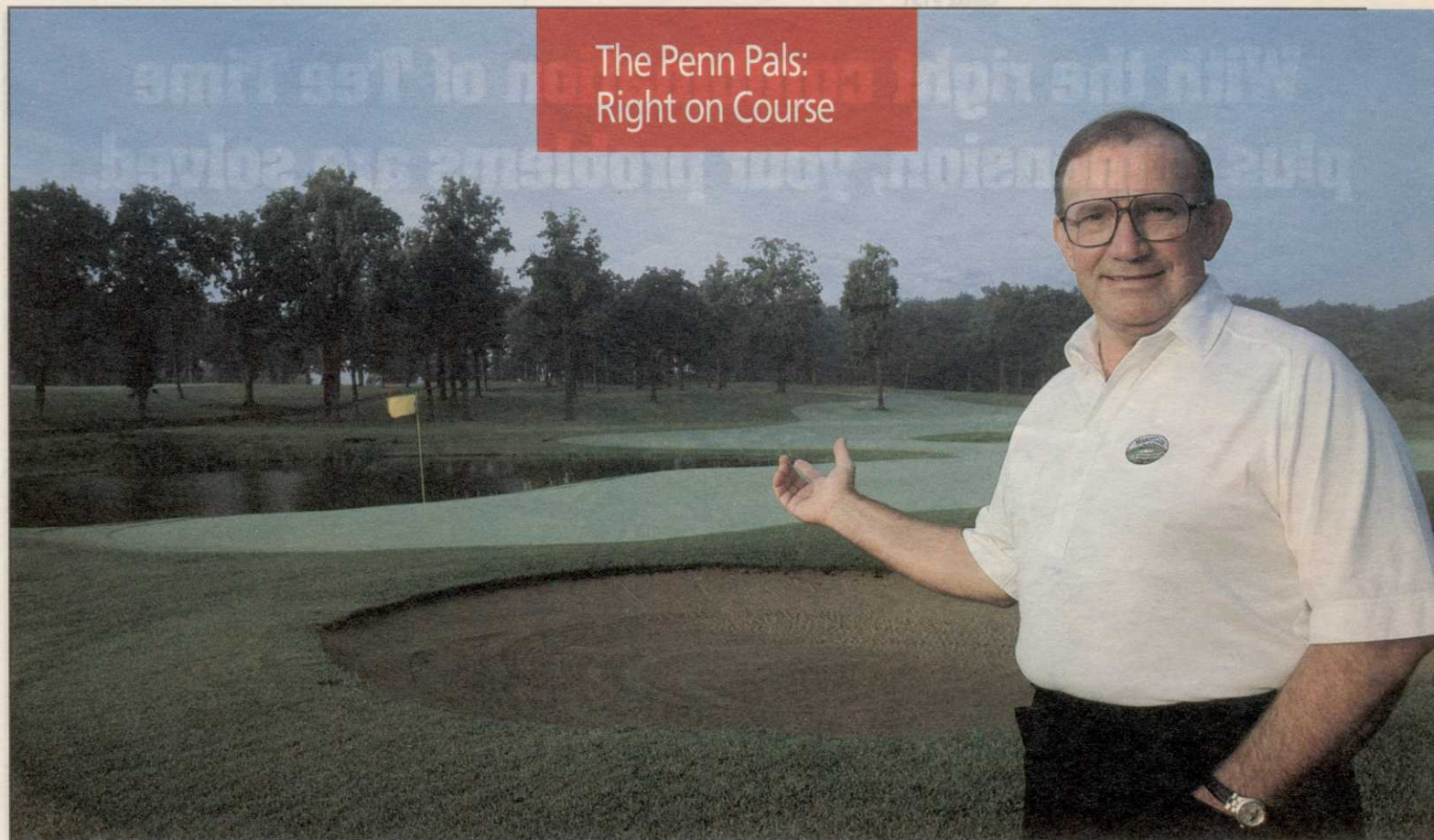
Three Ridges GC, Knoxville, Tenn.; Family Golf Center, Safety Harbor, Fla.; Sabal Trace GC, North Port, Fla.; Tayman Park GC, Healdsburg, Fla.; The Country Club at Silver Springs Shores,

Ocala, Fla.; Queens Harbor Yacht & CC, Jacksonville, Fla.

John F. Byrne Municipal GC, Juniata Municipal GC, Cobbs Creek GC, F.D. Roosevelt Municipal GC, Walnut Lane Municipal GC and GolfCorp Sports Center, Philadelphia; Middletown Country Club (CC), Langhorne, Pa.; Ed "Porky" Oliver GC, Wilmington, Del.

Clear Creek GC and Clear Lake GC, both in Houston; Forest Creek GC, Round Rock, Texas; Kingwood Cove GC, Kingwood, Texas; Oakmont CC, Corinth, Texas; Family Golf Center, Arlington, Texas; Plantation Resort GC, Frisco, Texas.

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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CIRCLE #151

AGC and MCI develop reservation system

CULVERCITY, Calif. — American Golf Corporation and long-distance telephone carrier MCI have developed a reservations network for AGC's courses that can be accessed by calling 1-800-GOTRY18.

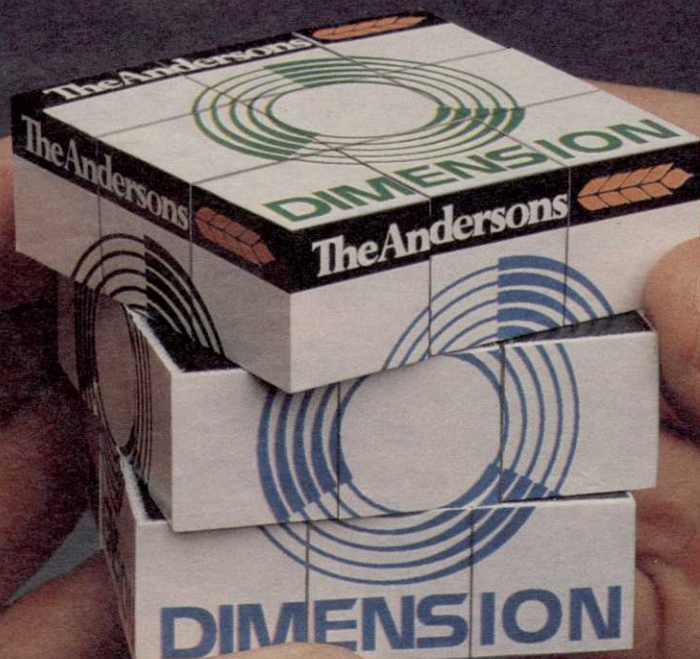
American Golf's centralized reservation tee time service handles 10 public, private and resort courses in Phoenix as well as Laughlin and Las Vegas, Nev., AGC has immediate plans to expand service into Southern California and Houston.

The reservation center allows resident golfers, travel agents, hospitality indus-

try employees and tourists nationwide to make tee times up to 60 days in advance.

In the future, MCI plans to provide AGC with MCI Mail, an electronic mail system linking all its courses; a corporate affinity program offering discounts and value-added services to private club members; a commission program set up at all courses to generate revenues from course payphones; fax broadcast for reservation confirmation; and electronic invoicing through MCI Perspective.

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CMAA president

Continued from page 1

Milwaukee.

"I have a great deal of respect for what superintendents do," Schulz said. "Developing a close relationship with the superintendent and head golf professional is very important. We all need each other to do our jobs."

Schulz said his primary goal will be keeping the 5,000-member organization focused on the strategic plan developed in 1992.

"Our main thrust is education," Schulz said. "We've developed a sports management program in conjunction with the University of Houston that will be available in 1994. It recognizes the need for club managers to become more familiar with sports and health facilities, like golf courses."

The one-week seminar will be offered through CMAA's Business Management Institute.

Also up for election is Norman Spitzig. The general manager of Oak Ridge Country Club in Hopkins, Minn., is running unopposed for vice president.

General managers George Carroll of Town & Country Club in St. Paul, Minn., and Randall Gudanowski of Indian Trail Club in Franklin Lakes, N.J., face off for secretary/treasurer.

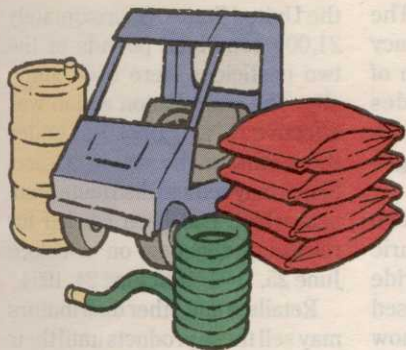
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More than 80 educational sessions are being offered over five days at the CMAA annual conference.

Golf-related sessions include *Elements of Golf Shop Operations* with PGA of America's Chris Hunkler; *The New York Audubon Society Cooperative Sanctuary Program* by the Audubon's Ron Dodson; *Golf and the Environment* with GCSAA members; and *How Proper Communication can Improve the Common Pitfalls of Golf Course Maintenance* by head superintendent Dave Fearis of Blue Hills Country Club in Kansas City, Mo.

Other conference highlights include the 438-booth annual exhibition, the largest ever; health and fitness expert Richard Simmons' keynote speech at the opening business session; and a silent wine auction to raise money for the Club Foundation's education and scholarship program.

BRIEFS



HUNTER SIGNS ON WITH ROOTSINC.

NEW HAVEN, Conn. — Rootsinc. has announced the hiring of Fred Hunter as vice president, sales and marketing. Hunter joins Rootsinc. after an extended career at Mead Paper, where he held several marketing positions. He will now be responsible for sales and marketing of the entire Rootsinc. product line, including products previously manufactured by RGB Labs of Kansas City, which Rootsinc. recently purchased.



Fred Hunter

HENDRIX TO LEAD TORO IRRIGATION

RIVERSIDE, Calif. — Calvin R. "Cap" Hendrix has been named vice president and general manager of The Irrigation Division of The Toro Company. Hendrix formerly served as president of the Thermador Corp., a subsidiary of Masco Corp., which manufactures and markets residential kitchen appliances.

RANSOMES PROMOTES NEHLS

MINNEAPOLIS — Ransomes America Corp. has announced the appointment of Sandi Nehls as market planning analyst. She will work out of the Johnson Creek, Wis., office. In her new position, Nehls will assist in sales forecasting for all Cushman, Ransomes and Ryan product lines. Nehls, who joined Ransomes 10 years ago, most recently held the title of sales coordinator in the marketing and sales department.



Sandi Nehls

CHRISTY TO REP AQUAMASTER

KIEL, Wis. — AquaMaster Fountains and Aerators, the Kiel-based manufacturer of aquatic management equipment, has announced that T. Christy Enterprises will represent its product line in California, Arizona, Nevada and Hawaii. For product inquiries, contact Jon Christy at 1-800-BLU-GLUE.

ATLANTIC MOVES BRITISH OFFICE

READING, Berkshire, England — Atlantic Tehnology has moved its offices to the following address: Clock House, 286 Kings Road, Reading, Berkshire RG1 4HP, England; Phone — 011-44-0734-510033; Fax — 011-44-0734-510044. Atlantic represents a number of British and American turfcare manufacturers, including Becker-Underwood, Bayco, Turf-Ex and FAL. Atlantic markets these products through 15 distributors in the U.K. and Europe.

GOLF COURSE NEWS

Europe looking to shake low-growth image

By HAL PHILLIPS

When U.S. golf course suppliers first turned their attention to overseas markets early in the 1970s, Europe represented the sum and total of their ambitions. Led by the long-established British market, Europe displayed consistent, albeit modest, growth before the Asia-Pacific market exploded in the 1980s, wooing U.S. suppliers across the larger pond to the west.

Despite the boom in Asia-Pacific, European construction continues to show marked growth. France, for example, opened 224 golf courses between 1988-92, increasing its course pool by 96.6 percent. The Netherlands has only 128 golf courses nationwide, but 80 were opened in the last five years. And Sweden — a larger percentage of whose citizens play golf than any other country on Earth — opened 158 courses between '88 and '92, an increase of 82.7 percent.

In all, Europe boasts nearly 4,300 golf courses, 1,100 of which have opened since 1988. More than 400 are scheduled to open before 1996.

"The fundamentals for golf in Europe continue to look very strong," said Owen Towne, Paris-based manager of international business development for Ciba. "But compared to the big numbers you can throw out for Southeast Asia, it doesn't look that great."

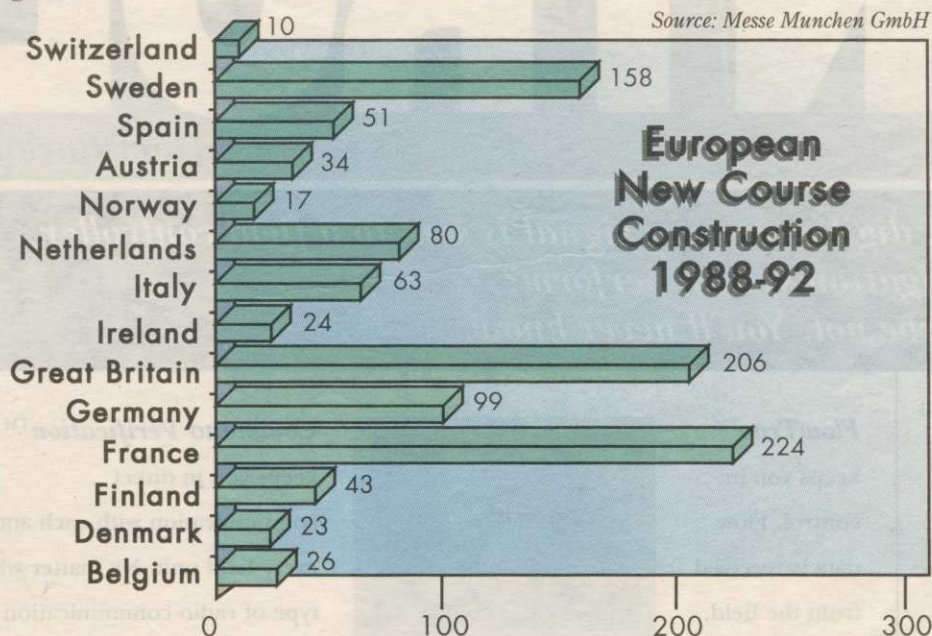
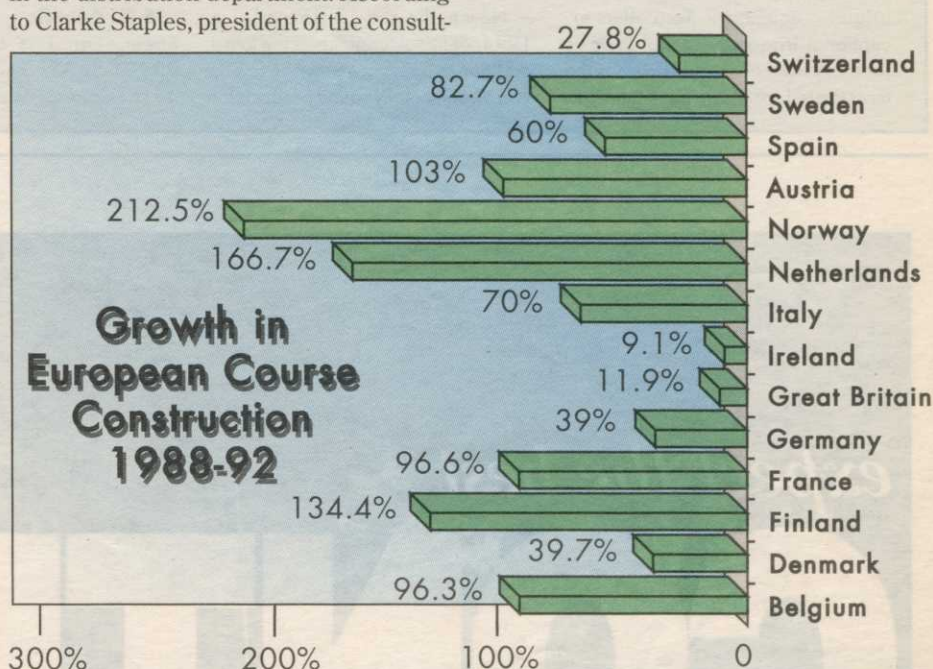
"I also don't think people in the U.S. realize the extent of the recession over here. We have 10 percent unemployment in most every country... But economies can't continue to shrink forever."

Because the U.S. golf course industry has fostered growth in Europe for some time, many suppliers — of iron, particularly — have established strong footholds in the distribution department. According to Clarke Staples, president of the consult-

ing firm Greentalk International, this provides an opportunity and a challenge.

"If the increase in golf course construction is that good, I don't think U.S. suppliers will lose market share. But they won't necessarily gain, either," said Staples. "There's always the chance that European firms will respond to the growth and pick

Continued on page 55



Source: Messe Munchen GmbH

Country	Existing Golf Courses	Golf Course Equipment Expenditures (US millions)
Germany	353	\$24
Belgium	53	\$2.8
Denmark	81	\$6.8
Finland	75	\$4.1
France	456	\$21.6
Great Britain	2,062	\$71.1
Ireland	289	\$10.2
Italy	153	\$16.1
Netherlands	128	\$6.5
Norway	25	\$3
Austria	67	\$5.9
Spain	136	\$5.9
Sweden	349	\$44.5
Switzerland	46	\$3.6



NEW PRODUCT OF THE MONTH

RGF Environmental Systems has introduced a negative-pressure, dust- and vapor-free, protective, hands-free chemical mixing chamber designed to protect employees and the environment from exposure to pesticides. The RGF Hands Free Mix & Load Chamber contains a water wash down and patent-pending venturi drain that can be connected to the loading station. For more information, call RGF at 1-800-842-7771. For more new products, see page 57.

SMT emerges from the ashes of Innova Corp.

By HAL PHILLIPS

LAKEWOOD, Colo. — "Every time we apply a fungicide, we're treating a symptom — not a problem," said Lou Haines, one of two principals at newly formed Soils Management Technology (SMT), a consulting firm with a fresh take on the dynamics of agronomy. "We'll spend less money on treating symptoms if we begin by treating the place where it all starts, and that's the soil," said Haines.

Lakewood-based SMT provides consulting services combining technology derived from environmental, soils and agronomic disciplines. Haines is a certified superintendent and past secretary-treasurer of the Golf Course Superintendents Association of America, while Roy Parker worked for the National Golf Foundation before getting involved with soil development.

According to Haines and Parker, Palmer Course Design, Robert Trent Jones II, Gary

Continued on page 54

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The following company descriptions were omitted from the Golf Course News Buyers' Guide, published in December 1993:

The Toro Company — Irrigation Division, 5825 Jasmine Street, Riverside, CA, 92504-1183; 909-688-9221; Fax 909-359-1870.

Sales Contact: Scott Morgan
Product/Services Offered: Irrigation Equipment and Supplies.

The Toro Company manufactures and supplies superior golf course irrigation equipment. Toro offers exceptional irrigation control systems for every level of need, as well as the most trusted sprinklers on the market.

Our products are backed by the premier service and sales organization in the industry.

Sandoz Agro, Inc., 1300 Touhy Avenue, Des Plaines, IL 60018; 708-390-3705, 1-800-435-TURF, Fax 708-390-3940.

Sales Contact: Ron Fister, Director of Specialty Sales

Products/Services Offered: Chemicals: Fungicides, Herbicides, Insecticides, Biological Insecticides.

New to the golf course market in 1994, Sentinel fungicide is the latest addition to Sandoz's growing family of environmentally-sound products for

turf and ornamental management. Sandoz also offers superintendents the proven performance of Barricade preemergence herbicide, Mavrik insecticide and Steward biological insecticide. The company's full line includes products for greenhouse and industrial vegetation management.

Also in the 1993 Buyers' Guide, an incorrect address was listed for E.P. Aeration. Following is the correct address.

E.P. Aeration, 2615 Meadow Street, San Luis Obispo, Calif., 93401-5633. Phone: 805-489-4218. Contact: Michael McGee

Grace-Sierra pulls Calo-Clor, Calo-Gran

WASHINGTON, D.C. — The Environmental Protection Agency has canceled the registration of the mercury-based pesticides Calo-Clor and Calo-Gran as voluntarily requested by the registrant, Grace-Sierra.

Both pesticides contain two active ingredients — mercuric chloride and mercurous chloride — at different percentages. Used to control pink and grey snow mold, Calo-Clor and Calo-Gran were the last two mercury-based pesticides registered for use in

the United States. Approximately 21,000 combined pounds of the two pesticides were used annually. The cancellation action was effective Nov. 1, 1993. But under the terms of the action, Grace-Sierra may sell and distribute products which had been labeled for release or shipment on or before June 25, 1993, until June 24, 1994.

Retailers and other distributors may sell these products until their stocks are gone. Likewise, users may use these products until their stock are exhausted.

RISE Notebook

Non-ag pesticide use the subject of EPA survey

WASHINGTON, D.C. — An Environmental Protection Agency (EPA) survey of non-ag use of pesticides by certified applicators was scheduled to begin at the close of January, reports Allen James, executive director of RISE (Responsible Industry for a Sound Environment).

The 1990 "Farm" Bill mandated applicator record-keeping, James explained. Now, the United States Drug Administration and EPA must survey non-ag, as well as agricultural use of both restricted and non-restricted products, then report to Congress.

EPA notes some 4,000 non-ag applicator firms will be interviewed. Golf course "applicators" appear to have been spared this process — for now.

RISE has moved its offices — across the street. The new address is 1156 15th Street, Suite 400, Washington, D.C. 20005. Phone/fax numbers remain the same.

The RISE Annual Meeting will be heading south. According to James, the fourth annual congregation of members will be held Sept. 8-11, 1994, somewhere in Florida. A hotel site has not yet been chosen, he said. The previous three annual meetings were held at the Ritz-Carlton Tyson's Corner in McLean, Va.

RISE founding member Bill Culpepper has resigned from the Board of Directors after leaving DowElanco to form his own business, SePro, which will become a new RISE member as a basic ingredient manufacturer. His Board vacancy will be filled by DowElanco.

In other action, the RISE Board of Directors has approved a resolution urging voting members to provide data on active and inert pesticide ingredients to the nation's poison control centers for use only by medical personnel for emergency treatments. Means of disclosure would be via confidential database services, said James.

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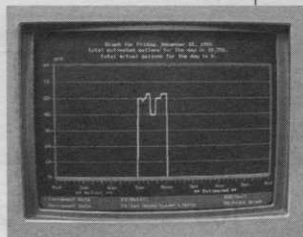
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Connex Private Limited, the Golf Course Superintendents' Association of America (GCSAA) and the International Management Group (IMG) are joining forces in 1994 to present Golf Asia as the

biggest golf trade show in the Asia Pacific region. Golf Asia '94 will cater to two broad categories of exhibitors. The Industry Section will attract qualified buyers in the trade. While the Commercial Section will target merchandisers and general golf enthusiasts. Thus Golf Asia '94 will capture all facets of the golfing industry.

The 4th Asia Pacific Golf Conference will be held in conjunction with the exhibition. It is an industry-recognised forum that covers current and future trends. It is also a perfect opportunity to meet with specialists and decision makers in the industry.

Even though Golf Asia '94 will be bigger and more comprehensive, space is limited. Which makes good business sense for you to sign up now.

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SMT emerges

Continued from page 51

Player Design, Hurdzan Design Group and Gene Bates Golf Design have all expressed a willingness to work with SMT. "Several project agreements are being finalized for the near term," said Parker.

"Our services are based on the precept that all soil properties — chemical, physical and biological — should be monitored and managed," said Haines. "Historically, the industry has focused primarily on the management and manipulation of chemical properties, while hoping the physical and biological properties would somehow take care of themselves.

"We want to help architects and superintendents become more completely informed concerning soil deficiencies *before* the golf course is built. Once the deficiencies are identified, sound modification and management programs can be implemented."

Porous ceramics and humate materials will play a significant role in these modification and management programs — this should come as no surprise, seeing as SMT rose from the ashes of Innova Corp., a firm that concentrated on the U.S. distribution of Isolite, a porous ceramic.

Parker was executive VP at Innova, while Haines served as VP of technical operations. Though Isolite was a useful product and the firm was owned by Japanese industrial giant Sumitomo Corp., Innova encountered all sorts of financial difficulties before declaring bankruptcy in February 1993.

"If you boiled it all down," Parker explained, "it simply failed financially. It filed Chapter 11 to reorganize but couldn't come up with a plan... It was a public company so anyone could've offered an alternative plan. But no one did."

At the request of the Innova board of directors, Parker and Haines stayed on during the early stages of protection. But after three months, they left and the case was dismissed from Chapter 11 and Innova formally went under last June.

"When we left Innova, Lou and I felt we had a new lease on life — we were freed from being Isolite salesmen," Parker said. "Innova centered on one product, Isolite... But Innova was all about establishing fiscal opportunities for distributors, whereas Lou and I were more interested in establishing a place in the golf course industry, getting superintendents and architects on board, and starting the long process of product introduction."

During his three years at Innova, Haines had plenty of time to find out what porous ceramics can and cannot do. For instance, he firmly believes porous ceramics are not necessarily water savers.

"They increase water *storage* in certain coarse soils," he said. "But they're best at oxygenizing the root zone. And when it comes to drainage, they increase percolation rates in bad-draining soil."

SMT has contracted with Aimcor to provide porous ceramic

products, said Parker.

Haines also discovered the power of humate materials — very concentrated forms of peat that have been composted over millions of years. By manipulating the humus content in soil mixtures, the environment for rootzones can be markedly improved with limited chemical intervention, especially when fine-tuning USGA greens mixes, he said.

"I keep coming back to this," Haines said, "but there are three important soil properties: physical, biological and chemical. If you can keep these three things in balance, you don't need so many chemicals."

Terra settles with Dupont; acquires Androc Products

SIOUX CITY, Iowa — Terra Industries Inc. has announced that its subsidiary, Terra International, Inc., has reached a settlement of its dispute with E.I. du Pont de Nemours and Company (DuPont) over Benlate claims.

According to the settlement, both Terra's lawsuit against DuPont in Iowa state court and DuPont's lawsuit against Terra and its insurers in Delaware state court will be dismissed. In addition, DuPont will assume responsibility for all pending Benlate claims.

In the coming months, Terra will resume its role as a wholesale and retail marketer of DuPont agricultural products. Benlate is a DuPont fungicide product that Terra, along with other crop protection product manufacturers, formulated for DuPont under contract in 1988-1990, growers who

used Benlate began to file claims alleging that Benlate had damaged their crops and plants. In 1991, Terra and DuPont each filed suits against the other over settlement of the Benlate claims. With this agreement those suits are being withdrawn.

Terra has also announced the acquisition of Androc Products, Inc. of Hopkins, Minn., a marketer and distributor of specialty and vegetation management products. According to Larry Pfeleiderer, professional products sales manager of Terra's Northern Division, Androc's customers can expect their current business relationship with Androc to continue with Terra. Joining Terra as a result of the acquisition are salesmen Ted Weidenfeller, Mark Crosswell and Richard Schulte; and Daryl Olson, warehouse manager/inside salesman.



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Ryan Greensaire® 24—Developed for greens and other fine turf areas, it delivers 110,000 more holes on 10,000 square feet than the competition, making it the ultimate in greens aeration.

Scotts, Shemin Nurseries join forces

MARYSVILLE, Ohio — The Scotts Company and Shemin Nurseries, Inc., have announced a new agreement between the two companies for the sale and distribution of Scotts Professional products to lawn and landscape maintenance contractors, and other commercial customers. The product line includes a broad mix of fertilizers, herbicides, insecticides and grass seed products.

Each Shemin location will have a technically trained Scotts representative serving that area. In ad-

dition, Scotts' strong R&D will continue to provide new products to the industry and technical support for each location.

With 10 locations in the Northeast, Mid-atlantic, Southeast and Midwest servicing the professional lawn care and landscape, Shemin Nurseries is the largest wholesale distributor of horticultural products in the U.S. For more information about this new alliance, contact Scotts Paulette Grimme at 513-644-0011; or Shemin's Larry Wegman at 203-438-2331.

TMI purchases KWS breeding program

TANGENT, Ore. — Turf Merchants, Inc. (TMI) has announced its purchase of the Turf and Forage Grass Breeding Program from KWS of Einbeck, Germany. The program, carried on by Dr. Fred Ledebauer in Aurora, Ore., has produced such notable varieties as the Bonsai Tall Fescue, Cypress Poa Trivialis, and Patriot II Perennial Ryegrass. Ledebauer will continue to oversee the operation in Aurora.

The purchase of the program happens to coincide with TMI's 10th anniversary.

In a related move, Dr. Mike Richardson has joined TMI as its research director and assistant to Ledebauer. Richardson is a stress psychologist most recently associated with the USDA in Athens, Ga. His primary role will be to introduce combinations of various fungal endophytes into TMI's line of current and experimental varieties.

European market grows in shadow of Asia-Pacific

Continued from page 51

up that business, lessening the need for U.S. supplies.

"The saving grace is Toro, Jacobsen, Deere and Ransomes — the home team, so to speak — all have solid distribution networks. And I know Toro, Jake and Deere are working hard to get that business."

Despite the great continental growth, England, Ireland and Scotland still comprise the core of the European golf market. Nearly half the continent's golf courses are located in the United Kingdom, which explains why American firms have always targeted Great Britain when venturing into the European market, said Staples.

But there are cultural distinctions in Britain which make it hard for U.S. companies to justify their investments.

"They maintain their golf courses to different standards," Towne explained. "Not better standards. Not worse. Just different. And those standards simply don't measure up to U.S. conditions. They probably think we overdo it, but it's a problem for suppliers."

Towne noted that golf cars are almost non-existent in England. He also explained that climatically, the biggest problems for English turf are winter diseases while the largest problems for American courses tend to be summer diseases. For example, the number-one turf disease in the U.K. is fusarium or snow mold — which ranks about fifth in the United States, where dollar spot is the number-one problem.

Poa annua management products would sell well in Britain, said Towne, but American product lines are largely geared to American troubleshooting. Further, superintendents' overall technical training and expertise in disease diagnosis is generally lacking in Britain, said Towne.

...

Herein lies the irony: Britain has the courses and players, but their idea of "maintenance" won't support the fiscal expectations of many American golf course suppliers. In Europe, where the American maintenance model is more prevalent, there doesn't yet exist the necessary course or player base.

"The golf course supply relative to the population in Britain is very close to that in the United States," said Towne. "And golf has always been a game of the people: You can always plop down five or 10 pounds and play."

"In continental Europe, golf is far more elitist. But that's beginning to change. Half the golfers in Europe are over 50 years old, and that will be the fastest-growing portion of the population over the next 20 years."



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eters, i.e. infiltration, percolation.

- Five to 12 percent increases in moisture content of USGA type sand/peat mixes; 30 percent in all sand; 60 percent increase in carbon release rates in USGA type sand/peat mixes — evidence of biostimulation which aids in breaking down complex organic compounds in the root zone.

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For more information, contact Emerald Isle, Ltd. at 2153 Newport Road, Ann Arbor, MI 48103; or call 1-800-628-GROW.

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The wide acceptance of the Green-Saver fans has led to the development of the GS-30, big brother to the Green-Saver. Where maximum air movement is needed, the GS-30 is the "bigger hammer" needed when all else fails to provide proper air movement. This fan moves a column of air over 180 feet yet offers the quiet operation expected of Green-Saver fans.

Large open greens and greens where the fan place-

ment is over 50 feet from the edge of the green can take advantage of the air movement offered by the GS-30. This fan will move air into areas that were not reachable because of the distance to a mounting support for a fan.

For more information, contact Patterson Fan Company, 409 North Springs Road, Columbia, SC 29223; Telephone: 700-768-3985, Fax: 803-736-3341.

CIRCLE #302

Encore dethatcher sprinkler-safe

Encore has introduced the new Power-Comb — a dethatcher that removes all the thatch and passes over underground sprinkler heads without damage. It's the same rugged machine as Encore's popular Power-Thatch, with heavy-duty housing wheels and handles, but now the unit offers a radically new combing shaft.

Encore's Power-Comb shafts is designed with spring tines molded into a rubber mounting. The combination of rubber and high carbon wire gives the tines an exceptional lifespan. The Power-Comb rotates in the direction of travel to eliminate tearing grass while removing thatch. The design also prevents the unit from throwing rocks and debris.

For more information, contact Encore at P.O. Box 888, Beatrice, NE 68310; or call 402-228-4255.

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Seeing double can speed up play!

The problem with placing yardage markers in the center of fairways is that most golfers rarely hit the ball down the middle. When you add the fact that distances to the green can vary dramatically from one side of a fairway to the other — especially on doglegs — it's easy to see why doubling up with our affordable

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5: 14 each of the white 100-yard, 150-yard and 200-yard markers; 4 each of the white 250-yards markers and 46 ground anchors. ♦ For more information, contact your nearby Standard Golf distributor and ask about our complete Yardage Marker System. Once you're seeing double on your course, you'll know why two markers are better than one!

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CIRCLE #156/BOOTH #2932

SG-182

Vandal-proof, stainless steel water fountain

A new, outdoor type, public drinking fountain built from stainless steel is being introduced by Most Dependable Fountains of Memphis, Tenn. The Model #410-SS (ADA design) is fabricated from heavy wall, type 304, schedule 10, stainless pipe. Basic unit assembly is by electric welding with all weld zones cleaned and polished to an overall satin finish. The vandal-resistant design incorporates rapid access to internal parts for maintenance people.

Most Dependable Fountains' new brushed satin finish, stainless steel drinking fountain, features an internal forged brass valve with easily replaceable, sealed cartridge regulator. Operator push bar is machined from a solid block of stainless steel and travel is limited to prevent all direct valve shock or abuse. Internal piping from the 1/2" inlet water strainer is 3/8" nylon reinforced and "freeze-burst" resistant with vinyl tubing.

For further information, contact Lynn Griffin, Most Dependable Fountains, 4697 Winchester, Memphis, TN 38118; or call 1-800-552-6331.

CIRCLE #304

Parkway unveils reel sharpening compound

Parkway Research of Houston, Texas, has introduced its new True Grit Reel Sharpening Compound. True Grit is a ready to use pre-mixed gel that contains the highest quality silicon carbide grit for effective sharpening of reel mowers. True Grit has excellent cling, but washes off beautifully and is water soluble. For additional information and a free sample call 1-800-256-3668 or write to 13802 Chrisman Road, Houston, Texas 77039.

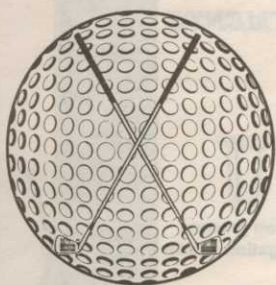
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CIRCLE #177

Leslie on Public Golf

Continued from page 10

of the new tour book, which will be distributed to 33 million members worldwide. "It didn't cost us anything. We give up a 15-percent discount on our green fee," Vaughn said.

- It worked with its state travel and tourism department.

- It produced 100,000 license plates for clients cars. "Now there are 100,000 advertisements in circulation."

Fitzgerald said brochures have proved to be "a pipeline of business" for the properties she consults. One generic brochure was placed in welcome centers and on the Florida turnpike, costing \$250 per quarter. Other brochures, placed in the pro shops, included coupons for \$10 off per round in the winter and \$5 off in the summer. A third version left a black space on the front for hotels to place their logos and announced that they "happily present the Carolina Club and Deer Creek Golf Club and outlining their packages.

"We have 25 major hotels working with us. It's a win-win situation for everybody," Fitzgerald said. "We literally have 25 sales departments going to all their trade shows domestically and internationally, doing mailings several times a year to corporate clients. Our program for their guests is: lowest guaranteed green fees; we allow guests to book tee times up to a month before arrival; and we give guests a VIP package including range balls, a locker, a second cocktail."

"The media is like having an advertising budget that you don't pay for. Those are the guys you have to take care of like they're your parents," added Dave Richards, president of Golf Marketing Services in Michigan. "Because it costs money to send a writer and photographer somewhere to do a story, most publications will accept a story you provide."

THE DRIVER: GREENS FEES

"Just as debt service often determines just how profitable you are going to be on an annual basis, don't ever forget the greens fees are what drives the money," said Steve Lesnik, chief executive officer of Kemper Lesnik Organization in Chicago.

R. Tary Kettle, president of Masters Golf Corp. in Winter Park, Fla., supported that statement, saying greens and cart fees represent 70 percent of a course's revenues and 90 to 100 percent of its profits.

Bemoaning the fact that 15 percent of people who prearrange tee times don't show, AGC's James suggested using credit card guarantees, particularly at courses that charge a high-dollar green fee and don't have many walk-ups.

Those who don't honor their tee times "represents big money" and "no one in the industry has really paid attention to this," James said.

By using credit card guarantees, he said, "You're saying to the customer, 'This is serious. I have a perishable commodity called a starting time. If you're not here to use it, I am going to lose. That's not fair to me. I only need to know that you're committed to using it, so give me your credit card number.'"

What do you do when you're so good, 100-percent of your tee times are used?

James cited Arrowhead Golf Course in Littleton, Colo., which charges a \$75 combination green and cart fee and last year made an extra \$20,000 selling the back nine before the players who started on the front nine came around.

"Price-sensitive, time-sensitive people will use it, as well as inexperienced players who don't want to be thrust in there with everybody else," James said. "Sell it at

Continued on page 60

February

4-6 — Executive Women's Golf League Business Links '94 in Palm Beach, Fla. Contact 407-471-1477.

6-10 — Club Managers Association of America Annual Conference and Show in San Antonio, Texas. Contact CMAA at 703-739-9500.

7-10 — National Golf Course Owners Association Annual Conference in Dallas. Contact 803-577-5239.

14-15 — Advanced Turfgrass Management Symposium at Cook College, Rutgers University, Brunswick, N.J. Contact 908-932-9271.

16 — GCSAA seminar on Turfgrass Stress Management in Suffern, N.Y. *

16-17 — Landscape Industry Show in Long Beach, Calif. Contact 916-448-CLCA.

16-17 — Turf & Grounds Exposition II in Suffern, N.Y. Contact 800-873-TURF.

17-18 — Nevada Landscape Conference and Trade Show in Reno. Contact 702-851-0423.

21-22 — GCSAA seminar on Golf Course Design Principles in Boise, Idaho. *

22-24 — Western Pennsylvania Turf Conference & Trade Show in Monroeville. Contact 412-837-1402.

23 — New Jersey Landscape '94 in Secaucus. Contact 201-664-6310.

23-24 — GCSAA seminar on Protection of Water Resources in Gaylord, Mich. *

March

1-2 — Massachusetts Turfgrass Conference and Industrial Show in Springfield. Contact Joseph Troll at 413-549-5295.

2-3 — GCSAA seminar on Basic Principles of Turfgrass Management in Normal, Ill. *

3 — Spring Valley Turf Products Golf & Turf Fair in Pewaukee, Wis. Contact Jordan Sensibar at 414-677-2273.

5-8 — 45th Canadian Turfgrass Conference & Trade Show in Calgary. Contact 905-602-8873.

11 — GCSAA seminar on Maximizing Job Satisfaction in Phoenix

14-15 — GCSAA seminar on Managerial Productivity in King of Prussia, Pa. *

14-16 — Maine Turfgrass Show and Conference in Rockport. Contact 207-781-7878.

17 — GCSAA seminar on Implementing Strategies and Plans for Turfgrass Environmental Systems in Minneapolis. *

22-23 — GCSAA seminar on Golf Course Design Principles in Palm Springs, Calif. *

22-23 — Turfgrass, Landscape and Sports Turf Institute in Pomona, Calif. Contact 619-723-0947.

July

31-Aug. 2 — Georgia GCSA Summer Conference at Callaway Gardens Resort. Contact Karen White at 706-769-4076.

October

29-Nov. 2 — Georgia GCSA Annual Meeting in Savannah. Contact Karen White at 706-769-4076.

November

8-9 — National Golf Foundation Golf Summit '94 in Phoenix. Contact 407-744-6006.

10-12 — Golf Course Expo in Orlando, Fla. Contact the Golf Course News Conference Group at 207-846-0600.

13-16 — 28th Annual Carolinas GCSA Conference and Show in Myrtle Beach, S.C. Contact 800-476-GCSA.

* For more information contact the GCSAA Education Office at 800-472-7878 or 913-841-2240.

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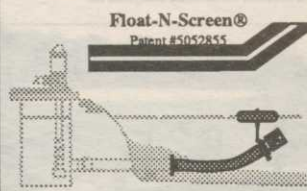
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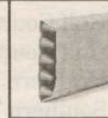
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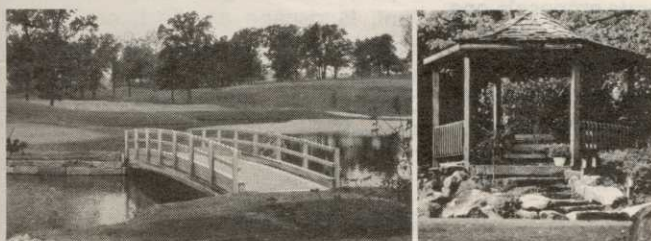
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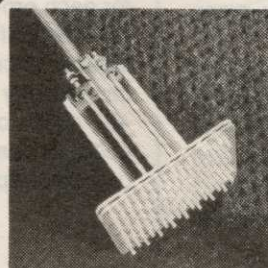
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Leslie on Public Golf

Continued from page 57

what you can get. It isn't going to cost you a dime more to put another player on the golf course."

HOT BUT HEAVY

To fill tee times during Florida's hot days, Lansbrook's Gagliardi improved his rounds from 114 to 164 per day on Terrific Thursdays promotions in July and August. Enlisting cooperation from area hotels, restaurants and other businesses, Gagliardi ran closest-to-the-pin contests on every par-3, two long-drive contests and a daily grand prize drawing, plus specials in the restaurants. He developed a mailing list using the registrations for the drawing.

SATISFYING THE CUSTOMER

"Grass and people: Those are the two things you have to spend your time thinking about," said Lesnik.

While saying a golf course should "spend what you have to spend on turfgrass maintenance — you'll get it back in the long run," Lesnik added: "We're as concerned that the people who play the \$9 round [at one of our courses] feel they got value for their money as we are about the person who paid \$95 [at another course]. It could have been a larger percentage of the ex-

pendable income of the person who spent \$9 than it was of the person who spent \$95."

Just as debt service often determines just how profitable you are going to be on an annual basis, don't ever forget the greens fees are where it's at. That's what drives the money.

One of several Lesnik suggestions: "If you sell permanent tee times at a public golf course, a lot of people are discouraged from coming. Sell every second, third or fourth tee time. If people want to play your course, they will pay a premium for a tee time. And if you stagger them in a way that is convenient for you, you won't discourage other play."

SOW AND REAP

"Have fun and ... make a difference. The key to that is give, give, give," said Alfonso, who is part-owner of The Rail in Springfield, Ill. "We can all make a difference in our lives — to the people around us, to our communities..."

What you sow in goodwill will return manifold to you in increased business, Alfonso said, adding that key to his business is building lasting relationships. He cited a study that found that "winning over a new customer is five times more expensive than selling a product to somebody who's already your customer."

Five years of GCN

Continued from page 10

builders association alive, and stayed very busy in Asia-Pacific

- Phil Arnold, executive director, GCBAA — the guiding hand

- Jim Snow, director, USGA Green Section — now, more than ever, the turf authority

- Carol Browner, administrator, Environmental Protection Agency — like her or not, she's a force to be reckoned with

- Steve Mona, executive director, GC-SAA — a new beginning

- Randy Nichols, outgoing president, GCSAA — oversaw the passing of the torch

- Tom Fazio, architect — solidified his reputation as golf's top designer

- Mike Shannon, head of KSL — made big splash on management side by snapping up La Quinta and PGA West, then acquiring Fairways

- Craig Price, president, American Golf Corp. — led AGC on acquisition binge, then formed publicly held acquisition wing, National Golf Properties.

From a publisher's point of view, it's interesting to note a large number of publications have entered this market over the past five years. If I miss one, I apologize to any of my peers. But here's a sampling:

- Golf Course News
- Golf Course New Asia-Pacific
- Northern Turf Management
- Southern Turf Management
- Western Turf Management
- Golf Business Today (and yesterday...)
- Turf (North & South)
- Golf & Grounds Trade
- Golf, Inc.
- GolfWeek (new format/circulation)

Last, but certainly not least, I offer a list of new products, trends and services which have emerged during the past five years or so — let me know if I've left any out:

- Water-injected aeration
- Computerized weather stations
- Soil blending
- Lightweight greens mowers
- Wetting agents
- Growth regulators
- Integrated pumping stations
- Slow-release fertilizers
- Composting
- Biological alternatives
- Endophytes

Thanks again to our readers and advertisers for your continued support. *Golf Course News* is proud to be involved in this industry, and I look forward to reporting back to you in my next column — on our 10th anniversary.

struction of a Pete Dye course there. Minger was also involved in the development of Desert Mountain and the Palmer course in Whistler, British Columbia, Canada.

"Golf has been given a bad name because of the mega-developments," Minger said. "It was a way of selling property instead of playing the game as it was originally constituted. We aim to invite people from the golf industry to show the green side, to show the good examples."

"Instead of sniping at each other and filing lawsuits, we're going to sit down and talk. We'll see what the environmental groups find wanting and how the golf course industry can respond and, in the past, I believe golf has shown itself to be very responsive."

Patterson said a preconference meeting is scheduled for June or July, when speakers and conference organizers can devise a first-draft program and walk through it.

"We've contacted more than 25 key individuals and organizations on both sides

Continued on next page

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Environmental Summit

Continued from page 3

Management, founded 12 years ago by actor Robert Redford, specializes in bringing together the forces of environmentalism and industry. According to Director Terry Minger, the Center — a 501-C3, or non-profit organization — has staged "meaningful, productive" conferences on oil drilling in the Bering Sea, reauthorization of the Clean Air Act, the ozone debate and global warming.

"We're an organization that builds bridges," said Minger. "We're not an advocacy group. When we brought people together for the Bering Sea seminar, we had 18 oil companies there, as well as environmental groups."

Minger said he expects no more than 65 or 70 attendees, equally representative of the golf/resort industry and environmental groups. Minger added that he possesses a solid grounding in the golf world, having been city manager in Vail, Colo., during con-

Course Marketplace

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Phillips commentary

Continued from page 10

situations. Now, correct me if I'm wrong, but if someone is too embarrassed to go in the bushes, might they also be too shy to use this so-called wiz stick?

The Arab-Israeli Better Late Than Never Municipal Development Award goes to... The town of Sherburne, Vt., which is on the verge of building the state's first municipal golf course (see page 3) — no small feat in a state where it's easier to elect a socialist congressman than receive permitting for a new golf facility.

The Tonya Harding/Lady Byng Trophy for Sportsmanship goes to... Members of the British Ryder Cup contingent, for bowing out of the brouhaha at the Belfry without clubbing anybody on the kneecap with a 9-iron. The English have such good breeding.

The Desmond Muirhead/Put the Artistry Back in Architecture Award goes to... Bob Cupp, whose geometric exploits have been the subject of more bad metaphors than Pythagoras ever thought possible. What critics have overlooked, however, is Cupp's acclaimed, Pumpkin Ridge outside of Portland, Ore. When viewed from a passing plane, Cupp's 36-hole routing plan actually resembles the inner ear of an ordinary house cat.

But seriously folks... I played some wonderfully designed, beautifully maintained golf courses during 1993. Here is but the creme:

Best New Course You've Heard Of: The Four Seasons Resort at Aviara. This Palmer/Seay design in Carlsbad, Calif. was drop-dead gorgeous, interesting and fair. Here's the ultimate test: I played horribly and still enjoyed it immensely.

Best New Course You've Never Heard Of: Cattail Creek in Edgewood, Md. A Willard Byrd course that featured about 14 spectacular holes, complemented by four solid ones.

Best Established Course You've Heard Of: Finally played Pebble Beach... But Spanish Bay was better. Honestly.

Best Established Course You've Never Heard Of: Oswego Lakes CC, Lake Oswego, Ore. This is a fantastic H. Chandler Egan design (1926) carved into a small mountain outside Portland. Exhilarating old world golf with views of Mt. Hood.

Best Maintained Course: Interlachen in Edina, Minn. Had the pleasure of playing just before the Walker Cup and the conditions were as you might expect: pristine. Incidentally, I played Royal Porthcawl — site of the next Walker Cup — over the summer. The Welsh wind was blowing about 40 mph off the Bristol Channel — nothing special, according to the club secretary.

Looks as if Jay Sigel turned pro at the right time.

Environmental Summit

Continued from page 60

and a couple of things have jumped out at me," Patterson explained. "First, 95 percent have expressed a keen interest. And second, nobody has been to a conference like this before.

"We'd like to break a little ground and maybe make a regular thing of it because these issues must be addressed over time. Solutions will evolve, but only with better communication."

Minger concurred: "We won't muffle anybody. We'll try to balance things so learning can take place."

Private clubs turning public with increasing frequency

By MARK LESLIE

Call it a trend, a surge, or a "blip" on the chart, but private golf courses nationwide continue the metamorphosis to for-profit status.

Last fall Club Managers Association of America (CMAA) Vice President Kathi Driggs called the change of status "a major trend."

"It's not a surge," said National Club Association Executive Vice President Suzanne Wegrzyn, "but we are looking at why clubs are changing their status from not-

for-profit to for-profit. There are pros and cons to both. It depends on the purpose of the club. The recent changes in deductibility of membership dues may cause a club to look at that question."

Meanwhile, noting the "staggering" growth of the National Golf Course Owners Association, Deputy Director Terry Sedalik said a number of issues have forced scrutiny of the private versus public question. Four years ago there were 300 members of NCGOA, an association of pri-

vately owned public courses. Last year there were 900 to 1,000. Today there are more than 1,400.

"I don't expect it to slow. There's such a wide field out there," he said.

Sedalik attributed the trend to changes in the tax code, competition, real-estate reassessments—"different issues in different areas of the country."

"Overall, people are finding it hard to maintain their membership levels," said American Golf Corp. Executive Vice President

Ken James. "It is an economic reality that in order to retain their club and playing privileges, [private club members] have to find new income."

Turning semi-private accomplishes that, although "oftentimes it is a tumultuous marriage," James added.

James put a new spin on the phenomena, claiming it is the end result of "an evolutionary process."

"Clubs built in the '60s, during the early boom times, have be-

come outdated," he said. "They don't have modern design or the amenities club members want today. Oftentimes they have been mismanaged, particularly if they are member-owned. The members haven't been willing to reinvest to update, and the world just passed them by... Those clubs eventually will be snapped up and become pure public properties. But in the interim they accept outside play—particularly group play—and try to weather the storm financially."

Some classic courses with enduring qualities, or members who steadfastly oversaw their upkeep, are ageless, James said. "But we're talking about an awful lot of clubs not built like that and without that type of membership. There are many second- and third-tier clubs that probably were never really successful."

James predicted the scenario AGC experienced with its Pecan Valley Golf Club in San Antonio, Texas, will be played out in communities around the country. Though Pecan Valley was good enough to have hosted the 1968 PGA Championship, its neighborhood deteriorated and growth went north of the city.

"Now Pecan Valley caters to discriminating public golfers in San Antonio and tourists who come to the downtown area. We bought it and put it in another niche," he said.

...

Meanwhile, 59 percent of CMAA members say their clubs will be negatively affected by the loss of dues deductibility and the drop in percentage of the cost of business meals that can be deducted as a business expense, according to a poll conducted by Public Opinion Research, Inc.

"We're not seeing dramatic effects from the change yet, but we're still in mid-January and clubs still do expect some devastating results—particularly the city clubs," said CMAA's Driggs. "My guess is, it will take two to three years for everyone to evaluate their situations and what's best for them. We're talking about a major change, and for some clubs a very dramatic change in their entire operation."

More than 80 percent of city clubs expect significant negative consequences on jobs and revenue, while 50 percent of the country clubs questioned felt that way.

The survey said: "While golf and country clubs are expected to lose between 7.3 and 8.6 [of their members], city clubs say they will lose 21.8 percent. The average country and golf club manager says their club will lose 52 to 54 members."

"Clubs are looking at changing their structure to being for-profit, paying taxes," Driggs said. "Then they can open up their clubs for outside business, which they can't do if they're private, and not worry about losing their tax-exempt status. For some clubs that's been a godsend."



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Spring is the best time to prevent summer dry spot.

You've probably seen those irregular areas of turfgrass that show signs of drought stress. Localized Dry Spot (LDS)—with its characteristic wilting and turf death—usually shows up at the height of the golf season. But the best time to control the problem is in the spring. LDS is characterized by an

irregular area of turfgrass that for no apparent reason begins to show signs of drought stress. The condition is most prevalent on sandy bentgrass greens, but it can also occur on fairways. Infrequent or reduced watering of golf greens increases the problem, but the symptoms may occur right after irrigation.

According to another Michigan State University study, it is now thought that these dry spots are the result of hydrophobic soil where a non-wettable organic coating of sand particles causes soil to repel water instead of absorbing it. Once soil moisture levels decrease in hydrophobic

soils, rewetting the soil can become very difficult. The condition has been compared to normally absorbent peat shedding water when it is totally dry. **By applying wetting agents to the soil in the spring, you can increase the soil's ability to absorb and hold water—and prevent it from drying**

out. Whether the summer is wet or dry, applying a wetting agent in the spring can promote better utilization of water. *For more information circle the number below, or call Kalo, Inc., toll-free: 1-800-255-5196.*

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