

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

A UNITED PUBLICATION
VOLUME 4, NUMBER 1
JANUARY 1992

INSIDE

Help for handicapped

Fore Hope program, national committee, USGA make strides for the disabled. 5

Getting the most

Leading architects tell developers how to get the most from a golf course designer. 9-11

'Budget-conscious'

Larry Flatt institutes course development program for communities 30

Avg. public playing fees/1990



COURSE MAINTENANCE

Squaw Creek living under no-chem rules 17
George Frye accepts Kiawah test 18
USGA thrilled with Pebble Beach renovations 25

COURSE DEVELOPMENT

Course Builders Ass'n maps strategic plan 27
Donald Ross Society winning members 29
Keith Foster opens own design firm 37

COURSE MANAGEMENT

Upscale public courses gain popularity 45
NGF report tells the score on fees 45
CMAA adds 5,000th member 45

SUPPLIER BUSINESS

RISE announces new board members 49
Sumitomo works deal with Innova 10
New products hit marketplace 54-57

Hawaii council nixes impact fees

By Peter Blais

The Honolulu City Council has unanimously overridden Mayor Frank Fasi's veto and adopted a golf course development policy that rejects the mayor's suggested \$100-million impact fees.

Instead the policy encourages developers to integrate the golf course project into the local community while setting strict social, economic and environmental requirements.

Bill 129 establishes guidelines for judging among the numerous propos-

als submitted for review annually on the island of Oahu, where at least 40 courses are in preliminary planning stages.

But critics complain the ordinance still fails to address how many more courses should be allowed on the island or where they can be located. One of the primary areas of concern is near already crowded Kaneohe Bay on the northeast side of Oahu, where another 14 courses have been proposed and residents are concerned about the bay's water quality.

"The ordinance is rational and scien-

tifically based," said Stuart Cohen of Environmental & Turf Services, a Wheaton, Md.-based firm that has done environmental risk assessments in Hawaii. "It takes the proposals, provides a rational basis for making decisions, and requires that good people are available to manage the turf."

Cohen, who testified at an August workshop concerning Bill 129, agreed that the number of courses and where they should be located are important issues that still need to be addressed on

Continued on page 34



One of the most talked-about holes at architect Tom Fazio's Ocean Course at Pelican Hill Golf Club in Newport Beach, Calif., is the 13th. It features two small greens fronted by a large area of coastal scrub and sand. The Ocean Course opened in November. A second 18-hole venue at Pelican Hill — the Canyon Course — is slated for completion some time later. The project was developed by The Irvine Co. For more on Pelican Hill and other new golf courses, see pages 27-43.

Photo by John Connell

The Best of 1991

The annual *Golf Course News* survey votes are in. The winners are:

Architect:
Tom Fazio
story, page 27

Builder:
Wadsworth
story, page 27

Resort Developer:
Landmark Land Co.
story, page 45

Conditioned Resort
Course on Tour:
TPC at Sawgrass
story, page 17

Sherman Hollow dealt a blow by Vt. board

By Peter Blais

The Vermont Environmental Board has denied the latest attempt to obtain a building permit for the Sherman Hollow Golf Course in Huntington.

But course developers, who have spent seven years and hundreds of thousands of dollars seeking approval for the multimillion-dollar resort under the state's strict Act 250 development

See related story on Squaw Creek, page 17.

law, are not giving up.

They feel the board made "substantial mistakes" and are asking it to reverse its ruling, according to Sherman Hollow President Paul Truax.

"It's a step we had to take within 30 days of the board's decision," said Truax,

who submitted the appeal on the final day of the one-month deadline.

The board denied the latest reconsideration for a land-use permit — which included the developers' promise not to use chemical pesticides or fertilizers — because of problems regarding waste disposal, streams, water supplies and soil erosion.

Continued on page 12

USGA puts rebuffed TRACS on hold

By Peter Blais

The U.S. Golf Association Green Section has temporarily shelved plans for its new construction consulting service after receiving complaints from golf course architects and builders that it

represents competition and unnecessary oversight.

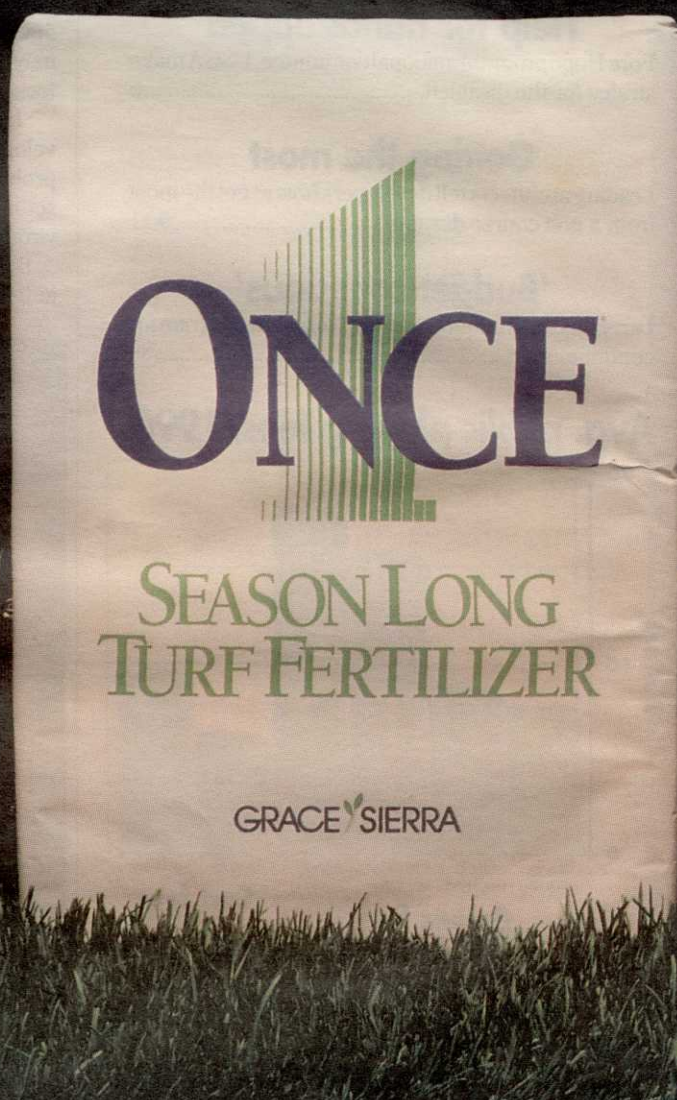
Green Section Director Jim Snow still hopes to establish the program, but will delay its launch until some "unfortunate misunderstandings" are clarified.

Snow announced the introduction of Turf Renovation and Construction Services in mid-November.

Headed by Mid-Continent Section Director Jim Moore, TRACS is designed as a

Continued on page 39

For Consistent Superior Growth Apply Just



ONCE™ gives you consistent, superior turf color and growth because it feeds continuously—all season.

ONCE eliminates the “feast or famine” effects of conventional fertilizers. This insures uniform, superior growth—with even mowing cuts. And minimal nutrient pollution.

ONCE was developed using our OSMOCOTE® resin coating technology, the leading controlled release fertilizer worldwide. This unique system meters nutrients continuously—every day—for a full season.

Because release is based *only* on temperature—not water, pH, or bacteria as with other fertilizers—nutrient availability matches turf and plant growth needs.

ONCE is available in a variety of analyses and 8-9 and 5-6 month longevities.

ONCE. Contact your Grace-Sierra turf/landscape distributor or call us toll-free at 1-800-492-8255.

Use ONCE, just once, for the best results all season long.

GRACE  SIERRA

PGA finally prevails in \$1.6B mega-plan for Hall, courses

JACKSONVILLE, Fla. — Ending 18 months of on-again, off-again speculation and frustration, the proposed \$1.6-billion PGA complex that will have as its crown jewel the PGA Tour Hall of Fame has found a home 20 miles south of Jacksonville and 10 miles north of St. Augustine.

Located at the intersection of I-95 and Nine Mile Road in northern St. Johns County, just across the Duval County line, the Saint Johns development will encompass the Golf Hall, national headquarters for the Tour's video and production company, golf academy, resort convention center and 700-room hotel with two 18-hole courses.

The Florida Department of Community Affairs and developer Jim Davidson signed the agreement, ending weeks of wrangling. The St. Johns County Commission ratified the pact after spelling out Davidson's responsibilities for improvement of I-95 linked to building the 6,300-acre development south-east of Orangedale.

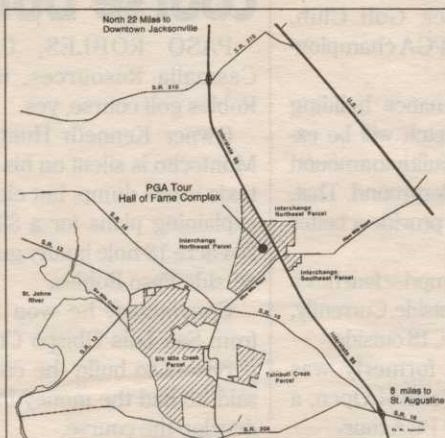
Davidson's cost was set at \$800,000, but that figure may not be firm. If the Florida Department of Transportation completes the interchange work before Davidson is ready to begin a third phase of development, there would be little or no expense for Davidson.

Davidson earlier had rejected as "absolutely ludicrous" a suggestion by state officials that he pay up to \$4 million of the estimated cost of \$20 million.

Tour official Richard Bowers said the Tour will refund to Jacksonville the \$896,000 the city put up to land the PGA Tour Productions facility, which will move to the St. Johns County site.

A proposed site on Julington-Durbin Park peninsula in the Mandarin area was abandoned in September because of concerns about obtaining environmental permits.

"The St. Johns site has received the necessary development permits, including completion of the Development of Regional Impact process," said Vernon Kelly, president of PGA Tour Investments, Inc. "The



construction of the Hall of Fame and related development would be environmentally compatible."

The development and \$70-million PGA Tour Hall of Fame complex would be constructed over five five-year phases. The Hall would be built first.

The Hall will honor competitors and innovators who have played a formative role in establishing the Tour as a leader in the sports industry.

Hall displays will detail Tour history, collections that will range from memorabilia to hands-on, computer-driven displays that will invoke state-of-the-art technology.

"This project will be a memorial to the players and sportsmen who have made the Tour so successful," said Deane R. Beman, PGA Tour commissioner.

Overall development would include 7,200 residential units and 6.4 million square feet of commercial, industrial and office space. It would create 25,542 construction jobs and 13,150 permanent jobs.

Bowers said the Hall could attract 1 million tourists a year and help tourism-related businesses such as motels and restaurants.

County officials foresee infusion of \$23.3 million a year in property-tax revenue, much stemming from 17,000 new residents.

THE COMPLETE COMMERCIAL MOWING SYSTEM FROM "A" TO "Z"



Kubota's FZ2100 with Auto Assist Differential and Zero Diameter Turning Radius.

Kubota has introduced a complete new mowing system, the FZ2100 Front Mower. From "A" – Auto Assist Differential (AAD) to "Z" – Zero Diameter Turning Radius (ZDT), it increases your power and mobility to handle all your mowing needs.

Equipped with 20 horsepower and four-wheel drive, the new FZ2100 Front Mower's zero diameter turning radius gives you the agility and power to get into the tightest spaces effectively. You can mow around trees, hedges, flower beds and other obstacles much more precisely and in less time. And, with the Auto Assist Differential drive system the machine automatically switches between 2WD and 4WD to match operating conditions and terrain, providing more traction and eliminating slippage. This increased productivity in all mowing conditions, and the FZ2100's ability to turn com-

pletely around in one spot without damage to the turf, cuts way down the time spent on labor-intensive hand trimming jobs.

The FZ2100's front wheels rotate freely through your tightest turns, and Kubota

has designed round shoulder tires that virtually eliminate turf damage. And, the FZ2100 offers all the durability and innovation commercial operators have come to expect from Kubota. Like our powerful Kubota liquid-cooled diesel engine, hydrostatic transmission, 55 degree tilt deck for easy access and blade maintenance and optional grass catcher.

Your authorized Kubota dealer can show you the complete commercial mowing system with the power and maneuverability to handle your tough jobs from A to Z. For more information write to:

Kubota Tractor Corporation
P.O. Box 7020-Z
Compton, CA 90224-7020.



Kubota

CIRCLE #102/GCSAA BOOTH #1435

LPGA breaks ground on project

DAYTONA BEACH, Fla. — The Ladies Professional Golf Association has taken the first step for its new resort development here.

Groundbreaking ceremonies were held Dec. 2 for the start of the entrance road to its new headquarters and golf courses.

N.J. proposals may be revived

Proposed administration deregulation of millions of acres of freshwater wetlands could mean revival of major southern New Jersey building projects in Cape May County.

Officials there are talking of dusting off plans for a public golf course and a new north-south highway scuttled the past two years because proposed construction sites contained land considered freshwater wetlands under existing laws.

President Bush's proposal would remove up to half the freshwater wetlands from protection.

"I would recommend a revisit of both (golf course and highway) projects should that come to pass," said Cape May County Freeholder Director William E. Sturm Jr.

Environmental interests say such lands are too valuable to build on, and the projects should be forgotten.

Indy Speedway course faces overhaul

INDIANAPOLIS — Speedway Golf Course hardly matches in stature adjoining and encompassing Indianapolis Motor Speedway, but the storied brick yard soon may have major green company.

Indy president Tony George, grandson of the late race car driving whiz Tony Hulman, plans to transform the course into an 18-hole championship facility. Completion target is July, 1993.

The course would be built on the south side of West 16th St., across from the Speedway where a strip

shopping center now is. A modern hotel is in the master plan, but George hopes to preserve some of the history of the existing hotel.

He plans a driving range and huge putting green, along with a teaching center.

Course superintendent Jeff Stewart has been lured from the Country Club of Indianapolis, and architect Pete Dye has been commissioned to "build a facility that will be really special."

Dye plans numerous spectator mounds, similar to those he built

into Crooked Stick Golf Club, Carmel, site of the PGA championship last August.

The golf maintenance building outside the backstretch will be expanded, and may be built into a mound so as to be part underground. That, said George, would provide a better view for spectators.

The course will comprise four holes inside the track, 14 outside. Currently, nine holes are inside, 18 outside.

The Speedway formerly was home to the 500 Festival Open, a regular stop on the PGA tour.

Toxic dump owner wants course built on waste site

PASO ROBLES, Calif. — Casmalia Resources, no; Paso Robles golf course, yes.

Owner Kenneth Hunter Jr. of Montecito is silent on his troubled toxic waste dump, but eloquent in explaining plans for a \$3 million, 204-acre 18-hole luxury golf course outside Paso Robles.

Convincing, he won approval from San Luis Obispo County supervisors to build the course. He said he had the money in hand to develop the course.

EPA officials say the cost of cleaning up Casmalia Resources could be as high as \$20 million. Hunter said the firms he is a part of — Hunter Resources Inc. and Casmalia Resources Ltd. — are nearly broke and can not complete a required cleanup of the closed dump.

Federal EPA lawyers and county attorneys are trying to seize the Paso Robles land and sell it, along with Hunter's other assets, to pay for the cleanup.

Introducing the rake for absolute perfectionists

If you like clean, you'll love the new Debris Rake from Standard Golf. It's the latest in our complete

line of bunker and utility rakes — and the most relentless of them all. ♦ The 20" wide cast

Even pine needles can't escape its tempered steel wire teeth!

aluminum head is loaded from end to end with tempered steel

wire teeth that literally grab everything in their path. And the

5-foot handle makes it easy to rake those hard-to-reach

places. ♦ It's perfect for use in bunkers and other areas

where pine needles and small debris defeat ordinary

rakes. ♦ For more information, simply contact your nearby Standard Golf

distributor and ask about our

Debris Rake. "Needles" to

say, it's the rake for absolute

perfectionists.

The Standard of Excellence

STANDARD GOLF Pro-Line

Standard Golf Company • P.O. Box 68 • Cedar Falls, IA 50613 • U.S.A. • 319-266-2638 • FAX 319-266-9627

Pebble Beach resident pushing eminent domain

MONTEREY, Calif. — Pebble Beach resident James Boccardo is working with state lawmakers on a bill that would transform Pebble Beach Golf Links into a state park — and feature golf fees under \$200 a round.

The San Jose attorney will ask California Parks and Recreation to acquire the property through negotiations or eminent domain proceedings.

Boccardo is suing Pebble Beach Co. to prevent its plan to sell memberships starting at \$150,000 into a proposed Pebble Beach National Club.

Vegas council supports delay

LAS VEGAS, Nev. — Developer Jack Sommer's decision to postpone for a year his request for zoning in connection with plans for a resort hotel, golf course and 1,800 homes in an area outside the city's gaming district brought favorable response from the Las Vegas City Council.

Sommer's project near Floyd Lamb State Park was approved unanimously.

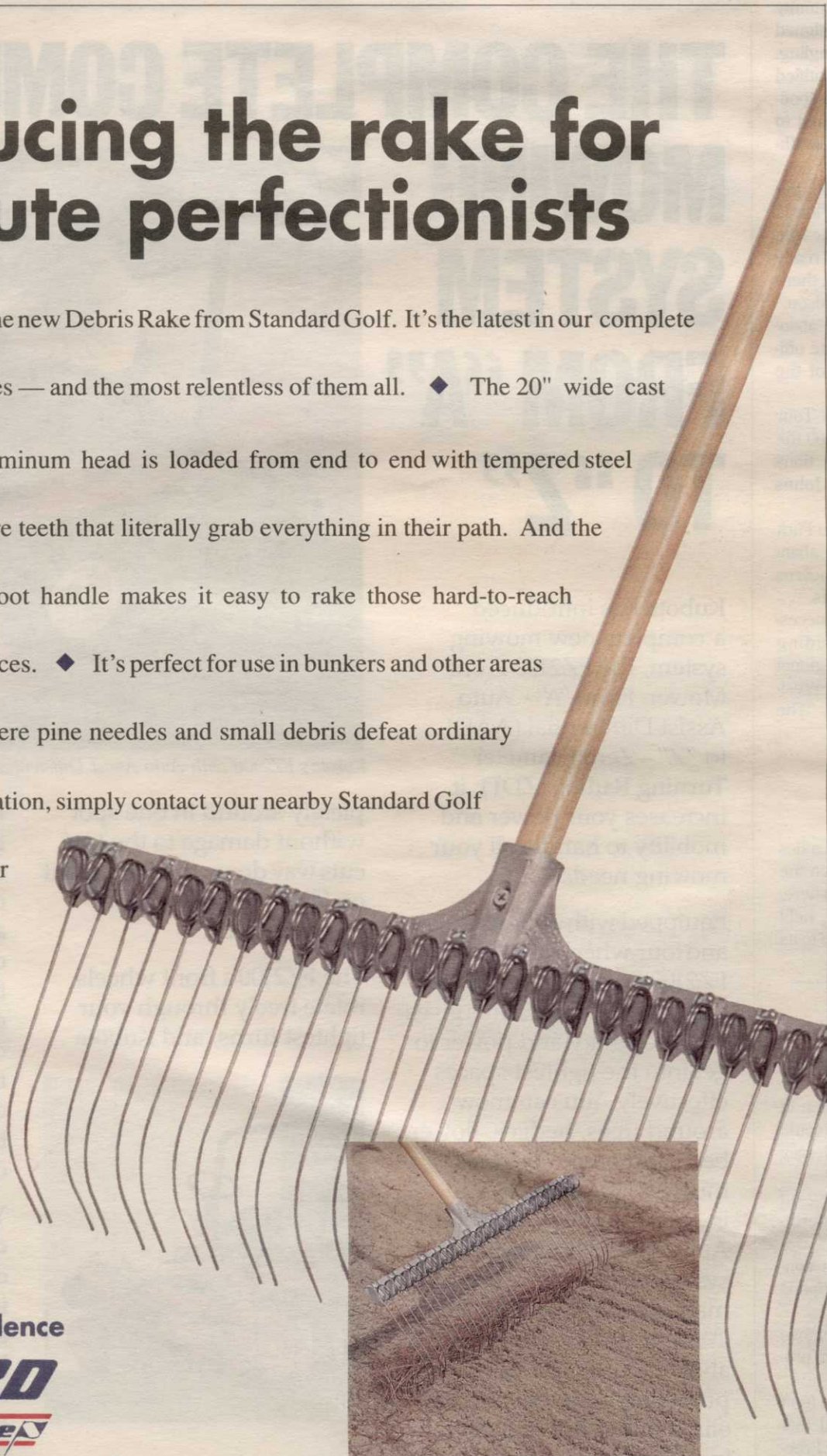
Sommer originally had requested approval of zoning for a 20,000 square feet casino as part of the hotel, but neighbor opposition prompted retreat. The development will be known as Mountain Spa.

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 is 207-846-0600.

The publisher assumes no responsibility for unsolicited material or prices quoted in the newspaper. Contributors are responsible for proper release of proprietary classified information. Copyright 1991 by United Publications, Inc. All rights reserved and reproduction, in whole and in part, without the written permission from the publisher is expressly prohibited.

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.

Postmaster: Send address changes to Circulation Manager, *Golf Course News*, P.O. Box 3047, Langhorne, PA 19047.



Fore Hope program for disabled gets lift

By Vern Putney

After three years of struggle, Fore Hope founder and director Melinda "Mindy" Derr believes her non-profit golf program for the physically disabled is off the ground in Columbus, Ohio.

She'd welcome a major sponsor from the golf industry, but is buoyed by a distinct upswing in interest in her project.

The latest Fore Hope focus was a four-minute spot on "Life Choices," a show originating in Columbus and syndicated to seven major cities in the United States.

Derr recently spent a week in Miami at the 8th International Symposium on Adaptive Physical Activity. Her work was selected for presentation from more than 400 abstracts.

Experts throughout the world shared knowledge that will improve opportunities of those with special needs to lead an active life.

Keeping on track with others through golf was a symposium highlight. That recognized need will be developed at a conference in Japan in 1993. Delegates from Finland were particularly interested in golf's future role for the handicapped.

Derr has assembled a like-minded board of directors, and has enlisted the support of, among others, veteran PGA Tour player Ed Sneed Jr. and paraplegic golfer Dennis Walters.

Walters, as promising young pro tour player, suffered a disabling injury in a golf car mishap in the mid-1970s. From his specially equipped golf car, the Florida-based Walters travels nationwide staging a trick shot show.

Said Walters: "I am impressed with her (Derr's) single-minded pursuit to help the disabled regain the joy and pleasure of playing golf."

"As one who has gone through the experience of a disabling physical injury, I can attest that golf is a wonderful form of therapy, both for the mind and the body. It is not only recreational, but is a vehicle to improve one's

confidence and social skills."

Though an avid golfer since childhood days (dad Guy's farm bordered a golf course), Mindy didn't venture into the golf teaching field until her father was stricken with Lou Gehrig's Disease in 1984.

She saw the need for recreational activities that would stimulate the minds of persons with limited physical abilities, and at the same time not require too much physical strength or agility. Golf fit the bill. It required concentration.

"You're not thinking of your problems while you're playing," Derr noted.

Developing a golf program for the handicapped — particularly for "forgotten people, those in nursing homes and those like Dad, at home" — was a challenge.

An even bigger problem was finding a teacher. In 1988, she attended a school in Chicago that taught pupils how to teach golf.

Her kickoff clinic in northern Ohio attracted 12 golfers. A two-season total was 43 persons, 107 lessons and \$20,000 raised.

She moved her program to Columbus in November 1990. The state capital has many rehabilitation centers. Edwin Shaw Hospital in Akron has built a three-hole course and practice range that are handicapped-accessible. Several pros have donated time to work with the handicapped.

Derr works with locals therapists, and stresses safety, fun and golf at each lesson. Handicapped golfers don't need special clubs, but there are Velcro gloves that fit around the hand and a place to attach the club to the hand for those unable to grip a club. She suggests lightweight shafts for some, and longer shafts for those in wheelchairs.



Mindy Derr

Derr advocates, not catering to the disabled, but increased integration and accessibility.

"There are steps course owners and developers could take to provide equal playing opportunity without compromising the character of the course or forcing costly adjustments," she said.

Right now, she's a volunteer recruiter, fundraiser, marketer and salesperson, public speaker and golf teacher. The Loudonville native, who gave up her job as exploring executive for the Boy Scouts of America to help the handicapped, qualifies as a Good Scout.

She can be contacted at P.O. Box 12117, Columbus, Ohio 43212. 614-487-1722.

USGA grants provide help

FARHILLS, N.J. — The United States Golf Association has initiated a grants program designed to expand opportunities for physically disabled golfers to enjoy the game.

This program will provide financial assistance to non-profit organizations dedicated to assisting the physically challenged.

Funds will be provided from the sale of USGA Christmas cards and contributions made to the USGA Foundation to assist disabled-golfer programs.

For more information, contact the USGA Foundation, Golf House, P.O. Box 708, Far Hills, N.J. 07931.

Nat'l panel formed for handicapped

A group of golf industry professionals in Colorado has formed the Committee for Better Access for Disabled Golfers and expects this spring to publish guidelines for making public courses accessible to the disabled.

The panel was the brainchild of Don Tolson, project coordinator for Fox Hollow at Lakewood Golf Course, and Tom Houston, a disabled golfer and inventor.

Joining them on the committee are golf course architect Richard Phelps, professional Marcia Bailey, who teaches the Golf-4-Fun instructional program for disabled golfers, Raccoon Creek Golf Course pro Dave Detweiler, Golf-4-Fun director and PGA pro Jim Bailey, Colorado Golf Association Executive Director Warren Simmons and CGA Assistant Executive Director Ed Mate.

Tolson said the group hopes that by April or May it will have printed three-part guidelines.

The first part, he said will be a brief introduction to disabled golfers, demographics of disabled Americans, and a comparison to the ski industry.

The second part will discuss the effect on public facilities of the Americans With Disabilities Act, which was enacted by Congress and signed by President Bush in July 1990.

Part three of the guidelines will regard obstacles to disabled people and make general statements about grades of land, widths of bridges and the like, Tolson said.

"They will only be suggestions, not rules," Tolson said, adding that developers and course officials will make their own decisions about how to deal with access regulations.

Houston, who owns Falcon Rehab and Mobility Plus in Commerce City, Colo., will speak Feb. 14 on the disabilities act's impact on public courses during the International Golf Course Conference and Show in New Orleans.

"What got me thinking about this was my goal to build a perfect golf course at Fox Hollow," said Tolson. "Part of that goal was making the course accessible to everyone."

Houston, who has been playing for three years from a specially designed motorized cart, said: "This project is going to be an uphill battle. There are still those psychological and perceptual barriers, things like carts (wheelchairs) damaging greens, slow play and liability. These issues may only be perceptual or they may really exist. To find out, we must provide access and encourage disabled people to participate in this great game."

Tolson said the committee hopes to demystify some of these perceptions by allowing able-bodied golfers a chance to play and spend time with disabled players.

"With the United States Golf Association handicapping system that we use here in Colorado, not only will disabled persons be able to play, many of them will be able to be competitive with and even outscore their able-bodied counterparts," said Simmons.

Through all its efforts, the committee hopes to put into action the Americans With Disabilities Act, which provides that "No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, and accommodations of any place of public accommodation."

AquaGro 20•Spreadable. More Concentrated, 15% Less Expensive To Use.



Spread The Word.

Turf managers everywhere are spreading the the word that the number one selling soil wetting agent costs less than ever before to apply. All the more reason to use the new AquaGro 20•S to solve your water related problems.

New AquaGro 20•S gives you the same outstanding performance as the old formulation, it's just more concentrated. And we're passing the cost savings on to you. What used to cost about \$4.40 per 1000 sq. ft., now costs less than \$3.75 — that's a 15% savings.

Just like the other AquaGro formulations, AquaGro 20•S speeds the movement of water into dry spots, compacted soils and slopes, drains wet areas and moves water soluble chemicals through thatch.

No other soil wetting agent manufacturer offers you the money-back performance guarantee that's printed on the front of every bag.

Lower price, guaranteed performance — that's an unbeatable value.

So when the heat is on, use AquaGro 20•S; it helps you make the most of available water.

To find out how the new, economical AquaGro 20•S can make you a better water manager, call us for a FREE copy of the User's Guide.

1-800-257-7797.

Another
Reason To
Use AquaGro.

AQUATROLS
The Water Management People

Cherry Hill Ind. Sites, Bldg. 26
Cherry Hill, New Jersey 08003

GC of Miami \$1M behind projections

MIAMI — The Golf Club of Miami, three years ago expected to provide plenty of "scratch" to Dade County, instead has become a high handicap to Dade taxpayers.

Metro has spent more than \$24 million on the Northwest Dade complex, but revenues at one of the nation's first joint public-private luxury golf facilities are \$1 million behind projections.

Blame is being centered on bad decisions by the county and the PGA Tour, which manages the club. A harsh financial climate has

plagued the facility which includes two 18-hole championship courses and a nearby 18-hole, par three layout.

Mayor Steve Clark may have been prophetic in 1989 when he told colleagues they would "rue the day" they voted for the PGA Tour contract.

It was anticipated that Metro would earn \$820,000 by the end of 1991.

Instead, Metro has made no money, plans for an on-site hotel were scrapped, and Metro must pay the PGA Tour about \$140,000 in

management fees.

All this is a far cry from early promise. Robert Trent Jones designed two courses there in the early 1960s, Arnold Palmer once represented the course, and Jackie Gleason was a regular.

General manager Paul O'Dell sees improvements. He said the marketing budget has been increased by one-third, sand traps were redone recently on the longer West Course, and similar work on the East Course will be completed in 1992.

Lou Holtz a founding member of Legends at Chateau Elan

BRASELTON, Ga. — Notre Dame football coach Lou Holtz, who paces the equivalent of 18 holes of golf during an intense Saturday afternoon, soon may be getting his exercise on the links.

He is the first founding member of the Legends at Chateau Elan, the latest exclusive golf resort in north Georgia.

The Braselton club hopes Holtz will head a number of high-profile personalities who will boost membership.

The Legends is being designed by Gene Sarazen, Sam Snead and Kathy Whitworth, along with course architect Dennis Griffiths.

The course is the concept of Chateau Elan founder and Chief Executive Officer Donald Panoz.

The pharmaceutical magnate plans three golf courses on the 2,400-acre site 30 miles north of Atlanta.

The first course, opened in 1989, is the state's top-ranked public course.

Construction of the third course is scheduled to begin next summer.

Inability to buy land puts snag in Ala. plans

PEEKS HILL, Ala. — The Retirement Systems of Alabama aims to build golf course across the state to draw tourists and spur economic development, but one of its big drives has found a giant sand trap.

Donald F. Gibbs, owner of 800 choice acres in northern Calhoun County eyed as a championship golf complex site, said the deal died when area property owners either refused to sell him their land or asked much more than their acreage is worth.

Gibbs said he needed to acquire about 300 acres to give him the 1,000 acres necessary for him to donate the golf course land. He said he needed 650 acres left over to make the project economically feasible.

RSA will build the \$8-million complex — 27 holes and a nine-hole par-3 — only if Gibbs donates about 450 acres.

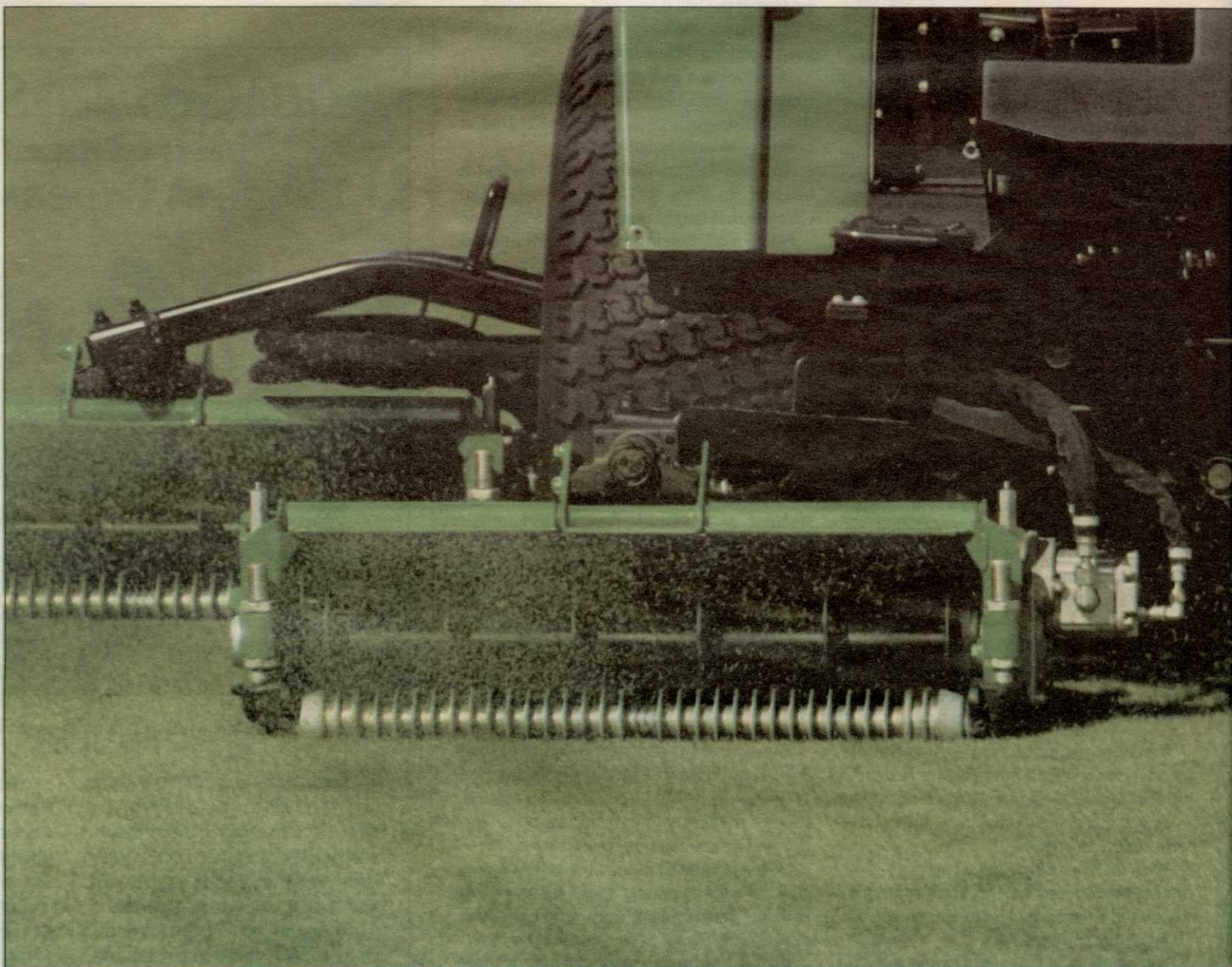
David Bronner, RSA executive director, held out hope that another acceptable site could be found in the same area. The RSA is building golf courses in Mobile, Auburn/Opelika, Birmingham, Huntsville, Greenville and Dothan, and has been looking at sites in the Anniston/Gadsden and Tuscaloosa areas.

City to purchase, improve course

COUNTRYSIDE, Ill. — Imminent purchase of the Maple Crest Golf Course by this city and the Pleasant Dale Park District will be followed by course closing for a year. This will permit an estimated \$1.7 million in improvements.

Owner Virginia Burket's selling price is \$5.8 million. In 1990, Countryside and Pleasant Dale voters passed a referendum to buy the golf course to preserve the open space.

Renovations may include a new 35-station driving range with lights, a new 3,500-square foot clubhouse with a pro shop, a freshly-landscaped nine-hole course (reduced from the present 12 holes), a new irrigation system, and parking for from 75 to 100 cars.



Takes more bumps

Introducing the new 3365 with John Deere ESP

A lot of people talk about commitment. John Deere just did something about it by dedicating a new factory unit to engineer and manufacture cutting units.

You can see the results on our new 3365 Professional Turf

Mower—the first product to feature John Deere-built ESP cutting units.

ESP stands for extra strength and precision—the built-in benefit you get every time you take the new 3365 out to mow.

Extra precision comes from an improved adjustment system that solidly holds cutting height adjustments through the bumps and shocks of everyday use.

Extra strength comes from new materials and components. Reels and bedknives are made

Sacramento projects to cost \$425M

Four major plans would surround courses with housing

SACRAMENTO, Calif. — Local developers hope to capitalize on the shortage of golf courses in the Sacramento area by wrapping large housing subdivisions around new courses.

Four projects planned would cost \$425 million. The two biggest — Chamonix and Golden Oaks —

would be among the first master-planned communities built around golf courses in Sacramento or south Placer counties since Rancho Murieta in 1973.

Riolo Greens, owned by local rancher Don Riolo, is zoned for 140 homes, and Los Angeles-based Dahlawi Corp. and Wallace Chin own 180 acres zoned for 180 homes.

Fifteen golf courses have been proposed in recent years in and around Sacramento, several as part of sub-division proposals. Most

have foundered because of environmental constraints or financing problems.

Most projects require money from Asian financiers.

Then there are formidable environmental regulations.

Developers often must invest \$250,000 or more before learning whether a proposal has passed environmental and municipal scrutiny.

Reflecting area interest, a course recently opened at Cherry Island Regional Park in Elverta has been swamped by players.

Senate committee backs bill to lease cemetery land

SALT LAKE CITY, Utah — Finally realizing that a bill to allow lease of unused portions of Mount Olivet Cemetery land for the next 70 years was not a grave issue, a U. S. Senate committee has endorsed the measure.

The bill alters purchase agreements with the federal government, which had prohibited the land from being used for anything but a graveyard.

Two senators questioned the

bill's purpose, possibly fearing takeover of sacred turf, but quickly gave up the ghost when committee member Jake Garn, R-Utah, pointed out that there would be no burying of people there.

Bill sponsors are Utahans Orrin Hatch, Wayne Owens and Garn. They say Salt Lake City lacks golf courses, and that installation of sprinkler systems for the golf course will lower costs of developing the cemetery there later.

Mich. developer faces heavy fines

HAMBURG, Mich. — Defying state environmental protection laws by building an 18-hole golf course without obtaining a single land-use permit may be costly to developer Donald Moon.

He's charged with five counts of violating state laws protecting wetlands, lakes and streams. If convicted on two of these counts, he faces fines of up to \$10,000 a day.

The other three counts carry \$2,500 fines and could require restoration of the wetlands. This could shrink the golf course.

The golf course is the centerpiece of Whispering Pines, a 385-acre development of 340 homes priced from \$200,000 that Moon is building.

The Department of Natural Resources charged that Moon since 1988 ignored six orders requiring that he obtain permits for course construction.

Law suits don't deter golfers

EAST NAPLES, Fla. — While course management contests turf rights, the 18-hole Lely Flamingo Island golf course has reopened to brisk business.

John Agnelli, president of Lely Development, and Don Breckenridge, designated developer for a hotel, sports and conference at the heart of the Lely resort community, have been at odds.

Lely was the first of three courses developed by Lely, a Swiss corporation, on a 3,000-acre tract that also includes residential lots.

Lely sued Breckenridge, claiming he owed \$57,250 for August rent and \$54,978 for a security deposit payment.

Breckenridge countered that Lely was late in completing the first of three golf courses, causing his firm to lose money.

Westin Hotel Co., a chain of luxury hotels that manages the existing course and plans to build a hotel at the site, also is suing Breckenridge. Lely seeks to evict Breckenridge's firm from the golf course, but Westin wants to foreclose on the Breckenridge/Naples lease with Lely. This would give Westin control of the golf operations.

ps, fewer grinds

cutting units

of induction-hardened high-impact steel that holds an edge longer. You spend less time backlapping and grinding.

For the name of the nearest distributor, or free literature, call 1-800-544-2122, or write John Deere, Dept. 956, Moline, IL.



The new 3365 Professional Turf Mower features John Deere-built ESP cutting units that deliver extra strength and precision.

NOTHING RUNS
LIKE A DEERE®



Jemsek family being honored as 1st family of golf for '91

By Vern Putney

ORLANDO, Fla. — It's safe to say that no man in golf has received as much varied recognition in one year as Joe Jemsek, "Mr. Public Golf" in the Chicago area.

The newest accolade is selection of Jemsek and family to receive the 1991 National Golf Foundation's Jack Nicklaus Family Golf Award. Presentation will be made at the PGA Golf Show here Jan. 24-25.

First recipients, in 1986, were the Nicklauses. Then came the families of Nancy Lopez and Ray Knight, John Cook, Pat Bradley and Jim Gallagher.

Jemsek's star-studded year included these laurels: The PGA Association of America's and Illinois' Professional Golfer of the Year awards; election to the Chicago Sports Hall of Fame; winner of Golf Digest's junior development award for a junior program for 400-500 boys and girls.

Golf Digest also named Jemsek one of the 36 most powerful people in golf, and cited his Dubsdread course at Cog Hill Golf and Country Club as one of America's 100 greatest courses.

Cog Hill last summer hosted the Centel Western Open. The week of golf festivities, plus four days of tour play, benefited the

Evans Scholars Foundation of the Western Golf Association.

Jemsek downplays his role as successful golf patriarch. He prefers to point out that Jemsek operations is a team effort and his golf "family" is far from confined to bloodlines.

For instance, he takes great pride in selection of Ron Skubisz, his reliable anchor at St. Andrews Golf and Country Club in West Chicago, as 1991 Pro Manager of the Year.

Carol McCue, vice president of Jemsek Golf, is another shining example of non-related but family loyalty. A former Herb Graffis Award winner for game contributions, McCue's recognized competence was a big reason Dubsdread was selected as the Western Open site, Jemsek said.

"You are only as good as the people you deal with and the responsiveness of your staff to customer needs," Jemsek said. "To achieve,



Joe Jemsek

there must be a feeling of wanting to help, of dedication. We believe our so-called empire, embracing eight Chicago-area public golf courses and supported by every member of the family, has met those goals."

Jemsek began his career at age 8 as a caddie at Laramie Field, now part of Chicago Airport. At 11, he switched to the original Cog Hill course. Six years later, he became Cog Hill's head golf professional. Four years later, he transferred to manager and head pro at St. Andrews. Two years later, he bought St. Andrews, and in 1951 purchased Cog Hill.

Son Frank, 51, has been involved in the family business for more than 40 years. He played on the golf team at Loyola University in New Orleans.

Frank's wife, Pat, recently was low amateur in the Florida Invitational Women's Open. Oldest daughter Marla, 22, has won an NCAA women's golf event, and as a college senior plays on the golf team at the University of Central Florida.

Frank's other children, Kathryn, 18, and Joe II, 15, play golf and, during summer vacations, work at their grandfather's courses.

The Jemseks reside in Burr Ridge, Ill.

Joe's daughter, Marianne, has worked at Jemsek courses since she was 8. Her hus-

band, Gerard Hinckley, also works for Jemsek Golf and, like Marianne, is a member of its board of directors.

Son Gerard, 27, played on the golf team at the University of California (Santa Barbara) and works with the NGF in golf course development.

Mike, 26, is a student at McGeorge Law School in Sacramento, Calif. He's been assistant manager the past five summers at Cog Hill.

Robert, 24, a Stanford graduate, is a member of the Detroit Lions National Football League team. An avid golfer, he aspires to become a sports writer after football.

Jim, 21, attends Stanford. Because of a back injury, golf is out. However, a career in golf is certain.

The Hinckley family, formerly of New York, N.Y., now resides in Walnut Creek, Calif.

Joe's brothers and sisters (George, John, Adam, Helen, Mary and Annie), all have been involved in Jemsek golf properties.

Jemsek courses employ 23 PGA and LPGA teachers. Eleven high schools use them as "home" courses. Jemsek courses on average give 30 days of free golf annually to various associations and schools for qualifying rounds and championships.

NGF chooses P.J. Boatwright for Herb Graffis Award

JUPITER, Fla. — The late P.J. Boatwright Jr., executive director of rules and competitions for the United States Golf Association and a man to whom the rest of the world deferred in matters of the rules of golf, has been named the recipient of the National Golf Foundation's 1991 Herb Graffis Award.

The award has been given annually since 1977 "in recognition of long-time and outstanding contributions in preserving the true spirit of the game; specifically for keeping golf as it was meant to be: for recreation, good fellowship and health." Named for NGF's co-founder, the award is one of the foundation's highest honors.

"In all of golf's history, no one earned such universal respect as P.J.," said NGF President

and Chief Executive Officer Joe Beditz. "His integrity, knowledge and unyielding devotion to the principles and the traditions of the game are unequalled."

Born Nov. 8, 1927, in Augusta, Ga., Boatwright joined the USGA in 1959 as an assistant director, working on the rules and conducting championships. At one time or another he dealt with nearly every phase of USGA work. He ran championships, became the USGA's ruling expert on the rules of amateur status, oversaw the handicapping system, and dealt with implements and ball.

In the early 1980s he served as chief negotiator for the USGA during its four-year discussions with the Royal & Ancient to refor-

mish the Rules of Golf. The undertaking resulted in the adoption of a near-unified worldwide code of the rules in 1984.

He was appointed secretary of the World Amateur Golf Council and was responsible for the World Amateur Team Championships.

He was honored frequently, most recently receiving the 1990 William Richardson Award for distinguished contributions to golf, given by the Golf Writers Association of America. He also received the Metropolitan (N.Y.) Golf Association's Distinguished Service Award in 1983, and the Metropolitan Golf Writers Association's 1986 Gold Tee Award.

He died April 5, 1991, at the age of 63, leaving his widow, Nancy, and three grown children.

Past Herb Graffis Award recipients are:

1990	Don Rossi
1989	William Campbell
1988	John Laupheimer
1987	Deane R. Beman
1986	Joseph C. Dey
1985	Howard L. Clark
1984	Bill Davis & Howard Gill
1983	Herb Graffis
1982	Jack Nicklaus
1981	Patty Berg
1980	Bob Hope
1979	Carol McCue
1978	Arnold Palmer
1977	Joe Jemsek

Kerry Graham to receive Joe Graffis Award

JUPITER, Fla. — Kerry Graham, president of the Ladies Professional Golfers Association's Teaching Division and teaching professional at the McCormick Ranch Golf Club in Scottsdale, Ariz., has been named the recipient of National Golf Foundation's 1991 Joe Graffis Award.

Presented annually since 1970, the award is given for "outstanding service and dedication to the educational advancement of golf."

Graham has been teaching golf for 24 years, having been an assistant and teaching professional at private, public and resort clubs in Arizona.

Since 1978, she's been the teaching professional at the McCormick Ranch.

She conceived and organized the LPGA's series of "Women in Golf" summits, the first of which was conducted in October in Orlando, Fla.

She also conducts national seminars, national teaching division championships and was the driving force behind the LPGA's study on women's golf that was presented at the NGF's Golf Summit 90.

Since 1985, Graham has served as an LPGA regional officer and, in 1988, was selected as the president of the Teaching Division.

In this capacity, she oversees the affairs and activities of the more than 600 club professionals and assistants, teaching professionals, college coaches and club managers.

She also represents the Teaching Division on the LPGA's board of directors and assists with junior golf and public relations activities.

Graham directed the development of the LPGA's publication, Handbook for Professional Golf Instructors.

From 1988 to 1991, she organized and conducted 45 LPGA Teaching Schools, which introduced the handbook's information to the LPGA professional instructors. The focus of these schools is to introduce a new model of teaching based on "how people learn" and "how they perform under pressure."

She has been instrumental in establishing several successful golf programs for juniors and minorities.

These include the 4-year-old LPGA-Girl Scout Golf program, which has introduced 300 girls from Girl Scout troops in the Phoenix area to the game; the Junior Girl's Golf Club, which provides young women with a support system for continuing golf involvement; and

the LPGA/AAF Junior Golf program, which has, since 1989, offered complete golf training to more than 950 Los Angeles area minority youths.

Past Recipients of the Joe Graffis Award are:

1990	Davis Love, Jr.
1989	Kathy Corbin
1988	Tom Addis
1987	Edwin B. Cottrell
1986	DeDe Owens
1985	No Award
1984	Paul Runyan
1983	Carol C. Johnson
1982	Jim Flick
1981	Peggy Kirk Bell
1980	Bob Toski
1979	Conrad H. Rehling
1978	Gary Wren
1977	Bill Strausbaugh Jr.
1976	Shirley Spork
1975	Patty Berg
1974	Opal Hill
1973	No Award
1972	Les Bolstad
1971	Barbara Rotvig
1970	Ellen Griffin

SOIL-FREE SOD?

Yes, **StrathAyr soil-free Penncross creeping bent** and **"Executive Blend" bluegrass sod** has arrived in the Midwest!

Benefits include:

- No interface problems.
- Amazing rate of rooting.
- Quick playability
- Lightweight/easy installation.
- Lower shipping costs.

CALL US FOR DETAILS!



**HUBER RANCH
SOD NURSERY**

Rt. 41 Schneider, IN
1-800-553-0552

Architects address 'Getting the most from a course designer'

By Peter Blais

How a developer can get the best out of a golf course architect was discussed by four of the world's top designers speaking at November's Urban Land Institute fall meeting in Washington, D.C.

Rees Jones, Ed Seay, P.B. Dye and Tom Fazio explained what developers and architects can do to help each other with the ultimate goal of improving the final product.

Developers have entered a new era, far different from the go-go days of the late 1980s, Jones said. Money is less readily available, requiring investors to move more cautiously. Potential buyers need to be certain what they are going to get before they get it.

"You can't build a character-less golf course and be successful. They aren't visual amenities for real-estate developments anymore," he said.

To make sure developers get what they want, they should hire the architect at the outset, Jones said. Too often, architects are brought on after the master plan is established, numbers developed, and told "here is the plan," even though the topography may not be right for a golf course, he said.

"There's a lot an architect can do at the outset to site the course for better golf, the real estate for better homes and have a major attraction that will draw people," Jones said.

At Woodside Plantation Club in Aiken, S.C., the developer brought Jones aboard after the master plan was done. Many hillside holes were simply unworkable, Jones said.

Jones flipped the design, putting golf holes in the valleys and creating value for real estate on hillsides. The result, Jones said, was a great golf course that contains errant shots and funnels them back into the valleys. The hillside homes sold out so quickly that developers had to build another golf course, he added.

"People were sleeping outside the sales office for 48 hours making sure they got the best golf course lots," Jones remembered.

If a course is sited correctly, home buyers can tell before their residence is built what they are going to have for value. Homes on hillsides, with the course in the valleys, is an ideal situation. Home sites located below the course rarely attract premium prices.

Such ideal sitings have been complicated by recent government regulations characterizing many lowland areas as protected wetlands, Jones conceded.

"If you have a choice, find a gently rolling site with a lot of folds," Jones told developers. "Don't get one that is too steep or rugged. And definitely don't find one that is too wet."

The Peninsula Club in Charlotte, N.C., epitomized how owners should work with consultants, Jones said. The developers hired Jones early and had him help select the planner, membership marketing director and management firm.

Each new consultant was included in hiring the next person.

"It caused us all to work harder because we all became part of the selection as well as implementation process," Jones said. "Even through the (Persian Gulf) War and this recession, they've sold over \$10 million worth of property. And they already have 300 members."

Selecting an architect is not easy. It requires considerable research and a decision on the designer's main function — a marketing tool, creator of a quality design, "or hope-



fully both," Jones said.

The first step in selecting an architect is looking at his past work, Jones said. Talk to former clients.

You can't build a character-less golf course and be successful. They aren't visual amenities for real estate developments anymore.'

— Rees Jones

Meet the designer's staff and discover who will be involved with the project. And ask as many questions as possible about the

design process.

The Colonial Williamsburg Foundation did an excellent job of researching potential architects when it came time to add another course, Jones said. After narrowing the field to five candidates, the Foundation put together a selection committee consisting of the head pro, superintendent and three vice presidents.

Committee members visited each of the architects' offices. They met the entire staff and invited each

Continued on page 10

1890

1897

1915

1920

1927

1929

1930

1942

1954

1966

1970

1980

100 Years of Innovation... Culminate in Golf's Most Efficient Irrigation System

Come see what's really new in golf course irrigation technology at Hunter's GCSAA Show Booth #1756. While there, register to receive a free copy of our new poster, "Innovations In Golf," an illustrated history of the game.

1992
Golf 500
Today's Most Energy and Water-Efficient Sprinkler

1992
ETC Controller
The Industry's Most Intelligent Field Satellite

CIRCLE #108/GCSAA BOOTH #1756

Hunter® The Irrigation Innovators

1940 Diamond St. □ San Marcos, CA 92069
619 / 744-5240 □ FAX: 619 / 744-7461

Ed Seay, Rees Jones, Tom Fazio, P.B. Dye share

Continued from page 9

architect, or one of his representatives, to play at one of the architect's courses with them. The committee completed the process with each of the five candidates before making a decision.

"After we completed the course, we got a letter from the developers saying we'd given them everything they wanted," Jones said. "That was the ultimate compliment. But they have to credit themselves to some degree because they did the

research."

Before hiring an architect, a developer should know what additional things the architect will do, such as preparing videos, being present on key occasions, meeting the press, doing television appearances.

"In many communities, the biggest event is the building of the golf course," Jones said. "It becomes a newsworthy event. In Augusta, Ga., they had a half-hour television program on the development of Jones

"Telling the architect, 'Here's \$3.5 million, now build me another Pebble Beach or Augusta National,' is simply unrealistic."

— Ed Seay

Creek Golf Club because golf is so important in that area."

Once the architect is chosen, listen to him regarding approvals, zoning requirements, planning,

marketing, and perhaps most importantly, the selection of a contractor, Jones advised.

RIGHT CONTRACTOR CRUCIAL
Hiring a competent contractor



may be harder than hiring the right architect, he said. Golf course construction is very specialized. Unqualified contractors can leave a developer with problems for years to come.

In addition to the architect's input, developers should also check a contractor's past sites, talk to clients, and make certain the contractor can complete the job in a reasonable schedule.

Regardless of course type — resort, daily-fee, private, real-estate development — developers should know what they want and then communicate it to their consultants.

"Too often we're not told who developers want to market the course to. Sometimes they just keep their fingers crossed and hope people will like it," Jones said.

Many older courses are being rebuilt because builders moved little earth when they were originally constructed. Many members scream and yell at the changes. At Congressional Country Club in Bethesda, Md., Jones presented his renovation ideas at a meeting of 400 members. The subsequent membership vote was 650-490 in favor of his proposed changes.

"Now that it's re-opened, it will host the U.S. Senior Open in 1995 and you can't find any of the dissenters," Jones said.

One developer asked why golf course development costs have risen 250 percent over the past six years while the general inflation rate climbed just 50 percent.

Courses cost different amounts in different parts of the country, said Jones, who told about a lakefront golf course he designed near Greensboro, N.C., that cost just \$2.5 million.

"But we got dirt moved for 85 cents a yard. In Williamsburg, the first price we got was \$5 per yard. When you go to California you have more irrigation costs. In the Northeast you have wooded sites, and you can't get rid of the timber by burning it. You have to carry it off. On islands, you have to import equipment. But in the Southeast and Southwest, you can still build pretty reasonably priced golf courses."

Jones concluded: "There are great golf courses, well-conceived courses and ill-conceived courses. Regrettably, there are too many ill-conceived courses that could have been avoided if the owners had done the proper research before they got on the roller-coaster and couldn't get off."

COMMUNICATION IMPORTANT

Communication is the key once all the consultants, including the architect, are in place, according to Seay. Only by asking questions can a developer understand how much a job will cost and when it will be completed.

To improve communication and reduce surprises, Seay has started having the owner's representative and the contractor complete a daily



After More Than Four Decades In The Business, We're An Overnight Sensation.

When your workers are willing but your machinery is unable, it's good to know Bunton can deliver replacement parts for any Bunton mower to any place in America in 24 hours or less.

We're a stone's throw away from the UPS hub in Louisville. Within minutes after you call us and place your order, we can have the part you need on a plane so it's in your hands the next morning. As a result, your crew experiences less down time and you keep your inventory to a minimum.

Few manufacturers can deliver a higher level of parts service. If you're choosing a mower for your commercial or golf course maintenance needs, choose one with close ties to the world's largest package distribution company. Bunton not only builds 'em better. We back 'em better.



4601 East Indian Trail • Louisville, Kentucky 40213 • 502-966-0550

CIRCLE #110/GCSAA BOOTH #2246

measures and methods to best plan projects

report. The report asks three things:

- What did you do today? For example, how many yards of earth were moved or feet of pipe installed?

- What are you going to do tomorrow? Tell everyone, so no one is surprised.

- Are you on schedule and within budget?

"There is nothing more important than that daily communication," Seay said.

While communication is to be sought, comparisons are to be avoided, Seay said. Telling the architect, 'Here's \$3.5 million, now build me another Pebble Beach or Augusta National,' is simply unrealistic.

"That wouldn't even buy the irrigation system for nine holes at Augusta," he said. "Yes, you can build a nice course for \$2.5 million. But don't be unrealistic."

Careful, sophisticated and flexible funding is the most important thing of all, Seay said.

Dye said selecting a top-notch superintendent, and bringing him aboard early in the development process, is as important as selecting a good architect.

"If you don't end up having a good golf course superintendent, you're looking at a \$3-million to \$4-million project, or even upwards of a \$30-million project, that won't look very good," Dye said.

"No matter who you choose for a designer, make sure that your designer and someone who understands golf help you select your golf course superintendent."

The architect can use some of the bad material unearthed in the residential development within the golf course, Dye said.

"The golf course has the most flexibility," Dye said. "If you say you've got to find someplace to put 30,000 yards of fill, we'll find someplace to put it. On-site decisions can be made like that when the architect is there. Whether a tee box is elevated two feet or 15 feet is just a matter of a set of steps."

"If you're an owner with 100,000 yards of muck you have to get rid of, I'd rather lose it on the golf course than truck it out at \$4 a yard. I'll put it in the golf course somewhere. But you have to compensate me with my budget so that I don't spend all my money losing your real estate's bad material. There has to be a little give-and-take."

ECONOMICS ARE CHANGING

The five-fold increase to build a basic course in the past dozen years has shocked Fazio. Competition between developers and designers trying to outdo one another have pushed prices upward.

Also, developers can no longer wait for trees to grow or grass to take hold. To meet the competition of nearby developments, a new course has to be perfect from day one. Anything less and the course is a failure, Fazio said.

"We've gone from not using very little sod in the late 1970s to sod-

ding every square inch of a golf course, so that when it opens the conditioning is on a caliber with that Augusta National quality," he said.

Those days are changing, however. Economics will be much more important in the 1990s, Fazio predicted. Designers and developers will have to be innovative in the coming decade to build courses that are perfect from Day One at a lower cost.

New, low-maintenance grasses



'No matter who you choose for a designer, make sure that ... someone who understands golf helps you select your golf course superintendent.'

— P.B. Dye

could bring prices down by reducing chemical and water use and requiring less labor, he added.

Existing courses will increase in value because of the difficulty of

obtaining permits for new courses, Fazio predicted. Consequently, architects should find significant renovation work available.

The need for public courses and

a tight economy should result in more reasonably priced public courses on non-difficult sites, Fazio said. Most hard sites will be passed over until environmental and economic climates improve.

More golf courses will be financially split apart from the master residential plan, Fazio said. Someone other than the real-estate developer finances the golf course and operates it on a daily-fee basis until the economy improves and it can be converted to an equity club.



One that's dependable, yet economical. One that won't color you or your cart paths a sick

is Pennant®. And although it's brutal on stubborn weeds,

your bahiagrass and Bermudagrass beautiful, your centipedegrass stunning, and your St. Augustinegrass awesome.

UNLESS YOU MANAGE FAIRWAYS LIKE THIS, YOU NEED PENNANT HERBICIDE.

it won't stunt or otherwise harm the warm-season turfgrasses on fairways as well as non-

Apply Pennant by impregnating it on fertilizer or simply spraying.

Since weed protection lasts up to 4 months, all you'll have to worry about in the meantime is too much rain, too little rain, too many pests, and divot-digging golfers.

Weeds are to turfgrass what hot, sticky wads of gum are to astroturf. They're aggravating, unyielding, and downright offensive. So in order to keep weeds off of your turf, you need a tough preemergence herbicide.

shade of orange. And one that will take care of annual sedges, crabgrass – even yellow nutsedge. The only herbicide that meets all these criteria

So you can use Pennant to keep

PENNANT

© 1991 CIBA-GEIGY Corporation, Turf and Ornamental Products, Box 18300, Greensboro, NC 27419. Always read and follow label directions.

Sherman Hollow's no-chem proposal denied

Continued from page 1

Developers claimed the use of Green Life Conditioner, a supposedly non-toxic and organic substance that frees naturally occurring nutrients in the soil for use by turf, would make chemical pesticides and fertilizers unnecessary. The board concluded there was insufficient evidence to support those claims.

The board said the most significant defect regarding waste disposal was the failure to submit information concerning the ingredients in GLC.

The board required a list of pesticides and fertilizers that could be applied to the golf course, including information on mobility and solubility. The developers claimed that was no longer necessary since GLC would make fertilizers and pesticides unnecessary. The only addition to GLC was a top dressing and those ingredients were submitted.

The board found that "GLC is analogous to fertilizers because it is a substance applied to land to promote plant growth." Claiming GLC is organic and non-toxic did not free developers from providing a list of ingredients. Developers claimed those ingredients are trade secrets and instead provided a product label and priority pollutant scan. The board found those insufficient.

"Without this information, it is not possible to reliably judge the behavior of GLC and its water pollution impacts," the board concluded.

The developers countered they had received a letter from Dr. William Bress of the Vermont Department of Health stating that applying GLC will comply with Vermont Drinking Water Health Advisories and they had also received a draft discharge permit from the Agency of Natural Resources. The board ruled those were not enough.

Concerning streams and water supplies, the board determined the pond and four wells proposed for irrigation would not provide enough water during July and August. That could force course managers to draw water from on-site streams, affecting existing water supplies, it argued.

Developers estimated the pond and wells could provide one inch of water weekly. But irrigation needs in July and August are expected to be 1-1/4 inches.

Developers claimed GLC would result in a 10-percent reduction in water needs. But the board claimed there was no scientific evidence that would happen.

"Because the sources which the applicants plan to use will not provide enough water to meet their needs during these months, the applicants will be forced to use other water sources," reads the report. "Use of such sources may affect the natural condition of Sherman Hollow Brook and other nearby streams and may present a burden on nearby wells.

"Unless the applicants can propose additional water sources, which they can prove will not have such effects, the board cannot issue a permit."

Finally, the board ruled there

could be serious soil erosion during and after construction. Developers submitted an extensive soil erosion control program during construction, but the board felt it was insufficient regarding protection of stream banks, stump burial within preserved tree stands and the use of an oat seed rather grass seed for winter erosion control.

More importantly, the board concluded that without use of fertilizers, turf would not grow after construction. Without grass, the

combination of steep slopes running downward toward Sherman Hollow Brook, shallow permeable soils and limited capacity to absorb water would mean "unreasonable" soil erosion.

"The soils on the site have poor value in terms of plant nutrients," the report reads. "The applicants plan to use GLC and a small amount of top dressing to make up for this difficulty. The applicants claim, however, that GLC does not have nutrients in it, but rather frees the nutrients in the soil

through microbial action.

"The problem with this claim is that GLC cannot free nutrients which are not there. If the nutrients are not there, it is unlikely that turf would be established."

Three of the eight board members disagreed with the majority on the soil erosion issue. In his dissenting opinion, William Martinez said he was satisfied with developers' plans for a full-time erosion control officer and forester during logging and clearing operations with authority to

implement erosion control measures; weekly inspections by engineers; the adequacy of oat seed and rye grass plantings to control erosion; and expert testimony that erosion would decrease once a grass cover was established.

"These facts demonstrate to me that there will not be unreasonable soil erosion either during or after construction of this project," he wrote. "I believe that, even if the permanent turf does not become established, other grasses can be used to prevent erosion after construction."

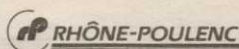


A TURF'S-EYE VIEW OF

What's really frightening about this vision is that every year your turf is seeing more of them. And it's this increased traffic that's making even your hardiest varieties more vulnerable to disease damage.

That's where CHIPCO® brand 26019 fungicide comes in. With its unsurpassed

control of Helminthosporium Leaf Spot and Melting Out, Dollar Spot, Brown Patch, Fusarium Blight and Red Thread, CHIPCO® 26019 is simply the best investment you can make to ensure the quality and play-ability of all your turfgrasses. It even protects against



Rhone-Poulenc Ag Company, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709. For additional product information, please call

Sherman Hollow developers file legal response to action

Truax declares findings 'distorted,' facts omitted

Sherman Hollow developers have filed legal documents claiming the Vermont Environmental Board was wrong to deny a golf course construction permit and asking the board to reverse its decision.

In its Motion to Alter Decision, Sherman Hollow Inc. claims the

permit should be issued "on the basis that the board erred in its conclusions and findings by distorting the evidence, omitting pertinent facts, erroneously shifting the burden of proof, making errors in applying the applicable law, and violating the appellant's due process rights by its actions during and subsequent to public hearings."

The developers also asked the board to seek the advice of an independent legal counsel who "has not exhibited bias in the matter."

If scheduling permits, the board will act on the developers' motion sometime in January, according to board spokesman Aaron Adler.

Following are excerpts from the conclusions of the 92-page motion:

"The board identified three main issues in its conclusion. The first regards the ingredients of the product (Green Life Conditioner). The board does not have the authority to violate the trade secret protection afforded in Vermont. The ingredients were, however, not

requested by the board in its 1989 decision, nor have they been required of other applicants using non-toxic products. The issue is whether the impact of fertilizers or pesticides will cause undue pollution. The appellant has submitted substantial and un rebutted presumptive and independent evidence that it will not.

"The second issue is the alleged failure to provide for an adequate water supply for irrigation. This is simply a problem of error or a dis-

tortion of the evidence. The board selectively culled the evidence, omitting certain components of the water supply equation, in order to deny the permit.

"The third issue is the probable failure to establish turf on the golf course. This is incomprehensible. All the factual evidence submitted by the parties demonstrates that the product will grow grass... most importantly the test plots grown on the site. In fact, grass is growing on the site, on slopes up to 35 percent, naturally, and without any organic or chemical management program. The board observed this on its site visit.

"The board has ignored the technology of the product and instead used a different technology (NPK) to judge the efficacy of the Green Life product. Since the product does not meet the NPK standards for completely different products, the board has rejected the established and scientifically sound technology.

"The most troubling aspect of this decision is in the pervasive distrust of the motives and actions of the appellant by the board. The board raised an issue in this decision which was not properly before the board: 'Whether the board has authority to deny an application because an applicant cannot be relied upon to properly implement the conditions.'

"The board has already ruled to preclude evidence on this matter at the hearings... The statement of this issue can only be to imply that this appellant is untrustworthy and dishonest.

"As the appellant has previously stated, neither the board, nor any other judicial or quasi-judicial body, has the right or authority to pre-judge future acts of any applicant... acts which have not yet occurred, may never occur and deny a permit based upon subjective speculation."

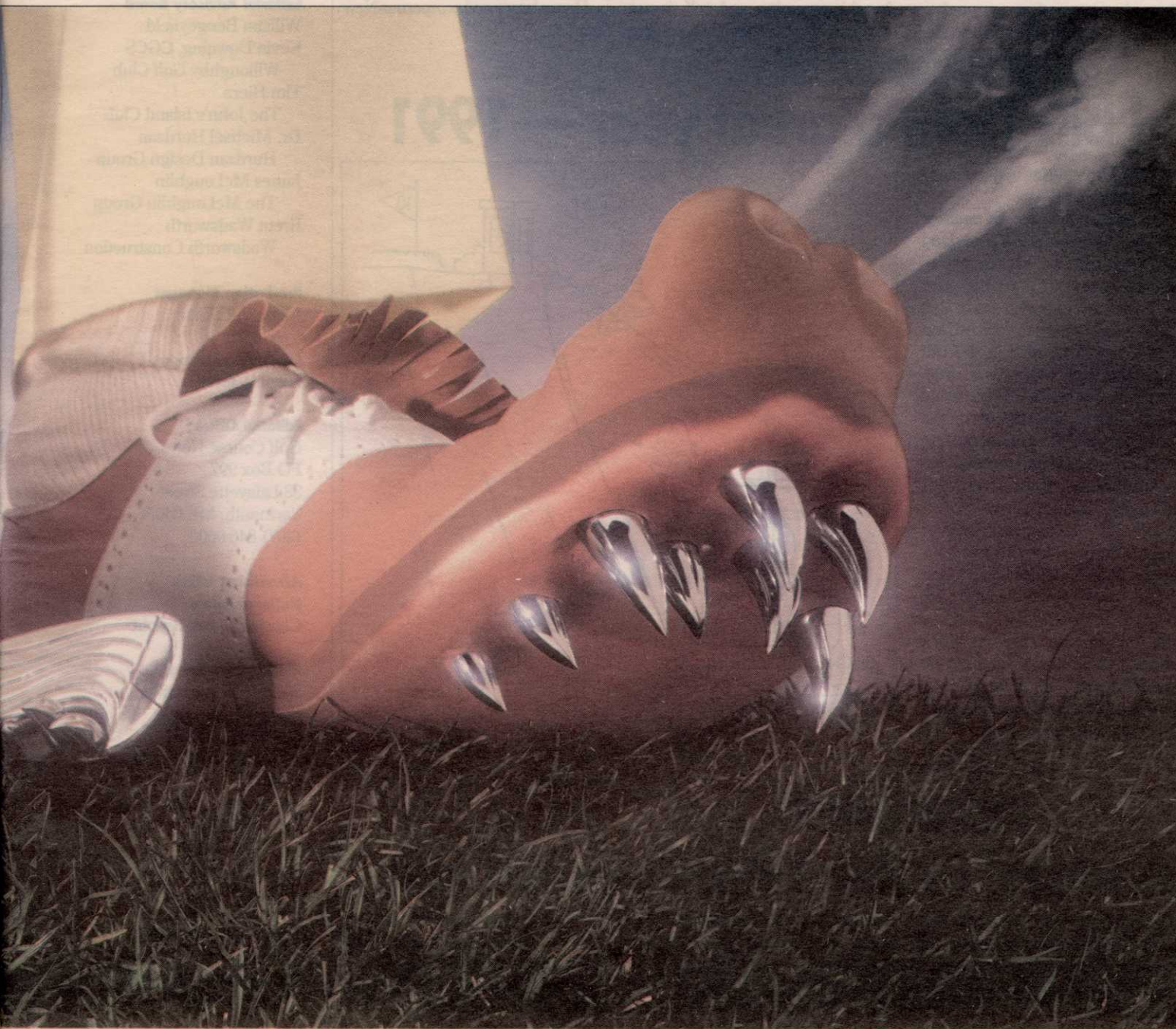
Mitsubishi pulls out of \$300M project

PORT TOWNSEND, Ore. — Though Mitsubishi Corp. has withdrawn as a managing partner in a 1,900-acre, \$300-million resort venture west of Port Townsend, developers retain an optimistic air.

Peninsula Partners feel new investors will be found for the proposed Cape Discovery Resort on the Strait of Juan de Fuca. They hope to open the facility, which would include two 18-hole golf courses, in 1996.

The destination/golf resort reportedly can not proceed unless developers find a new corporate player willing to buy out Mitsubishi's share in the partnership.

A tight money market was cited as the chief reason for Mitsubishi's pullout.



THE AVERAGE GOLFER.

Pink and Gray Snow Mold and Fusarium Patch.

And because CHIPCO® brand 26019 provides long-lasting control, and is registered for use on a wide variety of high-value ornamentals, you can keep more of your course



Chipco® 26019
Fungicide

disease-free all season long.

This year, take the bite out of traffic pressure with the proven disease protection of CHIPCO® brand 26019 fungicide. Available in wettable powder and smooth-pouring flowable formulations.

Reflecting back and looking forward for GCN

By Charles von Brecht

As I write this column on a flight, heading home to St. Petersburg, Fla., after barely escaping an all-night snowstorm in Maine, I reflect on the last few years of *Golf Course News*.



Charles von Brecht

Less than three years ago, it was a non-entity. We launched with a premiere issue at the '89 GCSAA show in Anaheim, Calif. I will remember that particular event forever with both fondness and

sadness.

Sadly, I buried my father just a day or two before we headed west and, quite frankly, I'm sorry that he is not here to share with me the success that *Golf Course News* has enjoyed. My fond memories of the show were the consistent positive comments from prospective readers and advertisers on the need for a publication like ours. That positive reaction has come to fruition as we end the year and begin a new one with this issue.

What's in store for 1992? You will see some consistent, though subtle, changes. Our commitment to the industry is stronger than ever, and our goal is to be the Number One publica-

tion in the industry. We're not far from that goal. Our average qualified circulation already has surpassed *Golf Course Management*, and we're growing significantly in ad pages as they decline.

We will introduce new editorial features in an ongoing effort to bring to our readers all the important news of the industry. We most likely will expand our staff to enhance our editorial quality and credibility. And we will add at least one more industry-related conference to our schedule in the coming year.

Many industries are suffering during this recession, and golf is not immune. But courses still are being

planned and opened coast to coast. The National Golf Foundation and our editors say 250-300 new courses will open in 1992. Added to that are many major renovations. It all adds up to increased business for suppliers and employment opportunities. Several of our advertisers tell me 1991 was their best year ever and they are planning for another good year in 1992.

A lot can happen in a year — and a year from now I will look back on this report and see just how we're doing at that time. I look forward to another positive update.

Have a happy and prosperous New Year!

COMMENT

Some tidbits and bits from a great year — 1991

By Mark Leslie

Some odds and ends, favorites and not-so-favorites picked up from the wonderful year of 1991.

Some of my favorite tidbits come from the fall hurricane season. Here are a few:

How do they get those ships in the bottles?

My favorite story from Hurricane



Mark Leslie

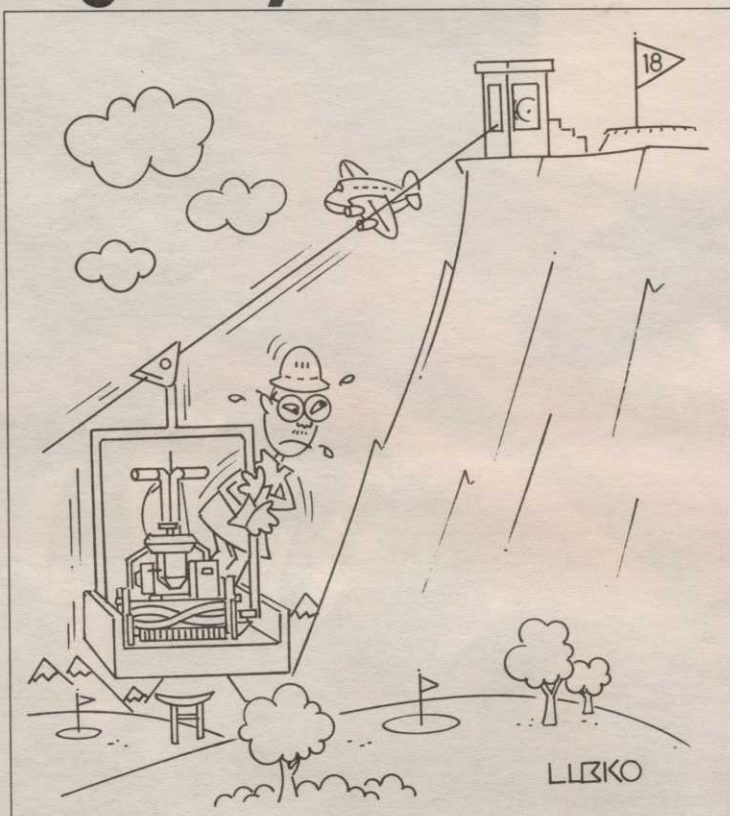
Grace, which tore into the Atlantic Coast last fall, came from Cape Cod, Massachusetts. The story goes like this: Driven by 78-mph winds, ferocious waves crashed ashore and drove a house partially off its foundation. Another wave deposited a boat in the basement, and yet another moved the house back close to its original position on the foundation. When the owner arrived and walked down the cellar steps, what to his wondering eyes should

appear? A boat sitting in deep water in his basement!

A storm, a cleanup, an auction: "I've got a propane tank here. Do I hear two? Yes, two, over here. Can anyone raise that? A refrigerator? Yes, a refrigerator over here. Can anyone top a refrigerator? A Catamaran from that man in the red shirt. That's our bid, a Catamaran. Do I hear... A house!?" Hurricane Grace left a lot of memories on the East Coast. But most memorable to some golf course superintendents were the things left on their courses by the flooding ocean waters.

The Mr. Community Service Award: Step on up and get your plaque, Rich Caughey. The superintendent at Wetherly Country Club in North Scituate, Mass., Caughey put his six-man crew to work clearing three feet of sand off the North Scituate and Minot roads so people could return to their homes following Hurricane Grace.

Best quote in the wake (sorry for Continued on page 33)



GUEST COMMENTARY

Golf's 'Megafactors' in the 1990s spelled out

By Steven H. Lesnik

Golf in the 1980s was like John Daly's swing: big, successful and something the game had rarely seen before. It was the "grip it and rip it" decade of easy money. If a project saw any early promise, financing wasn't far behind.



Steven Lesnik

While today's financial conditions are much different, they aren't the only thing affecting golf management. The industry is more complex, more demanding, yet for those who succeed, more rewarding.

If the 1980s was the decade of golf speculation, the 1990s will be the era of the double-edged sword in golf.

The pros and cons of golf as big business will become more apparent than ever in the 1990s as real-

ism replaces euphoria, and economic conditions separate true golf operators from golf speculators. It will be an era that requires sound management.

The need for more stringent business practices and philosophies is caused by a variety of factors that will affect everyone in the business.

These factors are so pervasive I call them "Megafactors." I don't think anyone is likely to escape their impact.

How each of us responds to these Megafactors will ultimately determine our success. Of course, some issues will affect each of us differently. Circumstances may cause one or more of the Megafactors to work in one's favor in one part of the country while they might be to one's disadvantage in another region.

Overall, though, I believe the Megafactors will be a net plus. From potentially most harmful to potentially most helpful, the Megafactors I see are:

• *Scarcity of capital:* Golf devel-

opment is a capital-intensive business. To flourish, it requires patient capital — a plentiful resource a few years ago, but scarce in today's domestic credit market, especially at S&Ls that historically have been the financial backbone of real-estate financing.

Despite less-than-rosy economic circumstances — tight domestic commercial credit, similar financial restrictions in Europe, government policy-makers preparing the economy for an election year, and wary Japanese investors who hang in the balance — it's my view that economically sound projects will nevertheless continue to attract discerning investors.

• *Environment:* Environmental hurdles are rising higher and higher. Golf course development is a visible enterprise that uses large tracts of virgin land near affluent population centers. It, therefore, attracts interest groups who, like responsible members of the golf industry, are committed to pre-

serving wetlands, wooded conservancies, natural sanctuaries, wildlife habitats and waterways.

As more open space is devoured through urban sprawl, environmental pressures will continue to mount on golf developers.

• *Competition:* The National Golf Foundation says America needs many more golf courses. That's surely true, on a national basis. On a micro basis, however, there is such a condition as too much of a good thing. Parts of the country have become sated, where competition is fierce and another golf course is not a "no-brainer" recipe for success.

Chicago, a golf market that has grown substantially in recent years, is one example. Competition in Chicago's upscale daily-fee market was virtually non-existent a decade ago. Today, that niche boasts a number of fine facilities and is highly competitive.

• *Need for land:* A first-class fa-

Continued on page 15

GOLF COURSE NEWS

Publisher

Charles E. von Brecht

Editorial Director

Brook Taliaferro

Managing Editor

Mark A. Leslie

Associate Editor

Peter Blais

Contributing Editors

Kit Bradshaw

Vern Putney

Bob Spiwak

Editorial Advisory Board

William Benneyfield

Kevin Downing, CGCS

Willoughby Golf Club

Tim Hiers

The John's Island Club

Dr. Michael Hurdzan

Hurdzan Design Group

James McLoughlin

The McLoughlin Group

Brent Wadsworth

Wadsworth Construction

Production Manager

Joline V. Gilman

Circulation Manager

Nicole Carter

Editorial Office

Golf Course News

PO Box 997

38 Lafayette Street

Yarmouth, ME 04096

(207) 846-0600

Advertising Office

National Sales:

Charles E. von Brecht

Marketplace Sales:

Simone M. Marsteller

Golf Course News

7901 Fourth St. North

Suite 311

St. Petersburg, FL 33702

(813) 576-7077

West Coast Sales

Wayne Roche

James G. Elliott Co.

714 W. Olympic Blvd.

Suite 1120

Los Angeles, CA 90015

(213) 746-8800

United Publications, Inc.

Publishers of specialized business and consumer magazines

Chairman

Theodore E. Gordon

President

J.G. Taliaferro, Jr.



CHARTER MEMBER

Copyright © 1991 by United Publications, Inc. All rights reserved and reproduction, in whole or in part, without written permission from the publisher is expressly prohibited. POSTMASTER: Send address changes to Circulation Manager, *Golf Course News*, P.O. Box 3047, Langhorne, PA 19047.

GOLF COURSE NEWS

In defense of Cape Cod study

To the Editor:

The New York Attorney General's office attacked Long Island golf courses this summer in a report that contained some interesting facts and survey results, much conjecture, and much sensationalist anti-pesticide, anti-golf course verbiage (GCN, Sept. '91 pp. 1, 17, 19).

When Dr. Michael Sorgan, a coauthor of the AG's report, criticized the Cape Cod study, I responded with a professionally written, scientific point-by-point defense (GCN, Oct. '91, p. 13). (I was the director of the study, and published the results in February 1990 in two publications.)

Sorgan then attacked my defense and some statements made by GCSAA President Stephen Cadenelli (GCN, Dec. '91, p. 11.)

Before I soundly rebut Sorgan's attack once and for all, I would like to make some general comments.

First, this type of politicized polarization of the golf course issue, which the AG's office began last summer, is becoming passe among many of the elected and career officials with whom I deal around the country.

Increasingly, I find them willing to listen to science. This science takes the form of the state-of-the-art risk assessments and monitoring efforts, coupled with detailed integrated golf course management plans (IGCMPs). The IGCMPs use proven techniques of integrated pest management, fertilization, construction, etc. to maximize the health of turf and minimize the need for pesticides.

It is a developing government/golf industry/citizen partnership that is leaving behind organizations that issue anti-golf course reports

with a questionable basis.

Second, people who really care about the environment should be careful about issuing reports such as "Toxic Fairways" (the AG's report), because others may ignore whatever good recommendations and information the report contains. The AG's report actually contains some good recommendations and useful information, but the average person knowledgeable in this area would probably not take this report seriously since it is mostly just a diatribe. Also, irresponsible attacks such as this can sometimes cause the pendulum to swing in the other direction, away from the environmental cause.

Dr. Sorgan's second set of remarks to the press can be rebutted as follows.

The depths of the monitoring wells were appropriate for detecting shallow contamination. This was thoroughly explained in my GCN letter (Dec. '91, p. 11), and supported by references to two peer-reviewed publications, one of which presented the results of the Cape Cod study, the other discussed results from Long Island (the subject of "Toxic Fairways"). Sorgan skipped right over the science—the peer reviewed literature—and cited a report on our study that was written by people whom I never met and who never participated in the study.

Had he looked in the appendix of that Cape Cod report, he would have noticed that no justification was provided for the statement "...in one case the top of the screen was 11 feet below the water table." This statement is wrong. One need only to look at Table 1 of our Cape Cod

paper published in the peer-reviewed literature (*Ground Water Monitoring Review*, vol. 10 (1), pp. 160-173) to see that the greatest screen-top depth had to be shallower than 9.5 ft, depending on the thickness of the bottom plug and/or well foot. Even the Cape Cod Commission report Sorgan cites states "...the tops of the screens mostly range from 2 feet below to 2 feet above the water table."

The response to Cadenelli's remarks that discuss pesticide use rates was misleading. While it appears the Sorgan's December statement regarding use rates may be true ("...Long Island courses reported annual application rates up to 22 pounds of active ingredient per acre"), Table 1 in the "Toxic Fairways" report, which he coauthored, also contained other relevant information.

For example, it is interesting to note that the average use rate is 7.7 lb/acre. Also, approximately 22 of the 52 golf courses reported in the GA's reports has pesticide use rates within the Cape Cod range quoted by Sorgan in his December letter (2.7-4.4 lb/A).

Although I agree that it can be difficult to extrapolate results from one study site to another, one must be careful about making sensationalist remarks regarding pesticide use rates, especially when one represents a government agency.

Placement of the wells was in or immediately adjacent to managed turf areas. Wells were placed to maximize the chances of detecting turf chemicals, within the constraints of practical considerations and the need to obtain results from different management areas—tees, greens, fairways, and background.

Although we can't all be geniuses and place the monitoring wells 1800 downgradient of potential contaminant sources all the time, we can try. And in this case we were mostly successful.

Even in those areas where we may have been cross gradient, the influence zones of these wells generally would have been able to capture turf chemical leachate anyway. (Remember that ground water seeps slowly rather than flows quickly, unlike a turbulent stream, and therefore is more susceptible to well capture. Also, note that the wells were installed on the golf courses, not off site.)

The proof is in the results. The detection pattern followed our initial design hypothesis that was tied to turf management strategies—more detections and more different chemicals were found in tee and green wells than in fairway and background wells.

Dr. Sorgan's letter was professionally written until the last paragraph. I have have disagreed with some of his points, and he may have been hamstrung by the AG's report, but it could have been one of these issues where professional people just agree to disagree, and walk away without enmity.

Unfortunately, Sorgan decided to get personal in the last paragraph. In 11 years as an official with the U. S. Environmental Protection Agency, I never wrote such an arrogant potshot. While I don't pretend to be wise enough to offer career counseling for Dr. Sorgan as he has done for me, I would counsel his supervisors to review his correspondence in the future.

However, this can be taken with a grain of salt. For I am still naive enough

to believe that good science will win out over bad politics in the long run, although there may be momentary setbacks along the way.

Sincerely,
Stuart Z. Cohen, Ph.D.
Environmental & Turf Services, Inc.

Apathy, excuses are the culprits

To the Editor:

Your trade newspaper does a good job of keeping people up to date on golf course issues, but please spare us your personal views on abortion and prayer in schools. They have no place in this paper. Apathy and excuses instead are leading the country into a reduction in personal rights.

Secondly, don't accuse the research community of apathy and lack of interest. Obviously you are unaware of the demands placed on us. As a student in turfgrass management, I see budget cuts continually reducing research funds and increasing work loads. A researcher is very willing to present the facts "armed with research documentation to help quell the storm." However, the same storm quells up repeatedly with the same arguments, as if the research wasn't presented at all.

Education of the public must be done by everyone in the industry, and not just as a potential marketing angle, but to deal with the real environmental issues we face.

Sincerely,
Paul G. Johnson
St. Paul, Minn.

Please mail letters to: *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.

'Megafactors' will drive golf industry through the decade

Continued from page 14

cility requires a minimum of around 150 acres. In urban settings, however, that much land is unavailable, unsuitable or too expensive to develop. Land is becoming scarce in the suburbs ringing our urban centers.

As a result, golf courses are springing up in ever-widening circles outside population centers. The question at hand is, How far out can one afford to go? And how far behind will the players be?

- *Imagery:* Consumers are heavily influenced by imagery and marketing. For almost 50 years the golf industry has been a marketing case study — without even trying. Each of the most recent several decades had signature influences. Ike in the 1950s. Arnie and his army in the '60s. Jack's dominance in the '70s and early '80s. And the Tour and Senior Tour in the late '80s.

It's probably too soon to forecast who or what trend will dominate the '90s. But it's worth noting that while sports TV ratings, including golf, are trending down, sponsorship interest in golf remains strong. Of the five sponsors who didn't extend their relationship with pro events, four have already been re-

placed. And more and more special events fill the airwaves and links.

- *Foreign investment:* A sluggish U.S. economy and the aftereffects of the Persian Gulf War have slowed the pace of foreign investment here. But the allure and prestige of owning a real piece of America, still regarded worldwide as perhaps the safest place for parking cash, will continue to be a powerful motivator to foreign money.

- *The economy:* The economy will eventually pull itself out of the current recession. When that happens, the undisciplined cash of the 1980s undoubtedly will no longer be readily available.

However, even a modestly growing economy should assure a reasonable amount of capital for golf, housing, investment and other capital-dependent ventures.

Overall, it's my view that the economy will help the golf industry more than hurt in the '90s.

- *Leisure time:* Leisure time studies often draw conflicting conclusions. Some, such as one conducted by the University of Maryland and by Michigan's Survey Research Center, say Americans enjoy 39 hours of leisure time weekly. Another, by the National

Research Center of the Arts, found that "Americans report a median 16.6 hours of leisure time each week."

The truth probably lies somewhere in between.

The trend toward longer weekday work hours and more overtime has produced a greater emphasis on week-end leisure activities and is likely to result in affluent consumers spending more leisure time and dollars on weekend golf in the '90s. But watch out for those weekday afternoons!

- *Quality:* The indiscriminate excesses of the 1980s are passe. Consumers today demand more value and quality from the things they buy and do.

The quest for basic quality will apply to golf, too. Building quality into both new and existing golf facilities will be more likely to attract players, members, buyers and investors in the '90s than ever.

- *Demographics:* The average age of all golfers, according to the NGF, is 37-1/2 years, which puts more golfers in the middle of the 1990s' most influential group: baby boomer Americans born between 1946 and 1964, who already represent 25 percent of the population and by the

year 2000 will control 40 percent of its purchasing power.

As this enormously powerful generation matures, raises its income and has more time to play golf, the game's growth will accelerate and gather momentum into the next century.

After all, the oldest baby boomers will only be 54 in the year 2000. And when they turn 36 in 2000, the youngest boomers will be entering the "sweet spot" of golf marketing.

- *Management:* Love of the game used to be all a golf manager needed in the 1980s. Easy money distorted the value and need for effective management.

In the 1990s, it's going to take more than luck, love (of the game) and liquidity. Golf is big business that requires rigorous financial and operational management.

Furthermore, golf consumers are more sophisticated than ever, which means the margins for error in serving patrons grows smaller and smaller.

- *The game:* Strip away the spreadsheets, P/L statements and pro formas, and what remains is the game itself, our most important element and advocate. There is something compelling about golf's

enduring simplicity, drama and aestheticism. No other game I know of challenges man to overcome himself and nature in quite the same way as golf.

Since its creation by the Scots (or was it the Chinese?) hundreds of years ago, golf has evolved to become a game that reveals human frailties and strengths: character, perseverance, spirit, anguish, frustration, joy and satisfaction, to name a few.

"What other people may find in poetry or art museums," Arnold Palmer once remarked, "I find in the flight of a good drive — the white ball sailing up into the blue sky, growing smaller and smaller, then suddenly reaching its apex, curving, falling and finally dropping to the turf to roll some more, just the way I planned it."

It is, after all, why we're in this business.

Steve Lesnik is president and chief executive officer of Kemper Sports Management in Northbrook, Ill. Kemper Sports develops and manages golf facilities nationwide, including 1989 PGA Championship site Kemper Lakes. He serves on the Illinois PGA Advisory Committee.

This may be the most beautiful golf car you've ever seen.



She's been around awhile. Up and down countless hills. Carelessly smashed and violently thrashed. Stuck, struck, rocked, rolled, bumped, bruised, used and abused.

Yes, she's worn. But worn out? Not yet.

That's because she's a Yamaha. And the beauty of that distinction? She's a tougher car—built with tougher standards. So Yamaha cars, gas and electric, outperform and outlast all others. On your course and your bottom line.

So if you're not driving a Yamaha fleet, you're not driving the kind of revenues you could be. And that's trouble. But doing something about it is no trouble at all. Just give us a call at 1-800-447-4700. We'll show you some real beauties.

YAMAHA USA
Better in the long run.

CIRCLE #101/GCSAA BOOTH #1634

Briefs



LAKE CITY CC PLANS CO-OP

Lake City Community College would like to hear from courses interested in being summer co-operative training sites next summer.

All programs in golf course operations, landscape technology, and turf equipment management require co-op.

The school is looking for quality sites that will provide meaningful training for the students.

They are asked to notify the school immediately of how many golf course, landscape, and/or golf mechanic students their sites could effectively handle.

The students will be making the employer contacts for site selection.

More than 20 golf course mechanics will be available for employment starting in May.

People should contact John R. Piersol, chairman; Division of Golf Course Operations; Landscape Operations; Lake City Community College; Rt. 3, Box 7; Lake City, Fla. 32055.

USGA ADDS WESTERN AGRONOMIST

Patrick Gross has joined the U.S. Golf Association Green Section as an agronomist in its Western Region office.

Gross, head superintendent at Industry (Calif.) Hills Golf Course's Eisenhower Course the past three years, will work with Western Region Director Larry Gilhuly and agronomist Paul Vermeulen out of the Pebble Beach, Calif. office.

Gross will make Turf Advisory Service visits in California, Arizona, Nevada, Utah, Oregon, Washington and Idaho.

"With the growth in that area of the country, we decided we needed a third person for that office," said USGA Green Section National Director Jim Snow.

Gross was also superintendent at Shandin Hills Golf Course in San Bernadino and assistant superintendent at Hacienda Golf Club in La Habra Heights.

He has a bachelor's degree in ornamental horticulture from California State Polytechnic University.

INDEPENDENT STUDIES SOUGHT

Golf Course News is calling for leads on turf runoff research that has been done or is planned at golf courses.

In order to add substance and bulk to the body of scientific knowledge, we are asking superintendents and others to let us know about any research they know about.

Please contact Stuart Cohen at Environmental & Turf Services, Inc., 11141 Georgia Ave., Suite 208, Wheaton, Md. 20902.

Cohen will follow up any lead and compile the results to be summarized in a report for the industry.

Cohen said he has discovered instances of isolated, limited studies of golf course runoff or leaching. Usually, those studies are never publicly released, he said.

TPC at Sawgrass wins players' vote

By Vern Putney

Christmas came a few hours early for Fred Klauk, superintendent at Sawgrass' TPC Stadium Course in Ponte Vedra, Fla., an apprehensive stop on the PGA Tour late last March.

Tour pros, extremely critical in 1990 of the layout's somewhat ragged appearance, in December voted it the best conditioned resort course on the 1991 tour schedule.

News of this turnaround, relayed to Klauk at a TPC Christmas party at nearby Marsh Landing Country Club, was cause for further celebration, and stamped Klauk, his staff and TPC as the comeback story of the year.

First to learn of the glad tidings were Klauk's wife, Peggy, and PGA Commissioner Deane Beman, an annual holiday attendee. Beman shared Klauk's elation. He had huddled with Klauk to discuss redemption

Best golf course architect: Story, page 27
Best golf course builder: Story, page 27
Best resort developer: Story, page 45

and regained reputation soon after that bleak 1990 period when Sawgrass was torn apart verbally by the players and flayed in the press.

Hard as it was not to share such good news, Klauk held off announcement until Sawgrass' "family" gathering the next day.

The balloting by mail and phone was dramatic. With five minutes to deadline in the voting, Larry Mize had moved Callaway Gardens Country Club of Pine Mountain, Ga., into a tie.

Then came a call from Wayne Levi of New Hartford, N.Y., 1990 PGA Tour Player of the Year. "Sawgrass," he said emphatically. "It was in perfect shape, from tees through fair-

ways through greens.

"The practice area was immaculate, the practice tees better than many tour fairways."

Levi did not play Callaway Gardens because of Ryder Cup conflict.

Early poll results showed well-scattered course support, but it finally came down to a two-course race.

Doral Country Club, in Miami; TPC of Scottsdale in Phoenix, Ariz.; TPC at Las Colinas in Irving, Texas, and TPC at The Woodlands in Woodlands, Tex., shared third place in the voting.

Other courses favored were Harbour Town Golf Links in Hilton Head Island, S.C.; Kingsmills Golf Club, Williamsburg, Va.; Innisbrook Resort, Tarpon Springs, Fla., and TPC at Star Pass, Tucson, Ariz.

Klauk and his crew of 52 forged perhaps the biggest turnaround in tour history.

Continued on page 43



Views are magnificent, but the challenge most difficult for the maintenance crew at the Resort at Squaw Creek in Olympic Valley, Calif.

Squaw Creek living under no-chem rules

By Doug Saunders

The first hints of winter have hit the High Sierra. For Carl Rygg, head superintendent of the Resort at Squaw Creek, the time has come to put his game plan into motion.

The challenge for Rygg is unique in golf course maintenance. He must develop a systematic plan to protect the grasses of this new course from the ravages of the difficult winter weather at this mountain setting. His task is even more difficult because he must develop a system that won't have the normal tools at a superintendent's disposal—fungicides and herbicides.

The Resort at Squaw Creek is a Robert Trent Jones Jr.-designed course that opened last September in Olympic Valley, Calif. Located at 6,200 feet at the base of Squaw Valley USA, the site of the 1960 Winter Olympics, the 18-hole layout winds up onto tree-lined mountainsides and flows out onto an Alpine meadow that contains many acres of fragile wetlands.

The valley receives an average of 300 inches of snow a year and from September until early June can see everything from monsoonal rains to the heaviest snowstorms imaginable.

In securing permits to build the course, the developers, Perini Land and Development, went through countless hearings over seven years.

Permits needed to be secured from two local boards, one regional board, and the

Army Corps of Engineers. The persistent concern at every stage was the effect of any runoff of nutrients and pesticides into the creek that flowed through the proposed course site.

The Sierra Club filed suit over the validity of the Cape Cod Study findings as they pertained to a mountain environment, and obtained the stipulation that a complete simulation for that study be performed on the site. The developers had this done over three years at a cost of \$500,000.

After 27 plan changes and numerous hearings, final approval was obtained in 1988. But the restrictions imposed made the Resort at Squaw Creek an immense maintenance challenge.

"The final approvals by the planning commission set up a Chemical Application Management Plan (CHAMP) that explicitly controls all phases of golf course maintenance," Rygg said. "Their intention was to put specific controls upon the course that would protect the creek and not adversely affect the natural aquifer of the meadow."

But in its hopes to be thorough, the board obtained input from one source on what it would take to maintain a course with minimum chemical use in a mountain environment. The suggestions of this one source became the rules for the Resort at Squaw Creek.

Every phase of maintenance, from types of

fertilizers to the weekly water used, has been spelled out and must be adhered to at all times. This makes for a very restrictive program under which Rygg must work. The use of herbicides is limited to only Roundup, but this nonspecific herbicide is virtually useless in developing a championship quality golf course, Rygg said.

"The CHAMP program — which is 12 volumes in length and contains five chapters of specific stipulations — also allows me to use MCPP-2,4-D but only after I have tried every feasible method of weed eradication I can," Rygg said. "I plan to use a large labor force to hand-pick weeds. But if I have a force of 25 workers and a weed problem continues, I must hire more workers in an attempt to eradicate it. The cost of such programs is not of concern, as is pointed out in the CHAMP."

"It is only at the time that a weed problem becomes bad enough to affect the interest of the paying customer to play, and it can be shown that severe economic hardship to the golf course operators has occurred, and I have done everything possible manually, that I could go back to the review board to obtain permission to use Weed Be Gone."

The CHAMP also names specific brands of products that may be used for fertilizers, herbicides and fungicides. This takes away the option of shopping for the most economical product, again making normal maintenance

Continued on page 25

Frye has worked with the best, accepts Kiawah's test

By Peter Blais

He has helped Robert Trent Jones, Tom Fazio, Jay Morrish and Pete Dye build courses.

He is head superintendent at the course that just hosted perhaps the most-talked-about golf tournament in history — the 1991 Ryder Cup at Kiawah Island, S.C.

So, when George Frye, 35, answers, "I just want to keep learning and advancing in the golf business," it's hard to imagine there is much left for him to learn.

Frye's education began in the golf-rich area of Pinehurst, N.C. He picked up his first club at age 10 and was on the ground crew at Donald Ross' personal shrine by 16.

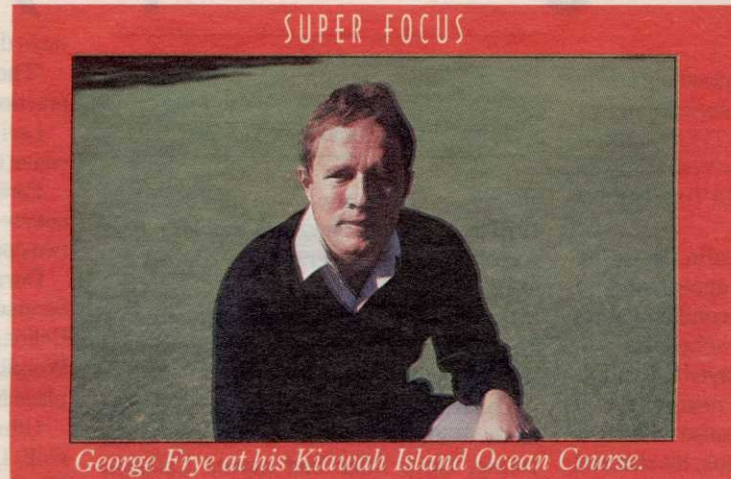
"I knew back then that all I ever wanted was to work in the golf business," said Frye, who received an associate's degree in turfgrass management from North Carolina State University in 1978.

Frye's first professional stop was a 4-1/2-year stint as assistant and later head superintendent at Seabrook Island, S.C., where he worked with Jones on the Crooked Oaks Course.

Asked for a brief description of the best-known of contemporary architects, Frye said: "Trent Jones is very traditional in his designs. He always said he tried to build courses with hard pars and easy bogeys. He has certain design philosophies and sticks to them. He's very consistent."

In 1984, Frye headed west to Oak Hills Country Club in San Antonio, Texas, to help Morrish renovate the A.W. Tillinghast layout.

"It was a huge job," Frye recalled. "The course was tinkered with a lot



George Frye at his Kiawah Island Ocean Course.

over the years. Jay was selected because he knew a lot of the history behind Tillinghast courses. It ended up being more of a total facelift than a renovation.

"Jay has a huge reservoir of golf design experience. He's worked with many architects (including Jones, George Fazio, Desmond Muirhead, Jack Nicklaus and Bob Cupp). He can adapt to many different design conditions. No two of his courses are the same."

But Frye and his wife Louise, a native of Athens, Ga., missed the Southeast. So when the chance to return to Kiawah as director of maintenance in 1985 appeared, Frye jumped at it.

The island, located 17 miles south of Charleston, had two courses — Gary Player's Marsh Point and Nicklaus' Turtle Point. Fazio had started a third course, Osprey Point, when Frye arrived.

Construction was delayed somewhat because of the resort's sale by a Kuwaiti investment company to a group of local businessmen. Landmark Land Co., in turn, bought the golf courses and other amenities from the local investors.

Frye assisted Fazio at Osprey, a course developers asked Fazio to make friendly on the budget and maintenance crew.

"Fazio was very accommodating," Frye said. "We ended up with a course that was a lot of fun to play, with wide fairways and a lot of character. It's a layout that can be very rewarding for the average golfer."

"Tom is very flexible. His designs really take advantage of the land. He creates features that complement the piece of property he has to work with."

While Frye oversaw construction at Seabrook Island, Oak Hills and Osprey Point, his role was more limited at Dye's Ocean Course.

"Pete did most of it," Frye recalled. "Pete prefers to say he builds rather than designs golf courses. He really does design as he builds, moving things around until he gets it just right."

"He lived on the course for about a year (1989 and early 1990). He was gone for only about three weeks. Pete directed everything. That's what he needs to do to get the product he wants."

The course was beginning to grow in by the spring of 1990. That's when Frye took over. Unlike most tournament courses, Kiawah was a brand new facility that would be open for just a few months prior to the late September Ryder Cup.

While older courses can simply cure existing ills in preparation for a major tournament, the superintendent at a new course must anticipate any problems that might crop up.

"We were shooting for perfect conditions. We didn't want anyone saying, 'Not bad, for a new course.' We wanted it to look like a mature course in great condition," Frye said.

Frye's first priority was the greens. A tournament mowing height of 6/64ths-of-an-inch was the target. His crew began grooming the grass with that goal in mind beginning in April 1990, 18 months before the tournament.

Frye verticut the greens every two weeks throughout the summer, smoothing out the grass, leveling off excess contours and taking out any unevenness in the putting surface, thus avoiding scalping come the tournament.

Laying a solid foundation by selecting grasses that could sustain such low cutting heights was extremely important, Frye said. He and Dye settled on Tifdwarf on greens, aprons and along the slopes (for contrast) bordering the fairway. Tifway 419 was selected for tees and fairways.

The fairways were next. Fairways were aerified and rolled between five and eight times during April and early May 1991 to get as smooth a playing surface as possible. Plugs were cut up, then dragged back over the aerification holes. A vibratory roller made two or three passes

over each fairway. Par-3 fairways were excluded to maintain a natural look.

After the fairways recovered, they were verticut twice that summer, further smoothing any rough spots. Frye also applied a top dressing of sugar sand, a native variety.

The grounds crew top dressed tees throughout the summer of 1991. Dye also added several new tees.

The last, but not least, important job was stabilizing the sand dunes bordering the course. The Ocean Course is fully exposed to wind and other elements from the sea. Blowing sand would be a major problem in the frequent 20- to 30-mile-per-hour gusts that buffet that stretch of coastline.

Seedless hydro-mulch was applied to the dunes beginning in 1990. Desirable vegetation — mostly sea oats, American beachgrass and sweetgrass — were then planted by hand. Once the desirable vegetation was established, Frye selectively applied herbicides to rid the dunes of undesirable plant materials, primarily purple nutgrass. The chemicals were applied from June through early September 1991.

The course closed two weeks prior to the tournament for fine tuning. Mowing patterns were established and greens verticut every other day the first week-and-a-half. Frye hoped to have the facility tournament-ready at least seven days before matches began, giving early-arriving players the chance to see and play the course under Ryder Cup conditions.

It was in such great shape the week before the tournament that Mark Calcavecchia shot a 64 in a practice round. But even the best-laid plans go awry. The wind gusted near 20 mph tournament weekend and "gave the players fits," Frye said.

"Once a tournament starts, the No. 1 thing you should have to worry about is consistency. Maintaining green speeds and mowing frequency are important (Frye double-cut the greens before play started and after it ended). But no one controls Mother Nature," he said.

Frye's crew tried to counteract the drying effects of the wind by adding extra water to the greens to keep speeds reasonable. The dunes were watered to keep blowing sand to a minimum. But some greens still received windblown sand and had to be swept off from time to time.

Still, PGA Tour officials were very happy with the conditions, Frye said. The players thought the course played extremely hard, but mainly because of the wind. And Frye's fellow superintendents were very complimentary.

"I even got a letter from a Florida superintendent who thought we had the best mowing patterns he'd ever seen," Frye said.

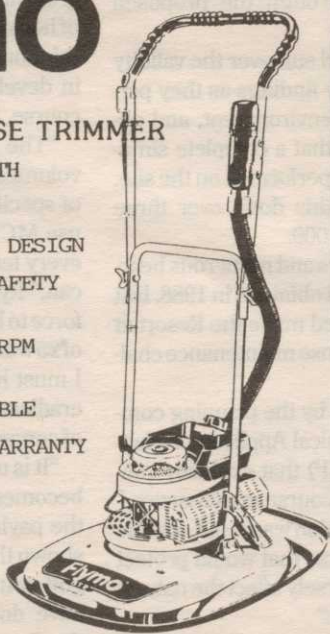
What was Frye's evaluation of his own contribution?

Continued on page 19

Flymo®

GCT 20 GOLF COURSE TRIMMER

- * 20 INCH CUTTING WIDTH
- * WEIGHT 34 LBS
- * NEW REINFORCED DECK DESIGN
- * PATENTED & PROVEN SAFETY CUTTING SYSTEM
- * 98cc/2 STROKE/4200 RPM POWERFUL JLO ENGINE
- * COMPLETELY REBUILDABLE
- * 1 YEAR COMMERCIAL WARRANTY (ENGINE ONLY)



See us at
GCSAA Booth #2572

PRECISION
SMALL ENGINE CO.
POMPANO BEACH, FLORIDA
(305) 974-1960 OR 1-800-345-1960
REPS WANTED

Avoid Environmental Pitfalls

Call E.T.S. For Professional Assistance in:

- Environmental risk assessments of turf chemicals running off to surface water and leaching to ground water
- Development of Integrated Golf Course Management Plans
- Turf agronomy technical services
- Ground water monitoring studies
- Expert testimony

ENVIRONMENTAL & TURF SERVICES, INC.
Addressing Golf's Environmental Concerns

HQ: 11141 Georgia Ave., S. 208, Wheaton, Maryland 20902
(301) 933-4700 Fax (301) 933-4701
Principal: S. Cohen (Cape Cod Study Director)
3525 Wellston Court, Simi Valley, CA 93063
(805) 527-9147 Fax (805) 527-1247
Principal: W.K. Alkire II
(Formerly w/Jack Nicklaus Golf Services)

Metam-sodium applicators now must be certified, EPA reports

All individuals associated with use of the pesticide metam-sodium must now wear protective clothing.

The U.S. Environmental Protection Agency and the principal registrants of metam-sodium reached an agreement on the requirement. Use around the home will be prohibited unless applied by a certified applicator.

The announcement is based on EPA's review of animal studies, which show that exposure of individuals (particularly pregnant women) under current use practices may pose a risk of birth de-

fects in the offspring.

Metam-sodium, registered since 1954, is a fumigant used before planting as a pesticide to control weeds, nematodes, fungi, bacteria and insects in the soil. The primary uses include agriculture and lawn grasses, flowers, fruit trees, grapevines and nursery stock. Approximately seven million to 12 million pounds are used annually, nearly half in agriculture.

EPA's review of the studies was prompted by the July 14 spill of thousands of gallons of metam-so-

dium into the Sacramento River near Dunsmuir, Calif.

"The actions we are announcing are primarily precautionary," said William K. Reilly, EPA administrator.

The two developmental toxicity studies on animals, which resulted in the protective measures being taken, are not considered to be fully adequate to fulfill EPA's requirements for reregistration. However, the agency does consider the studies useful to provide estimates of possible risk from exposure to this chemical.

Under terms of the agreement:

- Mixers, loaders, applicators or any other persons who may come into direct contact with this pesticide will be required to wear properly fitting respirators; body covering, which includes long sleeves and long pants; and chemical resistant gloves and boots.

- Workers entering treated fields within 48 hours following application will be required to wear chemical resistant footwear and body covering including long sleeves and long pants. Respirators and chemical resistant

gloves are to be immediately available and used by these workers if they are likely to come into direct contact with the pesticide.

Registrants of metam-sodium products included in the agreement are ICI Americas Inc. of Wilmington, Del.; Amvac Chemical Co. of Los Angeles; Buckman Labs Inc. of Memphis, Tenn.; Oregon-California Chemicals Inc. of Junction City, Ore.; and UCB Chemicals Corp. of Norfolk, Va. These registrants account for well over 90 percent of metam-sodium production.

Frye

Continued from page 18

"I'm an extremely quality-conscious individual," he said. "We used every resource available to get the most out of this golf course. A desire for quality is an important trait. To maintain a golf course properly you want to complement the design with sound management practices that bring out the true character of that design."

And what kind of course was Frye left with once the Ryder Cup hoopla died down?

"Pete didn't want to leave us with a maintenance nightmare and he didn't," Frye said. "The turf areas are relatively easy to maintain. It's the natural areas, particularly the dunes, that are the most difficult."

"This is a very sensitive piece of property. We have to spend the time and money to protect the natural areas, fowl and wildlife that make it special."

The total annual maintenance budget for the four courses runs between \$2.3 million and \$2.4 million. The Ocean Course and Turtle Point are the most expensive to maintain. Osprey Point and Marsh Point cost a little less.

Among Frye's 60 employees are head superintendents at each course—Jeff Stone at Marsh Point, Rich Abbott at Turtle Point, Wayne Sellers at Osprey Point and Steve Miller at the Ocean Course.

A new course has sprung up every four to five years at Kiawah since Marsh Point became the island's first 18 in 1976. Enough acreage is available at Turtle Point for another nine or possibly 18 holes, Frye said.

"I enjoy taking a course from beginning to end, producing something that is compatible with good maintenance practices," Frye said. "It's fun visualizing how things could be, putting a green here, figuring how you'd mow around a bunker there."

Whether it will be financially troubled Landmark or someone else who develops that land remains to be seen.

"Not knowing what the destiny of current management will be is somewhat troubling," Frye said. "But Kiawah is such a well-planned and developed facility that it will remain one of the top resorts on the East Coast, regardless of who owns it."

GOLF COURSE NEWS

BEFORE YOU BUY JUST ANY BENTGRASS, GO BY THE BOOK.



Phone 1-800-547-0255 today for your complimentary copy of the Penn Pals catalogue. You'll see why Penncross, Penneagle, PennLinks and Pennway blend set the standard for bentgrass on golf courses.

Tee-2-Green Corp.

PO Box 250, Hubbard, OR 97032

FAX 503-981-5626

1-800-547-0255

CIRCLE #115/GCSAA BOOTH #3436-3440

South Central



COLDIRON GAINS HIGHEST HONOR

The Kentucky Turfgrass Council has presented its highest honor to superintendent Jerry Coldiron, Jr. of Boone Links Golf Course in Florence.

In accepting the Winfrey P. Bunton II Man of the Year Award, Coldiron cited his entire staff and his course owners' commitment to turfgrass excellence. The award is presented annually to recognize individuals for outstanding contributions to the turfgrass industry.

A graduate of Eastern Kentucky University with a degree in agronomy, Coldiron has been superintendent at Boone Links since 1979 and has been involved in various athletic field projects around northern Kentucky.

West

NORTHERN CALIFORNIA GA HONORS SPAETH

United States Golf Association President C. Grant Spaeth was awarded the Northern California Golf Association's Grand Master award during its annual meeting at Castlewood Country Club.

The honor, presented by NCGA outgoing President Frank Brunk, goes annually to an individual who has given unselfishly of personal time and effort to the game of golf.

A member of the Palo Alto and San Francisco golf courses as well as the Royal &



Ancient of St. Andrews and the Honourable Company of Edinburgh Golfers of Scotland, Spaeth has served with the USGA for 14 years, the last two as president.

MENDENHALL MOVES TO SPANISH HILLS

CAMARILLO, Calif. — Scott Mendenhall will be the course superintendent at Spanish Hills Golf and Country Club, a \$170-million country club community scheduled to open in mid-1992.

The 6,750-yard championship course, designed by Robert Cupp, features wide fairways of drought-tolerant Bermudagrass.

Mitch Voges, 1991 U.S. Amateur champion and Walker Cup team member, will be director of golf.

Mendenhall has been superintendent the past two years at PGA West's Stadium course in LaQuinta. He oversaw 400 acres of turf, 40 bentgrass greens and numerous bunkers.

He was superintendent at the Jack Nicklaus Resort Course in LaQuinta in 1988.

Northeast

MRUK HONORED AT MASS. SHOW

SPRINGFIELD, Mass. — The 61st Massachusetts Turfgrass Conference and 16th Industrial Show, March 3-5 at the Civic Center here, will be dedicated to Charles Mruk.

Mruk, a turfgrass management consultant based in Cranston, R.I., will be honored for outstanding devotion and service to the turf profession.

Mruk was an early advocate of a grassroots proving ground for superintendents evolving into current sophisticated maintenance practices.

Dr. Joseph Troll, Massachusetts Turf and Lawngrass Association executive director, will give the welcoming address at 1 p.m. Tuesday, March 3.



Scholarship awards will be made.

Stephen Cadenelli, president of the Golf Course Superintendents of America, heads the first afternoon's speakers. He will discuss current and future issues in golf course management.

Speakers Wednesday include James Snow, national director of the United States Golf Association Green Section; Dr. James Beard of Texas A&M University; Dr. Houston Couch of the Virginia Polytechnic Institute; and Roger G. Rulewich, senior architect with Robert Trent Jones Sr. in Montclair, N.J.

Anthony B. Caranci, superintendent at Ledgecroft Country Club in Seekonk, opens the Thursday morning session. Dr. Bridget Ruemmele of the University of Rhode Island, Couch and Beard also will speak.

TOURNEY RAISES \$14,000

The recent third annual turf research tournament at The Country Club, Brookline, raised more than \$14,000 for the GCSA of New England Turf Research Fund.

This fund sponsors turf research projects at area universities. About \$25,000 has been distributed.

RUTGERS OFFERS JAN. 7-9 COURSE

NEW BRUNSWICK, N.J. — An introduction to golf course turfgrass management is a new course being offered Jan. 7-9 by the Office of Continuing Professional Education, Cook College, Rutgers University.

Taught by golf course superintendents, the course will survey current turfgrass management practices.

Pesticide safety for landscape contractors was the subject Dec. 13 and 18. Other subjects and dates are:

- professional turfgrass and landscape management with selected topics in commercial, residential and utility turfgrass, Jan. 2-20;
- Rutgers professional golf turf management school, Jan. 6-March 13;
- basics of turfgrass management, Feb. 4;
- improving turfgrass survival: site analysis and modification, Feb. 19-20; and

- advanced turfgrass management symposium, Feb. 26-27.

MECHANICS DRAFT CODE OF ETHICS

The New Jersey Golf Course Mechanics Association has outlined an 11-point code of ethics to promote and maintain professional standards of service and conduct.

Other objectives of the association include providing educational information and programs pertinent to golf course equipment, planning training programs in association with vocational-technical institutions, exchanging information associated with golf course technicians and their responsibilities, establishing a library, and publishing a newsletter with a listing of equipment and spare parts for sale, rent, loan or barter.

RACKLIFFE CONNECTICUT'S NEW PRESIDENT

WALLINGFORD, Conn. — Steve Rackliffe of Willimantic Country Club in Lebanon is the new president of the Connecticut Association of Golf Course Superintendents.

John F. Streeter of Woodbridge Country Club was elected vice president; John Motyka of Skungamaug River Golf Course in Coventry, treasurer; and Phil Neaton of Black Hall Golf Course in Old Lyme, secretary.

Directors are Robert A. Chalifour of Shennecossett Golf Course in Groton; Peter Lewis of the Country Club of Farmington.

Also, John M. Napieracz of Stanley Golf Course in New Britain; Peter R. Pierson of Peguabuck Golf Course in Cornwell; Brian Skelly of Old Lyme Golf Course; Dave C. Stimson of Tumble Brook Country Club in Bloomfield; and Peter Hull of Turf Products Corp.

PEST MANAGEMENT COURSE ARRANGED

A four-part short course on Landscape Integrated Pest Management has been organized by the University of Massachusetts Cooperative Extension Service.

The course begins Jan. 24, 28 and 29 with a course on managing turfgrass diseases and insects and on use of organics, blends, synthetics and new formulations. Drs. Gail Schumann, Patricia Vittum and Richard Cooper will teach the sessions.

Woody ornamentals will be addressed Feb. 11-13. It will focus on such topics as diagnosing disease and insect problems on plants, and devising biocontrol strategies.

A one-day course Feb. 25 will target landscape plant materials—from maintenance to irrigation techniques.

An overview of regulations related to the turf and landscape professionals will be held Feb. 26. It will give information on recordkeeping, drinking water and mixing, m loading and storage regulations.

MEUSEL HONORED ON RETIREMENT

Harry W. Meusel, retiring after 40 years as golf course superintendent at Yale Golf Club in Orange, Conn., recently was honored at a dinner there.

Among those paying tribute were representatives of state golf, course superintendents and PGA associations, prominent Yale alumni; family friends and associates.

RADIAL INSTRUMENTS PRESENTS THE GLEANER



Model JP

A CORE PLUG PUSHER

The gleaner was invented by Mr. Don Martinez, a foreman at a golf course in Northern California. We introduced it for him at the Golf Show in 1986 and it was a great success with you, the golf course supt., and we thank you. Mr. Don Martinez has now received his U.S. Patent #4,712,623 and we are the only authorized manufacturer of his invention. We are still setting up distribution centers across the U.S. and in those areas that we do not have a distributor we can ship direct to you via U.P.S. And if anyone is not completely satisfied just ship it back collect and you will be guaranteed your money back. Suggested retail for Model TP is \$470.00 and for Model JP is \$500.00.

SAVE TIME, LABOR & MONEY!!



Model TP

Phone or contact
B.H. SALES
P.O. BOX 3467
SANTA ROSA, CA 95402

(707) 823-2107

Do a 7,500 sq. ft. green in 15 minutes. Easy to mount onto either your Jacobson or Toro greensmower with model JP or TP. Two section blade that is free floating and will follow any contour of your greens. Made of heavy gauge metal and width is 72 inches.

Please send news to GCN

Superintendents associations and others are invited to send news stories and photographs to: *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.

Southeast

GEORGIA GCSA RE-ELECTS HOBAN

JEKYLL ISLAND, Ga. — Mark Hoban of the Standard Club in Duluth has been re-elected president of the Georgia Golf Course Superintendents Association.

Also re-elected at the annual meeting here was William K. Shirley of The Idle Hour Club in Macon.

Re-elected directors were Mark E. Esoda of Atlanta Country Club; Ralph A. Hinz of The Landings in Savannah, and Chuck Underwood of Northwood Country Club in Lawrenceville.

Other directors are Steve A. Davis, immediate past president, of Nob North Golf Course in Cohutta; Michael Hamilton of Harbor Club in Greensboro; Michael G. Martin of Berkeley Hills Country Club in Duluth; J. Paul Petrie of St. Ives Country Club in Duluth; and Bob S. Perry of Griffin Country Club.

Randy Waldron, of The Golf Club of Georgia, posted a 36-hole 149 to edge Mike Wilson of Canongate on White Oak, for tournament honors.

Craig Conner, assistant superintendent at Monroe Golf and Country Club, was cited for best article in "Through the Green," the GGCSA's bi-monthly publication.

Eddie Seagle, professor at Abraham Baldwin Agricultural College in Tifton, was honored for recruiting the most members in 1991.

DAUGHTREY, MARSHALL GET SCHOLARSHIPS

WATKINSVILLE, Ga. — Charles Daughtrey and Kyle Marshall have been awarded the 1991-92 GGCSA George M. Kozelnicky "Old Koz" Scholarships.

Daughtrey attends Abraham Baldwin Agricultural College in Tifton, and works at Valdosta Country Club.

Marshall, former assistant superintendent at Sunset Hills Country Club in Carrollton, attends the University of Georgia.

VIRGINIA SHOW EXPANDS EDUCATION

RICHMOND, Va. — An expanded educational program to address the diverse needs of those in the Green Industry will be featured at the 32nd Virginia Turf & Landscape Conference and Trade Show Jan. 13-16 at Richmond Centre and Richmond Marriott.

Topics opening day, Monday, will be turfgrass diseases, OSHA hazardous compliance, irrigation, basic turfgrass management and category 3 training.

Discussions Tuesday morning will center on the golf course, lawn service and athletic fields.

The afternoon will be devoted to a general session.

An evening symposia will embrace golf and lawn service discussions, women (and men) in the Green Industry, and Virginia sports turf managers founding meeting.

Sessions Wednesday will embrace the golf course, lawn service, landscape horticulture, erosion and water quality, and sod production.

Other critical industry issues will be probed Thursday morning.

GEORGIA TOURNEY "A HUGE SUCCESS"

The Georgia Turfgrass Foundation Trust trustees have declared their inaugural golf tournament, presented by Gold Kist, Inc. and Stovall & Co., Inc. a huge success.

Playing at Atlanta National Golf Club in Alpharetta on Oct. 29, some 60 golfers challenged the P.B. Dye-designed course.

The two-man Stapleford competition was won by Ken Mangum, superintendent at Atlanta Athletic Club, and William Shirley, superintendent at Idle Hour Country Club in Macon, with a net of 33 points. Both golfers had gross scores of 78.

Through the support of the presenting sponsors, hole sponsors, and all the participants, the GTFT raised in excess of \$15,000 for research, extension and teaching within Georgia.

Executive Director Hubert E. "A" Frenette thanked all the volunteers and, particularly, the club staff at Atlanta National Golf Club.

He expects this to be an annual affair and hopes for continued support of the event.

North Central



HAGCSA COMMITS TO MENDENHALL FUND

LAWRENCE, Kan. — The Heart of America GCSA and Chet Mendenhall, whose paths were entwined for so many years, will continue to be closely associated.

Mendenhall, 96, died last September after helping to dedicate the Golf Course Superintendents Association of America's new headquarters building.

HAGCSA has committed \$50,000 to a scholarship fund in Mendenhall's memory. First installment, \$1,000, was presented at a recent state superintendents meeting. A total of \$15,000 is ticketed in three years.

A native of Kingman, Kan., Mendenhall in an illustrious career spanning six decades received about all awards possible in his profession.

Included were the Heart of America GCSA Distinguished Service Award in 1965, and the Heart of America's Mendenhall award for extensive time devoted to the turf and golf industry.

He moved to Green Valley, Ariz., in 1982.

HAGCSA ELECTS ELMER

Jeff Elmer, Lakewood Oaks Country Club in Lee's Summit, Mo., is the new HAGCSA president. He succeeds Loren Breedlove of Kansas City Country Club in Mission Hills., Kan.

Terry Rodenberg of St. Andrews Golf Course in Overland Park, Kan., is vice president, Duane Patton of Lawrence (Kan.) Country Club, secretary/treasurer.

Directors are Bill Bologna of Hodge Park Golf Course in Kansas City, Mo.; Jud Coester of Meadowbrook Country Club in Prairie Village, Kan.

Also, Pat Finlen of Quivira Lake (Kan.)

Country Club; John Francis of Blue Spring (Mo.) Country Club; Steve Gregory of Shadow Glenn Golf Course in Olathe, Kan., and August Lietzen of Overland Park (Kan.) Golf Course.

Special directors are Jim Coleman of Robisons Lawn & Golf in Grandview, Mo.; Bruce Elliot of Lakewood Oaks Golf Course, and Jim Heinze of Champion Turf in Kansas City.

MID-AM PICKS UP ENDORSEMENTS

CHICAGO — The Mid-Am trade show Jan. 16-18 at Hyatt Regency has received the endorsement of six trade associations.

The Iowa Nurserymen's Association, Minnesota Nursery & Landscape Association and the Nebraska Association of Nurserymen have joined sponsors Illinois Landscape Contractors Association, Illinois Nurserymen's Association and Wisconsin Landscape Federation in support of the show.

For further information, contact Mid-Am at 1000 N. Rand Road, Suite 214, Wauconda, Ill. 60084; 708-526-2010.

Mountains



CACTUS & PINE PARTICIPATION UP

"A very good year" was president Jerry Zidow's sumup of the Cactus & Pine GCSAA's 1991 activities.

The course superintendent at Papago Golf Courses said:

"The participation by all our members increased substantially, a reflection of a nearly 30-percent increase in membership over the past two years."

MARKERS, INC.

Golf Course Marking System Links It All Together

- Tee Markers
- Fairway Yardage Markers
- Hazard Markers • Plastic Chain
- Chain Posts • Course Signs
- Stop at Booth #3080
New Orleans GCSAA Show
- Introducing Innovative
- Driving Range Products
- Rope Stakes
- Gallery Control System

For more information call Toll Free
1-800-969-5920

UNIFORMS OF DISTINCTION

Custom
embroidered & screened
designs



SOUTHERN
CORPORATE PROMOTIONS

(404)487-8095

800-233-3853

R.T. Jones Sr. to receive GCBAAs Rossi award

Robert Trent Jones Sr., who has pioneered the game of golf in countries around the world with his award-winning course designs,



Robert Trent Jones

will receive the second annual Don A. Rossi Humanitarian Award from the Golf Course Builders Association of America in New Orleans on Feb. 15.

The award will be presented at the GCBAAs annual

awards dinner, which will cap two days of association programs at the Golf Course Superintendents Association's 64th annual International Golf Course Conference and Show.

The 85-year-old Jones, whose sons Robert Jr. and Rees are also course designers, said he was grateful and pleased to be selected for the award.

It is named for the late executive director of both the GCBAAs and National Golf Foundation, who died in March 1990.

"The International Golf Course Conference and Show is an excellent venue for Mr. Jones to receive the praise and recognition of those in the industry who are most knowledgeable and appreciative of his contributions to the game of golf," said Perry Dye, GCBAAs president.

Founded in 1971, the association promotes general business interests of golf course contractors, fosters ethical and performance standards, and is involved in the industry internationally.

Jones has been an international figure himself for several decades. He has designed courses in 34 countries besides the United States.

His courses have hosted 27 U.S. Open or PGA Championships, and he has been honored perhaps more than any golf architect in history.

He was inducted into the World Golf Hall of Fame in Pinehurst, N.C., in 1987, the same year the Golf Course Superintendents Association of America presented him the Old Tom Morris Award.

Jones received the American Society of Golf Course Architects' first Donald Ross Award in 1976, Cornell University's Distinguished Alumni Award in 1980, and the Golf Writers Association of America's William D. Richardson Award for distinguished service and contribution to the game in 1981.

Cornell last fall named its golf course after Jones, who had designed it.

A native of Ince, England, Jones created his own major in golf course architecture while a student at Cornell University, mixing such courses as landscape architecture, agronomy and turfgrass science with history, philosophy and the classics.

A pupil of Stanley Thompson, he is credited with developing the "heroic" school of design—a blend of the best of the penal and strategic schools developed earlier.

Rossi was given the inaugural Humanitarian Award posthumously at the GCSAA conference last year.

The honorees

Kozelnicky, Tate named to get Distinguished Service Awards

By Vern Putney

NEW ORLEANS—George M. Kozelnicky of Athens, Ga., and C.E. "Tuck" Tate of Sarasota, Fla., will receive the Golf Course Superintendents Association of America's 1992 Distinguished Service Awards here Thursday, Feb. 13.



George Kozelnicky

Kozelnicky has served 25 years as executive secretary of the Georgia GCSA. He initiated the chapter's newsletter and until two years ago was editor, staff writer, layout designer and circulation manager.

While professor of plant pathology at the University of Georgia, Kozelnicky researched spring dead spot. After retirement, Kozelnicky handled chapter business from his home until the association moved into a new office in 1987. He was succeeded in 1989 by Karen White.

January and February will be a dizzying 60 days for Kozelnicky. He'll be inducted into the Georgia Golf Hall of Fame, Jan. 4, at William Bell Auditorium in Augusta.

Terming "particularly meaningful" the GCSAA award, Kozelnicky recalls being approached more than 30 years ago by a group of veteran superintendents. "They wanted to prepare for the technological explosion. Quite simply, they desired education."

Their meetings, long largely social, under Kozelnicky's guidance gave way to seminars

and educational programs dealing with golf course management. Research, communication and promoting the profession were stressed.

"Results of this shift in emphasis have been rewarding," Kozelnicky said.

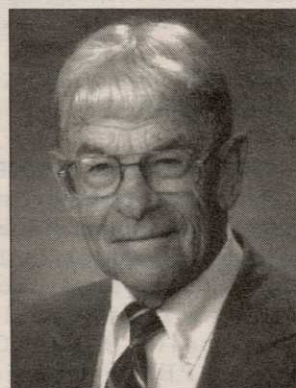
Tate, 81, owner/operator of the Frankfort (Mich.) Golf Club until retirement, in 1986 received the Distinguished Service Award from the Michigan Turfgrass Foundation of which he is a past president.

Tate was on the board of directors during acquisition and construction of Hancock Turfgrass Research Center at Michigan State University. He endowed a scholarship fund, which now exceeds \$100,000, for MSU turf students.

A lifetime member of the PGA, Tate served on the golf and cart committee at Crystal Downs Country Club in Frankfort, and on the greens committee at Sara Bay Country Club in Sarasota.

"This is quite an honor. It is wonderful to be recognized for input over a long span," Tate said.

Like Kozelnicky, he had been almost a one-man publisher for the Michigan GCSA.



Tuck Tate

Watson picked for Old Tom Morris

Tom Watson, six-time PGA Player of the Year, has been selected to receive the Old Tom Morris Award, the highest honor of the GCSAA.

Watson will be honored during the group's closing banquet on Feb. 17 in New Orleans. He will be unable to attend and will make his acceptance speech via videotape.

"Tom Watson embodies all that is great about the game of golf," said GCSAA President Stephen G. Cadenelli. "Beyond his greatness as a player, Tom has demonstrated extraordinary commitment to his family and community. He has, and continues to make, significant contributions to others."

Watson was cited for his charitable and community efforts. The Children's Mercy Hospital Golf Classic is an 18-hole exhibition team match hosted by Watson which raises money for the local Kansas City (Mo.) hospital. Every year since 1980, Watson has brought in golf's finest players for a one-day golf match. The Golf Classic has raised more than \$3.5 million.

Ken Flisek gets Feser

Ken Flisek was "shocked, surprised and flattered" when notified he had won the 1992 Leo Feser Editorial Award from the Golf Course Superintendents Association of America.

The superintendent at The Club at Nevillewood near Pittsburgh, Flisek won the award for best article written by a GCSAA member superintendent and published in Golf Course Management.



Ken Flisek

He will receive the award Feb. 13 during the International Golf Course Conference and Show in New Orleans.

Flisek's prize-winning article, "Using Proven Basic Principles To Improve Your Professional Image," appeared in the February 1991 issue.

"A lot of what I've learned has been from other superintendents," Flisek said. "I've tried to pattern myself along those lines. I turned those ideas into a speech I have given, then drew on that for the article."

He said he also gleaned some ideas from an out-of-print GCSAA manual on public relations.

In his article, he emphasized that effective public relations is the duty of the superintendent, who must play a major role in building a positive image of the superintendent and the turfgrass management profession.

"The promotional efforts of GCSAA and affiliated chapters can only be as successful as the public relations efforts of individual superintendents," he wrote.

The article also listed practical ways to go about the task.

Flisek wrote the article while superintendent at The Woodlands in Falmouth, Maine. He was Maine GCSA newsletter editor before returning to his home state of Pennsylvania. He holds a two-year degree in turfgrass management from Pennsylvania State University.

The award is named in honor of Leo Feser, a pioneer superintendent and charter member of GCSAA, who is credited with keeping the association's official publication alive during the Great Depression.

For three years he wrote, edited, assembled and published each issue of the magazine from his home in Mayzata, Minn. He died in 1976.

Student writers chosen for GCSAA's annual turfgrass essay contest

Michael Fast of Ohio State University has won first place in the 1992 Turfgrass Student Essay Contest conducted by the Golf Course Superintendents Association of America.

Fast won the award for his article "The Interface Between Wetlands and Golf Course."

Iowa State University students William Greenwell and Jeff Oelmann won second and third places, respectively. Greenwell wrote on "Waste Disposal for Professional Turf Management," while Oelmann's topic was "Water: An Environmental Crisis."

GCSAA holds the contest annually to increase the awareness of future golf course superintendents concerning their environmental responsibility and to raise public awareness of the role of the superintendent and related industry in preserving and enhancing the land. It is open to students enrolled in formal turfgrass science, management or closely related education programs.

The first, second- and third-place winners receive \$1,000, \$600 and \$400, respectively.

The essays may be published in Golf Course Management in the months ahead.

The tournament

GCSAA's first winner still ahead of game

By Vern Putney

PITTSBURGH — First national golf course superintendent champion Ernie Jacob won't be present when 400 sharpshooters fire away over 36 holes in the 42nd event at four Ponte Vedra, Fla., layouts. But he is delighted at the progress and stature the tournament has achieved in 53 years.

Competition in 1938 at Congress Lake Club in Hartville, Ohio, was as intense as today, but numbers were lacking. The 37-year superintendent at Pittsburgh South Hills Club recalls the field as "perhaps less than 30."

Jacob, now 84, and Art Snyder, the Golf Course Superintendents Association of America's oldest member at 93, motored from Pittsburgh to Hartville, played their 36 holes the same day, and returned to Pittsburgh that night back in 1938.

Jacob received a silver platter for his winning total of 146. Runnerup in 1939 to Don Boyd of Portage Country Club in Akron, he remained competitive over the years. But Emil "Mashie" Masciocchi of the Onwentsia Club in Chicago was too tough.

Masciocchi won six of the seven tournaments held from 1940 through 1950. In 1946 at the Country



Ernie Jacob

Club of Indianapolis, Jacob blazed home in 71 after a morning round of 79. Masciocchi, then of Lake Forest (Ill.) Country Club, went 67-75 — 142. Players had risen to 60.

Jacob suffered a serious leg injury in 1951 that required a foot cast for four years and ruled out golf, but he rebounded well. He ended competition with his superintendent colleagues in 1986 at Palm Desert (Calif.) Country Club.

He played 18 holes in November with Navy captain son Glenn.

Jacob saluted the efforts of Frank Lamphier, superintendent at Aspetuck Valley Country Club in Bethel, Conn., in keeping their tournament alive and shepherding its growth from 1968 through 1988.

Because Ponte Vedra is so distant from New Orleans, site of the annual GCSAA Conference Feb. 10-17, there won't be the 500-plus field of recent years.

Still, it's a far cry from the inaugural test, when it was known as the National Greenkeeping Superintendents Tournament and received little media coverage.

And "chauffeur" Snyder? He still plays frequently with son Jim, who succeeded him as superintendent at Paradise Valley Country Club in Phoenix, Ariz., and recently retired from a similar position at Skyline Country Club in Tucson, Ariz.

Snyder last played in the national event in 1987 at Canoa Hills Country Club in Green Valley, Ariz. He carded an 87, two strokes better than his age, but a couple of triple bogeys knocked him out of senior title contention.

Jacob is "about 10 minutes" senior to Snyder in terms of GCSAA membership. Their applications were being processed in 1929, and Jacob had the last-name edge alphabetically. He became member 568, Snyder 573.

They are as one in lasting friendship, and in wishing well the tournament they helped found.

Past champs eye return to No. 1

By Vern Putney

PONTE VEDRA, Fla. — Both Roger Null, who will be seeking his third straight GCSAA golf championship here Feb. 10-11, and Dave Wright Powell, who won in 1985, '88 and '89, had the rare good fortune to be raised practically next door to a golf course.

They cashed in on the good luck, though as youngsters they were more geared to improving their game than thoughts of a lifetime career.

Null, 47, figured his future would be in coaching football, following in the footsteps of his father and older brother. Instead, he's been bound exclusively to golf, and is marking his fifth season as superintendent at the prestigious 36-hole Norwood Hills Country Club in St. Louis, Mo. Nephew Mike also is a superintendent there.

Null grew up in Lemars, Iowa, near a small nine-hole course. He spent much of his boyhood summers helping out in the pro shop and dispensing soda.

Powell had much the same background. In 1955, his dad built a home in Anderson, S.C., overlooking a golf course, and in 1960 the first public golf course there was built almost in Powell's backyard.

Powell hung around the pro shop, mowed greens, raked traps and had a sturdy hand in all phases of the business.

He was guided to an interest in turf and toward Clemson University. The golf course took a back seat while he was in college because he married as a sophomore. Graduating in 1969, he landed a job at Myers Park Country Club in Charlotte, N.C., as assistant to superintendent Garland Merchant. When Merchant retired in 1981, Powell became superintendent.

Null's road to Norwood Hills wasn't as direct. He had enrolled at Westmar, a liberal arts college. While working on the grounds at Sioux City (Iowa) Country Club, it was suggested he transfer to Iowa State College and major in turf management. Lacking scholarship and money, he required six years to gain a degree in 1969.

His first post was assistant superintendent at Rock Island Arsenal (Ill.) Golf Club. Superintendent jobs at Cedar Rapids, Iowa, and Old Warson Country Club in St. Louis preceded his present position.

Though unfavorable weather last November and early December discouraged his play and practice, Null plans to hone his game here a few days before tournament time.

Last year, he opened with a three-under-par 69 and followed with a 75 for a two-shot win over Powell.

Null has qualified for four U.S. Amateur championships and two Mid-Amateur title events for players over 25. He's also won the Ozark Invitational in Missouri, and has played well in state amateur events.

Powell, 42, said he knows Myers Park "like the back of my hand" and is a scratch golfer there. He isn't just a whiz on his home course,



Roger Null

finishing strong in the recent Carolina Mid-Amateur to make the top 20.

Like Null, Powell laments lack of competitive playing time.

As is the case with most superintendents, finding enough hours to sharpen playing skills during what are frequently 60-hour work weeks is a problem.

Myers Park hosts 42,000 rounds a year. From mid-June to late September, bentgrass greens require much care. That means staying on the job a lot longer. Powell will play in the practice round pre-tourney mixer with Kevin Downing, superintendent at Willoughby Country Club in Stuart, Fla.

Firm friends if title rivals, Null and Powell are keenly aware there is a flock of title flight players who could triumph. Powell cited South Carolinians Gary Bennett of Crickentree Golf Course in Blythewood and Charles "Chuck" Green of Florence.

Many superintendents who not long ago might have cast their eyes on cracking the pro tour now see their chosen field as a pleasant alternative.

Having a measure of job security and a firm foothold in the game in which most hope to spend a lifetime isn't a bad way to go, they say.

David B. Oliver at 36 isn't a typical young tiger, but he doesn't lack enthusiasm and confidence.

The 1986 champion and superintendent at Martin Downs Country Club in Palm City, Fla., has a word of warning to Null, Powell and '82 and '87 champion Mike Apodaca, superintendent at Tijera Arroyo Golf Course in Albuquerque, N.M.

"I think my time has come," said Oliver. "I'm playing well." Oliver and Carter Murchison recently combined for a nine-under-par score to win the South Florida pro-super tournament at Willoughby Country Club.

Oliver last year played with Null in the opening round. He could only watch and admire as Null putted superbly for a 69.

Oliver isn't overlooking the tournament's team aspect. Powell and Carolinas foursome companions in 1983 ended Florida's three-year title reign. Except for Rocky Mountain in 1986 and Midwest in 1989, it's since been all Carolinas.



Dave Powell

Oliver likes his team's chances. The title quartet probably will average around par.

Powell isn't sympathetic to the frustration of Oliver and mates. "Just because he's in his home state doesn't mean it's going to be any different. He's just tired of being whipped."

Apodaca matches Oliver's confidence level, pointing out that his first title came in Orlando, Fla., and that this year's Sunshine State location may be a good omen. He's 46 and a 2 handicapper.

A native of Santa Fe, N.M., he began his golf career as a caddy at 11 at Santa Fe Country Club. He's been in the superintendent field 25 years.

Null is pleased to see somewhat tardy recognition of superintendents as players competing at a high skill level. "It's nice to get press comparable to those vying in the national club professional championship," he said.

Powell echoes that observation. He said: "We're professionals in a special profession. Those in positions of club authority should realize we can play well, that our expertise isn't confined to course management and the maintenance building."

At Ponte Vedra, they'll emphasize their competitive side.

One strong contender should be Fred W. Klauk, superintendent at the Tournament Players Club at Sawgrass Stadium Course and the Valley Course, two of the four tournament sites along with Sawgrass Country Club and The Oak Bridge Club at Sawgrass.

In addition to home turf advantage, Klauk's handicap has long ranged from scratch to two.

If there is a playoff, watch out for Thomas C. "T.C." Hamilton. The 1978 and '80 champion is "two for two" on the first extra hole. His second title came at the expense of defending champion Dan Meyers. Meyers, now in the nursery business in the Tampa, Fla., area, won the next year and again in '84.

Hamilton is 50 and eligible for the Seniors division, but feels he's still competitive at the title level. He hasn't had much chance to whittle a handicap varying from 2 to 4 because of a busy schedule, but hopes to hit the practice tee

Last 25 winners

1963	Chuck Fatum
1968	Art Donaldson
1969	Gene Stoddard
1970	Bob Martino
1971	Harry Cirata
1972	Bob Martino
1973	Bob Martino
1974	Ennio Lattini
1975	John Doughton, Jr.
1976	William Knox
1977	Vaughn Barker
1978	Thomas C. Hamilton
1979	Dan Meyers
1980	Thomas C. Hamilton
1981	Dan Meyers
1982	Mike Apodaca
1983	Roger Null
1984	Dan Meyers
1985	Dave Powell
1986	David Oliver
1987	Mike Apodaca
1988	Dave Powell
1989	Dave Powell
1990	Roger Null
1991	Roger Null

The schedule

Education remains key to annual conclave

More than 60 educational sessions and seminars will highlight the 63rd International Golf Course Conference and Trade Show,

Following is a brief schedule of the one- and two-day educational courses, and the seminars planned for the GCSAA conference. In parentheses are the credit hours assigned each course. The courses will be held at the convention site.

MONDAY AND TUESDAY FEB. 10 AND 11

8 A.M. — 5 P.M.

- *Basic principles of turfgrass management (1.4)
- *Basic turfgrass botany & physiology (1.4)
- *Environmental considerations in golf course management (1.4)
- Golf course construction techniques & management (1.4)
- Golf course restoration, renovation & construction projects (1.4)
- Insect pests on golf course trees & shrubs (1.4)
- Introduction to integrated pest management (1.4)
- *Introduction to surveying (1.4)
- *Irrigation I: system component technology (1.4)
- *Landscape design & plant materials (1.4)
- Managerial productivity (1.4)
- *Plant nutrition & fertilizers (1.4)
- Protection of water resources (1.4)
- Public relations & public speaking (1.4)
- Turfgrass identification & utilization (1.4)
- *Weed control (1.4)

TUESDAY, FEB. 11

8 A.M. — 5 P.M.

- Safe pesticide management (.7)

WEDNESDAY, FEB. 12

8 A.M. — 5 P.M.

- *Budgeting & forecasting (.7)
- Calculations & practical mathematics for use in golf course management (.7)
- Effective business writing (.7)
- Financial management (.7)
- Implementing strategies & plans for turfgrass environmental systems (.7)
- International seminar (.7)
- Maximizing job satisfaction (.7)
- Preparing your golf course for a major tournament (.7)
- Scouting, sampling & monitoring golf course pests (.7)
- USGA golf course rating system (.7)
- Water quality & irrigation scheduling techniques (.7)
- Wildlife management & habitat conservation (.7)

WEDNESDAY AND THURSDAY FEB. 12 AND 13

8 A.M. — 5 P.M.

- *The assistant superintendent: managing people & jobs (1.4)
- Business communications & assertiveness techniques (1.4)
- *Disease identification & control (1.4)
- Golf course design principles (1.4)
- Golf course restoration, renovation & construction projects (1.4)

scheduled Feb. 10-17, in New Orleans, La.

Hosted by the Golf Course Superintendents Association of America, the event will include a three-day trade show, a banquet featuring a performance by Kenny Rogers, the association's annual meeting and election of officers, and the 1992 GCSAA Golf Championship.

Conference week opens with the annual golf tournament, Feb. 10-11 at several courses four states away — in Ponte Vedra Beach, Fla. A field of about 400 will compete for individual and chapter team honors in the national tournament.

Topics ranging from golf course restoration to protection of water resources will be covered in 53 one- and two-days seminars offered during the first four days of the con-

- *Introduction to soil science (1.4)
- *Irrigation II: system design, operations & management (1.4)
- *Turfgrass insects: basic & advanced principles (1.4)

THURSDAY, FEB. 13

8 A.M. — 5 P.M.

- *Cardiopulmonary resuscitation
- Certification exam study guidelines
- Developing your hazard communication program (.7)
- Golf course safety, security & risk management (.7)
- International seminar (.7)
- *Computers & turfgrass management (.7)
- Irrigation efficiency (.7)
- Maximizing turfgrass disease control (.7)
- Negotiating (.7)
- Options & their application in pest management (.7)
- Personnel functions of the golf course superintendent (.7)
- Practical tree management (.7)
- Turfgrass stress management (.7)
- Underground storage tank selection & installation (.7)
- *SGA intermediate rules of golf (.7)
- Von Hagge on golf course design (.7)

GCSAA TRADE SHOW DAILY SCHEDULE

THURSDAY, FEB. 13

11 A.M. — 5 P.M.

- *On-site Registration Open

11 A.M. — 1 P.M.

- *Past Presidents' Reception (By invitation)

5:15 P.M. — 8:30 P.M.

- *Opening Session and Reception

FRIDAY, FEB. 14

7:30 A.M. — 5 P.M.

- *On-site Registration Open

8 — 10 A.M.

*Concurrent Educational Sessions

- Golf Course Management Techniques: Part I
- 8:00 — Dwarf Turfgrasses for Golf Courses
- 8:20 — Penncross: Why Change?
- 8:40 — Bentgrass Cultivar Update
- 9:00 — Seed Priming and Pregermination — Is It Worth the Trouble?
- 9:20 — Maximizing the Habitat Potential of the Golf Course — For the Birds
- Golf Course Landscaping**
- 8:00 — Naturalistic Landscaping on the Golf Course
- 8:20 — Integrated Landscape Management
- 8:40 — Arborist on the Golf Course — Can You Afford To Be Without One?
- 9:00 — Wise Decisions Concerning Trees on the Golf Course
- 9:20 — The Biggest Problem on Golf Courses
- Public Golf Operations**
- 8:00 — Trends in Public Golf: A Demand and Supply Perspective

ference, Feb. 10-13. Six concurrent educational sessions are scheduled for Friday, Feb. 14, with several more educational programs scheduled for Saturday, Sunday and Monday.

Terry Bradshaw, who quarterbacked the Pittsburgh Steelers to four National Football League Super Bowl victories, will be the keynote speaker at the opening session on Feb. 13 at the New Orleans Convention Center. Elected to the NFL Hall of Fame in 1989, Bradshaw serves as a studio analyst for CBS' "NFL Today." He has written several books and produced the business video, "What Makes Us Great."

Nearly 600 manufacturers and distributors of golf and turf industry products, supplies and services are expected to exhibit at the trade show, which runs Feb. 15-17 at the

- 8:20 — Planning and Construction of a Public Golf Course
- 8:40 — Automated Tee Times and Information System
- 9:00 — Addressing the Public's Pesticide Perception
- 9:20 — Golf and the Americans with Disabilities Act: The Impact on Public Courses

10 A.M. — NOON

- *Environmental General Session

Noon — 1 P.M.

- *Certification Luncheon

1 — 4:30 P.M.

*Concurrent Educational Sessions

Golf Course Management Techniques: Part II

- 1:00 — The Evolution of Golf Course Maintenance in the United States
- 1:20 — Adapting Modern Techniques and Standards to Courses from Another Time
- 1:40 — Preparing for the 1991 Ryder Cup
- 2:00 — A Review of Irrigation Water Quality
- 2:20 — A Mesh Element System for Stabilizing Root Zones
- 2:40 — BREAK
- 2:50 — Update on Cultivation Options
- 3:10 — Practical Fertilization of Green Section Greens
- 3:30 — Effects of Fungicides on Non-Target Organisms in Bermudagrass Greens
- 3:50 — Monitors and Sprayer Control Systems in Modern Turf Management
- 4:10 — Concrete Pesticide Containment Pads for Golf Courses
- Intelligent Plant Management**
- 1:00 — Golf Course Specific Pest Management Programming
- 1:20 — Biological Control of Annual Bluegrass
- 1:40 — An Integrated Approach to Summer Patch Control in Turfgrass
- 2:00 — IPM: Training Is the Key
- 2:20 — IPM for the 90's: A Practical Turfgrass Approach
- 2:40 — BREAK
- 2:50 — Organic Fertilizers — Old Ideas, New Technology
- 3:10 — Water Requirements of Cool and Warm Season Turfgrasses
- 3:30 — Biostimulators: What's Their Place in the Overall Turf Management Program?
- 3:50 — Getting to the Roots of Turf Management
- 4:10 — Maintaining Bentgrass Under Stress
- The Business Side of Golf**
- 1:00 — Managing the Employee of the 1990's
- 1:20 — Developing a personal Pension Plan
- 1:40 — Why the Grass Won't Grow
- 2:00 — What a Search Firm Can Do for You
- 2:20 — Professionalism: A Must in Superintendent/Golfer Relations
- 2:40 — BREAK
- 2:50 — Identifying and Managing Environmental Law Risks

convention center.

Rogers will provide entertainment at the formal closing banquet on Monday, Feb. 17.

The highlight of the evening will be presentation of the Old Tom Morris Award, GCSAA's highest honor. The award is given to an individual who, through a continuing selfless commitment to golf, has helped to further the game with the same dedication and inspiration demonstrated by Old Tom Morris. Previous recipients of the award include Gerald Ford, Bob Hope and Arnold Palmer.

Last year's conference and show, held in Las Vegas, Nev., drew more than 16,400 people. Almost 1,400 of those attending were international visitors and guests, representing 46 countries outside the United States.

- 3:10 — Practical Environmental Responsibility
- 3:30 — Working with Consultants
- 3:50 — CGCM: Impacting the Golf Course Management Industry Through Research
- 4:10 — Harnessing TGIF: Turf's Guiding Information Force
- 4:45 — 6 P.M.
- *Members' Briefing/Meet the Candidates

SATURDAY, FEB. 15

7:30 A.M. — 5 P.M.

- *On-site Registration Open

9 A.M. — 5 P.M.

- *Ribbon-cutting Ceremony
- Official Opening of Trade Show

9 A.M. — 3:30 P.M.

- *Certification Examination

10:30 A.M. — Noon

- *International Forum and Reception

Noon — 1 P.M.

- *Voting Delegates' Luncheon

1 — 4:30 P.M.

- *Golf Course Builders of America Session

1 P.M. — Conclusion

- *Zoysiagrass Forum

SUNDAY, FEB. 16

7 — 8:30 A.M.

- *Prayer Breakfast

7:30 A.M. — 5 P.M.

- *On-site Registration Open

9 A.M. — 5 P.M.

- *Trade Show Open

9 — 11:30 A.M.

- *Major Speaker Session — Wendy Stebbins on "Dealing with Difficult People"

10:30 A.M. — NOON

- *Voting Delegate Check-In

1 — 4:30 P.M.

- *American Society of Golf Course Architects

1 — 4 P.M.

- *Green Chairmen Session

1:30 — 3 P.M.

- *Voting Delegate Check-In

3 — 4:30 P.M.

- *Golden/Platinum Tee Club Reception

7 — 8:30 P.M.

- *President's Reception

MONDAY, FEB. 17

7:30 A.M. — 5 P.M.

- *On-site Registration Open

8 — 9 A.M.

- *All Exhibitors' Breakfast Meeting

8 A.M. — Conclusion

- *Certification Re-Exam

8 A.M. — NOON

- *USGA Green Section Program

9 A.M. — 1 P.M.

- *Trade Show Open

9 A.M. — 11 P.M.

- *Voting Delegate Check-In

1 P.M. — Conclusion

- *Annual Meeting and Election

6 — 7 P.M.

- *Banquet Reception

7 — 11 P.M.

- *Annual Banquet and Show

* — Division I seminars.

USGA thrilled with Pebble Beach

By Frank Pollard

While discussions continue between the California Coastal Commission and Pebble Beach Co. over private membership plans as they relate to public access to the course, restoration of Pebble Beach Golf Links and its preparation for the 1992 U.S. Open is on schedule.

The year-long, massive facelift of the course has been successful as Pebble Beach Co. has brought the course back to its original linksland look and challenging qualities. At the same time, with the June 1992 U.S. Open looming close on the horizon, the stringent course requirements of the United States Golf Association have nearly all been met.

More than 70 years of substantial public and tournament play had caused many subtle changes throughout the golf course. Greens, bunkers and tee sizes, shapes and locations had changed over the decades and an enormous infestation of Kikuyugrass in fairways, collars, aprons, tees and roughs was rampant.

Eradication of the Kikuyugrass, a noxious weed, was mandatory. It is very nearly unplayable since the golf ball doesn't roll well and tends to nestle deep in its tough stolons (above-ground stems/runners), presenting tricky lies that make it almost impossible to hit the ball out in many cases. The course, in fact, had generally suffered from neglect over a period of time.

Kikuyugrass has been eradicated and the 18 fairways reseeded in

perennial ryegrass, with the assistance of golf course architect Jack Nicklaus, and under Director of Golf Operations Ed Miller and Pebble Beach superintendent Brad Hines.

A thorough renovation of all greens (including reclaiming putting surfaces lost over the years to encroaching rough on their perimeter), collars, tees and bunkers has restored them to meet the original 1919 design of architects Jack Neville and Douglas Grant.

The 4th, 5th and 7th greens have been entirely reconstructed to USGA specifications. A unique heating system was installed beneath the heavily shaded 5th green to maintain soil temperature and assure good grass growth during the cold winter months.

After a recent USGA inspection, the team of USGA President C. Grant Spaeth; former USGA President Frank "Sandy" Tatum, who had assisted Neville in making minor course changes prior to the 1972 Open; Tom Meeks, USGA Director of rules and competitions; Tim Moraghan, USGA championship course agronomist; and Ron Reed, USGA manager of regional affairs, was enthusiastic about the progress.

"Our recent walk-through (October) was to assess the current condition of the course and the progress that has been made, and to establish various parameters such as fairway widths; cutting heights of the fairways, primary roughs and intermediate roughs; condition and consistency of the greens; and other course prepara-

tion guidelines for the 1992 Open," said Spaeth. "We are right on schedule and actually, the course looks to be in absolutely wonderful condition."

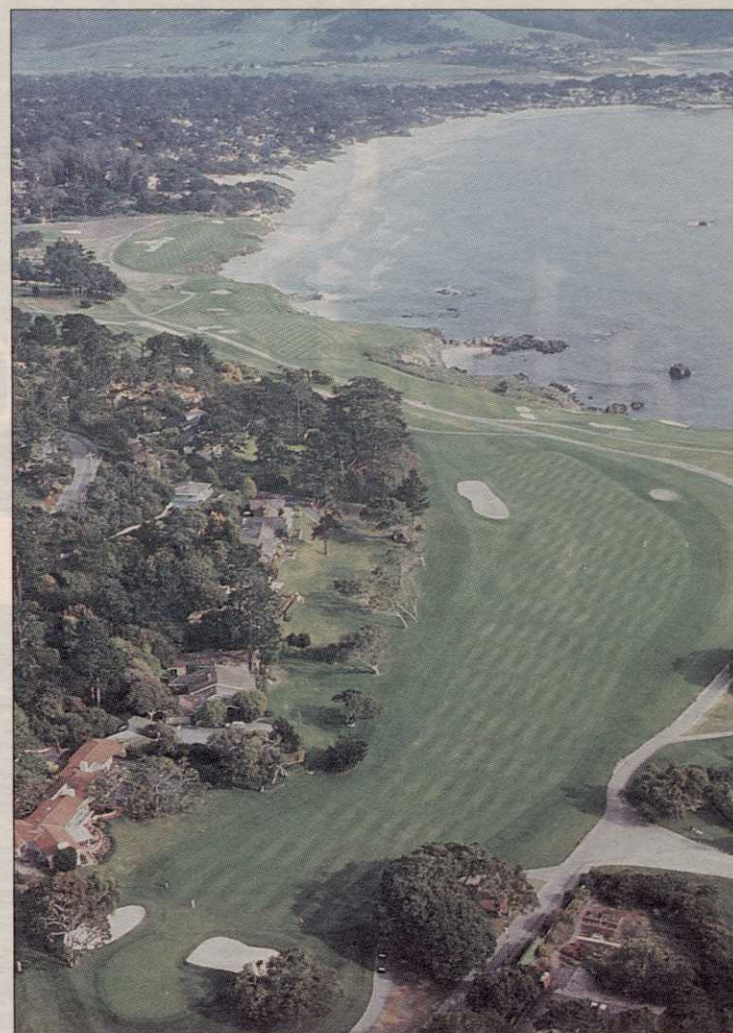
"The cooperation of the Pebble Beach people — company President Tom Oliver, Vice President of Golf Paul Spengler (also U.S. Open general chairman), Ed Miller and Brad Hines and their staffs has been marvelous and they have done a superb job. All we really have to do from here on in is fine-tune it."

Other USGA team members, in complete agreement with Spaeth, also commented on the course's superior condition and the confidence the USGA has in the Pebble Beach staff and its accomplishments in bringing the course back into such magnificent shape.

Miller has nothing but praise for the enormous amount of work as well as the caliber of the work accomplished by his Pebble Beach grounds-keeping staff and U.S. Open project crew in a relatively short time.

"We've made tremendous progress this past year and the credit belongs entirely to the dedication of our exceptionally fine crew of people working out on the course," Miller said. "Most people thought the eradication of the Kikuyugrass alone was an insurmountable task."

That, coupled with our total course restoration program, plus meeting the requirements of U.S. Open course conditioning, made our work even more difficult. Yet, our crews managed to complete their demanding assignments and



Pebble Beach's 14th hole is typical of the condition of the course today, with firm, dense and close-cropped perennial ryegrass fairways; fast, consistent and true poa annua greens; and beautifully sculptured and playable bunkers set along the precipitous and rugged cliffs of Carmel Bay bordering the Pacific.

objectives very successfully, with minimal interruption or disturbance of daily play.

"Restoration is very nearly complete," said Miller, "with only minor tasks to be wrapped up. The fine-tuning of the course for the Open will, however, continue over the next few months and we have

every reason to expect that it will be in the best shape it's ever been by the time the Open rolls around."

The public, AT&T Pebble Beach National Pro-Am touring pros and 1992 U.S. Open field will now be seeing the course as the original classic design dictated and players of the past saw it and played it.

Rygg's chore at Squaw Creek is a no-chemical attack

Continued from page 17

nance management practices obsolete.

This challenge intrigued Rygg from the outset. Rygg is familiar with working under restrictive conditions. His previous work place was The Links at Spanish Bay in Monterey, Calif. This Robert Trent Jones Jr. course was constructed on the site of an abandoned sand pit just north of Pebble Beach.

Rygg's challenge there was both reclamation of the dunes destroyed by the mining operations and the protection of the existing fragile dune environment. Many controls were imposed by the California Coastal Commission, but they paled to the specifics imposed at the Resort at Squaw Creek.

"My job is to develop a plan to grow the healthiest stand of turf possible," Rygg said. "My plan is to create the best possible situation, through soil analysis and bringing the soil into balance, to make the necessary elements and nutrients available to the turf plant. By developing healthy turf, I can help it fight off disease and other pest infestations."

"I am not anti-chemical at all. In

fact, I know they are very advantageous and cost-effective for controls on specific problems," Rygg explained. "But I must work within the framework of the management plan that governs this course."

The typical plan at the mountain courses in the High Sierra calls for use of fungicides on greens through the winter months to prevent snow mold that develops under the snowpack as the soil warms up.

The Resort at Squaw Creek is limited to only the use of one fungicide, Chloroneb, and this product is not available in California as it does not meet the state label requirements for use. In an attempt to locate Chloroneb, Rygg found only enough available to treat half of the greens for one winter.

He covered all greens with course covers and will begin to hand clear the greens in March as the soils begin to warm up to a temperature that will allow the growth of molds.

"There will be a high labor cost for all of these programs," Rygg said. "We could see anywhere from two to six feet of snow on portions of the golf course as March is a high snow month historically."

As spring melt exposes the grass,



Carl Rygg

Rygg won't have the advantage of hitting the course with soluble nitrogen to kick the grass into growth. Instead it will take a diligent close-down effort in the fall of cutting back irrigation and fertilizer to harden off the turf before the first snows.

Rygg foresees the possibility of having to resod areas on greens and landing areas of the fairways that may succumb to snow mold.

"With such a short playing season here, I can't justify having patches of the greens unplayable as

we wait for new turf to grow in," he said.

Through the summer months, the course will become a living laboratory as Rygg works on new ideas to use modern-day products that will work in a restrictive maintenance program.

He plans to use wetting agents to help with areas of hydrophobic soils. He will use biostimulants to help develop good balance in the soils. And he will use one of the most labor-intensive programs imaginable.

The course is restricted to only 80 acres of fertilized and cultivated turf, but Rygg will begin with a staff of 25 workers. Many of them will begin work in March and be busy through November, even though the course itself won't open for players until mid-May.

The course went through its first winter last year and the double whammy of warm weather through January and February, followed by more than nine feet of snow in March, produced perfect conditions for severe damage from molds.

Rygg was happy with how the young grass pulled through this first shock and learned much about

the fickle Sierra weather. After a brief warm-up in April, the golf course was still receiving snowstorms and cold temperatures in May.

"We had some spot damage out of that first thaw and we got a better feeling of how the snowpack varies. This is going to help in the future in knowing what areas we need our attention first."

The Resort at Squaw Creek and the work of Carl Rygg is already drawing scrutiny by golf industry officials as he begins to find ways to maintain a course without pesticides, herbicides and fungicides.

The techniques he develops could pave the way for modern maintenance techniques for the next century. But Rygg keeps this futuristic view in perspective.

"I really look at the program that I am developing in Squaw Valley as a step forward into the past to a time when chemical use was not as prevalent as it is today," Rygg explained. "I think there is much to be learned from the old-fashioned methods to encourage healthy turf. And I know that sound cultural practices and good old-fashioned hard hand labor can make the difference."

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.

Call or write, today, to find out how CONCEPT₂ can help you keep your water quality up to par.



CONCEPT₂ High Volume

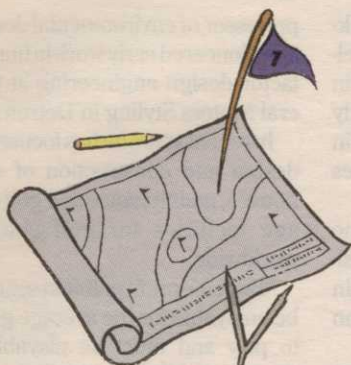
SUNBURST₂



Water works with Otterbine.

P.O. Box 217, Emmaus, Pennsylvania 18049 • (215) 965-6018

Briefs



EPA DEMANDS MAN 'UNDO' NINE HOLES

WEST BEND, Wis. — Owner Jim Korth was "pretty proud" of the nine holes he almost single-handedly had added to the 18-hole Hon-E-Kor golf course.

Now he's been told by the U.S. Environmental Protection Agency he must restore the area to pre-construction condition, in effect moving the tees and greens south, or face more than \$100,000 in fines for wetlands habitat violations.

Restoration cost is estimated at \$20,000.

Korth had dealt with the county Land Use and Park Department and the Army Corps of Engineers.

MICH. GOVERNOR RESURRECTS PLAN

ACME, Mich. — Gov. John Engler has resurrected a controversial proposal to replace wetlands along the Leelanau Peninsula's Crystal River with an 18-hole golf course and housing development.

EPA Administrator said the agency has re-evaluated its decision to block the proposed expansion of the Homestead Resort in Glen Arbor. Developer Robert Kuras seeks a permit to fill almost four acres of wetlands near Crystal River.

Michigan's Department of Natural Resources wants to approve the project.

"If the EPA allows the golf course development," said Sierra Club's Great Lakes program director Brett Hulsey, "it will be open season on wetlands in Michigan."

LIBERTY STATE PARK OPPOSED

JERSEY CITY, N.J. — Scott Weiner does not believe advocates of an 18-hole golf course at Liberty State Park have demonstrated a need for it.

The state environmental commissioner questioned whether the course could generate enough money to be self-sustaining and finance improvements in other sections of the park. He did not rule out consideration of a golf course or other public use of the park if a financial and environmental need could be demonstrated.

The golf course would cover 150 to 160 acres of park land and accommodate 50,000 to 60,000 golfers a year.

VOTERS REJECT PUBLIC FINANCING

WEST DES MOINES, Iowa — Public financing to help pay for a private golf course and housing development here has been rejected by the Polk-Des Moines Taxpayers Association.

The watchdog group opposed use of tax increment financing for the Glen Oaks Golf Course Community because it was a private venture and a residential golf course development.

Insurance executive Gary Kirke had asked West Des Moines to designate 435 acres of farmland an urban renewal area to help development of the course, clubhouse and executive housing. Cost to prepare the tract for development was estimated at \$50 million.

GOLF COURSE NEWS

The best of 1991

Wadsworth repeats for 3rd time as top builder...

By Peter Blais

For the third straight year, Wadsworth Construction Co. has been selected the top golf course builder in the Golf Course News annual golf course architects survey.

While the Plainfield, Ill.-based contractor garnered 36 percent of the votes, three other companies — Paul Clute & Associates Inc., Landscapes Unlimited Inc. and Guettler & Sons Inc. — registered strong showings.

"We appreciate the architects giving us this consideration. It's a good feeling. We also appreciate the efforts of the developers

Best conditioned resort course on pro-

tour: Story on page 17

Best resort developer: Story on page 45

we've been able to work for," said John Cotter, Wadsworth's vice chairman of the board.

Despite the slumping national economy, Wadsworth opened 16 courses in 1991 and has another 12 planned openings set for 1992.

The 1991 openings include (with architect in parentheses) University Ridge, Madison, Wis. (Robert Trent Jones Jr.); Chicopee Woods Golf Course, Gainesville, Ga. (Denis Griffiths); Seven Bridges Golf Club,

Woodbridge, Ill. (Dick Nugent); Bonita Bay Golf Course, Naples, Fla. (Arthur Hills); The Golf Club of Georgia, Alpharetta, Ga. (Arthur Hills); Green Acres Country Club, Northbrook, Ill. (Roger Packard); Bardmoor/Bayou Club, Largo, Fla. (Tom Fazio); Cobblestone Creek Country Club, Victor, N.Y. (Michael Hurdzan); Cedar Creek Golf Course, Aiken, S.C. (Arthur Hills).

Also, Deer Creek Golf Course, Savannah, Ga. (Tom Fazio); Hyatt Regency Kauai, Koloa, Hawaii (Robert Trent Jones Jr.); Conway Farms South, Lake Forest, Ill. (Tom

Continued on page 42

...while Fazio garners most designer votes

By Mark Leslie

From a Baltimore course he calls "a modern-day Augusta National" to a California site that "is so strong it even shocks me," Tom Fazio is thrilled about his 1991 golf course designs.

Chosen in a Golf Course News poll of course architects and builders as the Architect of the Year for the third straight time, Fazio said, "The courses I did this year are the best I've ever done."

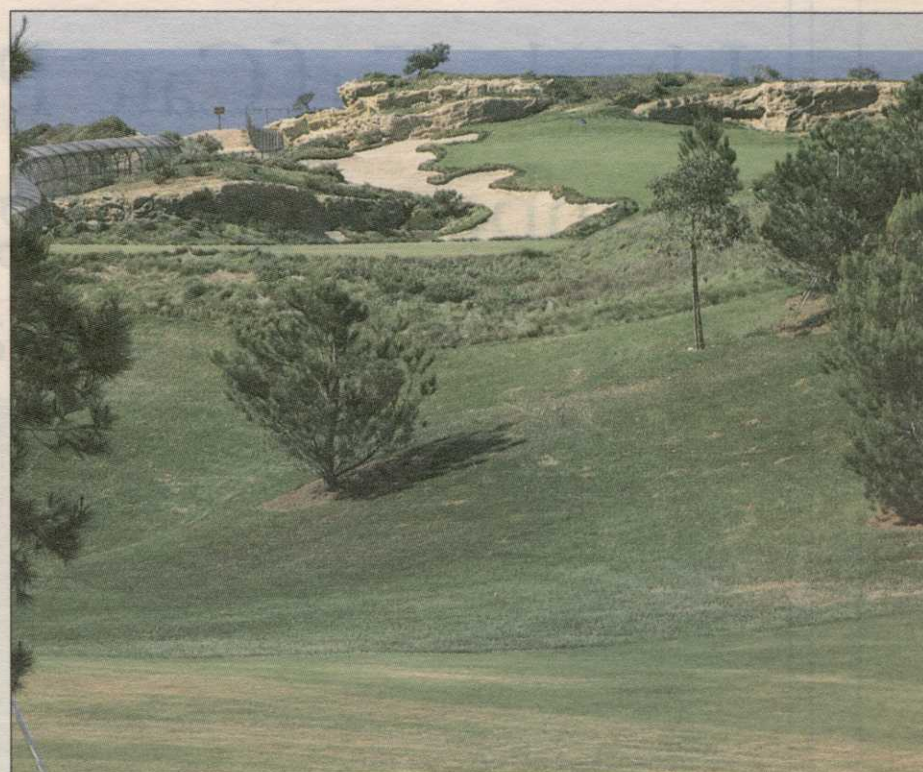
Fazio received more than one-fourth of the votes cast in the annual survey, gaining the nod over runners-up Rees Jones and Pete Dye. Twenty-two architects received votes.

Jones drew praise for his extensive renovation work on championship courses, and for his new Atlantic Club on Long Island, which, one architect said, "shows a culmination of years of experience of sensitivity to golf environment and people."

Another said: "Rees is not influenced by fashion. He uses bedrock concepts of classic design. And he can work within budgets."

Dye, whose major work of the year was the Ocean Course at Kiawah Island, was praised for his innovative designs and advanced technical applications.

Fazio's supporters attributed their votes



Pelican Hill Ocean Course's 12th hole, a 212-yard par-3 called Pelican's Nest, features a large green nestled among rock outcroppings, with a large waste area in front of the green. The course was designed by Tom Fazio.

to his courses' versatility, playability, challenge and sensitivity to the environment.

"He has great versatility in style; no two courses are alike," wrote one.

"(He designs) great but playable courses that are sensitive to the environment," wrote a second.

Another said Fazio produces "fair, challenging and beautiful design work."

Fazio himself said he would stake his fu-

ture on courses he designed in 1991.

Talking about the Golf Course of Tennessee in Nashville, he said: "I'd stake my future on this golf course — it's that strong. Hole after hole after hole. And I'd do the same with the others this year as well."

Reviewing the courses he worked on in 1991, Fazio reported:

• Golf Course of Tennessee, a private

Continued on page 40

Golf Course Builders Ass'n maps strategic plan

By Peter Blais

Golf Course Builders Association of America officials plan to unveil a first draft of the association's new strategic plan at February's annual meeting.

The initial gathering of the nine-member planning board was held Oct. 25-26 in Chicago. The board will meet again Jan. 15-16 in Dallas, according to GCBA Executive Director Phil Arnold.

The strategic plan, Arnold said, will detail where the organization is headed and address such issues as in-house educational programs for members; builder certification programs; membership growth; and revenue-producing activities, such as seminars for non-members.

The committee's recommendations will

be a working document that members will discuss at the annual meeting in New Orleans. That input will be incorporated into the final strategic plan, which should be drafted sometime in 1992, the executive director said.

"This is the first time anyone has sat down and really thought about what direction the association should be heading in," Arnold said. "A strategic plan gives you a road map for figuring out where you want to go and how to get there."

Arnold sees the GCBA heading in a positive direction. Membership grew from 72 to 110 members during the past year and could eventually reach 150 or more, he said. The association has about a dozen interna-

tional members and Arnold expects additional growth in that area.

"We get frequent calls from overseas," he said.

Arnold also hopes to begin a golf course construction cost data base.

"No organization I know of has a wide body of construction cost data," he said.

The members of the strategic plan committee include Arnold, GCBA President Perry Dye, Paul Eldredge of Wadsworth Construction Co., Jerry Pierman of International Golf Group, Jim Kirchdorfer of Irrigation Supply Co., John McDonald of McDonald & Son Construction, David Truttmann of Buckner Inc., Doyle Jacklin of Jacklin Seed Co. and Paul Clute of Paul Clute & Associates.

DeHays, Jones form all-purpose consulting, design firm

From staff reports

PALM BEACH GARDENS, Fla. — Stating their firm's credo will be fiscal responsibility, Craig R. Jones and H.A. DeHays have formed Golf Facilities Development Ltd.

Jones is president and DeHays director for the company, which will perform the full spectrum of work on projects, from feasibility studies to design.

"The time has come for fiscal responsibility," Jones said. "A lot of golf facilities have been monuments. They don't function. Developers

build retail, food service and hotel components, then put the three together. That's doesn't work."

Claiming, for instance, that maintenance buildings are too often designed to dimensions that don't fit the equipment, Jones said Golf Facilities Development will design facilities that work.

He also stressed the importance of feasibility studies.

"Now, and we think increasingly so, projects have to make sense. You can't build a Ford for a Cadillac market, or vice versa. We want to

put a round peg in a round hole... Successes are the best advertisements for golf."

He added: "Prior to any construction program, community needs should be defined with an analysis of both local and outside markets. Such factors as private club versus daily fees, potential rounds for all sources, cart purchase versus lease, income from cart rental fees, pro shop, driving range, restaurant and lounge, et cetera, should be given careful analysis."

Jones has an extensive background in land and retailing development, following experience in municipal planning. He recently developed golf feasibility studies in addition to marketing the services of Gary Player Design Co.

At GFD, Jones will market the company's services, develop feasibility studies and help clients obtain local, state and federal construction approvals.

DeHays' background includes 32 years of facilities design and engineering. He taught for 14 years as a

professor of environmental design, and pioneered early work in human-factor design engineering at General Motors Styling in Detroit.

In recent years he has focused on design and construction of clubhouses, maintenance and golf storage facilities for golf courses worldwide.

"Built-for-profit golf courses must be enjoyable for the average golfer to play and must be playable in three to four hours," DeHays said.

He observed that "most recreational golfers only have five to six hours away from family responsibility."

He noted that to accomplish the fast-play goal and still generate profit-making revenue requires coordination of several architectural and engineering disciplines.

"Proper design of the course," DeHays said, "can make a major contribution to profitability of an operation."

He added that bunkers, located in proximity to greens, permit machine rather than hand-mowing of fringes without affecting the effectiveness of the bunker, and reduce staffing requirements significantly.

Baird opens West Coast headquarters

NASHVILLE, Tenn. — Golf Course architect Gary Roger Baird has opened a West Coast office and added a senior designer/engineer to the Nashville design group.

The West Coast office, located in Costa Mesa, Calif., was created to serve the burgeoning list of clients in the Western United States, Hawaii, the Far East and Asia.

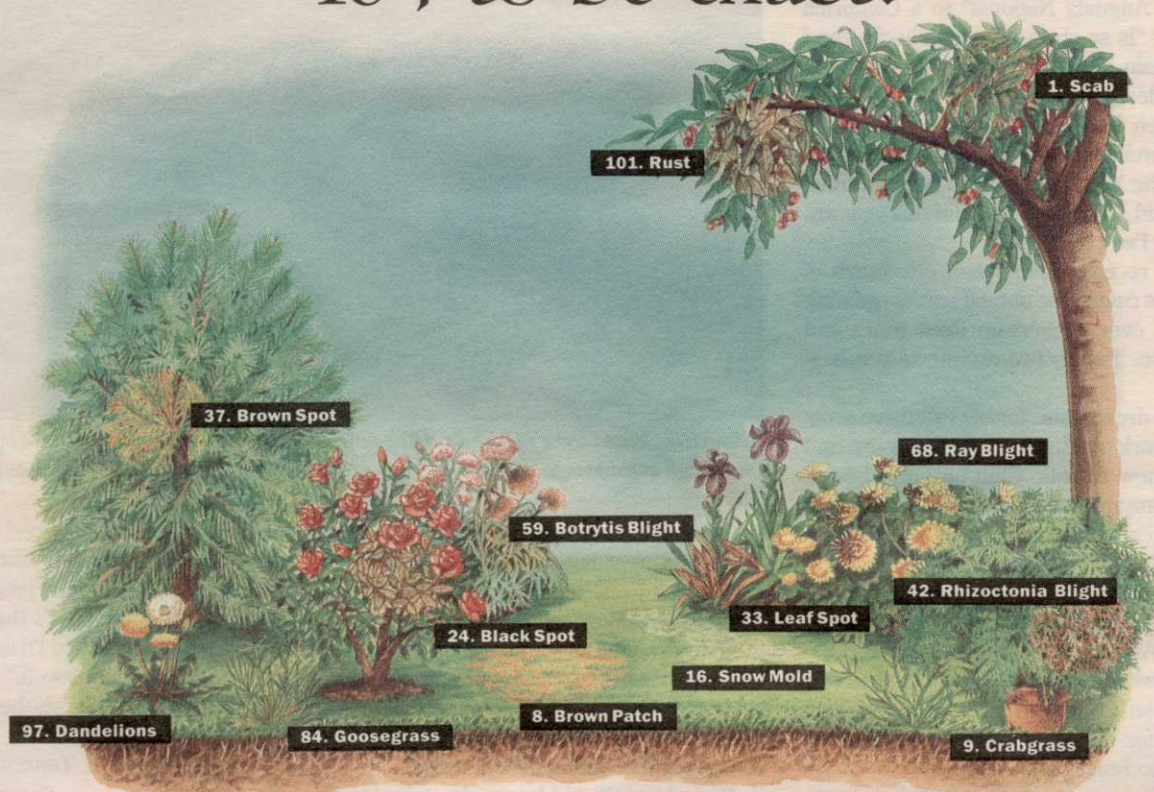
Charles Davison has been named director of business development for Gary Roger Baird Design International, Ltd. He has responsibilities for both regional and corporate operations, administration, and business development. In this capacity Davison will be involved in developing new projects, providing liaison on courses under construction, in addition to corporate responsibilities.

Anative Californian, Davison, 50, has been involved in international marketing for 20 years in the capacity of executive vice president for International Management Systems and most recently as president of Worldnet Marketing.

In Nashville, Baird has added Jae H. Lee to his staff, as overseas project manager. A civil engineer, Lee, 37, will have engineering and design responsibilities with a primary emphasis on earthwork engineering.

A native of Seoul, Korea, Lee was most recently the assistant manager of the resort division for SsangYong Engineering Co., one of the largest engineering companies in Korea, a company with which Baird had been involved in golf course design in South Korea.

Use the Turf Care® Pros for any number of growing problems. 104 to be exact.



Professionals count on the Turf Care Pros. To treat diseases, Daconil 2787® is the cornerstone of your management program. The broadest-spectrum fungicide on the market, it controls 12 major turf and the major ornamental diseases. And there's never been a documented case of disease resistance to Daconil 2787.

For pre- and postemergent herbicide control of annual grasses and broadleaf weeds, it's Dacthal® and Daconate 6®. On pesky broadleaf weeds, use 2 Plus 2.



Always follow label directions carefully when using turf chemicals.
*Roundup is a registered trademark of Monsanto Company.

And round out your program using Frigate® with Roundup® to control perennial and annual weeds. Together with Daconil, they all create a complete professional management program.

When it comes to turf and ornamental care, count on the Turf Care Pros. And count out diseases and weeds — 104 to be exact.

ISK Biotech Corporation, Turf & Specialty Products Division, 5966 Heisley Road, P.O. Box 8000, Mentor, OH 44061-8000.

Donald Ross Society winning members, answering the call

By Peter Blais

Current British Open champion Ian Baker-Finch recently became the 400th member of the Donald Ross Society.

Formed less than three years ago to help preserve the works of and pay tribute to the legendary golf course architect, the society now lists some of the golf industry's top players, architects and superintendents among its growing ranks.

It has also helped some members find work. Greens committees at several Donald Ross courses have hired architects for remodeling projects, in part, because they were Ross Society members, according to Palm and founder Barry Palm.

Among them are architects Stephen Kay at Oyster Harbors Club in Osterville, Mass., and Winchester Country Club north of Boston as well as Ron Forse at Hyannisport (Mass.) Country Club.

"In some cases the clubs have come directly to us looking for architects," Palm said.

Others who have joined the society include PGA players/architects Jack Nicklaus, Ben Crenshaw, Tom Weiskopf and David Graham; architects Michael Hurdzan, Keith Foster, Ken Kavanaugh, Gary Panks, Dan Maples, Craig Schreiner and Ron Garl; and superintendents Brad Kocher (Pinehurst Golf & Country Club) and Charles Passios (Hyannisport CC and Golf

Course Superintendents Association of America board of director member).

As of the second annual meeting last May at Pinehurst, the society had already received 130 requests from Ross courses seeking historical data. The society has been able to fill about 60 percent of those requests, Palm said.

"If we have the blueprints, we'll photocopy them and make them available," Palm said. "If we don't have them, we might be able to help locate them elsewhere. We've found

Ross drawings in local zoning board office files, stuffed away in drawers at course maintenance buildings and other places.

"Sometimes we're successful. Other times we've found that plans went up in flames when the old town hall burned down. You never know."

Ross' daughter has indicated she may donate many of her father's papers and drawings to the Tufts Archives in the Given Library at Pinehurst, Palm added.

The two-day fall meeting at Salem

Country Club in Peabody, Mass., drew 70 people. The third annual meeting is scheduled for April 14-18 at Pinehurst No. 2, site of October's PGA Tour Championship, is one of Ross' most famous courses. Twelve of Ross' 385 layouts are among *Golf Digest* magazine's Top 100 courses in the country.

The society also raises money for its Ross Memorial Scholarship Fund, given to a student of golf course architecture.

"The Donald Ross Society was started as a way to recognize the

tremendous contribution Mr. Ross made to American golf and to promote his spirit to people who appreciate classic golf course architecture," Palm said.

"I am personally very gratified that more than 400 people across America have become members of our society in just two years. It is a real testament to the greatness of Mr. Ross."

For more information write Donald Ross Society, P.O. Box 403, Broomfield, Conn. 06002, or telephone 203-243-1433.

How we're changing the course of the world.

Where on earth can you find everything you need for total golf course water management?

With Rain Bird, wherever you are.

You can depend on us for the most advanced irrigation control products and technology available.

Our complete product family offers everything you need, from high quality rotors and dependable field satellites to the powerful

MAXI® V central control system.

With every Rain Bird product you also get the experience of our world-wide field sales and service team. Plus the confidence of knowing that our technical assistance and support is there for you anywhere you are.

You see, only Rain Bird has made the commitment to span the globe, yet still thinks the world of meeting your individual needs—including today's most challenging environmental and water management concerns.



So for water management that's always on course, turn to Rain Bird. The company that's committed to keeping the golf world greener.

Wherever you are in the world.

Call us today.

Wood, Verplank join Heckenkemper on Okla. design

OKLAHOMA CITY, Okla. — PGA professionals Willie Wood and Scott Verplank assisted architect Randy Heckenkemper in designing the city's newest golf course, the daily-fee SilverHorn Golf Club, which opened in August.

Developers David Hardin and Elby Beal said the \$5-million SilverHorn was built to fill the need for a high-quality, championship-level facility in the area.

"SilverHorn is tough enough to challenge the scratch player, yet forgiving enough for the casual golfer," Hardin said.

The course features up to six tees and plays from 5,400 to 6,839 yards.

Louis Pugh is superintendent of the 170-acre course which is dissected by four winding creeks through eight holes.

Golf Works Construction Co. built the course. Resort Management of America is managing it.

Credit Pulley alone

Royal Virginia Golf Club in Hadensville, Va., was designed by Algie Pulley. Lester George, now with Colonial Design, was project manager and lead design coordinator. In a *Golf Course News* article in November the course was described as a co-design of Pulley and George.

GOLF COURSE NEWS

RAIN BIRD

Keeping the golf world greener.™

145 North Grand Avenue
Glendora, CA • 91740 • (818) 963-9311

CIRCLE #125/GCSAA BOOTH #2946



Flatt institutes program for 'budget-conscious' communities

By Mark Leslie

Larry Flatt saw a need for public golf when he was an Overland Park, Kan., official for 18 years. Now the former course superintendent, who two years ago ended a long hiatus from the world of golf, has instituted a program he feels will help fill the need for more public golf courses.

Flatt Golf Services, a design and development consulting firm, has initiated a program for "budget-conscious golf clubs, community

associations and smaller communities," the company president said.

Its thrust, Flatt said, is to provide professional design assistance to smaller clubs, associations and communities in their efforts to develop or expand a course on a modest budget. The cost? He estimates \$350,000 to \$400,000 for construction and design services, minus any donations the client can get.

"I enjoy doing these," said Flatt, who has two courses under construction and has completed master plans for six or seven others.



Larry Flatt

Referring to his \$12,000 to \$13,000 fee, plus a per-visit charge under this program, Flatt said: "I didn't get into this to make a lot of money. Rather to get back to what I enjoy."

Flatt, who serves on the U.S. Golf Association and Kansas Golf Association's Public Golf committees, was a superintendent in Kansas City, Mo., and Overland Park for six years. He became Overland Park's director of parks and recreation in 1971 and community development director in 1980. He is a

former secretary of the Heart of America Golf Course Superintendents Association and has seen golf from a variety of angles.

His new approach reflects that experience. It is essentially a three-step process:

- Locating an appropriate piece of property and preparing a master plan. The master plan typically includes information regarding the feasibility of a course, a routing plan, detailed construction cost estimate, a narrative description of each hole and how it will play, a description of the necessary construction techniques, a list of maintenance equipment needed for the completed course, and a projected first-year maintenance and operational budget. The plan provides the community, club or association a road map to pursue membership sales, financing and/or local government support or commitment.

- Developing a step-by-step process and timetable for building the course. The client is provided with detailed greens designs, irrigation, grading and planting plans, and a complete list of materials. The construction guidelines cover earthwork and grading including dams and reservoirs; greens, tees and bunkers construction; irrigation system and pump station; planting; such miscellaneous items as bridges, cart paths and halfway house; and a grow-in section to help the client meet the projected opening date.

- Inspecting and consulting. This includes visiting the course weekly during construction to check progress of work, planning and scheduling work that needs to be started, training volunteers or local contractors, and helping stake and lay out greens, tees, bunkers, and the irrigation system.

"This doesn't work in urban areas. But in small communities, with more community spirit, it can work," Flatt said. "It's a lot of work. I tell them they are in for a couple of years of work."

In exchange, the client gets two things: a golf course at low cost and "quality where it is most needed: the layout, greens, flat tees, and good irrigation system," Flatt said.

Cimarron Valley Golf Club will cost the community of Satanta, Kansas, \$350,000 to \$400,000, while Nora Springs, Iowa, will pay closer to \$200,000 for Western Hills Golf Club because area businesses contributed so much work.

Under this plan, Flatt designs a course "in skeleton fashion," he said. "I don't do full-blown drawings. Each is different. I try to get them (clients) involved with a superintendent who has good background. I show them how to build it step by step."

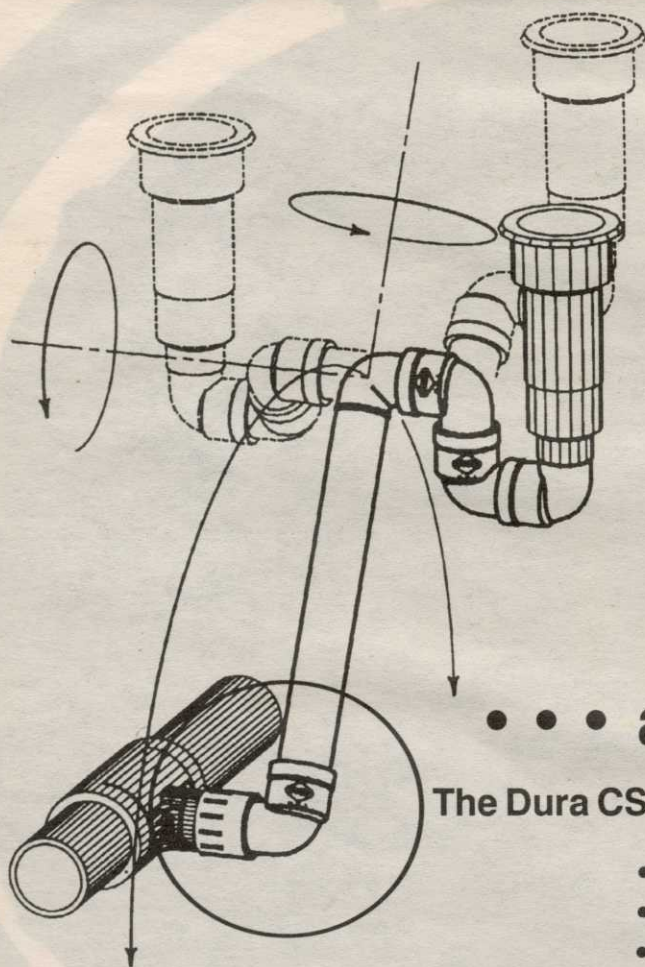
That assistance comes in many forms. "I don't get the permits for them, but show them how to," Flatt said.

And, he draws up applications for matching grants from the Land and Water Conservation Fund — a federal program administered by

Continued on page 31
GOLF COURSE NEWS

#1 Swing Joint gets a New Twist • • •

The "Ultra" Unibody Swing Joint still offers all the proven features which makes it the #1 choice of the worlds leading Golf Course Builders.



- Double O-ring seals
- Schedule 80 construction
- One piece Unibody construction
- Rated to 350 psi at 73°F per ASTM D3139 Std.
- Full 360° swing
- Vertical adjustment thru 8 1/4"
- Four year limited warranty

• • • and here's the Twist

The Dura CS90 "Continuous 360° Swivel 90° Elbow"

- No disassembly to install
- Double O-Ring sealed
- Easier adjustment to grade

Quality, Durability and Performance

Stop by and see us at the GCSAA, booth 810-814



DURA PLASTIC PRODUCTS INC. BEAUMONT, CA. USA. 92223
(714)845-3161 FAX: (714)845-7644



Flatt

Continued from page 30

the state.

"In most states the priority for that money is acquisition of recreational and open space," and property for a golf course qualifies, he said.

"I design greens to detail. I stake and survey and whatever needs to be done. They have to get somebody to coordinate it, and I'll train them," Flatt said.

"The rest depends on how much money they have."

Often, a major ingredient is community spirit. It takes many forms, from land or financial donations to bulldozer work.

"First, always, is the land," Flatt said. "You start with no cost for the land, if possible. We work with local bankers. We can go to local businesses for grants, for them to be a good neighbor. In west Kansas, where oil and gas has been a good business, oil and gas companies give back to the community. The Cimarron Valley clubhouse was donated by an oil company that had used it as a training house..."

Cimarron Valley Golf Course is owned by an association that plans to give the course to the city of Satanta eventually. As a fund-raiser, it is selling holes. "You can get your name on the hole," Flatt said.

In addition to land and money, a lot of work can be done by local citizens.

"A lot of farmers have scrapers and dozers and do that work. They are the general contractor. They will bid out the irrigation system and well-drilling," Flatt said. "These guys are golfers, farmers, people with community spirit."

Another community, Nora Springs in north central Iowa, is similar. An association of community leaders founded a non-profit association. It did its own feasibility study.

It sold memberships — "for which buyers got nothing" — and raised the money to hire Flatt.

The association bought some low-cost property and received solid community support, said Flatt, who drafted the master plan and agreed to visit the site whenever needed.

The association hired a farmer, who had two scrapers and a bulldozer, to grade the course. Flatt hired a premier dozer operator, who had never seen a golf course, as the shaper.

Local people built a lake for irrigation and contracted out the irrigation system.

All trucking of sand (3,000 tons) was contributed.

Flatt said greens are built to USGA specifications, minus the choker layer.

"In west Kansas we used native soil. It's great sandy soil," he said. "In Iowa we had too much clay, so we brought in sand."

Flatt budgets automatic, single-row irrigation systems, and suggests his clients lease their maintenance equipment.

Flatt said he is also designing a "conventional course, but I really enjoy the challenge and uniqueness of doing these."

GOLF COURSE NEWS

NGF seminars planned for developers, owners

Series of five aims to address issues affecting successful building, operating

JUPITER, Fla. — The National Golf Foundation has five seminars set for 1992 that will illustrate how critical issues facing golf course developers and operators are being successfully managed and surmounted.

The first two in the series will

address environmental regulations, increasing expenses and other issues impacting the success of golf course operations, now and in the future. Two others will focus on how public-private partnerships are successfully being employed in acquiring development capital and overcoming other obstacles to golf course development.

The fifth will look at how some are taking advantage of the growing market for alternative golf facilities, such as golf ranges, executive and other non-regulation courses. All of

the programs will be presented using a case study approach.

The series includes:

- March 15-17 — "Golf Course Operations in the 1990s-Obstacles Overcome by Successful Golf Course Operators," at Marriott at Sawgrass resort in Ponte Vedra Beach, Fla.

- April 5-7 — "Golf Course Operations in the '90s - Issues Affecting the Future of Successful Operations," at Newport Beach (Calif.) Marriott Hotel & Tennis Club.

- May 3-5 — "Public-Private Joint

Ventures in Golf Course Development," at Dallas Marriott Mandalay at Las Colinas in Irving, Texas.

- June 7-9 — "Alternative Golf Facilities - The Development and Operation of Ranges and Non-Regulation Golf Courses," at Fairview Park Marriott in Falls Church, Va.

- Sept. 20-22 - "Public-Private Joint Ventures in Golf Course Development," at Boston Marriott in Newton, Mass.

For further information, contact Roger Yaffe at 407-774-6006.

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

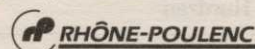


You know the story. The guys who swing an iron the way a lumberjack wields an ax are the same guys who yell the loudest when weeds give them a bad lie. So, with all the abuse your turf takes, the last thing you need is root-pruning from your herbicide. That's why you need CHIPCO® RONSTAR® brand G herbicide. University root pull studies show that CHIPCO® RONSTAR® G works without pruning turf roots. That means healthier roots and stronger, more durable turf. Best of all, just one pre-emergence application provides season-long control of 25 tough broadleaf and grassy

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.

New Low-Dust Formulation
Chipco Ronstar® G

Brand Herbicide



Rhône-Poulenc Ag Company, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709. For additional product information, please call: 1-800-334-9745. As with any crop protection chemical, always read and follow instructions on the label. CHIPCO and RONSTAR are registered trademarks of Rhône-Poulenc. ©1991 Rhône-Poulenc Ag Company.

CIRCLE #127/GCSAA BOOTH #2756

Golf courses newly planned around the United States

Location	Type	Work	Contact	Location	Type	Work	Contact
Arizona				Maryland			
Chandler	M	N	City Mgr. John Pinch	Mount Airy	D	N	Frall Developers Inc.
California				Massachusetts			
Brentwood	N/A	N	Councilman Bill Doheney	Ashfield	N/A	N	Mark Graves
Chino	P	N	Rees Jones	Attleboro	N/A	N	Fafard Corp., Ashland
Fremont	N/A	N	Timothy Starkweather	Duxbury	M	N	Town Mgr. Thomas Groux
Fresno	N/A	N	Sienna Corp.	Lee	M	N	John Wells
Fullerton	N/A	N	Union Oil Co.	Pittsfield	M	N	N/A
Indian Wells	M	N	Sunrise Co.	Mexico			
Kings County	N/A	N	Arnold Palmer	State of Sonora	N/A	N	Fonatur
Laguna Hills	N/A	N	Rossmoor Business Partners	Michigan			
Lakeside	N/A	N	Helix Water District	Addison Twp.	N/A	N	Curtis Wright
Palm Springs	D	N	Joseph Solomon, Beverly Hills	Canton Twp.	M	N	Golf Resource Assoc.
Palos Verdes	N/A	N	Barry Hon	Canton Twp.	N/A	N	Twp. Supervisor Thomas Yack
Paso Robles	N/A	N	Ken Hunter Jr.	Fenton Twp.	N/A	N	Tom Fazio
Pleasanton	N/A	N	City Council	Grand Blanc Twp.	N/A	N	Paragon Development
Pomona	D	N	Reggie Webb	Livingston County	N/A	N	Donald Moon
Roseville	N/A	N	Lakemont Dev.	Metamora Twp.	N/A	N	George Papadelis
Roseville	N/A	N	Chartwell Holdings	Oakland Twp.	P	N	Robert Rediske
Santa Clarita	N/A	N	Santa Fe Mortgage & Dev. Corp.	Traverse City	D	N	Spruce Mgmt. Co.
Scotts Valley	N/A	N	APC Int'l	Nebraska			
Simi Valley	N/A	N	City Council	North Platte	D	N	Val Skinner
Vallejo	N/A	N	City Mgr. Ed Wohlenberg	New Hampshire			
Ventura	D	N	Potomac Investment Assoc.	Lebanon	N/A	N	City Mgr. Steve Smith
Walnut	N/A	N	Wm. Lyon Co., Newport Beach	New Jersey			
Colorado				Bernards	N/A	N	Club Corp. of America
Canon City	D	N	City Council	Hopewell Twp.	N/A	N	Hopelawe Properties Ltd. Partner.
Dacono	N/A	N	Jack Finley	Manchester	N/A	N	Hirair Hovnanian
Lafayette	N/A	N	City Fin. Dir. Mary Hornbacher	North Hanover	N/A	R	John Limm
Connecticut				Rockaway Twp.	N/A	N	Samco Rockaway 90 Inc.
Middlefield	N/A	N	Lyman Farm Inc.	Stanhope	M	N	Liberty St. Pk. Dev. Corp.
Trumbull	D	N	Town Council	New Mexico			
Wallingford	M	N	Steven Holmes	Santa Fe	D	N	Ranch at Santa Fe/Las Campanas
Florida				Santa Fe	N/A	N	Ted Robinson
Charlotte Cnty.	N/A	N	Doak Campbell, Palm Beach	New York			
Kendall	N/A	N	Charlie Stanton	Gorham	D	N	Doug Negley
Oldsmar	N/A	N	James Bradley	Suffolk County	N/A	N	State Div. of Cemeteries
Orlando	D	N	Melvin Simon & Assoc.	Yorkshire	N/A	N	Derek Tennant
Orlando	D	N	Ritz-Carlton Hotel Co.	Ohio			
Pensacola	N/A	N	Champion Dev. Mgmt. Co.	Circleville	N/A	N	James Cook
Sarasota	N/A	N	Troon Assoc.	Cleveland	P	R	Barry Serafin
Sebastian	M	N	City Mgr. Robb McClary	Kenton	M	N	Barry Serafin
So. Dade County	N/A	N	Jeffrey Lehrman, Coconut Grove	Madisonburg	D	N	Betty Hawkins
Georgia				Springfield	N/A	N	James Gastineau
Bibb County	N/A	N	Charlie McGlamry	Oregon			
Doraville	D	N	De Kalb Cnty. Rec. & Parks Dept.	Bend	D	N	Sunriver Properties Ltd.
Leesburg	D	N	C & J Investments, Albany	Bend	D	N	Deschutes County Administrator
Macon	N/A	N	Charlie McGlamry	Lane County	D	N	Bruce Chase
Rome	M	N	Arthur Davis	Salem	N/A	N	Settecase Smith Doss Arch.
Hawaii				Woodburn	N/A	N	Robert Withers
Hilo	N/A	N	Royal Coast	Pennsylvania			
Honokaa	N/A	N	Hamakua Sugar Co.	Carlisle	N/A	N	KMWW Partnership
Honolulu	N/A	N	Y.Y. Valley Corp.	Carroll	N/A	N	Arnold Palmer
Kau	D	N	Sazale Corp.	Coalport	D	N	Glendale Industrial Dev. Assoc.
Lanai City	N/A	N	David Murdock	Limerick	N/A	N	Bill Waltz
Waimea	N/A	N	Nansay Hawaii	Norristown	D	N	James Nolen, Plymouth
Idaho				Texas			
Coeur d'Alene	N/A	N	John Pring	Galveston	N/A	N	County Beach & Parks Dept.
Pullman	N/A	N	Public Works Dir. Ralph Dannenberg	La Marque	N/A	N	Don Glywasky
Illinois				Plano	M	N	Rec. Dir. Don Wendell
Alton	D	N	AAI-Campbell Inc., Collinsville	Port Aransas	M	N	Mayor Chuck Borders
Benton	N/A	N	Rend Lake Conservancy Dist.	San Antonio	N/A	N	Powell Cos.
Blue Island	N/A	N	Blue T Golf Inc.	Utah			
Chicago Ridge	M	N	Oak Lawn Park Dist.	Mapleton	M	N	THK Assoc.
Geneva	D	N	Shodeen Construction Inc.	Orem	N/A	N	Richards Dev.
Kane County	N/A	N	Thomas Thornton	Salt Lake	N/A	N	Mt. Olivet Cemetery
St. Charles	N/A	N	James Follensbee & Assoc.	West Point	N/A	N	Ernie Schneider
Tinley Park	N/A	N	Intercontinental Real Estate & Dev.	Virginia			
Tuscola	M	N	Mayor Dan Kleiss	Bristol	N/A	N	Don Nicewonder
Utica	N/A	N	Ronald Senica	James City County	N/A	N	CBSG Inc., Newport News
Winchester	N/A	N	Ed Gant	Washington			
Indiana				Anacortes	N/A	N	Interpacific Golf Assoc., Bellingham
Anderson	M	N	Links Inc., Carmel	Auburn	P	N	Soos Creek Inc.
Indianapolis	N/A	R	Pete Dye	Bellevue	N/A	N	Richard Rutledge
Lake County	N/A	N	Parks & Rec. Dept.	Bellevue	N/A	N	De-en Lang Subdivision Mgmt. Inc.
Plymouth	N/A	N	Marshall Cnty Plan Commission	Bellevue	P	N	R.W. Thorpe & Assoc.
Iowa				Bellingham	N/A	N	Airport Planner Bill Hager
Ames	M	N	Bob Lohmann	Cashmere	D	N	Paul Hansen
Des Moines	N/A	N	Joe Chapman	Elberton	N/A	N	Darryl Dutke
West Des Moines	P	N	Gary Kirke	Leavenworth	D	N	Ben Browning, Longview
Kansas				Marysville	N/A	N	Tulalip Tribes
Lawrence	D	N	Jeff Gazaway	Omak	D	N	Colville Confederated Tribes
Wyandotte County	D	N	Robert T. Jones Jr.	Orting	N/A	N	Cascadia Dev. Corp.
Kentucky				Redmond	D	N	Pacific Golf Development
Bowling Green	N/A	N	HCS Enterprises	Richland	M	N	William Neff
Knott County	D	N	Donald Webb, Lexington	Wisconsin			
Lancaster	N/A	N	Lincoln-Garard County Park Comm.	Beloit	N/A	N	THK Assoc.
Union	D	N	Michael Hurdzan	Fond du Lac	N/A	N	Bob Lohmann
Maine				Racine County	N/A	N	County Planner Arnold Clement
Turner	N/A	N	Steve Leavitt				

Golf courses newly approved around the United States

Golf Course News is publishing these lists — on this and the opposite page — monthly from our sources and with the assistance of *Forecast Golf Marketing & Financial Systems, Inc.* of Richmond, Va. The chart at right includes courses that have been approved around the country in the past month. The list below contains the sites and contacts for new courses and renovations in the planning stages. When those courses are ready to begin construction they will be listed again in this "Courses newly approved in the U.S." chart.

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

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

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

Under "Work" — N= New; R= Renovation.

Location	Course Name	Type	Class	Work	Contact
Arkansas					
Pine Bluff	To Be Announced	D	R	N	Mike Drewett, Parks and Rec. Dir.
California					
Diablo Range	To Be Announced	R	N		Shea Homes San Jose
Colorado					
Mesa County	Chipeta National GC (Course #1)	R	N		Ned Wilson
Mesa County	Chipeta National GC (Course #2)	P	N		Ned Wilson
Hawaii					
Maui	Grand Hyatt Wailea	D	R	N	Wailea Resort Co. Ltd.
Illinois					
Okawville	Okawville CC	N/A	N		Jack Valian
Indiana					
Indianapolis	Indianapolis Motor Speedway GC	D	R	R	Pete Dye
Kentucky					
Daviess County	The Summit CC	P	R	N	Don Charles
Michigan					
Kalkaska County	To Be Announced	R	N		
Ohio					
Centerville	To Be Announced	M	R	N	Darryl Kenning, City Mgr.
Lockbourne	Foxfire Golf Club	D	R	N	Barry Serafin
Oregon					
Dallas	To Be Announced (Course #1)	P	R	N	Dong Keun Chaey Salem
Dallas	To Be Announced (Course #2)	D	R	N	Dong Keun Chaey Salem
Pennsylvania					
Chester County	Stonewall	P	R	N	Tom Fazio
Utah					
West Bountiful	To Be Announced	M	R	N	City Council
Washington					
Stevenson	Skamania Lodge	D	R	N	Gene Mason
Wisconsin					
Weston	Greenwood Hills CC	P	R	N	Houdek GC Const.

Tidbits around the industry

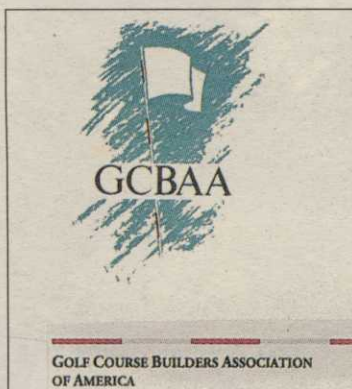
Continued from page 14

the pun of a hurricane: After Hurricane Bob brought the ocean (and its turf-killing salt water) to the shore on Cape Cod, Hyannisport Club superintendent Charles Passios said: "I've got three greens and 15 browns."

Greatest quandary: Eastward Ho CC has wind insurance but no tidal insurance. The insurance company ruled that damage to the course from Grace was caused by the tides. "Well," said superintendent Brian Cowan, "if we hadn't had 78-mile-per-hour winds we wouldn't have had that tidal surge." The decision could be settled in the courts.

Talking about tidal waves and other topics...

Reverse the curse—please! People in the golf industry responded in splendid fashion when, in 1989, the word went out from England that a dying little boy, Craig Shergold's last wish was to be entered in the Guinness Book of World Records for receiving the most get-well cards. They came in by the thousands — from Margaret Thatcher and Prince Charles. From Ronald Reagan, George Bush and Mikhail Gorbachev. From Michael Jackson and Sylvester Stallone. From Jan Beljan and... Jan Beljan? Yes, but! But, the lady architect in Tom Fazio's Jupiter, Fla., design firm now wants the golf industry — and, indeed, the world — to STOP! Craig will live. He no longer needs the cards. And, in fact, he very much wants the mail to stop. At 15,000



GCBA's letterhead

cards and letters a day, his south London post office is quite in agreement. Craig had a miraculous recovery after Charlottesville, Va., billionaire John Kluge stepped in, found a neurosurgeon who had a new technology, and, well, the rest is history — and God's hand.

For her part, Beljan has written all the people she first contacted through the chain letter that went like wildfire through the golf industry. Oh yes, the record. The old record was 1.3 million. Craig's new record is 16.2 million. He's alive, happy, and in Guinness. So, please stop the chain letters. The family — whose church has had weekly sing-alongs where everyone helps open letters — has 400 bags of mail that have yet to be opened stored in warehouses.

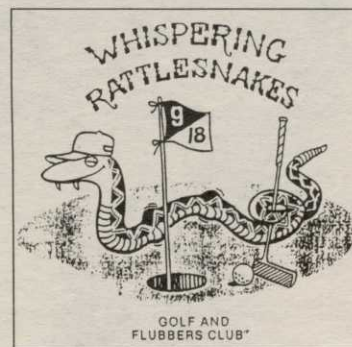
Greatest letterhead of all golf industry association: The Golf Course Builders Association of America, hands down. Executive Director Phil Arnold followed organization's name change with a creative logo that knocks the socks off the rest. *Is this a gondola ride or a golf round?* The label "mountain course" has been taken to new heights (a-hem!) in Japan. But, come on now. Can we believe this? Like many courses in

land-scarce Japan, Tsutsujigaoka ("Amalea Hills") Country Club was blasted out of a ridge. Paths between greens and tees are so formidable that half are equipped with so-called autoslopes — push-button conveyor belts that carry golfers up or down to the next hole. To get to the 18th tee, golfers must mount an autoslope, but that's not the end of the ride. They then have to pile into a funicular gondola for the final 100 yards.

Buddy, wanna give me a light? A number of golf clubs ban smoking to keep their courses clean. But, to avoid disaster? One course on an island off Tokyo harbor bans smoking so the place doesn't go boom! The site used to be a landfill and operators are afraid of methane gas exploding.

An idea born by a board-game guy: Michael Hurdzan-designed Devil's Pulpit golf course outside Caledon, Ontario, Canada, was developed by Trivial Pursuit creators Chris Haney and Scott Abbott. It was little surprise, then, that some of the holes took on, let's say, innovative character. There's the CN Tower hole, with a view of the CN Tower in Toronto 35 miles away; the Memorial Hole, built around a gravesite; a hole with a double green; et cetera. Then there's the betting hole, called Jun's Hole after partner Jun Matsuura, who died in an automobile accident in 1990. The hole is actually a hidden 19th hole in the back nine. If you play it, you bet on it.

Greatest logo for a golf course: Bob Spiwak, come on down. When golf writer-photographer Spiwak built his own nine-hole course on his "back 40" in Winthrop, Wash., he got national attention. But to make it official, he just had to de-



Bob Spiwak's logo

sign a logo. Whispering Rattlesnakes Golf and Flubbers Club's mascot is a snazzy rattler with a smile on his face, a hat on his crown and a putter in his tail. Bob's obviously a talented guy himself — smile on his face, hat on his head and artist's pen in his hand. *Most astounding demographic statistic:* The average age of members at exclusive Eastward Ho Country Club in Chatham, Mass., is 74.

A real trouper helps the troops: Nora Berard of Foxboro (Mass.) Country Club didn't make this public. But we will. Nora gave her late professional-manager Dad's clubs — which totaled "scads," according to one insider — along with tees, gloves and grips, to George R. McGrory for his teaching program for handicapped schoolchildren in North Palm Beach, Fla. McGrory sure could use 20 acres now.

The absolute, most extraordinary — and even very best — calendar from a golf course architect: Robert Trent Jones Jr. has done some absolutely extraordinary — among the very best — courses in the last couple of years. They are captured in absolutely extraordinary breathtaking angles in his 1992 calendar. Photographers are John and Jeannine Henebry, Brian Morgan

and Stephen Munday.

A hidden nugget to check out next time you're near Tequesta, Fla.: Riverbend Country Club, featuring eight par-4s and one par-5 on 60 acres of land, built for around \$350,000 in 1972 and designed by George and Tom Fazio.

"It's never going to get the publicity, or be rated in the top 100. It won't get the notoriety of Shadow Creek or Wild Dunes. But when you look at the product — with the land, the environment, the cost and the end result of what you did and had to work with, I love it," said Tom Fazio.

Press advisory: The Golf Course News office received a "press advisory" announcing a public meeting on dioxin to be held Nov. 15 in Washington, D.C. A problem, you ask? Yes, getting there on time. We received the advisory on Dec. 1.

Dress code or bust: Alco-Sport of Aurora, Ohio, says first-time players are slowing down the game of golf with "a new problem... dress code." The solution, according to president Al Schroeder, might well be his company's dress code card. It can be used like a greeting card for member-guest or invitational tournaments — whatever — to let visitors know a club's dress rules. Since it is not just a men-only problem, Schroeder is working on a women's version.

Best Get-Those-Reindeer-Outta-Here Potion: Colorado's Estes Park golf course personnel put elephant poop around their greens to keep the elk off. While elephant poop may be hard to come by, the city of Milwaukee is pushing its Milorganite, a product from its effluent treatment plant, as a deterrent to deer on ornamentals.

Poor elk...

Honolulu City Council nixes impact fees with

Continued from page 1
a statewide basis.

"State planners must decide what their goal is regarding golf," he said. "If they want Hawaii to be a golf mecca, that means one amount of courses. If they want it to just be a golf resort, well, that's a little less. And if they just want to fill the needs of inter-island interests, that's even less.

"Once they've done that, then they have to decide on the most appropriate places to put golf courses. They haven't done that yet, but they are working on it."

The new ordinance applies to public and private facilities as well as both new courses and renovations.

Fasi wanted to charge developers multimillion-dollar impact fees and use the money to build affordable housing.

The council opted to judge course proposals, in part, on optional "community integration plans." Councilman John DeSoto called the impact fees "an extortion fee" prior to the council's vote.

"The council developed the golf course policy in conjunction with many developers," said Lori Kunioka, a research assistant in DeSoto's office. "They were comfortable with the plan, but were very concerned about the impact fees."

Honolulu-based golf course architect Robin Nelson agreed that impact fees were the major concern of developers. He and others believe the impact fee-less ordinance passed by the council in late October will have little effect on the number of courses that receive preliminary approval, averaging about five yearly.

"It might slow down the approval process a little bit," Nelson said. "But it shouldn't discourage developers. Our office has been busier than ever the last few weeks."

If included in a golf course proposal, the community integration program may include, but isn't limited to, an employment plan that encourages training and hiring local residents on the project; public play at affordable rates and convenient times; junior golf programs; availability of clubhouses and other amenities to the public; hiking, biking and jogging paths; and considering local suppliers to provide developmental, operational and maintenance materials.

The council will review the community integration program when it decides whether to rezone land or issue a plan review use permit authorizing construction.

In developing the ordinance, the council acknowledged the "unprecedented" interest in golf course development. Golf courses can be a positive land use in that they contribute to the economy, increase the tax base, provide recreation and open space, according to the ordinance.

But, the council also found that excessive course development can

displace agricultural uses and disrupt rural lifestyles; increase land and home prices while the island is suffering from a lack of affordable housing; potentially harm the environment; and use large amounts of the city's limited water supply.

The ordinance's social and growth criteria encourage open space that can be enjoyed by the community and be seen from public roadways and other areas; discourages displacement of people or land uses without adequate com-

pensation and/or relocation plans; discourages development of land rated "A" or "B" by the land study bureau classification, although it does not forbid it; encourages public play at reasonable rates; discourages concentrations of courses that cause traffic problems; and discourages impacts and inaccessibility to archaeological, cultural and historic resources.

Golf courses should be compatible with surrounding uses and provide an appropriate buffer be-

tween incompatible uses (i.e. separating residential and agricultural uses), potentially incompatible levels of intensity for similar land uses (i.e. single-family residential and medium-or-high-density apartment uses), and dangerous conditions or areas (i.e. blast zones or flood-prone areas).

Economically, the chief planning officer can require investors to develop a forecast of the project's impact on land values and property taxes, which can be used for com-

paring various proposals.

Golf courses should not have any serious environmental consequences, according to the ordinance. Projects will not be approved unless every effort is made to reduce the use of pesticides, herbicides, fungicides and fertilizers. Applications, storage and disposal must comply with state and federal laws.

The chief planning officer will also judge proposals on how effectively they:



regional master development regulations

- Establish an integrated management plan to minimize fertilizers and biocides.

- Conduct modeling studies reflecting unique site characteristics and evaluate risks of fertilizer or biocide leaching and runoff into water or wetlands.

- Establish a ground water monitoring plan and system in accordance with the State Department of Health. It should include ground water, surface water and, if applicable, near-shore water monitoring

programs at least a year before construction starts to establish baseline water quality data. Periodic monitoring should continue for at least a year after construction ends and play begins.

- Establish a solid-waste disposal plan that includes lawn and landscape trimmings disposal, emphasizing on-site use and disposal.

- Promote water conservation by using non-potable water for irrigation in the following priority — secondary (effluent from a municipi-

pal treatment plant), secondary or tertiary (effluent from a private treatment plant), brackish ground water (non-potable surface water, including establishment and use of catchment basins or partially desalinated water). All water source and irrigation plans are subject to Board of Water Supply review and approval.

- Design the course to maximize natural drainage, recharge the aquifer alleviate stream channelization and other formal drainage systems in

nearby areas.

- Protect and support existing wetlands and fish and wildlife habitats.

- Protect streams, rivers and coastal waters from runoff; minimize runoff during grading and construction; emphasize target golf; protect vegetation; use vegetation buffers to preserve water resources and provide landscaping with appropriate indigenous flora; and recognize water conservation principles.

- Employ a superintendent who

is or will be certified by the Golf Course Superintendents Association of America within three years (only four of the GCSAA's certified members work in Hawaii) and is or will be a licensed pesticide and fertilizer applicator.

- Provide monitoring and reporting of pesticide applications, submit quarterly biocide use reports and prepare contingency plans for potentially harmful occurrences.

- Conform to the provisions of the Oahu Water Management Plan.

Jury awards \$3M to businessman in Hawaiian court

HONOLULU — Tokyo businessman Misuru Shirai has won a \$3 million jury verdict in state court in Honolulu over a proposed golf course development.

The verdict, against Haseko Realty Inc. and Sun Mari Corp., sided with Shirai's failed attempt to buy 2,400 acres in Waialua on Oahu from Castle & Cooke Inc.

Allegations included misappropriation of funds, failure to keep records, breach of fiduciary duties, self-dealing, conflict of interest, and concealment.

ASGCA targets misconceptions

Overcoming misconceptions surrounding golf and the environment is the purpose of a document the American Society of Golf Course Architects hopes will be ready for publication by its annual convention in May.

ASGCA President Tom Clark of Kensington, Md., is sifting through comments made on a preliminary draft during November's Allied Golf Association meeting and December's ASGCA executive committee gathering in Chicago.

The final document, which Clark hopes will run about a dozen pages, will be made available to local zoning and planning boards, state and federal regulatory agencies and people interested in golf course development.

It will use case studies involving development and maintenance practices at some of the country's best-known older courses, such as Cypress Point and Pine Valley, and newer courses built with the environment in mind, like the Ocean Course at Kiawah Island, S.C. and Old Marsh Golf Club in Palm Beach Gardens, Fla.

"We want to help lay people see what a golf course is and how it can interact successfully with the environment," Clark said.

"Too many people have negative views of golf courses. We are paying a high price in permitting costs and time delays and those extra expenses are being passed on to golfers. They should be aware of that."

Clark called publicizing that golf benefits the environment "one of the most important things the ASGCA has ever undertaken."

We've got three important points to drive home about Dimension®.

Now it's easy to get long-lasting weed control, without the worry of turf injury...because Dimension® has you covered.

Turf Safety

Dimension turf herbicide offers exceptional turfgrass safety. You can apply Dimension on a variety of warm- and cool-season grasses—even on bentgrass. When you use it according to label directions, Dimension will not cause turf discoloration or root injury.

Weed Control

You can use Dimension with confidence for outstanding control of a broad spectrum of grassy weeds—including goosegrass and crabgrass. Break-through chemistry in Dimension turf herbicide gives you longer-lasting results, plus both preemergence and early postemergence* control of crabgrass.

Ease of Use

Dimension is less affected by moisture and temperature than

many preemergence products.

Plus, you can conduct normal fall overseeding three months after an application.

It's no wonder more and more pros are selecting Dimension. Join the club. Call: **1-800-323-1421**.

* Refer to label for stage of growth and species controlled.



DIMENSION
Turf Herbicide
by Monsanto

Consultant: Europe stands on 2nd wave of development

Yet, higher living and land costs, competition for leisure dollar and other disturbing factors may stand in the way

PARIS, France — Even with a worldwide economy in the doldrums, American experience in the golf business creates an exciting opportunity for Americans in the European golf industry.

That's the opinion of Ronald A. Croen, founder and principal of the Croen Group, a consulting firm specializing in European golf and real estate industries. Croen Group has been active in the European market for two years.

A business lawyer in the past, Croen's experience combines the organization and management of operations, structuring, negotiation and supervision of strategic relations, and the execution of financing and acquisition transactions.

Croen notes a golf boom in Europe the past five to 10 years — a growth of new courses and an increase in golfers. From a limited number of private member clubs, most dating from the early part of

the century, golf has become democratized in Europe, he said.

This second wave of golf development in Europe corresponds to what happened in the U.S. market when Arnold Palmer, Gary Player and Jack Nicklaus emerged as stars, he said.

The European picture today, he emphasized, also incorporates certain elements of the third wave of golf development which occurred in the United States during the

1980s, a phase that might be characterized as real estate and finance-driven.

Factors producing the boom in Europe through the 1980s included media coverage of golf. Accented were Europeans Seve Ballesteros, Nick Faldo, Ian Woosnam, Bernhard Langer and Jose Maria Olazabal.

Economic and political trends that enriched Europeans generally and provided more leisure time next entered the picture, and were fol-

lowed by concerted efforts of the national golf federations and, in some cases of national and local governments, to promote the game of golf.

These factors, said Croen, triggered significant growth. Many took up the game either for business or pleasure. Entrepreneurs and bigger companies alike thought they could build a golf course, sell 400 to 600 memberships, recover their investment and reap a developer's profit, all within a two- or three-year period.

Croen and others call this an inverted Gold Rush. On the development side, there's a rush to bury huge sums of gold in the ground with the hope that, on the consumer side, others will follow close behind to leave their money as a member of clubs or customers at golf facilities.

For example, France went from 150 courses in 1980 to nearly 400 now.

Unlike the situation in United States during the golden era of golf development, Croen points out five disturbing factors distinguishing the current European market.

- Everything costs more in Europe. This applies to land, labor and operating costs in general. This impacts on the cost of construction and the ability to recover investment in, and operate profitably, golf facilities recently opened or ready to open.

- Even with higher living costs, European salaries, particularly for white-collar jobs, generally are lower than in the United States. Fewer, then, can invest in golf.

- More competition than ever for the leisure dollar in the face of a short-term decline in travel and tourism.

- The number of golfers has grown rapidly, but not as quickly and, other than in the United Kingdom and perhaps Sweden, with not as great a commitment to the lifestyle of golf as Americans developed in the 1960s and 1970s.

- The world is facing a pervasive shortage of capital. There is some quiet money in Europe for real estate and golf, but the need is great and financiers can be very selective.

"Even 12 months ago, it was not sure that Europe was going to track the United States into recession. The dominant theme was 1992," Croen said. "Two or three years ago, the future in the new Europe was regarded as wide open. Cross-border investment and economic activity were increasing at impressive rates.

"What has happened since, however, is that the principal European countries have had to address their own near-term problems. The rallying cry of 1992 has not been a panacea in Europe for a worldwide economy in trouble."

The dominant countries in Western Europe all have faced problems, Croen said, adding:

Continued on page 37



FORE-PAR SIGNS COME WITH EASY TO FOLLOW DIRECTIONS.

Face it. Your golf course is under constant assault. From hackers and hot heads to golf carts everywhere.

Now, you can minimize damage due to negligence and make maintaining your golf course a lot easier with direction and rules signs from Fore-Par. Universally recommended by golf course superintendents, Fore-Par's Elasto-Signs are virtually indestructible and maintenance free.

Constructed from 3/4" polyurethane, they retain their flexibility indefinitely, even under extreme

weather conditions. You can choose from an outstanding selection of messages or customize to fit your needs. For innovation, durability and ease of maintenance, *it doesn't get any better than this.*

CARTS

So equip your golf course with the finest signs and accessories ever made. Call for your free Fore-Par catalog today!



Fore-Par elasto direction and rules signs.

FORE-PAR

DISTINCTIVE GOLF COURSE ACCESSORIES

16761 Burke Lane, Huntington Beach, California 92647
714 842-8494 • 800 843-0809

Foster opens own design firm

By Mark Leslie

Keith Foster, who cut his teeth on bedrock working for Wadsworth Construction Co. and refined his design skills under the tutelage of architect Arthur Hills, has struck out on his own.

Foster, for six years Hills' lead architect for the Western United States, has formed Keith Foster & Associates, headquartered in Mesa, Ariz.

On the heels of his announcement, one of his co-designs with Hills — Harbour Pointe in Seattle, Wash. — was named Best New Public Golf Course by *Golf Digest*.

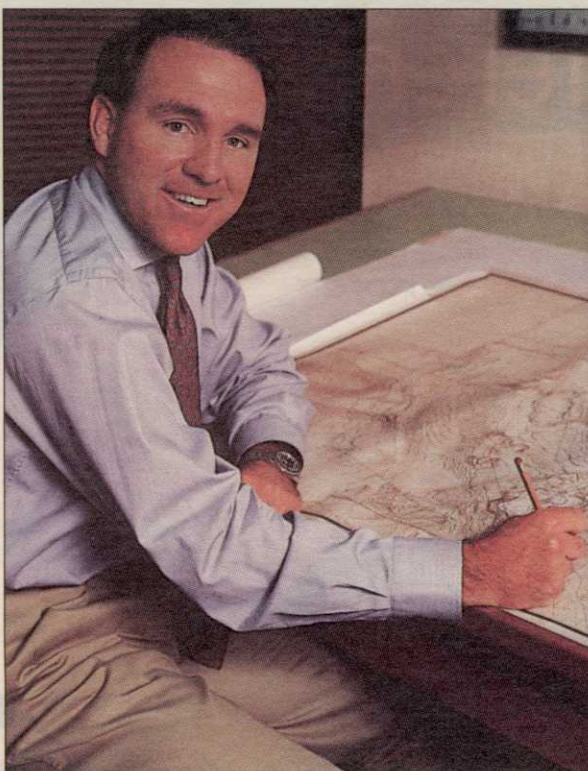
An associate member of the American Society of Golf Course Architects, Foster said of his new firm: "We want to be involved in every phase of the work. That's one great thing about the Tom Fazio organization and Pete Dye. That's how you get quality..."

"Nothing will happen on paper or on site that I don't know about. We are responsible for everything. I don't want to compete with builders, just be on site to work with the construction managers."

Foster credited Brent Wadsworth and Hills with helping him in all areas of golf course construction and design.

"I owe a lot to Brent," Foster said. "He took a real interest in me when I was 25 years old. He helped me understand design and the entire process..."

"When working on Cypress Run (Country Club in Tarpon Springs,



Keith Foster, above, intends to continue designing such well-received venues as Walking Stick, right, in Pueblo, Colo.



Fla.), Mr. Wadsworth and I would walk the course and talk a lot about design... We worked closely together for about a year."

Foster worked seven or eight Wadsworth projects in the next three years — prompting Wadsworth to speak with Hills about the young man. Hills offered Foster a position in 1985.

Foster said Hills has influenced him tremendously. "He is a great man. He's got a real sense of style and aesthetics," Foster said.

"When I first started with Art, I was more form-driven. I was more concerned with shape. As I've matured and worked more closely with Art, I've become a student of strategy. I've always enjoyed classic things... So, too, I enjoy

classic American-designed golf courses. The last three to four years I've been studying a lot of the great golf courses in this country and have developed an appreciation for that type of work."

While working with Hills has given him "an opportunity to work on a lot of quality projects," Foster said:

"I am gearing my firm toward a simpler, more classically designed golf course. We are structuring everything for that. (H.S.) Colt, (Alister) MacKenzie, (George) Thomas, (Donald) Ross, (A.W.) Tillinghast, all the great older designers key on strategy. Everything was set on angles.

That's what we're trying to do — create worthy courses that are simple forms, yet very functional

and strategic, and more blending into the existing topography."

He said his plans have "a 1920s, 1930s flair. We do everything in black lines.

We create softer lines, more fractured lines, more angles. They have a weathered feel. They are more comfortable to look at, more classic."

Foster & Associates, including a landscape architect, agronomist and office manager, has signed on to design three golf courses — in Phoenix, Utah and Missouri — while Foster completes a couple of Hill projects.

"My plan is to stay here in Arizona for at least the next two to three years," he said. "I definitely want to drift toward the Midwest and back to the East. I think there

are a lot of exciting opportunities to do great golf courses utilizing topography.

On a lot of the courses out West we have to do substantial cutting compared to back East. In the East and Midwest you have the opportunity to work with a lot of tree cover, a more natural site. I'd like to do that, although I still enjoy working on projects out West."

Foster began his love for golf at an early age.

And while working his way through Miami Dade Junior College, he was a superintendent at the 54-hole Country Club of Miami, in charge of one course when he was 19 and all three by the time he was 22.

Designing courses has fulfilled that love.

Europe said open to American involvement

Continued from page 36

- Britain is in the midst of a severe recession. It suffers from declining competitiveness and a somewhat insular view of its role in Europe;

- Germany, even with a relatively strong economy, is facing the costs of unification and the impact of the political instability in Eastern Europe;

- France is in a situation of low or no growth, high unemployment and budgetary pressure on its Socialist economy;

- Spain is coming through a period of inflation, an overheated economy and high interest rates, at the same time that tourism is suffering the pullback of its traditional clientele; and

- Italy has not overcome the image of disorganization and political cronyism that dominate its business life.

These five countries represent about 70 percent of the population of Western Europe. While Europe theoretically is an economic union of 12, if it is not happening in these

countries, it is not going to happen for Europe as a whole, Croen said.

Japanese activity as European investors and potential club members also has stalled, he said. He said the prevailing view is that the supply of golf courses now exceeds demand.

"Yet, the number of golf courses remains incredibly small for the population," he said. "Portugal, for instance, portrayed as a golf destination for Europe much like Florida for the Eastern United States, has fewer than 25 golf courses. Florida has more than 1,000."

Meanwhile, there has been impressive growth in the number of golfers in Europe — at least in percentage terms.

In its third wave of development — in Europe as in the United States — golf is part and parcel of the real-estate market.

Therefore, the rules of real estate apply. The first issue is location. So is the second and third.

Croen believes the pause in the European market is largely a function of a sick real-estate industry. Happily, the situation on the conti-

nent is not nearly as bad as in the United States, Japan or the United Kingdom, he said.

Croen predicts continued growth in new golfers will outpace the ability of the market to produce new courses. Europe, he contends, still is under-served with appropriate golf facilities.

Americans have evolved know-how and technology of golf development and operations further than anyone else in the world. Croen said many big names have found their way abroad — IMG, Disney, Club Corp., Robert Trent Jones and Golden Bear International. Less widely known names such as Robert von Hagge and Ronald Fream are much bigger in Europe, he added.

"Americans seeking to approach the European market should be aware that one does not need to begin a new project in order to find a point of entry," Croen said. "There are projects in all stages of completion — from conception to open play — that can benefit from American golf development and operations experience.

The competition's talking about our lies.

With good reason. Best Bunker Sand supports the ball with a firmer base to minimize "fried egg" lie, plus:

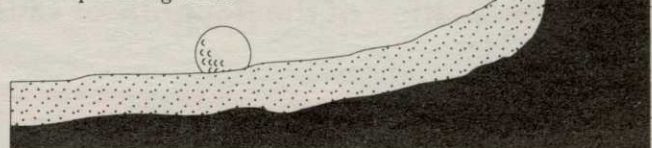
- Off-white color to reduce glare
- Sub-angular grain shape conforms to bunker sides
- Drains quickly; traps the ball, not the rain
- Non-crusting surface for less raking

Call today at 1 (800) 237-4986.

With Best Sand, one good lie leads to another.

Available Nationwide and in Canada.

Ask about Best Construction Gravels and Best Top Dressing Sands.



BEST SAND

11830 Ravenna Road, State Route 44, P.O. Box 87, Chardon, Ohio 44024
Subsidiary of Fairmount Minerals Ltd.

The 2nd International Golf Exhibition & Conference

BE THERE!

Canada
USA
UK
Europe
South Africa
Korea
Japan
Taiwan
Hongkong
Malaysia
Singapore
Indonesia
Australia
New Zealand

GOLF ASIA '92
26-29 March 1992

Singapore World Trade Centre

The region's premier golfing event featuring

- * Golf Course Architects and Designers
- * Golf Course Maintenance and Equipment
- * Golf Equipment and Accessories
- * Golf Apparel and Fashion
- * Golf Holiday Resorts
- * Golf Driving Range and Equipment
- * Golf Educational Videos and Magazines
- * Golf Trophies and Souvenirs
- * Other Golf Related Products and Services

Golf Asia Exhibition and Conference, the event that took the world by storm early this year is back again. Much bigger than Golf Asia '91, not only in terms of size and shape alone, it has attracted more principal exhibitors and agents from all over the world than ever expected. This means big business for exhibitors and a spectacular show for Golf enthusiasts.

Endorsed by
Singapore Golf Association
Thailand Golf Association
The Golf Association of the Republic of China

Organised By



CONNEX PRIVATE LIMITED

(International Exhibition Division)
7500A Beach Road #07-308/9, The Plaza, Singapore 0719
Tel: (65) 2966961 Fax: (65) 2935628 Tlx: RS 36463 CONNEX

CIRCLE #131

In conjunction with the exhibition, the **2nd Asia Pacific Golf Conference** will be held at Marina Mandarin hotel from 24-26 March 1992. The conference is geared to put you ahead of your competition and provide you with an indepth study of the global golfing industry. Exchange your views with the key principals of the Golfing World in this major conference.

Official Airline
SINGAPORE AIRLINES



Official Publication
AUSTRALIAN
GOLF DIGEST

Supporting Publication
Golf Vacations

Fax or mail the reply coupon or
your business card today.

☐ would like details on attending the Asia Pacific Golf Conference
☐ would like details on exhibiting at Golf Asia '92 Exhibition

Name:
Position:
Company:
Address:
Fax:
Tel:
☐ Please tick where applicable

Opposition derails TRACS for time being

Continued from page 1

quality control service, providing course owners and directors access to USGA professionals, who make sure course construction and renovation projects are done properly and to the developers' specifications.

Some controversy arose when architects Mark Hayes and Jerry Slack invited Moore to explain the program during their presentation for a project at Oklahoma State University. Although Moore explained he was not endorsing the Hayes/Slack proposal, and that TRACS was available to anyone, some architects felt Moore's presence could be interpreted as favoring one proposal over another, Snow said.

Rumors soon spread that the Green Section was hiring golf course architects and intending to compete with architectural firms for certain services, Snow said.

"Golf course architects were surprised, upset and I don't blame them," Snow said. "Until the architects understand what we're trying to do, we'll wait on the program."

Snow contacted American Society of Golf Course Architects President Tom Clark of Kensington, Md. Snow explained the program and gave Clark information on TRACS to circulate to his members.

Clark said he has received some negative initial feedback from architects and builders.

"I understand what the USGA is trying to do," the ASGCA president said. "But they have gotten off to a rocky start. They should have conferred with the architects and builders more in the first place."

"The idea of quality control is good. But the USGA should concentrate more on things like their testing labs. You send a sample to different labs and you get different results. That should not happen."

Snow said that, although TRACS may look like a competitive threat, "It is not our intention to take money out of architects' pockets."

Many architects have a different view, according to Clark.

"It's definitely potential competition," he said. "Some firms do mainly remodeling jobs and see course operators thinking the USGA is hiring on to do the same jobs."

Snow's assertion that smaller architectural firms could benefit from the additional expertise did not impress Clark.

"If you call yourself a golf course architect, you should be able to do the same field tests TRACS will do," he said.

TRACS has received "mixed reviews" among builders, according to Phil Arnold, executive director of the Golf Course Builders Association of America.

"In theory it's a laudable program, delivering a quality product and one the owner wants," he said. "The test will be in seeing how it actually

works. We'll have to wait and see it in a particular setting.

"Some felt that a lot of what TRACS plans to do overlaps with what architects or superintendents already do.

"One member, who is probably one of the top three or four builders in the country, said 'I build quality golf courses and I'll continue to build them, whether the USGA is there or not.'"

Ecology short course offered at Virginia Tech

BLACKSBURG, Va. — A turfgrass ecology and management short course is scheduled Jan. 27-31 at Donaldson Brown Center for Continuing Education on the Virginia Tech campus.

Dr. David R. Chalmers, extension agronomist-turf at Virginia Tech, will direct the program.

Thirteen faculty members from turfgrass-related disciplines will provide 36 lecture and laboratory contact hours of instruction.

Massacre Canyon reopens as Golden Era Golf Course

JAN JACINTO, Calif. — The Massacre Canyon Inn Golf Resort, closed more than a decade, has reopened as the redesigned Golden Era Golf Course.

Floods wiped out several holes when the San Jacinto River dike, which borders the course to the south, broke in the late 1970s.

The Church of Scientology bought the land in a bankruptcy auction in 1978. The course was closed in 1980.

The former 27-hole course has

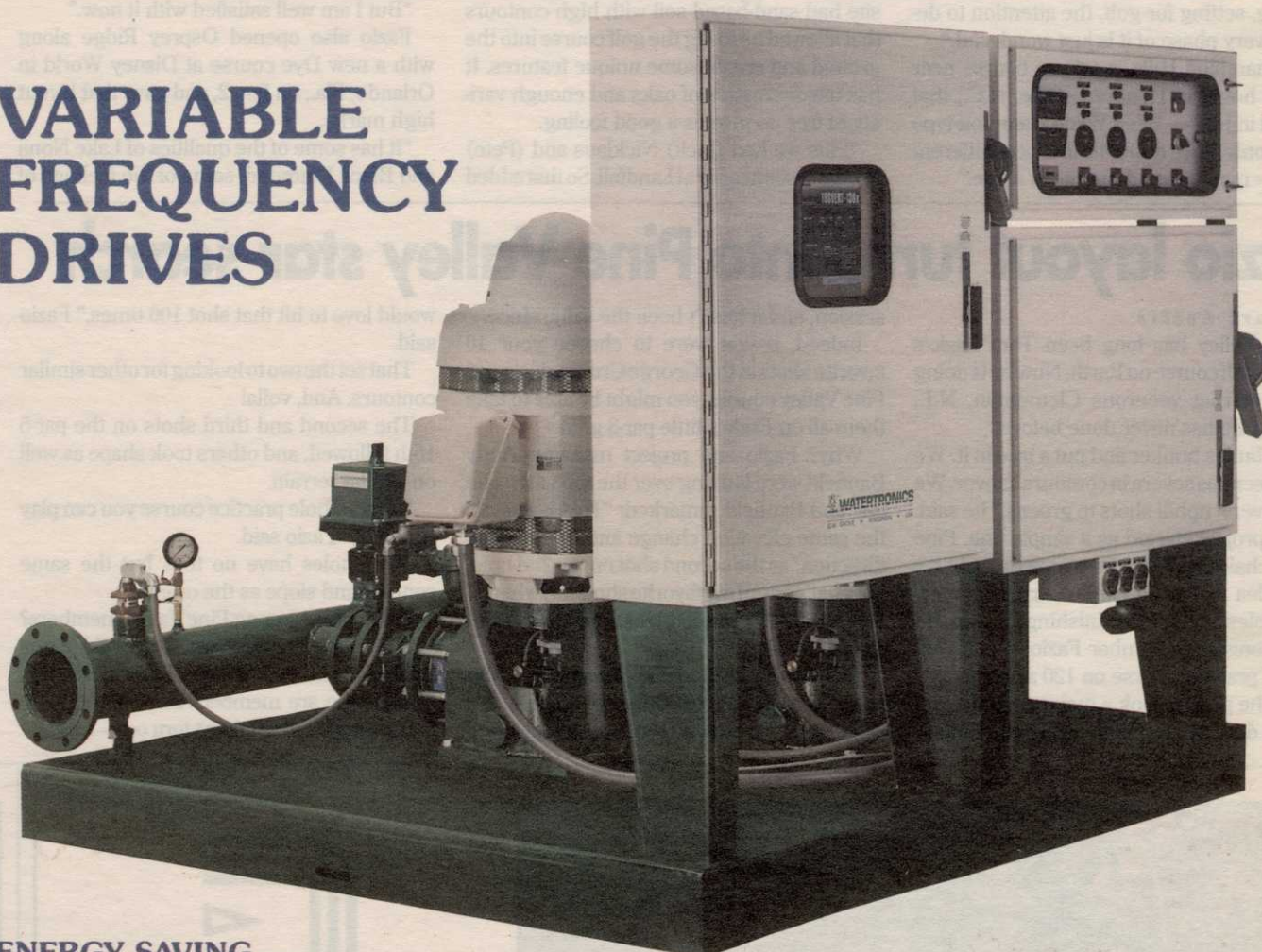
been seeded with winter rye grass and includes a newly-built 5,000 square foot clubhouse.

In 1987, Herbert Krauch, a retired editor of the Los Angeles Herald-Examiner, and others neighboring the golf course called for its return. The Scientologists agreed to build the golf course in a compromise with Riverside County officials that allowed operations of their studios beyond 1990.

The course is managed by Jeremy Duda of Golfcorp, a management firm headquartered in Dallas, Texas.

WATERTRONICS ENERGY SAVER

VARIABLE FREQUENCY DRIVES



ENERGY SAVING

By varying pump speed, the pump performance closely follows the operating system curve, using precisely the power needed and eliminating the need for a pressure robbing hydraulic regulating valve. Additionally, soft starting reduces costly utility demand charges.

SURGE FREE

Surges are eliminated by using the variable frequency drive (VFD) to start pumps slowly and vary their speed to match systems demands.

FLEXIBILITY

The VFD can be adjusted for additional capacity and pressure for future expansion.

EXPERIENCE

Watertronics, a pioneer in the use of microprocessors to control pump station functions, applies the same time proven technology to VFD systems.

ENGINEERING

Our sales engineers custom design every "ENERGY SAVER" pump station to meet your individual conditions.

Watertronics manufactures a complete line of fixed speed centrifugal, vertical turbine, submersible, and in-line booster stations that utilize our innovative electronic regulating valves. Watertronics also offers retro-fit packages to bring state-of-the-art performance to your present pumping system.

For more information on how we can save you money call in USA 1-800-356-6686. From Europe call 00-1-414-367-5000 or fax 00-1-414-367-5551.

 **WATERTRONICS**
ELECTRONICALLY CONTROLLED PUMPING SYSTEMS

Watertronics, P.O. Box 530, 525 Industrial Drive, Hartland, WI 53029 USA

Fazio says great competition pushes himself, colleagues

Continued from page 27

course that opened in March — “We had so much land and so many great opportunities, with no restrictions, that it worried me.”

But he is happy with the results — the “individual character of the holes and the playability characteristics, and the features, creeks, trees, rock outcroppings, sheer cliffs, long-range and short-range views, the forms and shapes of greens and bunkers, and the vegetation.”

• Caves Valley, a private Baltimore course that opened in July — “It’s tremendous — a modern-day Augusta National. It has great variety in rolling terrain, with the strength, character and style of beautiful, natural golf lands of the Northeast. Everything was perfect when it opened... It looks like it’s been there a long, long time.

“This is a club of the next century — what clubs will be like. It’s a tremendous environment. And the quality of maintenance, landscaping, setting for golf, the attention to detail... Every phase of it is just wonderful.”

• Champion Hills, a private course near Fazio’s home in Hendersonville, N.C., that opened in July — “It’s a Wade Hampton-type of site, only more dramatic in a lot of different ways — maybe less dramatic in some.”



Tom Fazio on site.

• Porter’s Neck, a private course in Wilmington, N.C., that opened Oct. 1 — “The site had sand-based soil with high contours that allowed us to dig the golf course into the ground and create some unique features. It has major clusters of oaks and enough variety of tree to give us a good feeling.

“Plus we had (Jack) Nicklaus and (Pete) Dye courses nearby at Landfall. So that added

the degree of challenge for us to do it. If you have great competition, a good piece of land and a client with a commitment to quality, you have it all.”

• Pelican Hill Golf Club’s Ocean Course, the first 18 of a 36-hole resort facility in Newport Beach, Calif., which opened Nov. 1 — “The course is in such magnificent condition, has such a tremendous environment, and is so strong that it even shocks me. The whole course was sodded. We planted a lot of trees. It’s like Shadow Creek (in Las Vegas) in that way.

“I was more nervous (about Pelican Hill) than with Shadow Creek. My concern was that when you go to Newport Beach and see the oceanfront, you expect a lot. I was nervous to the point that I second-guessed myself about being involved with it... People could see this property and say it should be another Pebble Beach. There will never be another Pebble Beach.

“But I am well satisfied with it now.”

Fazio also opened Osprey Ridge along with a new Dye course at Disney World in Orlando, Fla., on Jan. 2, and gave that layout high marks.

“It has some of the qualities of Lake Nona and Black Diamond, some of the feelings of

John’s Island West and of the ridges and open spaces of Jupiter Hills, features like Hammock Dunes and some of the interior holes at Long Point, all rolled up into one.”

CHANGES OVER YEARS

Fazio, who broke into the industry working for his famous designing uncle George, said much has changed in the last 29 years.

“The expectation level of a new golf course has changed substantially from what it was in the 1960s,” he said. “Back then, if you did a new course, people would say, ‘It will be a good golf course some day when it grows in and matures.’

“That was the mark of excellence. In the last five to eight years it has evolved to where a new course is compared to the best courses in the world. That’s the expectation level to some degree in a lot of places.”

Fazio said such thinking is “a tribute to the industry, to all the designers, the technology and the dedication to quality throughout the industry.”

The high expectations have evolved for many reasons, he said, including course rankings in the media and the society’s outlook overall.

“We’re all into ‘now,’” he said. “Nobody wants to wait any more. We’ve learned how to not even wait for nature. We just move nature in. Instead of waiting for grass to grow, we put sod in. Instead of planting small trees and waiting five or 10 years for them to grow, we plant trees with 20-year maturity on them. It just amazes me.”

Maturity has also been enhanced by sophisticated irrigation systems, maintenance programs, equipment, and the technology of maintenance itself, Fazio said.

COMPETITION

Fazio also said competition is keener for keeping course design at a high level.

“There are many quality designers, contractors and developers out there. The competition of business, your product, the pride of authorship permeates through the whole society, not just in golf,” he said.

Fazio layout turns into Pine Valley star search

By Mark Leslie

Pine Valley has long been Tom Fazio’s favorite golf course on Earth. Now he is doing things at that venerable Clementon, N.J., property he has never done before.

“We built a bunker and put a tree in it. We built greens as severe in contours as ever. We built several uphill shots to greens,” he said.

The project started as a simple one. Pine Valley chairman Ernie Ransome thought it a good idea to have a par-3 course, or a few more holes, to play after finishing a round. He asked long-time member Fazio to design a 10-hole practice course on 120 acres.

But the project took a major — and novel — turn during a topographical map-reading

session, and it hasn’t been the same since.

Indeed, if you were to choose your 10 favorite shots at the George Crump-designed Pine Valley course, you might be able to take them all on Fazio’s little par-3 gem.

Why? Fazio and project manager Andy Banfield were looking over the topo map one day and Banfield remarked: “This is exactly the same elevation change and in the same direction” as the second shot on the 2nd hole.

“That’s one of my favorite shots anywhere,” Fazio said. “It lies uphill, which I don’t like, but it’s a great shot.”

Then the same thing happened on the 10th hole. “I didn’t want to duplicate the hole. But what would be wrong with simulating it? I

would love to hit that shot 100 times,” Fazio said.

That set the two to looking for other similar contours. And, voila!

The second and third shots on the par-5 15th followed, and others took shape as well on similar terrain.

“It’s a 10-hole practice course you can play and love,” Fazio said.

Most holes have no tees but the same contour and slope as the originals.

Is it popular among Pine Valley members?

“The risk factor was high,” Fazio said. “I was always worried and nervous. I have a hundred friends who are members there. I see them every spring, and if it didn’t turn out — well...



Golf Course Consultants, Inc.

Excellence in golf course construction begins with experience. The nucleus of key supervisors, foremen and operators at Golf Course Consultants combines for over 50 years of hands-on experience in building golf courses around the world. Golf Course Consultants, Inc. provides clients with cost analysis, construction management, golf course shaping, or total turnkey construction. Each contract is structured to meet our clients' individual needs.

Golf Course Consultants, Inc.
7575 Dr. Phillips Blvd. Suite 220
Orlando, Florida 32819
Telephone: (407) 352-6757
Fax: (407) 345-9462

"NOVATEE"

NOVATEE—the combination of specially manufactured synthetic grass of commercial quality. Its patented design, featuring our special topdressing imbedded between the fibers, allows golfers to tee up or hit irons just like on natural grass. Our list of satisfied customers and their endorsements is what it's all about.



NOVAMAT our new 1 foot square interlocking high use replaceable mat for ranges. It makes the most sense.

NOVAGREEN our latest breakthrough in synthetic greens 13 years in development. Our customers deserve the best.

NOVAPATH to keep the ball in bounds in those OB areas.

See us in booths 735-739
at the GCSAA show in
New Orleans Feb. 10-17, 1992

Sales Agents requested.

SynTenniCo Inc.

PO/CP 533 CSL
Montreal, P.Q., Can. H4V 2Z1
514/486-1696
Fax: 514/486-9927



Senior Skins venue Mauna Lani's new layout

*Francis I'i Brown
North Course
opens with a flair*

A brand new South Course at Mauna Lani Resort on the Big Island of Hawaii's Kohala Coast will stack up against some of golf's greats at the fifth annual Senior Skins Game, Jan. 25-26.

Designed by Homer Flint in conjunction with the Honolulu-based design firm of Belt Collins and Associates, the South Course is the result of nine holes being added to the existing front nine of the Francis H. I'i Brown Golf Course.

Another nine holes were added to the back nine of the original Brown course, and the result is Mauna Lani's North Course.

"We are very pleased with the expansion of our courses at Mauna Lani and we know the South Course will provide the Senior Skins Game competitors with a super test on Super Bowl weekend," said Jerry Johnston, director of golf for Mauna Lani Resort, Inc.

Meandering over the dark, rich lava flows of Kalahuipua'a, the South Course offers dramatic ocean views.



One of the Francis H. I'i Brown South Course's two ocean holes, the par-3 7th will challenge Senior Skins Game players with an onshore wind on Super Bowl weekend, Jan. 25-26. Tee shots must carry a shoreline lava cliff. The large two-tiered green nestles in front of windswept kiawe grove. Any shot to the left will land in sand, lava or sea.

It was designed to be enjoyed by the average player as well as professional.

The North Course emphasizes rolling fairways. Groves of twisted kiawe trees along the fairway edges

and more pronounced topography give it a flavor that contrasts sharply with the South Course.

Course OK'd on farmland

ALBANY, Ore. — The Linn County Board of Commissioners has backed a Planning Commission decision not to allow building a golf course on the 346-acre farm of Jefferson brothers Leighton and Monte Weddle.

The Planning Commission ruled last May that the location would not be suitable for a golf course because it is in a flood plain and flood way, and because the land is zoned for exclusive farm use.

Pen Park a year ahead of schedule

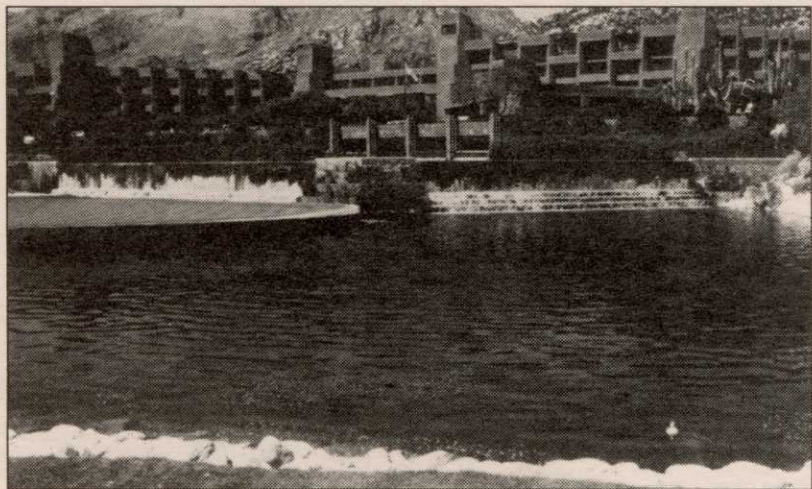
PEN PARK, Va. — Pen Park Golf Course's new nine holes could be completed next summer, one year earlier than anticipated.

The City Council approved the \$1.5 million expansion of the nine hole layout about 14 months ago.

City parks and recreation director Eugene German said the stepped-up construction schedule requires the city to send an emergency \$90,000 to fertilize the new nine and cut the grass until the course is ready for play.

The money would go to hire four course attendants, lease mowing equipment and pay for chemicals.

Success In Golf Is Often Measured In Inches.



The scenic 18th green and unique water feature at Ventana Canyon Resort near Tucson, AZ.

At The Watersaver Company, We Measure Success In Zero Leakage.

For over 20 years, our lining systems have been used to prevent seepage loss in lakes for some of the country's finest golf courses.

We specialize in the fabrication and installation of membrane liners for decorative lakes, traps, greens and aquascapes. So, before you design or build your next project, talk to us.

We can assist you with the right technology that will prevent your work from becoming a real hazard.

And, if your existing lakes are showing signs of leakage, it may be time to retrofit with Hypalon® or PVC membrane liners fabricated for both durability and cost effectiveness.

For assistance with specifications and cost estimates on your next golf course project, contact the Watersaver Company today!



*Hypalon is a Registered Trademark of E. I. DuPont

WATERSAVER CO., INC. • Plant/General Office • 5870 E. 56th Avenue • Commerce City, CO 80022
PO Box 16465 Denver, CO 80216 303-289-1818 • 800-525-2424 • FAX 303-287-3136

SIGNAL™
Spray Colorant
TRUE BLUE™
Lake and Pond Dye

Now in Water Soluble Packets

Precision Laboratories, in developing SOLUPAK water soluble packets, now delivers the same outstanding performance of Signal™ and True Blue™ with these convenient handling features:

- Convenient and clean – no staining worries
 - Quick dissolving
 - Safe-to-handle
 - Premeasured for easy application
 - Avoids container disposal and messy spills
- SIGNAL SOLUPAK is a highly visible temporary blue spray indicator.
- Non-toxic; environmentally safe
 - Assures accuracy
 - Totally compatible and water soluble
 - Highly concentrated

TRUE BLUE SOLUPAK brings a natural blue to your ponds and lakes. It's true to nature's living colors, not artificial in appearance.

- Non-toxic; environmentally safe
- Harmless to fish, wildlife and other aquatic species
- Long-lasting

800-323-6280

PRECISION LABORATORIES, INC.

P.O. Box 127, Northbrook, IL 60065

Signal and True Blue are trademarks of Precision Laboratories, Inc.



Wadsworth garners Best Builder plaudits for third time

Continued from page 27

Fazio); Four Seasons Golf Course, Lake Ozark, Mo. (Ken Kavanaugh); Laurel Oak Country Club, Sarasota, Fla. (Gary Player); The Grasslands at Oakbridge, Lakeland, Fla. (Pate/Cupp Designs); Bighorn Golf Course, Palm Desert, Calif. (Arthur Hills); Porter's Neck Plantation, Wilmington, N.C. (Tom Fazio).

The Golf Club of Georgia was Golf Digest's top new private course and Loch Lloyd in Kansas City, another Wadsworth project, was fifth.

Scheduled 1992 openings include courses in Hawaii (3), Michigan (2), California, Virginia, Ohio, Oregon, Guam, South Carolina and Pennsylvania.

The company is also looking at expanding into the international market, pursuing jobs in Canada and Saipan near Guam, Cotter said.

The demand for new golf courses continues strong, although the lack of financing is affecting the course construction industry, Cotter said.

"Fortunately, we've been able to pick up several projects the past few months," the Wadsworth executive said. "Many courses have their permits and are ready to go. They just can't get underway because they can't get the financing."

"But I have heard of several banks that are re-opening negotiations on projects they turned down a few months ago. So maybe things are starting to improve."

Many courses have their permits and are ready to go. They just can't get underway because they can't get the financing.'

—John Cotter

Wadsworth vice chairman of the board

Clute agreed lack of financing is a major stumbling block.

"Demand for new courses is fine," said the Hartland, Mich.-based contractor. "But we aren't insulated from what's happening to the economy. Our industry is tied to the housing market and that's affecting us."

"Financing and environmental permitting are the two big issues and will continue to be for some time. Two years ago, permitting was the major item slowing down construction. Today, lack of financing has probably passed it by."

Although they are competitors, a strong mutual respect exists between the top vote-getters in this year's survey.

"I have very fond memories of working there," said Clute, who worked eight years for Wadsworth during the late 1970s and early 1980s. "I feel like I was a part of what the company did during that time. The people at Wadsworth have a high degree of competence and integrity."

Said Cotter of Clute: "They are doing some excellent work. We're friendly competitors."

Paul Clute & Associates, which Clute started in 1984, finished second in the balloting with 13 percent of the votes. Clute, who entered the golf course construction business in 1965, attributes his firm's strong reputation to providing personal service to architects, owners and developers coupled with an experienced workforce.

That workforce fluctuates between 100 and 200 employees. The average job requires 40 to 50, and can go as high as 90. That's up from the 10 to 15 required when he first entered the business 25 years ago.

"The biggest change I've seen is the increased attention to detail and that requires more people," Clute said. "The detail we used to put into the green has spread all the way back to the tee."

"Developers want cart paths, irrigation, drainage, turf and everything else ready to go from the first day. People used to say it took two to five years for a course to mature. Now they want it to look mature right away. And that's driven the cost up."

"We could build a course for \$20,000 a hole

25 years ago. Now it costs that for the average green."

Clute's 1991 revenues will be in the \$10 million- to \$15-million range, about the same as two years ago.

"1990 was our highest revenue year ever," he said. "We had a couple of high-dollar projects that just happened to both be completed that year. It was unusual. This year will be about the same as 1989 and next year should be about the same again."

Clute opened seven courses in 1991 — Naperbrook (Ill.) Golf Course (Roger Packard); Brighton Crest Golf Club, Fresno, Calif. (Johnny Miller/Gene Bates); Trapper's Turn, Wisconsin Dells, Wis. (Roger Packard/Andy North); The Golf Club of Tennessee, Kingston Springs (Tom Fazio); Hills Course of Palmetto Halls Plantation, Hilton Head, S.C. (Arthur Hills); Emerald Bay Plantation, Destin, Fla. (Robert Cupp); and Ibis Golf Course, The Heritage and The Legends, West Palm Beach, Fla. (Jack Nicklaus).

Under construction are Coosaw Creek Country Club, Charleston, S.C.; Gibson Bay Golf Course, Richmond, Ky.; Glenmoor Country Club, Canton, Ohio; Eagle Brook Country Club, Geneva, Ill.; Tree Tops Country Club, Gaylord, Mich.; and Cupp Course of Palmetto Hall Plantation, Hilton Head Island, S.C.

Landscapes Unlimited finished third in the survey. Like Clute, President William Kubly praised Wadsworth.

"They do a quality job, have a professional

Continued on page 43

When it comes to covering a lot of ground, the competition isn't the only thing

Wadsworth

Continued from page 42

staff and pay attention to detail," Kubly said. "I'm always happy to be included on a bid list with them. It lets us know that the developer wants a quality job. A local contractor's bid could blow us both out of the water, but the local contractor wouldn't deliver what Wadsworth and we do."

Cotter returned the praise.

"Landscapes Unlimited is an excellent contractor and is doing some outstanding work, too," he said.

Lincoln, Neb.-based Landscapes Unlimited received 9 percent of the architects' vote. The staff includes 80 full-time and another 40 to 80 part-time employees. Among them are five project managers, 15 construction superintendents and 20 shapers.

"Very simply, we try to deliver quality," Kubly said. "We have a strong back-up staff to help out on projects throughout the country."

Despite the slow economy, revenues are expected to exceed \$20 million this year.

"We've been barraged by people looking for work," Kubly said. "We're working at 95 percent of capacity. But a lot of our work is in the Northeast, which is being hit hard by the recession. Subcontractors up there have been offering to work at some very low prices."

Landscapes Unlimited averages six to 10 course openings annually, Kubly said. Openings in 1991 included Woodloch Pines Golf Club, Hawley, Pa.; Uwharrie Point, Albemarle, N.C.; Eagle Run West Country Club, Omaha, Neb.; Jackson Country Club, Jackson, Tenn.; Huntsville Country Club, Huntsville, Ala.;

Windtree Golf Course, Nashville, Tenn.; Sunset West Golf Club, Raleigh, N.C.; and The Oaks Golf Clubs, Muscle Shoals, Ala.

Others under construction are Bentcreek Golf Club, Lancaster, Pa.; Glenmore Golf Club, Charlottesville, Va.; Glenmaura Golf Club, Scranton, Pa.; Hyatt Golf Course, San Antonio, Texas; Sapphire Country Club, Cashiers N.C.; and Wildwing Plantation, Myrtle Beach, S.C.

Kubly, a registered landscape architect, received his bachelor's degree in landscape architecture in 1971 from the University of Wisconsin. He worked in the golf course construction and design field five years before opening Landscapes Unlimited.

"The biggest change I've seen is the amount of work," Kubly said. "When I first got out of school, I thought all the course work would dry up in a few years. There has been a lot more work than I ever thought there would be."

Guettler & Sons Inc. was the choice of 5 percent of the architects. The Fort Pierce, Fla. firm has served primarily the Southeastern United States since 1954. Peter F. Guettler is chairman of the board.

Guettler course openings in 1991 included the Fairwinds Course at St. Lucie County Golf Course, Ft. Pierce; Valkaria Airport Public Golf Course, Palm Bay, Fla.; and Windsor Golf Course, Vero Beach, Fla.

Courses under construction are Northport at the Lake, Lake Ozark, Mo.; Old Tabby Golf Links, Spring Island, S.C.; and Sandridge, Indian River County, Fla.

Sawgrass takes Tour's resort honors

Continued from page 17

The course that Nature had savaged with winter wind and storm fury was attacked and renovated by man on a major scale. Needed changes were defined. An earlier end to daily play prior to the tourney was deemed advisable. Shutting down the course the Monday before tournament practice was a practical stroke.

The course was closed in the fall for winter seeding. The week's shutdown permitted uninterrupted germination of the grass.

A tree-trimming program added course sunlight.

Three months before the late March event, three persons were added to the workforce.

Ball marks on all greens were seeded. There were no fairway divots. Sawgrass was ready.

Greg Norman, who had led the chorus of criticism in 1990, this time observed, "Perfect."

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

Klauk, who said his mission in 1991 was to make the course the best ever, did just that in a rousing vote of confidence from those most

knowledgeable and most demanding — tour pros.

"We were very focused the entire year and accomplished our goal," he said.

He cited this "team" for making it possible: Bob Clarkson, assistant on the Stadium course; Gene Baldwin, assistant at the Valley course; chief mechanic Mark Sanford, landscape assistant Lee Rowe and office manager Cathy Macormic.

Gary Wilder and Callaway Gardens' Mountain View layout, most testing of the resort's 63 holes, made a remarkable run for tour laurels. Time wasn't on their side.

Wilder, superintendent at Harbour Town and a veteran of 10 tourney events, was contacted last March by Callaway Gardens officials. The Buick Southern Open, a 27-year fixture at Green Island Country Club in Columbus, Ga., had been switched to Callaway Gardens Sept. 26-29.

Wilder was offered the job of whipping the course into tournament shape. Bunkers were to have priority. Wilder, who had much sand experience, arrived early in May and launched renovation operations.

The course was closed for the summer.

Wilder rebuilt bunkers that contained from one to two feet of sand. Greens received major stripping and fumigating attention, and fairways were sprayed heavily with a plant growth regulator that encouraged grass to grow from side to side and thicker. The ball set up well as the result of this concentrated treatment.

Pros responded favorably to the intense course face-lifting, as witness the flood of voting backing.



Fred Klauk

that trails behind the Cushman® Turf-Truckster.™



Only Cushman increases your productivity with a complete line of 5th Wheel Implements.

Cushman 5th Wheel Implements provide the highest capacities available to meet the demands of intense turf maintenance practices. They are exclusively designed

to keep ground pressure to less than 12 psi. When you have to aerate, haul, dump, spray, spread or top dress, no one offers more capabilities than Cushman. No one!

Contact your Cushman dealer or call toll free today, 1-800-228-4444.

Built to Last

RANSOMES

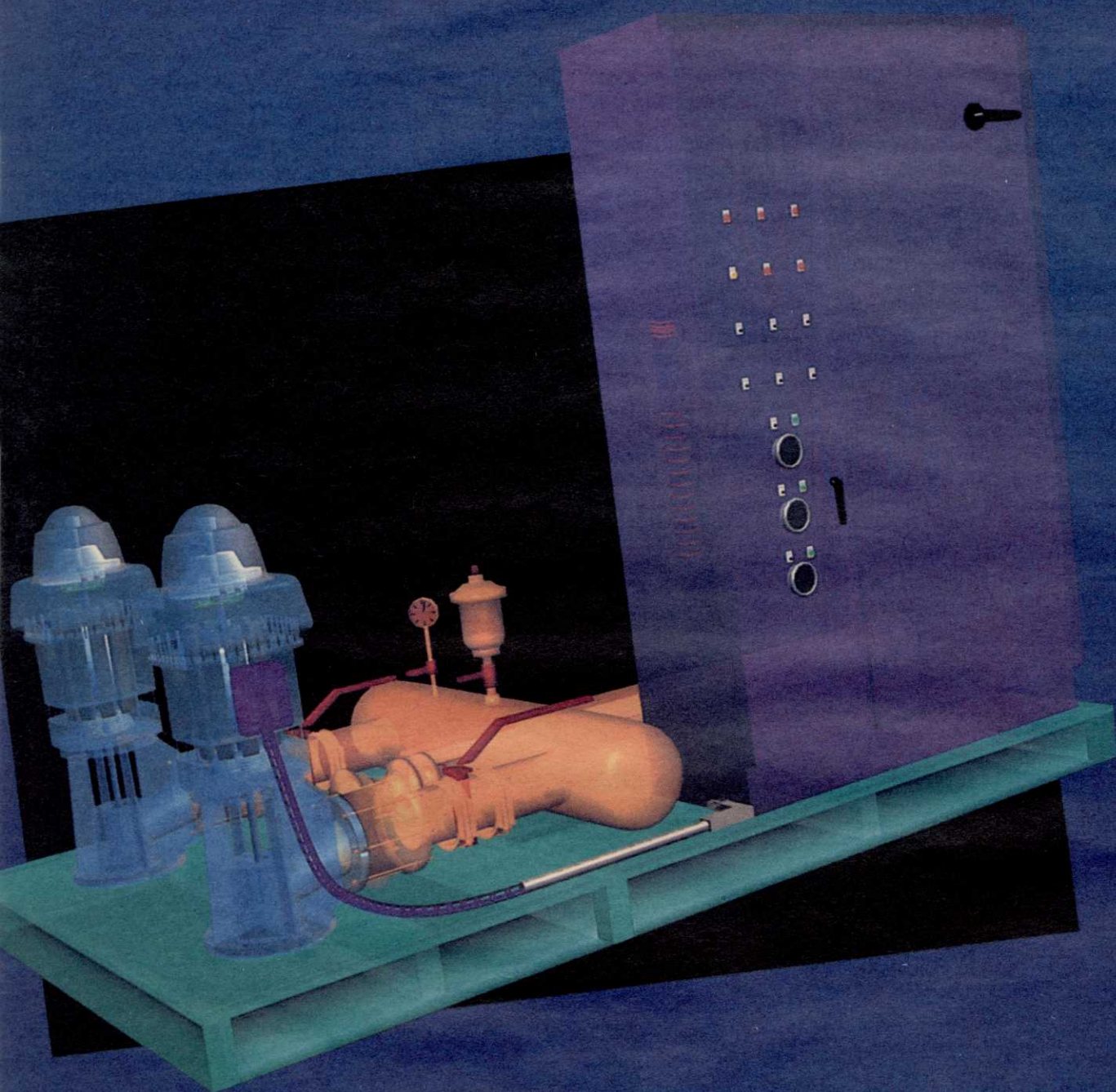
CUSHMAN



4003 Cushman, P.O. Box 82409, Lincoln, NE 68501 © Cushman, Inc. 1991. A Ransomes Company. All rights reserved.

FLOWTRONEX

Variable Speed Pumping Systems



THE FIRST

Flowtronex was the first national pump station manufacturer to install variable speed pumping stations for golf course irrigation.

THE BIGGEST

Flowtronex manufactures more variable speed pumping stations than all of our competitors combined. In fact, over 2/3 of all golf course variable speed installations were built by Flowtronex.

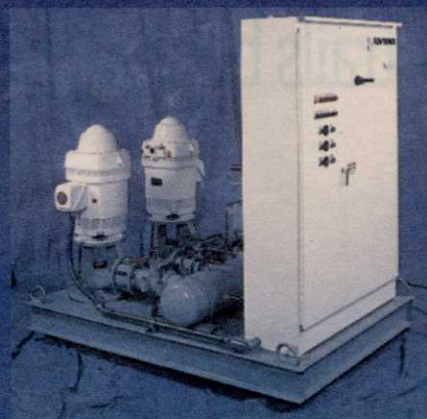
and still THE BEST

Over 10 years of building variable speed systems gives us something none of our competitors can match --- EXPERIENCE! We continually incorporate this experience along with new engineering developments to improve and enhance our VSPS line of pump stations. NOBODY makes a better variable speed pump station than Flowtronex.



FLOWTRONEX
International

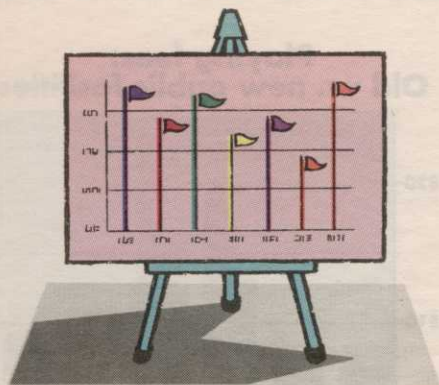
Flowtronex International
1631 Northwest Professional Plaza
Columbus, Ohio 43220
614-442-5850
1-800-PUMPSTATION
(1-800-786-7782)



Flowtronex V-Series VFD pump stations combine smooth efficient operation with proven reliability to give you the best value on the market.

VSPS Variable Speed
Pumping Systems

Briefs



CMAA ADDS 5,000TH MEMBER...

ALEXANDRIA, Va. — Membership in the Club Managers Association of America reached an all-time high, with the induction of its 5,000th member, William J. McMillan, assistant general manager of the John's Island Club in Vero Beach, Fla.

"Although clubs are implementing cost-cutting measures," said James B. Singerling, executive vice president of CMAA, "many feel the education of their staff cannot be sacrificed. Clubs rely on quality service to retain their membership and for that reason need to continuously adjust with the times in order to survive. That is why so many associations whose emphasis on education are able to ride out economic hardship."

Previous to John's Island Club, McMillan served in a management training program at Riviera Country Club in Coral Gables, Fla. He graduated with a bachelor's degree in psychology from Williams College and a master's degree in hotel and food service sciences from Florida International University.

...AND CERTIFIES 900TH

ALEXANDRIA, Va. — Beverly Schlegel, manager of Shenandoah Club in Roanoke, is the 900th member to be accredited a Certified Club Manager by the Club Managers Association of America.

Schlegel was approved by the Certification Committee of CMAA for passing the extensive examination.

Schlegel qualified for the CCM certification by fulfilling specific requirements over a period of years in management, experience, education and association activity.

The CCM exam contains 13 subject areas, such as private club administration, managerial accounting, food and beverage operations and principles of management. The exam is prepared and administered under the direction of the Certification Committee at various college and university sites across the country.

DEEP CLIFF SELECTS COURSECO

CUPERTINO, Calif. — CourseCo, Inc. has been selected to manage operations at Deep Cliff Golf Course, an 18-hole executive layout built in the 1961 by Clark Glasson.

Purchased last May from the Glasson family by Deep Cliff Associates, L.P., the facilities are slated for major renovation to be completed this spring.

John C. Telischak, general partner, announced the selection of CourseCo as management company saying, "We selected CourseCo because of its award-winning commitment to high quality public golf and for its experience in renovation."

Based in Petaluma, CourseCo's Riverside Golf Course in Fresno received the 1991 National Golf Foundation's Public Golf Achievement Award for maintenance and operations.

Landmark named top resort developer

By Peter Blais

While financially it may be in shambles, Landmark Land Co.'s reputation as a premier golf resort developer remains very much intact.

The La Quinta, Calif.-based firm received better than a quarter of the votes for best resort developer in the Golf Course News third annual survey of course architects.

Landmark's vote total was more than twice that of any of its three nearest

competitors — Marriott Corp., Woodbine Development Inc. and Arvida Corp.

"A resort golf course should have a sense of integrity," said architect William Newcomb, who did much of the design work at Boyne Highlands and Boyne Mountain near his Ann Arbor, Mich., home.

"You want to see the golf course, not homes and hotel rooms. I get the sense that Landmark strives for that sense of golf course integrity. I'm looking at it as an architect. The company's financial condition has nothing to do with that."

Landmark's holdings include some of



PGA West is one reason architects named Landmark the top resort developer in the country.

the most prestigious courses in the country — Kiawah Island near Charleston, S.C.; Palm Beach Polo & Country Club in West Palm Beach, Fla.; Belle Terre Country Club between Baton Rouge and New Orleans, La.; and Oak Tree Golf Club and Oak Tree

Country Club in Edmond, Okla.

Its California properties are Carmel Valley Ranch near Carmel and the Palm Springs area resorts La Quinta Hotel Golf & Tennis Resort, PGA West and Mission

Continued on page 47

Upscale public courses gain popularity

By Peter Blais

Used to be that if you wanted the valet bag drop-off, preferred tee time, meticulously maintained course and employees who knew you by name, you had to shell out thousands of dollars to join a private country club.

Not anymore.

Upscale daily-fee courses with all the amenities of a private club are becoming the

rage as developers scurry to fill a market niche many feel has long been under-served.

"It does seem to be a trend," said Earl Collings, publications editor for the National Golf Foundation. "People are willing to pay extra for a round at high-quality courses with that private country club look."

From 1987 to 1990, the number of private U.S. courses fell 1 percent (from 5,289 to

5,232) while daily-fee courses jumped 8 percent (from 6,025 to 6,497), according to NGF figures.

"The cost of private clubs has become almost penal," Collings said. "The rich will always be able to afford them. But for marginal people, like me, paying \$4,000 a year in dues and playing a handful of times can work out to

Continued on page 46

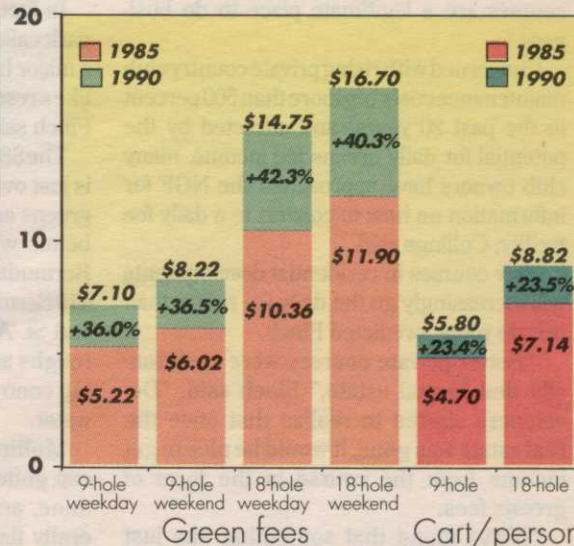
NGF report tells the score

Fee increases reported at all private facilities/ 1985-90

Fee Type	1985	1990	Increase
Playing fees			
Initiation	\$4,734	\$7,985	68.6%
Annual dues	\$1,036	\$1,411	36.2%
Guest fees	\$20.09	\$30.08	49.7%
Cart fees (per person)			
9-hole	\$5.64	\$7.02	24.5%
18-hole	\$7.84	\$9.53	21.6%
Consumer Price Index	109.2	134.6	23.3

Source: NGF

Playing fee increases at all public facilities/ 1985-90



Source: National Golf Foundation

The Consumer Price Index in the Entertainment category during the period from 1985-90 rose from 109.2 to 134.6, a 23.3-percent increase. Entertainment is the most appropriate PI category for comparison to golf cost increases.

Importance of core golfers noted

JUPITER, Fla. — Underscoring the importance of America's 12 million core golfers, a special report by the National Golf Foundation noted that, although they make up only 40 percent of the total U.S. golf population, they account for nearly 90 percent of all rounds played.

A core golfer is defined as one at least 18 years old and playing eight or more rounds per year. An occasional golfer is considered at least 18 and playing less than eight rounds per year.

A new NGF report indicates the total annual expenditure by core golfers is three times greater than occasional golfers. Core golfers spend \$3,246 on golf equipment and facilities fees, compared to \$1,087 by occasional golfers.

Nearly half of all core golfers purchase at least one golf club a year, compared to 17.2 percent for occasional golfers.

Among all player segments, the average annual expenditure on golf clubs is \$199.85.

Among other findings:

- While the nation experienced a 23.3-percent growth in Consumer Price Index from 1985 to 1990, the average cost of an 18-hole round of golf at a public facility on a week day rose 42.3 percent over the same period — from \$10.36 to \$14.75.

- 18-hole green fees at today's newer public courses (opened for play since 1985) on average are running 40-45 percent higher than their older counterparts.

Golfers willing to pay for top quality public courses

Continued from page 45

something like \$700 a round."

Still, people want to play top-notch courses. High-quality, daily-fee facilities give them that opportunity without binding them to yearly dues, Collings noted.

"There are a lot of people out there who want to play golf on top courses, but don't want to be strapped into yearly dues," said Bob Husband, chairman of GolfCorp, a Club Corporation of America affiliate managing 38 daily-fee courses throughout the United States including Clear Lake Golf Course near Houston, Foothills Golf Course in Phoenix and Upland (Calif.) Hills Country Club.

The growing number of golfers (up 38 percent from 20.2 million in 1986 to 27.8 million in 1990) is driving the demand for upscale, daily-fee courses, according to Kemper Sports Inc. President Steve Lesnik, who oversees Kemper Lakes Golf Course in Long Grove, Ill.

Opened in 1979, the Ken Killian/Dick Nugent-designed layout surrounding Kemper Insurance and Financial Services headquarters, was one of the first high-end, daily-fee facilities in the country and is the only public, daily-fee course to ever host a PGA championship (1989). Raymond Floyd called it the best-conditioned course he'd ever played, including Augusta National, Lesnik said.

"Economics are working in favor of upscale, daily-fee courses," Lesnik said. "People just picking up the game don't necessarily want to join a private club right away. But they want to play where they are treated well."

"There are more people playing, but they aren't playing as often as golfers used to. From an economic standpoint, it makes sense for them to play at an upscale, daily-fee course rather than join a club."

Recent Internal Revenue Service rulings threatening the tax-exempt status of private clubs if members conduct business there have also made daily-fee courses more popular, added Raymon Finch, co-owner of Emerald Dunes, an upscale, daily-fee course in West Palm Beach, Fla.

"Belonging to a private club isn't that important anymore," Finch said. "Daily-fee courses are a legitimate place to do business."

Concerned with rising private country club maintenance costs (up more than 500 percent in the past 20 years) and attracted by the potential for daily greens fee income, many club owners have approached the NGF for information on how to convert to a daily-fee facility, Collings said.

New courses in residential developments will increasingly go the daily-fee rather than private route, predicted Finch.

"Better private courses were traditionally tied to real estate," Finch said. "Developers started to realize that once the real estate was gone, it would be nice to get income from the course in the form of greens fees."

"We've found that something like just one in five people buying lots on a golf course actually play golf. And just one in 10 buys a membership in the course bordering their property. They buy the lot for the aesthetic value of having a course in their backyard. The course ends up under-utilized by the people who live along it. Building daily-fee courses within private residential developments will be the wave of the future."

Finch's course is part of what many see as an even bigger wave, stand-alone daily-fee courses with no real estate.



Eagle's Nest in Silverthorne, Colo. is among the growing number of upscale, daily-fee golf courses.

Economics are working in favor of upscale, daily-fee courses' — Steve Lesnik of Kemper Sports

"Many of the new, upscale daily-fee courses are not real estate oriented," Collings said.

In fact, surrounded by a major industrial park called Vistana that will one day include a major hotel, Emerald Dunes is much more like a resort than a private, residential course, Finch said.

The \$8-million, Tom Fazio-designed layout is just over 7,000 yards long. Bermudagrass greens are overseeded with bentgrass for a better winter putting surface. Tifton 328 Bermudagrass covers the greens and Tifton 419 Bermudagrass covers the fairways. Bahia and St. Augustine grasses run through the roughs and between dunes and trees, offering contrasts in colors and saving irrigation water.

Multiple-tees allow low- and high-handicap golfers to enjoy the course. A 50-foot dune, an enormous elevation in the generally flat southeast Florida landscape, is home to three tees, three greens, an assortment of bunkers, boulders, bushes, waterfalls and cascades, and a panoramic view of the course. The clubhouse cost \$2 million.

The \$100 greens fee, Finch said, is slightly lower than the top fees at such well-known Florida resort courses as Doral (\$140), Grand Cypress (\$130) and PGA National (\$125). Memberships are available, but the bulk of play is daily-fee.

Finch and his partners — who include his father, Fazio and the father-and-son ac-

counting team of John C. and John R. Owens — plan to build similar high-end courses throughout the United States. Atlanta, Louisiana and Arizona are likely sites.

Plans to build three more courses in West Palm Beach were scrapped for lack of financing, a common problem facing golf course developers, Finch said. But plans to begin construction of a 27-hole facility in Orlando next year are moving ahead.

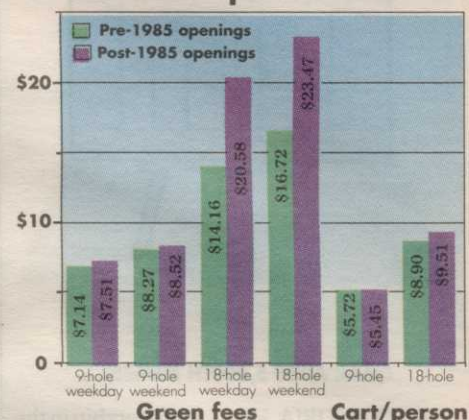
Shaker Hills Golf Club in Harvard, Mass., opened this summer and touts itself as "An extraordinary public course that looks, feels and plays like an exclusive private club."

Designed by architects Brian Silva and Mark Mungeam, the 6,850-yard course features multiple tees, wall-to-wall bentgrass, computerized irrigation system, 300-yard practice area, computerized handicapping service, 24-hour automated telephone tee-time reservations and valet bag drop. The top greens fee is \$35 with a \$20 cart rental.

"As designers, we lean toward upscale, daily-fee courses," Mungeam said. "We've encouraged planting bentgrass everywhere, like we first did with The Captains Golf Club back in 1984. A lesser course might have bluegrass on the fairways with ryegrass on the tees and greens."

"Traditional public courses are usually less challenging to maximize the number of rounds and profits. But an upscale course doesn't need as many rounds. You give the

Playing fees: Old vs. new public facilities



developer an environment that lets him charge more.

"Multiple tees affording many different angles of play allow a high-handicap golfer to play the course in the same amount of time as a low-handicap golfer, if the high-handicap plays from the appropriate tees. Shaker Hills has four of five tees on every hole, plus signs explaining what skill levels should play off each tee."

"The course has been very well accepted so far. It's averaging 180 to 200 rounds a day. Upscale, daily-fee courses are a trend. It's the type of course that isn't always available."

Public course players are generally less skilled than their private club counterparts, although the gap is usually less pronounced at upscale daily-fee courses, said Shaker Hills superintendent Paul Chesterton. Less-skilled golfers are harder on a course and the extra effort needed to repair divots and ball marks must be reflected in the maintenance budget.

"You have to pay more attention to the details to maintain it like a private course," said Chesterton, former superintendent at Sky Meadow Country Club, recently rated the top course in neighboring New Hampshire by Golf Digest. "The maintenance budget is higher than at a typical public course."

"It's a little more frustrating having beginners on the course. But the owners are committed to keeping it in top shape and are sympathetic to maintenance needs."

The undulations and severe slopes at Emerald Dunes make it more difficult to maintain than the typical Florida course, superintendent Chip Fowkes said. Maintaining the course in resort-type shape requires verticutting and top dressing every other week, overseeding with bentgrass in the fall and aerifying several times a year.

"The owners give me the time and close the course if needed to maintain it at this level," Fowkes said. "The maintenance budget is between \$600,000 and \$700,000 a year, which is in line with most of the better private and resort courses."

Unlike many private clubs, GolfCorp doesn't have the luxury of closing its courses for all or part of a day every week for maintenance, said company Vice President of Agronomy Dave Johnson.

"We have to squeeze our maintenance practices in without interrupting play and still maintain them at a level that keeps people coming back," said Johnson, who classifies about 10 of the company's courses as upscale, daily-fee.

"That means we go out very early in the morning or very late at night for some of the things we do."

Marriott and others among the best resort builders

Continued from page 45
Hills.

"Landmark has several resorts I've really enjoyed, PGA West and Carmel Valley Ranch in particular," said Salt Lake City architect William Neff. "I really like Pete Dye's work at PGA West and Carmel Valley is the best resort I've ever visited. You get the five-star treatment at any of their resorts."

Pleasing the customer is the main concern at all Landmark resorts, according to Brian Curley, Landmark's director of golf design and construction.

"From the moment they set foot on the property, we treat them as if this is the ultimate experience of their lives," Curley said. "We have resort courses, but we want customers to feel like they are at their own, high-end private membership facility."

Landmark's courses are known as stern tests of golf. That's fine with visitors, who tend to belong to private clubs and are generally accomplished golfers, Curley said.

"We don't try to make them easy," the Landmark official said. "The Stadium Course at PGA West runs contrary to the general resort philosophy that courses should not be too hard. It's a difficult course, but that's the way people want it."

Another Pete Dye-designed layout, the Ocean Course at Kiawah, which hosted this fall's Ryder Cup, brought Landmark into the limelight this year.

"Their courses have been very visible with the Ryder Cup at Kiawah and The Skins Game at PGA West," said architect Baxter Spann of Finger Dye Spann.

"The Ryder Cup really put Kiawah on the map as a worldwide destination resort," Curley said. "Everyone wants to play it and that's had a spill-over effect on the resort's other three courses."

While Dye and Landmark have been intertwined, the company has also assembled its own in-house design and construction teams, which are striving to make a name for themselves.

Mt. Woodson Golf Club north of San Francisco opened this fall and marked the first Landmark Signature course designed for a customer other than Landmark Land Co., Curley said.

The in-house staff also designed Landmark's Oak Harbor Yacht & Country Club in Louisiana and Oak Valley, located 16 miles east of Riverside, Calif. Both courses have been ready for play for more than a year, but have sat idle, victims of Landmark's financial and regulatory woes, Curley said.

"We haven't been able to finish the clubhouses," he added. "No clubhouse means no place to plug in golf cars which means no golf. We're looking at temporary facilities so we can at least open the courses up."

"We won't know what's going to

happen financially until early next year. That's the most frustrating thing about this situation. We have some other fantastic sites just waiting to go. Whether we'll do them, they become joint ventures or something else, we just don't know, yet."

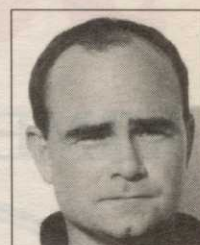
Second-place finisher Marriott operates 18 golf resorts, including Camelback in Scottsdale, Ariz., Desert Springs in Palm Desert, Calif., Golf Club at Marco Island on Florida's west coast and Seaview Golf Resort in Atlantic

City, N.J.

"We've been in the resort marketplace for years, but we really started coming out of our shell in the golf area about four years ago," said Roger Maxwell, vice president of Marriott Golf. "Some of the facilities we've opened lately, like Desert Springs (900 rooms, 36 golf holes) have received more attention."

Marriott is also becoming increasingly involved in the construction and management of stand-alone, public golf courses,

"We don't try to make them easy"
— Brian Curley
Landmark golf design director



Maxwell added.

Other multiple vote-getters were Woodbine Development Inc. of Dallas Texas; Ft. Lauderdale, Fla.-based Arvida Corp., developers of Weston Hills Country Club, site of

March's PGA Honda Classic; and Lely Resorts in Naples, Fla., a 2,900-acre community with Robert Trent Jones Sr. and Gary Player-designed courses and a Lee Trevino layout in the works.

THEY TOOK THE BEST APPROACH TO THE GREEN

\$2,000,000

in 1991 to

The Club at Cimarron, Inc.

a wholly owned subsidiary of

Club Corporation of America

for a 60 Month

First Mortgage Loan for

Cimarron Country Club

18 Holes of Golf, Clubhouse
and Racquet Center in
McAllen, Texas

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

\$9,000,000

in 1990 to

New Seabury Limited Partnership

for a

60 Month Participating
First Mortgage Loan

for

The Country Club at New Seabury

36 Holes of Golf, Restaurant
and Clubhouse Complex
in

New Seabury, Massachusetts

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

\$15,000,000

with an initial advance of \$14,500,00 in 1991 to

Sun City Center Corporation

for a

60 Month
First Mortgage Loan

for

Sun City Center and King's Point

90 Holes of Golf, Clubhouse, Restaurant
and Recreational Complex
in

Sun City Center, Florida

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

\$1,500,000

in 1991 with further possible
advances of \$2,250,000 to

**The Beach Club Limited
Partnership**

for a

60 Month Participating
First Mortgage Loan

for

The Beach Club Golf Links

18 Holes of Public Golf in
Ocean City, Maryland

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

\$3,000,000

in 1990 with further possible
advances of \$2,000,000 to

Robin Rossi

for a

60 Month
First Mortgage Loan

for

San Luis Bay Golf Course

18 Holes of Golf, Restaurant
and Clubhouse Complex in
Avila Beach, California

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

\$1,850,000

in 1991 with further possible
advances of \$650,000 to

**Meadow Lake
Golf Resort, Inc.**

for a

60 Month Participating
First Mortgage Loan

for

Meadow Lake Golf Course

18 Holes of Golf and Pro Shop in
Flathead Valley, Montana

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

\$5,000,000

Takeout commitment in 1990 funded in 1991 to

Four Seasons USA

for a

84 Month Participating
First Mortgage Loan

for

Seasons Ridge Golf Course

18 Holes of Golf, Clubhouse
and Golf School
in

Lake Ozark, Missouri

This transaction was arranged
by the undersigned in its entirety.

TFC TEXTRON

\$5,000,000

in 1991 to

Northgate, A General Partnership

for a

60 Month Participating
First Mortgage Loan

for

Northgate Country Club

18 Holes of Golf and Clubhouse
in

Houston, Texas

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

\$1,000,000

in 1991 to

Mission Dorado Country Club, Inc.

a wholly owned subsidiary of

Club Corporation of America

for a 60 Month

First Mortgage Loan for

Mission Dorado Country Club

18 Holes of Golf, Clubhouse
and Athletic Center in
Odessa, Texas

This transaction was arranged and funded
by the undersigned in its entirety.

TFC TEXTRON

These successful golf courses each used the best approach to financing or re-financing their courses... **TEXTRON FINANCIAL CORPORATION.** The TFC Golf Course Finance Division is number 1 on the leader board with attractive and innovative golf-related financing. And, golf is our one and only business. For the most complete golf-related financing programs, TFC is the best approach to the green. TFC is represented nationally by exclusive correspondent brokers.

For more information feel free to contact our exclusive golf finance correspondent in your region.

CIRCLE #139/GCSAA BOOTH #2546

Eastern Correspondent:

Russ Maloney
Maloney Golf Finance, Inc.
6901 West 63rd Street
Overland Park, KS 66202
Tel: 913-432-9990 Fax: 913-432-5759

Western Correspondent:

M.J. Mastalir
Real Estate Capital Corp.
6950 E. Belleview Avenue, Suite 202
Englewood, CO 80111
Tel: 303-290-9710 Fax: 303-771-5200



SURF-SIDE WETTING AGENT

ARMEN SUNY



TOURNAMENT
DIRECTOR

MARSHALL FEARING



GOLF COURSE
SUPERINTENDENT

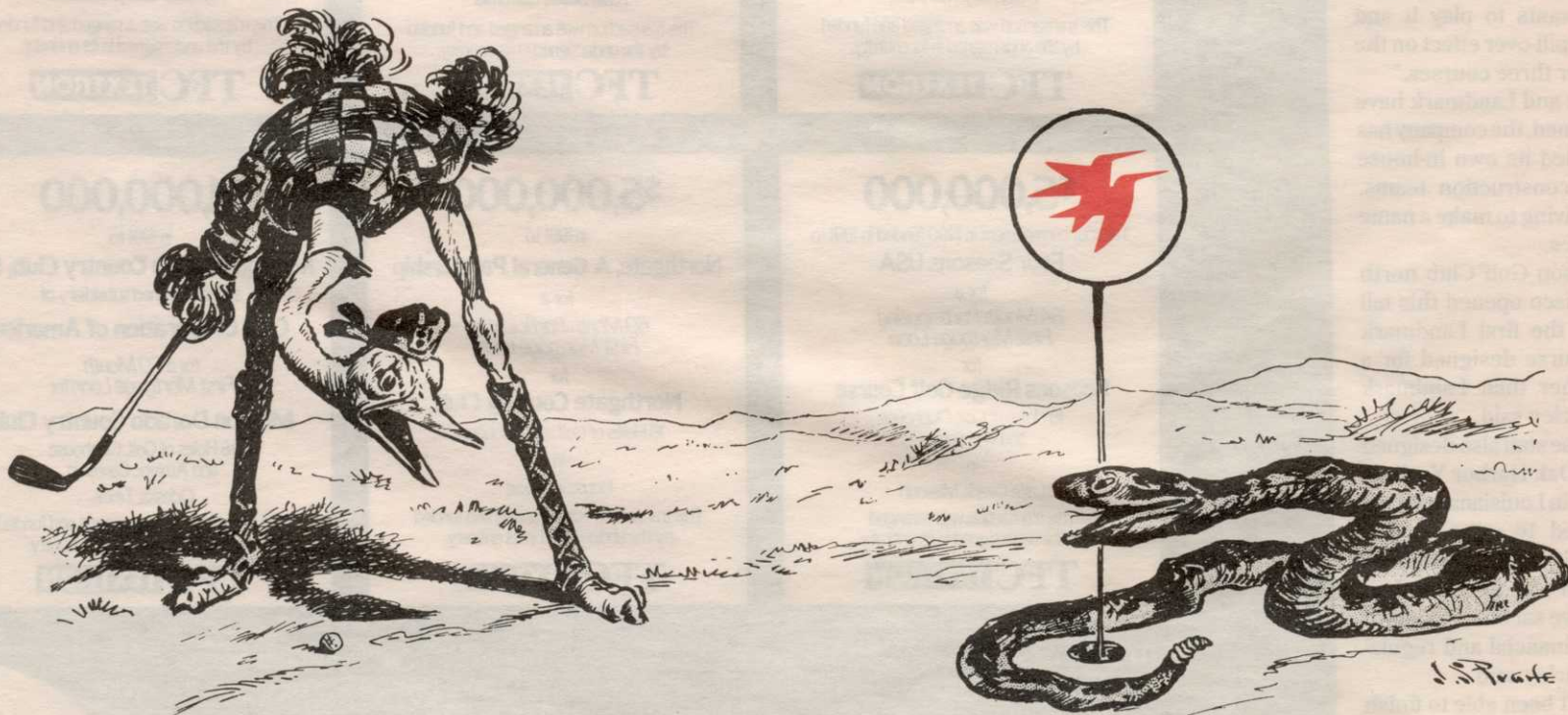
CASTLE PINES GC

HOME OF THE INTERNATIONAL
TOURNAMENT, CASTLE ROCK, CO.

For the "International" we spray everything inside and outside the gallery ropes with Surf-Side #37 and Iron. Our fairway program during the summer is 3-oz Surf-Side/M and 1½-oz Iron/M applied every other week. We don't water-in the application. The Iron mixed with Surf-Side does wonders for the grass! Greens receive 1 qt./M Surf-Side to start season.

Back in 1986 we had lots of fairway areas that didn't take water well. Localized dry spots were a real problem due to thatchy turf and a clay-gravel soil. With 40 days over 90°F and winds coupled with 15 to 25% humidity the exposed sites dried out rapidly. A program of aeration plus Surf-Side has reduced this problem significantly. At Castle Pines hand watering isn't just hand watering any more . . . any remaining dry areas on fairways are hit with Surf-Side using a quick coupler and a 5-gal tank proportioner containing a premix of 1½ gals Surf-Side #37 to 3½ gals water. This gives us one quart Surf-Side to sixty gallons water applied as a drench. A repeat application usually isn't needed for up to 4 weeks. Our fairways are irrigated twice a week. When conditions warrant we also premix Surf-Side and Iron (with water) in a 50-gal tank and inject this into the irrigation system.

Fairways were originally seeded to Seaside and Astoria bent. Tees and greens to Penncross. We now oversee fairways with Penncross and SR 1020.



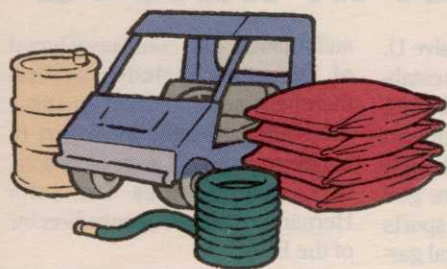
SURF-SIDE DOESN'T BURN, DISCOLOR, OR ROOT PRUNE

ZAP! DEFOAMER

MONTCO PRODUCTS CORPORATION
BOX 404
AMBLER, PA 19002

BLEND 37

Briefs



COLUMBIA PARCAR APPOINTS TWO

DEERFIELD, Wis. — Appointment of two regional managers and a factory sales representative were announced by Columbia ParCar Corp.

Terry Dooley will be responsible for field management of golf car and industrial vehicle sales in the Midwest region, Frank Miscavage in a similar capacity in the Atlantic Coast region.

Chuck Pohlman has joined the company as factory sales representative.

Dooley worked in construction equipment sales management for such companies as International Harvester and Komatsu Inc. He resides in Chicago.

Miscavage, a resident of Turnersville, N.J., said he likes the challenge to continue in the area of dealer development, which has been his focus the past 15 years in the construction equipment business.

Pohlman has worked as territory and operations manager for Tiziani Golf Cars and Jordan Golf Cars in Madison. He resides in Sauk City.

TOCA CREATES NEW SCHOLARSHIP

MINNEAPOLIS — The Turf and Ornamental Communicators Association has created a scholarship program for students interested in green industry communications. College students entering either their junior or senior year by the fall of 1992 are eligible to apply for the \$1,000 scholarship.

Funding for the scholarship was provided by GIE Publishing and Edgell Communications Inc., publishers of green industry magazines.

TOCA, in its second year, will make the scholarship an annual award.

To qualify, students must have an overall grade point average of 2.5, with a 3.0 in their major field. More information is available by writing Den Gardner, executive director, 8500 Normandale Lake Blvd., Suite 1200, Bloomington, Minn. 55437.

ASPA CONVENTION SET

LAS VEGAS, Nev. — Special presentations on marketing, media relations and agronomic and business-related speakers will highlight the American Sod Producers Association's annual convention here, Feb. 5-7.

Conference events will be housed in Bally's Casino and Resort.

The enlarged exhibit will accommodate firms offering specialized products and services to turfgrass sod producers.

A session on water ordinances has been added with Harry Fahnestock of Western Turf speaking.

HARDY APPOINTED AT GREENSMIX

WAUPACA, Wis. — Greensmix President Christine Faulks has announced the appointment of Frank Hardy as Southeast regional sales manager.

Hardy brings 15 years of experience in the industrial sand, soil and turf industry.

Service school in session at Cushman

A new series of Factory Service School sessions are underway for mechanics who work on Cushman and Ryan equipment.

Sixteen five-day schools are being held at Cushman, beginning in mid-October and continuing through mid-March. Each class covers either turf, industrial, Ryan, or Front Line products. The sessions cover the entire Cushman/Ryan product lines, with weekly choices of either electric vehicles, air-cooled or liquid-cooled gas engine vehicles, mowers, or the full range of turf maintenance equipment.

The Cushman Service Schools are open to all maintenance personnel who work on Cushman and/or Ryan equipment, including dealer personnel and customer mechanics. Tuition for the five-day school is \$55. Students are responsible for their own meals and lodging as well as transportation to Lincoln, Neb. Lunches are furnished by Cushman during the school.

The training sessions are primarily hands-on instruction. All course materials, including manuals and service bulletins, are included in the tuition fee.

Customer maintenance personnel must register through their local Cushman/Ryan



Cushman factory service school session.

dealer. Class size is limited to 12 students for each session, so early registration is advised.

Cushman has conducted Service School training since 1964.

Details are available from Cushman and Ryan dealers, or prospective students may write: Service Information Coordinator, Cushman Inc., P.O. Box 82409, Lincoln, Neb. 68501-9971; 402-475-9581.

RISE announces new board members

WASHINGTON, D.C. — Allen James, executive director of Responsible Industry for a Sound Environment, has announced new governing board members for 1991-1992.

Nominees elected to three-year terms are Ken Bakshi, general manager of vegetation/pest control ventures for American Cyanamid Co., Agricultural Division; Marvin Moore, national sales manager for Riverdale Chemical Co.; and Duane Hagert, specialty markets manager for Wilbur-Ellis Co., Brayton Division.

William H. Culpepper, commercial director of specialty products for DowElanco Co., will serve as board chairman.

Reviewing his challenge as chairman, Culpepper said, "RISE is now well established as the unifying voice of the non-agricultural

specialty pesticides industry. We will continue to educate the public and policymakers on the benefits of our products and will work diligently to overcome misleading information often disseminated by those opposed to the continued use of pesticides".

Peter Machin, general manager of The Andersons, Lawn Products Division, will be vice chairman and Ken Bakshi will serve as treasurer.

Other members continuing their service include:

- Dr. David Duncan, director of government affairs for Monsanto Agricultural Co.
- Allen Haws, manager of the specialty products group at Mobay Corp.
- Charles Nash, business manager of professional products for ICI Americas, Inc.

• Richard Stahl, vice president and general manager of The Scotts Co., Professional Business Group.

Bills Liles, director of the Turf and Ornamental Department at Ciba-Geigy Corp., served as chairman of the board last year and will continue to serve as an ex-officio, non-voting member of the governing board for one year.

RISE is the trade association created to address key issues affecting the specialty pesticides industry. Its membership consists of manufacturers, formulators, distributors and other industry leaders involved with specialty pesticides used in turf, ornamental, pest management, vegetation control and other non-agricultural applications.

Aquatrols names new president

PENNSAUKEN, N.J. — With founder and president Robert A. Moore retiring, the Aquatrols board of directors has named Tracy D. Moore as the new president.

Mr. Moore will continue serving as a part-time consultant to the R&D and Technical Service departments.

Ms. Moore has been with Aquatrols 10 years.

She started as bookkeeper, and was promoted to financial and human resources manager.

She has been responsible for implementing many of the administrative changes during the last decade.

Her previous responsibilities will be assumed by Patrick Holroyd, who has been with the company for eight years.

Ms. Moore has a bachelor's degree in economics. She also administers the business of the family farm and is treasurer and on the board of directors for the U.S. Pony Club Organization.

Meanwhile, Aquatrols has hired three technical sales representatives.

They are Ken Manser, Jim Turner and Chuck Doll.

Mauser brings to Aquatrols more than 15 years of technical and practical sales experi-

ence in the turf, horticulture and agriculture industries.

Mauser will represent Aquatrols' products from the Rocky Mountains westward. He is a graduate of Fresno State University. He resides in Bakersfield, Calif.

Turner has 15 years of sales, marketing, product management and technical service experience in the South-east.

He is a graduate of the University of Florida. He resides in Sarasota, Fla., and will cover the Southeastern United States for Aquatrols.

Doll comes to Aquatrols from one of the nation's largest producers of lawn and garden products bringing with him more than 20 years of experience in the turf and horticulture industries.

The new technical sales representative will represent Aquatrol's products in the Midwest.

Doll holds a master's degree from Central Michigan University and resides in Pittsburgh.



Tracy Moore

Marketing report offered by CGCM

Information about the growing golf course management industry is available in a marketing research report compiled by the Center for Golf Course Management.

The 1991 Buying Habits of Golf Course Superintendents Report features summarized information from CGCM's three previously released 1991 research reports and looks at maintenance trends in the golf course management industry.

Statistics on annual maintenance budgets, capital and maintenance expenditures, inventory analysis and average replacement intervals are included. The information is categorized by facility type and USGA region.

The report also features a section devoted to maintenance trends in the industry. Among the trends looked at are wetting agents, chemical packaging, water usage and single-task vs. multi-task equipment.

The Buying Habits of Golf Course Superintendents Report is available for \$185. Previously released reports are also available.

For more information on CGCM's 1991 marketing research reports, contact Robert Shively, director of marketing for CGCM and GCSAA, at 913-841-2240.

Sumitomo Corp. purchases equity interest in Innova

WESTMINSTER, Colo.—Sumitomo Corp., one of the world's largest trading companies, and its U.S. subsidiary, Sumitomo Corp. of America, have purchased a substantial equity position in Innova Corp. Innova is a publicly owned company that is the sole U.S. distributor of a new-technology product in soil science called Isolite. Isolite is manufactured by Isolite Insulating Products Co. Ltd., and distributed by Sumitomo Corp.

Sumitomo has entered into a stock purchase agreement with Innova whereby Sumitomo has invested \$1 million in Innova in return for non-public, non-voting, preferred stock in Innova. Announcement of Sumitomo's investment was made by Innova President and Chief Executive Officer William D. Leary.

Leary said, "Sumitomo's investment strengthens our company and adds to our long-term commitment to bring environmentally significant products to the North American marketplace."

Innova also markets an infrared service known as Remote Sensing which complements Isolite and enables users to detect disease, stress, and other costly problems in plants before they can be seen by

the naked eye.

The principal link between the emerging-growth company in Westminster, Colo., and the multinational giant is Innova's aggressive marketing of Isolite. "Isolite is a soil modifier which provides benefits and problem solving capabilities never before available, and we believe it to be one of the most significant products to be introduced in the agronomic industry in many years," said Lou Haines, Innova's vice president of technical operations.

Isolite is formed from a unique variety of diatomaceous earth that primarily contains the fossils of sea algae and plankton. Isolite Insulation Products Company developed the process of mining this diatomaceous earth, and through extrusion and heat treating, creates small, hard granules that are 70 percent porous. The result is an environmentally safe, permanent soil modifier that helps roots flourish, conserves water and builds healthier plants while reducing plant maintenance costs.

Since obtaining the exclusive U.S. rights to Isolite, Innova has established a nationwide distribution network to introduce the product to a wide variety of users. Although the initial users of Isolite are golf courses, other users include sports stadiums, nurseries, botanical gardens, municipalities and home gardeners.

To support its marketing efforts, Innova has assembled a professional management team in the fields of agronomy, horticulture, biological science, sales, marketing

and finance. The company's board of Directors includes several members accomplished in these fields and is headed by Robert B. Lange, founder of Lange Ski Boots, Inc., and includes Dr. John Hernandez, former deputy director of the EPA.

The headquarters of Innova Corporation are located at 8670 Wolff Court, Suite 170, Westminster, Colo. 80030. The Denver area phone number is (303) 426-4383; nationally, the number is (800) 533-7165.

Tee Master forms new division

Tee Master Inc. has formed a Builders/Developers/Designers Division.

Rik Holliday, currently regional sales manager located in Dallas, and Fred Palacios, regional sales manager in Southern California, will head the division to provide those entities a single point of contact for all of their telecommunications needs.

Tee Master Inc. had concentrated its sales efforts on the VIVA Voice Pro automated tee time reservation system. Deciding that new courses would be an ideal market for their product, "we decided to channel over 20 years of experience and industry contacts along with a love for the game of golf into the new division," said Palacios, director of operations.

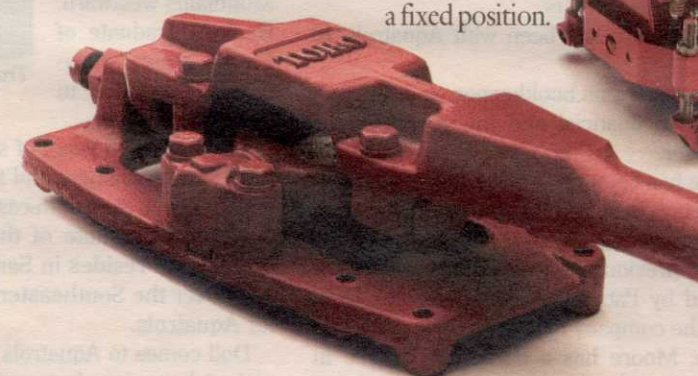
The BDD division offers a single point of contact for telephone systems, call processing applications (automated attendant, reservation systems and voice mail), paging equipment, computer equipment, and voice/data cabling. Tee Master has reached agreements that can provide services for courses anywhere in North America. Negotiations are under way to expand operations to the Far East and Europe.

Holliday, now director of marketing, said: "It is our belief that builders, developers, and designers want to concentrate as much of their efforts as possible on the course itself. By providing a single point of contact for all of their telecommunications needs, Tee Master allows that to take place. This in no way diminishes our efforts to bring the VIVA Voice Pro to existing facilities..."

It Stopped Just To Have Its P

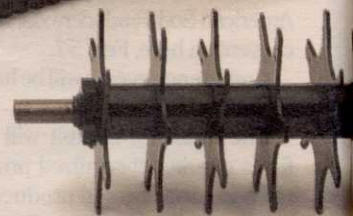
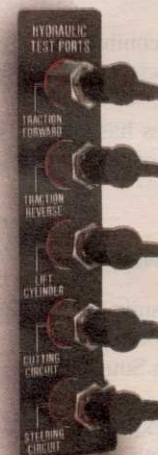
You're witnessing a rare sight. Toro's Reelmaster® 450-D actually standing still. A rare sight because the Reelmaster 450-D is so dependable that it goes and goes and goes. Giving you the high capacity mowing and precise even cutting you've been looking for.

Each cutting unit is connected to a universal joint, so it can float freely in any direction, following the contour of the turf for an even, uniform cut. Or can be locked in a fixed position.



The Toro 450-D gives you protection against hydraulic fluid leaks. Wherever possible, hoses have been replaced with strong steel lines and O-ring seals protect connections. A hydraulic warning system flashes an alarm when the fluid level drops. For easy servicing, test ports for the hydraulic system are right on the side of the machine.

The Toro Company, Commercial Marketing Services, 8111 Lyndale Ave. So., Minneapolis, MN 55420.



The Reelmaster 450-D can be customized with these accessories: ROPS, Cab, 5- and 7-bladed reels, rollers and thatching reels.

Threadgill named Irrigation Assn's Person of the Year

SAN ANTONIO, Texas — Awards highlighted the recent four-day Irrigation Association Expo and Technical Conference here attended by 3,500 persons.

Dr. E. Dale Threadgill, professor and chairman of the Division of Geological and Agricultural Engineering, University of Georgia, received the IA's 1991 Person of the Year Award.

Phil Tropeano, president and founder of Larchmont Engineering and Irrigation Co. in Lexington, Mass., received the Industry

Achievements Award for contributions to the development of the irrigation industry and its products.

Len Ring, president of Ring Irrigation Engineering in Alberta, Canada, was given the industry's Crawford Reid Memorial Award for promoting the use of proper irrigation procedures and for work which has resulted in major achievements in irrigation outside the United States.

Westlands Water District received the Water and Energy

Conservation Award for promoting efficient irrigation management techniques, resulting in conservation of both water and energy.

The Westlands program, targeting growers in an area in the Western San Joaquin Valley of California, was developed by water management specialists Tracy Slavin and Gerald Robb.

Thomas Kimmell of Olson Irrigation Systems in Santee, Calif., was elected president, and William Koonz of Koonz Sprinkler

Supply in Springfield, N.J., president-elect.

Joe Goecke of Valmont Irrigation in Valley, Neb., was elected vice president; Jack Buzzard of Rain Bird International in Glendora, Calif., treasurer.

Robert C. Emmerich, IA immediate past president, noted that irrigation experts from industry, government and academia presented the latest findings of water management research and other topics of concern to the irrigation profession in 30 technical sessions.

sions.

The Person of the Year award is given to people outside the irrigation industry — such as in government or education — who have made outstanding contributions to further the acceptance of good irrigation practices and procedures.

Threadgill has been involved extensively in research, education, extension work, government and industry task forces, trade and civic groups.

Tropeano's career spans 50 years of designing and engineering of irrigation products, many of which were firsts.

He began Larchmont Engineering in the late 1940s, as a distributor for major irrigation equipment manufacturers in the Northeast. His changes at Larchmont included establishment of a Good Dealer Organization, and expansion into design and construction of couplings and fittings.

He also led the firm into the snow-making business and wastewater systems.

Holbrook named new president at Grace-Sierra Co.

MILPITAS, Calif. — Grace-Sierra Horticultural Products Co. has named Kenneth W. Holbrook Jr. as its new president.

Chairman of the Board Robert C. Walsh said Holbrook's "experience in total quality management, business strategy and management information systems will be a great asset to Grace-Sierra, a company with a mandate for fast growth."

Since 1978, Holbrook worked for Koch Materials Co., a division of Koch Industries in Wichita, Kan., and had been the division's president since 1980. During this time, he grew a regional company into a diversified worldwide corporation.

Prior to working at Koch Materials, Holbrook was employed by Exxon Chemical Co. in its United States, Far East, Latin American and worldwide operations, where he held sales, marketing and management positions.

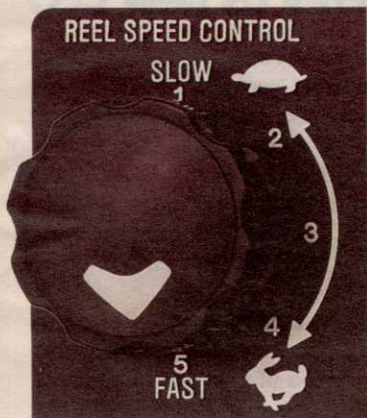
Holbrook, a native of Arizona, earned a bachelor's degree at the University of Arizona and a graduate degree at the American Graduate School of International Management.

Grace-Sierra Horticultural Products Co. was formed in 1989 by the merger of W.R. Grace & Co. - Conn.'s horticultural products business and Sierra Chemical Co.



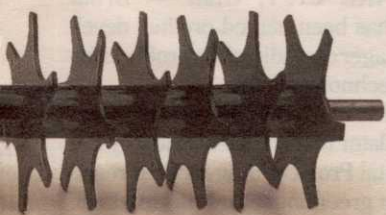
Kenneth Holbrook

Long Enough cture Taken.



Toro's exclusive variable clip control allows you to calibrate reel speed and mowing speed to give you the highest quality of cut in varying course conditions. Combine that with faster mowing speeds, up to 7.5 mph and 12.5 mph transport speed, and you're going to witness an increase in productivity. All controls are in easy reach of the operator to provide greater comfort.

The 450-D is designed with its weight evenly distributed around a center-mount 50 hp engine for better balance. This means more up-hill climbing ability than other machines and better traction.



Compared to tractor gang mowers, the Toro 450-D weighs less and is equipped with wide 31-inch tires that spread the weight for the lowest PSI, further minimizing turf marking.

For faster, easier mowing with more beautiful results, call your local Toro distributor for a demonstration of the Reelmaster 450-D or contact Toro at the address below. A machine built from the ground up with proven Toro design experience. And that translates into the kind of productivity no one can argue with.



The Professionals
That Keep You Cutting.

"Toro", and "Reelmaster" are registered trademarks of The Toro Company. ©1988 The Toro Company.

JOHN DEERE TEAM CHAMPIONSHIP



The Champion Hills Country Club of Hendersonville, N.C. won first place in the 5th annual John Deere Team Championship, Nov. 23-24 at the Tournament Players Club of Scottsdale. Team members are (left to right) Jim Sparks, golf course superintendent; Ben Ballentine, golf professional; Ben Brovet, club manager; Bill Stokes, club president; and Bob Crosby, John Deere representative. The Championship allows golf professionals, golf course superintendents and other club officials to tee off together in a national tournament.

EPA issues new pesticide policy

EPA has issued a new policy under which it will deny certain pending petitions for pesticide tolerances.

The denials will occur if the petitioner has not responded within 75 days after being notified by the agency that the data supporting the petition are inadequate. By this action, the petitioner would be required to either withdraw the petition or set timetables for submission of missing information.

The time frame for submitting the data may not exceed four years.

The new tolerance petition policy went into effect Oct. 1. EPA intends to deny all petitions that have been pending with the agency for five years or longer and for which the petitioner has not responded to the agency within the past four years concerning the lack of adequate data to complete the review.

EPA has approximately 250 pending tolerance petitions under active review. Another 750 petitions have been reviewed and the petitioners notified that these petitions lack sufficient data to establish a tolerance. Petitioners have failed to respond to 386 of these 750 within the past four years.

Total Containment taps Frey as new CEO

EXTON, Pa. — Total Containment, Inc., a manufacturer of secondary containment systems for underground storage tanks and piping, has named Charles A. Frey as chief executive officer of Highland Tank and Manufacturing Co.'s Manheim, Pa., affiliate.

Highland Tank is a licensed applicator and distributor of Total Containment's products on the East Coast.

Frey has been prominent on technical committees of the Steel Tank Institute, National Association of Corrosion Engineers, National Fire Protection Association and many state associations.

According to TCI President John D. Morrison, Frey has "contributed significant guidance to development of the company's products. His experience, particularly with effective underground storage tanks and piping systems, will contribute to expansion of the company's Tank Jacket applicators' network and continued improvements to existing products and development of new secondarily contained product lines."

Cummings named to new development post

SALT LAKE CITY, Utah — Brian Cummings has been named product development manager of azadirachtin products for AgriDyne Technologies Inc.

Azadirachtin is a naturally derived insect growth regulator that is under review by the Environmental Protection Agency for registration in the greenhouse and turf markets. In the greenhouse market, the product is tradenamed Azatin.

Cummings has held various positions in the company's research group for six years. Most recently, he served as scientist/project manager in charge of new product development, where he was instrumental in the development of AgriDyne's azadirachtin products.

Cummings received a master's degree in business administration from the University of Phoenix and a second in molecular biology from the State University of New York.

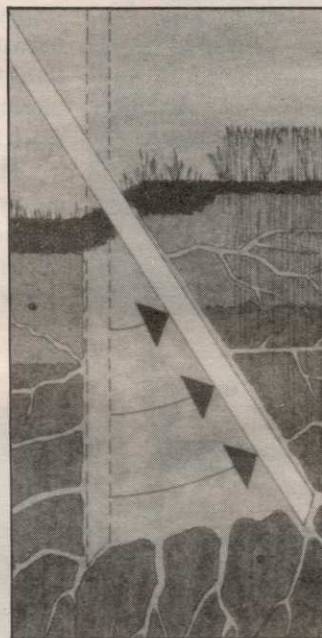
BELIEVE IT OR NOT

Only Verti-Drain® helps you grow bent grass roots as deep as 8 inches.

Turf professionals are amazed to see how healthy and deep their root systems grow after deep tine aeration with Verti-Drain. Case study after case study worldwide shows root systems of fine grasses 8 to 10 inches deep, often through the black layer into the deep root zone.

In all sorts of applications Verti-Drain has saved greens, improved fairways, brought back sports fields, racetracks, restored high-traffic turf areas... even shown dramatic savings on water usage. All because it does one thing better than anything else on the market today—it promotes deep root growth. Customers say it works like a pitchfork actually pitching the tines forward, heaving the soil and creating new pockets for air and water without scarring the surface. There's no other machine like it. And only Verti-Drain can pull cores up to 12 inches deep and solid tine up to 16 inches deep.

Whether you're into hollow tining or solid tining, there's a Verti-Drain model to fit your needs and budget. Deep tine aerification with Verti-Drain can answer your compaction and drainage worries. Now you can have better turf, believe it or not.



The patented Verti-Drain design permits tines to pivot back and forth while penetrating as deep as 16 inches into the soil. A lifting-shattering effect occurs similar to the action of a pitchfork. The results are improved drainage and deeper, stronger healthier root systems.

A Verti-Drain user in Virginia sent us proof of his unusual bent grass results. After aerating he found root-bound holes like this with healthy, white roots growing well past the black layer. It convinced him of the benefits of deep tine aerification. If it works this well for him, think of what it can do for your turf.

No matter what your aeration productivity and depth requirements are, Verti-Drain has a model and the attachments to meet your needs. Call or write today for more details and the name of a dealer near you.



VERTI-DRAIN®
Works like a pitchfork, only better.

Emrex Inc., Hilltop Drive, RR #3, PO Box 76, Tunkhannock, PA 18657 (717) 836-3406

CIRCLE #141/GCSAA BOOTH #2672

Lebanon appoints Wingate and Dougherty to new positions

LEBANON, Pa. — Paul Mengle, manager of sales and Marketing for Lebanon Turf Products, a division of Lebanon Chemical Corp., has announced the appointments of Murray R. Wingate as territory account

manager for upper New York State and Patrick T. Dougherty to territory account manager for eastern Pennsylvania.

Wingate has been extremely active in the industry for more than 13 years in numerous posi-

tions in sales, marketing and service for the golf, seed and nursery business.

Wingate holds an associates degree in agronomy from SUNY Agricultural and Technical College, N.Y.

Dougherty is working in transition with territory Account Manager Paul Butz, who will be retiring in the spring.

Dougherty brings more than nine years of experience, including managing his own landscape

business. Prior to employment with Lebanon, Dougherty was general manager at a large New Jersey garden center. He received a bachelor's degree in business management from the University of Colorado.

Partac opens new distribution centers in Tennessee and Nevada

GREEN MEADOWS, N. J. — Partac has opened distribution centers in Memphis, Tenn., and Reno, Nev. They join regional ser-

vice centers in Orlando, Fla., South Bend, Ind., and Great Meadows.

Partac produces top-dressings for golf course greens and tees, and

ceramically colored "Green Sand" widely used for televised events.

Partac also distributes nationally such golf course products as Terra

Green solid conditioner and top-dressing, Terra-Flow drainage systems, Typar turf blankets and geotextiles, Super Sopper water re-

moval machines and sand trap pumps, Yankee rakes and squeegees, Bentonite pond liners, and Har-True, Lee and Hadeka tennis court supplies.

Houston firm names pres.

HOUSTON - John G. Watson has been named president of Watson Distributing Co here. Founded by his grandfather in 1940, Watson Distributing Co maintains operations in San Antonio and Irving for the sale and service of golf cart, utility vehicles and turf maintenance equipment. His previous position was vice president-sales.



John Watson

Watson attended the University of Texas, where he was a member of the 1975 class in the School of Business Administration. Following college, he returned to Watson Distributing Company's Houston operation where he received training and experience in various facets of the company's business. Watson managed the Irving branch from 1982 to 1985.

Lofts gives \$490G to Rutgers Univ.

Lofts has presented Rutgers University with royalty payments totaling \$490,234 for 1990 seed sales.

Royalties are generated from domestic and foreign sales of varieties developed at Rutgers and sold through the partnership Lofts has with Rutgers in the development, introduction and sale of proven varieties.

This year's royalties were based on the sales of Ram I and Princeton 104 Kentucky bluegrasses; Rebel, Rebel II, Rebel Jr and Tribute turf-type tall fescues; Palmer, Repell and Yorktown II perennial ryegrasses and Laser Poa trivialis.

In presenting the check, President Jon Loft said: "The success of these proven varieties enables us to pump dollars back into the research and development necessary to produce the further-improved varieties of the future."

"We're happy to play our part in these programs here at Rutgers."

THANKS! IT'S GREAT GROWING WITH YOU

The
Andersons
and our
family of
Tee Time
distributors
look
forward
to another
green
season
with you
in '92

CONNECTICUT

Charles C. Hart Seed Co.
Wethersfield, CT 06109
203-529-2537

ILLINOIS

Turf Products Ltd.
West Chicago, IL 60185
312-668-5537

Shafer Group
Downers Grove, IL 60515
708-852-3200

INDIANA

Allen County Co-op
New Haven, IN 46774
219-749-5139

Cannon Turf Supply
Indianapolis, IN 46220
317-845-1987

IOWA

Big Bear Turf Equip. Co., Inc.
Eldridge, IA 52748
319-285-4440

D & K Turf Products
Des Moines, IA 50313
515-262-9352

KANSAS

Robison's Lawn and
Golf, Inc.
Wichita, KS 67209
316-942-2224

KENTUCKY

Bunton Seed Company
Louisville, KY 40206
502-583-9040

MARYLAND

Newsom Seed Co., Inc.
Rockville, MD 20850
800-553-2719
301-762-2096

MICHIGAN

Turfgrass, Inc.
South Lyon, MI 48178
800-521-8873 (MI only)
313-437-1427

MINNESOTA

North Star Turf, Inc.
St. Paul, MN 55117
612-484-8411

MISSOURI

Outdoor Equipment Co.
Chesterfield, MO 63005
314-532-6622

Robison's Lawn and
Golf, Inc.
Grandview, MO 64030
816-765-3333

Robison's Lawn and
Golf, Inc.
Springfield, MO 65807
417-886-8333

NEBRASKA

Big Bear Equipment, Inc.
Omaha, NE 68127
800-228-9761 (Outside NE)
402-331-0200

NEW HAMPSHIRE

Turf Specialty, Inc.
Hooksett, NH 03106
800-228-6656 (Outside NH)
603-485-7866

NEW JERSEY

Seacoast Laboratories
Dayton, NJ 08810
201-821-4769

NEW YORK

Banfield-Baker Corp.
Horseheads, NY 14845
607-739-8771

Gro Green, Inc.
Buffalo, NY 14120
714-826-3300

J. & L. Adikes, Inc.
Jamaica, NY 11423
718-739-4400

Utica Seed Co.
Albany, NY 12204
518-434-6521

NORTH CAROLINA

Porter Brothers
Raleigh, NC 27636
800-852-4975
919-851-8940

Porter Brothers
Shelby, NC 28150
800-732-6567
704-482-3424

OHIO

Apex Feed & Supply, Inc.
Marietta, OH 45750
800-234-4401
614-373-4401

C.O. Lowe Sales
Columbus, OH 43229
614-771-0486

Garick Corporation
Garfield Heights, OH 44125
800-631-1395
216-581-5533

John S. Grimm, Inc.
Medina, OH 44256
800-547-1538
216-725-5334

Shaffer Seed & Supply
Canton, OH 44707
800-543-5852
216-588-9655

Thornton-Wilson, Inc.
Maineville, OH 45039
800-582-6129 (Inside OH)
800-543-7249 (Outside OH)
513-683-2141

Toledo Turf Equipment
Toledo, OH 43623
419-473-2503

OKLAHOMA
Oklahoma Turf & Irrigation
Tulsa, OK 73502
918-622-8676

PENNSYLVANIA
Allegheny Lawn Products
Wexford, PA 15090
800-245-2967
412-935-2290

Farm & Golf Course Supply
Philadelphia, PA 19128
215-483-5000

Northampton County Seed Co.
Bath, PA 18014
215-837-6311

SOUTH CAROLINA
Porter Brothers
Hilton Head Island, SC 29925
800-922-7947
803-837-3900

Porter Brothers
N. Myrtle Beach, SC
29597-0069
800-235-7734
803-399-1323

SOUTH DAKOTA
Dakota Turf Supply,
Incorporated
Sioux Falls, SD 57105
605-336-1873

TENNESSEE
Tennessee Outdoor
Power
LaVergne, TN 37086
800-854-4851 (TN only)
615-793-6052

Turfaid, Inc.
Memphis, TN 38107
901-521-1191

TEXAS
Van Waters & Rogers
Dallas, TX 75355
214-340-7300

Van Waters & Rogers
Houston, TX 77210
713-644-1601

VIRGINIA
Herod Seed Company
Richmond, VA 23219
804-643-7683

WASHINGTON
Environmental
Turf Products, Inc.
Bothell, WA 98011
206-488-8516

WISCONSIN
Turf Management
Supply
Sun Prairie, WI 53590
608-837-5598

Wisconsin Turf
Equipment Corp.
Janesville, WI 53545
608-752-8766

Wisconsin Turf
Equipment Corp.
New Berlin, WI 53151
414-544-6421

the professional's
partner®

The
Andersons

Lawn Products Division
P.O. Box 119
Maumee, Ohio 43537
1-800-225-ANDY(2639)

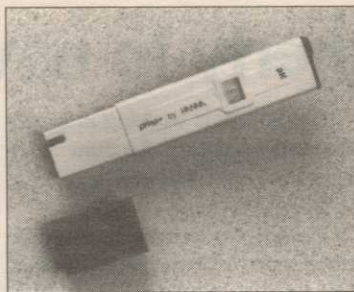
Hanna adds pocket-sized pH tester

WOONSOCKET, R. I. — Hanna Instruments has introduced the first shirt pocket-sized O-1 pH accuracy tester for easy pH monitoring.

The pHep Plus features both automatic temperature compensation and two-point calibration for automatic +0.1 pH accuracy.

When used to monitor treated waste prior to discharge, it can help companies comply with EPA guidelines. Applications include water treatment and conditioning, sewage, industrial and hazardous waste, and environmental control.

The new tester also can be used to monitor pH levels in aquariums, swimming pools, streams and ponds.



Hanna pH pocket tester

For more information on the O-1 pocket-sized pH accuracy tester or any other Hanna Instruments product contact Hanna Instruments, Inc., 584 Park East Drive, Woonsocket, R. I. 02895, or telephone 401-765-7500.

CIRCLE #301

Biosys receives nematode patent

PALO ALTO, Calif. — Biosys, a producer of biological pesticides for agricultural and consumer markets, has received a U.S. patent for its liquid-culture, large-scale production technology. The patent covers Biosys' process for producing insect-killing nematodes cost-effectively and on a mass scale.

The Biosys patent is the first awarded for the production of multicellular invertebrates in fermenters. The process couples an enhanced media emulsion with other techniques to accelerate the or-

ganisms' growth

The new process can yield sufficient quantities of nematodes per batch to treat more than 10,000 acres effectively, making nematode pesticide technology viable on a major agricultural scale.

Beneficial nematodes are microscopic organisms that seek out and destroy a broad range of soil pests. Biopesticides based on this process are harmless to humans, plants and animals, and leave no residue in soil or groundwater.

For more information contact Biosys, 1057 E. Meadow Circle, Palo Alto, Calif. 94303 or call 415-856-9500.

CIRCLE #307

Paver minimizes turfgrass wear

SAN DIEGO, Calif. — GOLF 2000 has developed a new soft paver that protects grass from foot traffic and resists wear from spikes. The pavers are especially useful beside tees, ball washers and other heavy-traffic areas.

The grass green pavers are made of toughened polyvinyl chloride with ultraviolet light inhibitors. The pavers interlock to form a seamless pavement which follows ground contours.

Contact GOLF 2000 Corporation, 9842 Hibert St., Suite 257, San Diego, Calif. 92131.

CIRCLE #312

Cushman GT-1 has new features

LINCOLN, Neb. — The Cushman GT-1 model utility vehicle incorporates new design features for added durability and smoother operation.

The Turf-Torq KT 30 transaxle features reliability and rugged construction for tough jobs. Also new is the "Z" pattern shift and solid rod linkage for positive gear selection of forward, neutral and reverse. An integral neutral start switch is standard.

The redesigned air intake, with 50 percent larger air cleaner, gives added engine protection along with reduced noises and reduced air cleaner maintenance. The heavy-duty, 8-hp engine includes an adjustable carburetor for smoother engine performance.

The 14-gauge steel cargo box can hold up to 8 cubic feet of cargo and haul up to 1,000 pounds. New front suspension design includes dual three-leaf springs with coil springs in the rear and front and rear shock absorbers.

The GT-1 has a maximum speed of 12 mph. The fuel tank holds 5 gallons.

Contact Cushman, P.O. Box 82409, Lincoln, Neb. 68501 or call 800-228-4444.

CIRCLE #305

PE Sales offers better True Blue

WYOMING, Mich. — PE Sales is manufacturing an improved version of True Blue, its "glue-able" polyethylene irrigation pipe.

In a recent test between New True Blue and schedule 40 PVC fittings, all connections withstood 36,000 pressure cycles, the equivalent of two irrigation cycles per day for 50 years. At maximum safe velocities, gallons per minute averaged 20 percent more than for Schedule 40 PVC.

Improved flow characteristics were attributed to larger inside diameters.

Contact PE Sales, 3727 Linden S. E., Wyoming, Mich. 49548 or call 616-243-1588.

CIRCLE #306



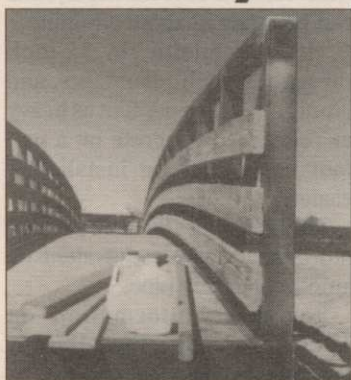
Continental uses recycled materials

ALEXANDRIA, Minn. — Continental Bridge has introduced recycled plastic components and accessories to its prefabricated bridge products.

The firm offers Durawood plastic lumber made from 100 percent recycled high-density polyethylene (HDPE) for use as bridge decking, rub-rails, hand-rails and toe-boards.

The polyethylene is the end result of discarded dairy containers and detergent bottles shredded, pelletized and molded into a usable product.

Durawood, a product of Eaglewood Profiles, has the ap-



Continental Bridge's plastic lumber

pearance of wood but does not absorb water, so will not rot, split or

splinter. The material is virtually maintenance-free, requiring no painting (natural wood colors are molded in), and is UV-stabilized to prevent fading.

Continental Bridge believes it is the first bridge manufacturer offering HDPE plastic wood components.

For more information on Durawood plastic lumber or any other Continental Bridge products contact Bruce Leland, Route 5, Box 178, Alexandria, Minn. 56308 or call 800-328-2047.

CIRCLE #302

Honda expands mower products

DULUTH, Ga. — Honda Power equipment enters another lawn care category with the HRC7013ZXA series mid-size commercial walk-behind mower.

It features a unique two-step 36 or 48 inch cutter deck which provides excellent air flow characteristics. In addition to side discharging, the mower offers the option of mulching or bagging clippings.

Powered by a durable 13-horsepower Honda four-stroke overhead valve engine, the mower features a twin hydraulic drive pump and motor system.

This system gives the model a zero-turn radius for high maneuverability and offers variable speeds, plus reverse within the range of the control lever.

Honda's dual control levers provide excellent tracking capability, especially on uneven terrain or landscaping berms.

Operator productivity is enhanced through comfortable, easy-to-use controls combined with exclusive quick height adjustment system, and features a blade brake system to quickly stop the blade when the PTO lever is disengaged.

Contact American Honda Motor Co., 4475 River Green Parkway, P. O. Box 100020, Duluth, Ga., 30136-9420.

CIRCLE #308

Drop spreader versatile, uniform

LITCHFIELD, Ill. — New drop spreaders developed by Worksaver, Inc., provide accurate and uniform application of seed, granular fertilizer and chemical and eliminate streaking. The spreaders can also be used to spread salt for ice and snow control.

They are ideal for use on golf courses, and in the sod, lawn and garden industry, as well as municipalities, small farms, estates and nursery. Easy to clean, they have pneumatic tubeless 2-ply tires.

Model DS-36 is 36" wide, weighs 87 pounds and has a 180 pound fertilizer capacity. Model DS-60 is 60" wide, weighs 108 pounds and has a 300 pound capacity.

Contact Worksaver, Inc., P. O. Box 1000, South State Road, Litchfield, Ill. 62056. (217) 324-5973.

CIRCLE #309

Module makes watering easier

RIVERSIDE, Calif. — The Irrrometer Co., has introduced the Watermark Electronic Module (WEM), used with its soil moisture sensor to control individual valves on an automatic irrigation system.

The WEM, and its soil moisture sensors, can be added to any 24-volt (AC) control system without running additional wiring. The new WEM is fully adjustable over the entire soil moisture range, and easily bypassed for manual system operation.

Contact Irrrometer at 714-689-1701.

CIRCLE #310

Jacobsen mower gives better cut

RACINE, Wis. — Jacobsen's new HR 5111 rotary mower has three rotary decks with a total cut of 11 feet, 3 inches.

All cutting blades are driven by hydraulic motors, eliminating problems caused by belts, pulleys, idlers and deck lids. Motors require no maintenance or lubrication.

A floating deck design reduces the risk of scalping, even on contoured turf. Cutting heights adjust from 1 to 5 1/2 inches.

Contact Jacobsen at 414-637-6711.

CIRCLE #311

Afternoon Sailing. Thanks To 19-4-6 With Ronstar.

For controlling grassy weeds and delivering a healthy dose of nitrogen to southern turf, nothing works harder or saves more time than Country Club 19-4-6. With RONSTAR® brand herbicide.

Homogeneous granules ensure uniform distribution of nutrients and herbicides. And just one Ronstar® application offers season-long control of goosegrass, crabgrass and 25 broadleaf weeds.

For more information about Country Club 19-4-6 with Ronstar®, or 7-3-22 with Ronstar® for earlier in the spring, contact your local Country Club distributor. Or call Lebanon Turf Products at 1-800-233-0628.

Then apply pre-emergent weed control and fertilizer in just one step. And take the afternoon off.

Country Club
19-4-6
WITH RONSTAR®



Hancor offers new line of watertight polyethylene drainage products

FINDLAY, Ohio — Hancor, Inc., a manufacturer of plastic drainage products, has introduced TiteLine.

This polyethylene conduit was developed specifically for watertight gravity flow drainage systems.

TiteLine is a modification of Hi-Q, Hancor's high-capacity smooth interior storm drainage pipe.

A corrugated exterior adds strength and a smooth interior high capacity.

Flexible, TiteLine's bell-and-spigot design provides a dependable watertight joint without ad-



Hancor TiteLine

hesives, bolts or tools. Most joints can be made in about a minute.

It is available in 12-inch through 30-inch diameters, and is only about five percent as heavy as reinforced concrete on a per-foot basis, making installation easier.

TiteLine offers 30 to 50 percent more capacity than equivalent-diameter concrete pipe.

For more information on TiteLine or any other Hancor products, contact Hancor, Inc., P. O. Box 1047, Findlay, Ohio 45839 or call 419-424-8314.

CIRCLE #303

ParCar markets new products

DEERFIELD, Wis. — Columbia ParCar has introduced the Parcar Eagle and the Utilitruck and all-weather Cab.

The Eagle is available in gas or electric models.

Ergonomics have been a priority in Eagle design. The exclusive tilt-to-open clam shell rear body is a time saver, of great benefit to service personnel. The clam shell was designed to expose the entire drivetrain and undercarriage for ease of maintenance and cleaning.

The Eagle's bag rack holds clubs vertically for excellent visibility. Low bagwell height eases loading and removal of clubs.

Two-cycle gasoline engines have been redesigned for higher compression ratios and improved fuel/air combustion. The new combustion chamber, in conjunction with a new engine lubricant, eliminates smoke, spark plug fouling and extends engine life. The electric-powered Eagle's soft start system eliminates jerky starts and damaged turf.

The new Utilitruck has an extended wheel base centered under the payload platform for optimum safety and stability.

With its tight 18-foot turning circle, the Utilitruck works expertly in smaller areas, yet has a generous cargo capacity of 12.5 cubic feet.

Driver visibility, ventilation and weather protection feature the new cab, color impregnated and made of impact resistant materials that will not dent, rust or crack.

Narrow steel pillars and large windows provide driver protection and visibility. Featured is a pop-open windshield and rear vents that combine for true flow-through ventilation.

Contact Columbia ParCar Corp., P. O. Box One., One Golf Car Road, Deerfield, Wis., 53531.

CIRCLE #320

Echo introduces new shredder

LAKE ZURICH, Ill. — The new Echo hand-held leaf shredder, the Shred 'N' Vac, is designed to vacuum leaves off lawns and pavement while shredding the debris and blowing it into an attached large-capacity bag.

It's the first product in the new "Echo System," Echo's environmentally beneficial product line. The 9-pound unit cleans light-weight garden debris off lawns and decks, out of bushes and gardens and away from driveways and walkways.

After the debris passes through the wide-mouthed intake tube, it is funneled to a four-bladed shredder device located within the unit housing the material. This material, reduced to up to one-twelfth its original volume, may be used to enhance and protect the environment.

For more information contact Echo Incorporated, 400 Oakwood Road, Lake Zurich, Ill., 60047.

CIRCLE #321



Oregon Fine Fescue.

If you give it a foot, it won't take a yard.

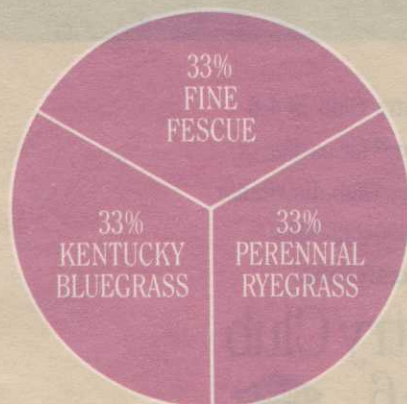
Fine Fescue Mixes Well

Fine fescue's color and texture is agreeable with rye and blue, and won't crowd out its companions. If you give it a foothold, it won't take over a yard, so to speak.

Fine Fescue is a Survivor

You'll find that fine fescue may be the only turfgrass to grow in hot, dry, undernourished or deeply shaded areas. It could have just the stuff to carry your turf through tough times.

Now, if you still wish to plant 100% fine fescue, it's O.K. with us. Just call your seed dealer today, and specify *Oregon grown* fine fescue, for sure!



Percentage by weight

Sure, we'd like to see 100% fine fescue lawns, parks and golf course roughs, but some people still prefer to add the rapid establishment of perennial ryegrass and the dark, luxurious appearance of Kentucky bluegrass. If you are one of them, we encourage you to include shade and drought tolerant fine fescue in at least 1/3 of the mixture.



**Oregon
Fine Fescue
Commission**

E-Z-GO adds energy saver system to cars

AUGUSTA, Ga. — E-Z-GO Textron has added the Wizard of Watts to its golfcartline. The Wizard is an electrical energy management system designed to take advantage of lower rates offered by most utility companies during "off peak" hours.

The system manages the battery recharging process so that the amount of power required at any one time is minimized. By better managing the recharging process, a club's utility costs can be reduced by 20 to 50 percent.

John Bush, who retired in 1990 after 33 years with E-Z-GO, has rejoined the company to manage the sales effort of the Wizard of Watts.

"Since the Wizard of Watts is directly related to electric vehicles, we decided it was an excellent way for us to broaden our full-service approach to golf car fleet sales and management," said E-Z-GO Presi-



E-Z-GO golf car line has Wizard of Watts energy saver.

dent L.T. Walden.

For more information contact E-

Z-GO at 404-798-4311.

CIRCLE #304

First front discharge topdresser made

ST. PAUL, Minn. — Turfco has introduced an automatic topdresser suited to the needs of commercial groundskeepers.

Ideal for golf fairways and athletic fields, the Mete-R-Matic LA2 Large Area Top Dresser is the lawn care industry's first front-discharge top dresser.

It works with all top dressing materials, wet or dry, and can be used with any standard 35-horsepower tractor.

The front discharge allows the applicator to see the application before the tires roll over it. This means greater control and less

chance of error.

The LA2 can top dress at speeds up to six mph and transport loads up to 20 mph. It provides uniform greens and quality application from 1/16" to 1/2" over a six-foot spread.

It has a two-cubic-yard capacity and eight low-PSI tires for even weight distribution on turf.

The Mete-R-Matic LA2 also features a low profile that lets operators see how much material is left in the hopper.

For more information on the Mete-R-Matic or any Turfco product contact 612-785-1000.

CIRCLE #313

Gandy machinery rehabilitates turf

OWATONNA, Minn. — Gandy's new multi-purpose turf care machine is designed to help rehabilitate older established turf areas or seed in bare ground.

The compact 48-inch unit is designed for Category I, 3-point hitch systems and is powered by 540-rpm PTO from tractors of 18 horsepower or more.

Serrated knife blades are set on 2-inch centers. Pneumatic tires, rather than skid-supported machines, keep the machine level.

A poly chain belt drive that transfers power from the gearbox to the serrated knife blade shaft operates quietly so as not to disturb course play.

For more information phone 800-443-2476.

CIRCLE #314

Range markers ease maintenance

AVON LAKE, Ohio — Markers Inc. believes it has a new concept in driving range distance/yardage marking.

Featuring an easy-to-locate ground socket, a brightly-colored marker/target placed on the range is a large, highly-visible, color-coded foam wedge.

If hit, the ball will bounce off without damaging the range marker.

To mow or retrieve range balls, lift the lightweight marker from the ground socket and drive over those locations. Markers are replaced by slipping the anchor back into the ground socket. All markers are washable.

For more information on Markers Inc. range markers call 800-969-5920.

CIRCLE #315



Wherever Golf Is Played

Few things are subject to more intense scrutiny and concentration than your cups and flagpoles. That's why, from Yuma to Yokohama, the precision craftsmanship and consummate quality of all Par Aide products make them the accessories of choice for courses around the world.

For a free copy of our current catalog, contact your Par Aide dealer or call us today.



Pictured above: Ichiro Nakamura lines up his 6th putt on the 17th green in Japan's first Cross Training Invitational.

© 1991, Par Aide Products Co.

3565 Hoffman Rd. East • St. Paul, MN 55110 • FAX: 612-779-9854 • TEL: 612-779-9851

CIRCLE #146/GCSAA BOOTH #1938

Guidebook highlights 3,000 Great Lakes region courses

More than 3,000 public and private courses in the Great Lakes Region are pinpointed in the Illinois, Indiana, Michigan, Ohio or the Minnesota/Wisconsin edition of the "Golfers Travel Guide."

Each guide names each course, address (including directions), phone number, holes, par, yards and USGA rating. Estimated green fees, cart rates, special discounts, course and clubhouse amenities also are featured.

The Illinois guide describes more than 650 courses in Illinois and NW

Indiana. The Indiana edition locates and describes more than 700 courses in Indiana and NE Illinois. More than 700 courses are embraced in each of the Michigan, Ohio and Minnesota/Wisconsin editions.

Also included in each guide is a directory of major U. S. golf associations and sources of regional travel information.

For copies, send \$5.95 per edition plus \$1.50 for shipping to RSG Publishing, Inc., P. O. Box 612, Plymouth, Minn. 48170.

Pesticide handling focus of authoritative new book

DOVER, Ohio — Fredric R. Haskett's recently-completed guide book on pesticides has a long title and packs much information.

"How to Build Your Own Integrated Pesticide Storage, Mixing, Recycling System" helps large and small operations to design and construct an affordable, viable and safe

facility to store, handle, mix and recycle pesticides and fertilizers.

Explained are industry problems and a simple, cost-effective and safe way of dealing with them.

Haskett has been involved in the grounds care industry for 15 years, nine in operation of his Greenworld Landscape Management.

He's spoken on the topic at the PLCAA Conference in 1988 and 1990 and GCSAA Conference and Show in 1989. He was the subject of a Lawn Care Industry cover story last year.

Haskett's address is P. O. Box 336, Dover, Ohio, telephone number 216-364-5235.

Solid Waste Composting Council publishes new report

The Solid-Waste Composting Council in Washington, D.C. has published a 48-page report titled *A Decision-Maker's Guide to the*

Composting Industry.

The publication discusses the nature of compost, its uses, and how it fits into an integrated waste

management system. It includes an 81-page glossary.

For more information contact the Council at 202-638-0182.

NOBURN™

NATURAL WETTING AGENT
AND SOIL PENETRANT

THE WETTING AGENT YOU DON'T HAVE TO WATER IN

With NoburN™, there is no danger of burning or discoloring your grass or plants, even when it is not watered in after application. This makes NoburN™ the ideal wetting agent for these uses:

1. Applications in dry conditions, or hot summer weather, when plants are stressed and the risk of burn is high.
2. Spot treatment of problem areas that require higher corrective rates.
3. As a spreader sticker with contact fungicides and herbicides that are not supposed to be watered in.
4. Treatment of newly germinated seed and sod that may be more susceptible to the phytotoxic effects of alcohol based wetting agents.
5. Environmentally sensitive areas or IPM programs that specify reduced chemical use.

NoburN™ is a steroid saponin extract from the desert Yucca plant. Steroid saponins are natural surfactants that increase the movement of water through dry, compacted, and hydrophobic soils. Unlike synthetic wetting agents, saponins are natural floccing agents that help to aggregate soil particles for improved aeration and percolation over time.

In three years of studies at the University of Georgia, NoburN™ was applied in combination with pesticides and fungicides at ten times the recommended rate and shown to be completely safe and non-phytotoxic to the turf. It was also proven to be highly effective in reducing hydrophobic conditions, and increasing water penetration.

NoburN™ is tank mix compatible with liquid fertilizers and pesticides, and can be easily applied through any injection irrigation system. It is biodegradable in the soil, with no danger of residue buildup or sulfur layering.

Call us toll free at 1-800-342-6173 for copies of the university research and the name of your local distributor.

SEE REVERSE SIDE FOR APPLICATION RATES.

roots inc.

A Division of LISA Products Corp.
25 Science Park, New Haven, CT 06511
Tel: (203) 786-5295
Fax: (203) 786-5297

NOBURN™
NATURAL WETTING AGENT
AND SOIL PENETRANT

*NoburN is a trademark of LISA Products Corporation.

CIRCLE #147/GCSAA BOOTH #1428

ASGCA directory details members

CHICAGO — The American Society of Golf Course Architects' inaugural 120-page directory contains valuable information on each of its 111 associate and regular members.

A map shows the location of each member of the Society, embracing leading golf course architects in the United States and Canada.

Individual member data includes a listing of representative courses, professional and personal background and the architect's design philosophy and strategy.

For copies, send a \$5 check to The American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, Ill., 60601.

Brochure shows bridge designs

Continental Bridge's new four-page full color brochure displays various design-build bridging structures.

Illustrations include pipe support, material handling, elevated platforms and stairs, and skywalk systems.

Continental bridges and bridging structures are custom-made and available in virtually any length and width. Bridges larger than 75 feet are shipped in sections to be spliced together in the field.

Installation time for most Continental bridges is less than two hours.

For more information, in United States and Canada call (800) 328-2047 or (612) 852-7500.

Rain Bird releases satellite brochure

GLENDORA, Calif. — Rain Bird has a new brochure with complete information on the entire irrigation satellite family.

The satellite controllers brochure outlines key features and specifications of each satellite, including the ISC-SAT-B+, SBM and LM-1230. Also highlighted is the multi-manual panel, which is compatible with the SBM and LM-1230 satellites.

The golf division of Rain Bird, a leading manufacturer of irrigation products, may be contacted at 145 N. Grand Avenue, Glendora, Calif. 818/ 852-7227.

GOLF COURSE NEWS

Golf Course Marketplace

To reserve space in this section, call Simone Marsteller, 813-576-7077

ADVERTISING INFORMATION

1992 Rates	2X	6X	12X
Per col. inch:	\$55.00	\$50.00	\$40.00
Add-on per 1/4":	\$13.75	\$12.50	\$10.00
Logo incl. in ad:	\$30.00	\$30.00	\$30.00

- Minimum 2-time insertion.
- Prepayment is required.

Send prepayment and ad copy to:

Golf Course News
7901 4th St. N., Ste. 311
St. Petersburg, FL 33702
813-576-7077 • Fax 813-579-9788

EMPLOYMENT

SUPERVISORS/SHAPERS

EXPERIENCED GOLF COURSE CONSTRUCTION SUPERVISORS, SHAPERS & OTHER EQUIPMENT OPERATORS NEEDED. Excellent compensation. Domestic & foreign projects. Fax info. to (813) 387-4943.

NATIONAL TECHNICAL REPRESENTATIVE

For aggressive, fast-growing turfgrass seed company. Sound university education plus experience as a golf course superintendent required. Must relocate to Oregon. Excellent company benefit package. Send resume with salary requirements to **M. Robinson, Seed Research of Oregon**, P.O. Box 1416, Corvallis, OR 97339.

POSITIONS WANTED

PROJECT MANAGER/SUPERVISOR

Seeks position with golf course developer and/or construction company. 20 years in the golf course industry as coordinator & supervisor of construction. BS in agronomy, and well-versed in irrigation engineering.
(813) 924-8963
FAX (813) 993-0940

REAL ESTATE

GOLF COURSE FOR SALE

LIFETIME OPPTY. Beautiful rural southern OH setting. Championship 18, 6100 yds., 173 ac, 1600 s.f. clubhouse w/bar & grill. No equip. or other bldgs. Asking \$495K, \$50K dep. Bal. 8.5%. Don't waste my time if you're not experienced & qualified financially to make an immediate major commitment. Owner (614) 679-2082.

GOLF COURSE FOR SALE

18 holes, 6,300 yards, 150 +/- acres. Land, clubhouse, maintenance & cart facility, equipment, swimming pool included in price. Excellent location. 12 month season. \$895,000. Call 606-885-4331 or 502-839-8400.

GOLF COURSE READY TO BUILD

250 ac. beautiful, rolling, overlooks Lake Michigan; zoning, permits, 22 prof. greens plans, bldg. plans for 7,100 sf clubhouse. Liquor license, well & basement completed, one 2 ac. lake partially dug, permits to dig more. Property is enroute to state park with 150,000 yearly attendance. Partner or buy outright. \$300,000. Call 906-644-2672.

DID YOU KNOW?

CB Commercial, formerly Coldwell Banker Commercial, the nation's largest commercial real estate brokerage has a GOLF PROPERTIES MARKETING GROUP that works ONLY with buyers & sellers of golf properties. We specialize in golf properties & have properties listed in:

- 1) Denver, Colorado
- 2) Northern Georgia
- 3) South Bend, Indiana

For information call:



Roger Garrett 602/262-5511
Tom Harris 602/262-5521

TEXAS GOLF COURSES

9 & 18 holes — Statewide.
Some with extra land, dev. lots.
Descriptive list available.

TEXAS GOLF PROPERTIES

1603 Lightsey — Austin, TX 78704
512/442-7105 • Fax 512/442-1812

EDUCATIONAL OPPORTUNITIES

GRAYSON COLLEGE, Dennison, TX. 2-year technical program in golf course & turf grass management. 18-hole golf course on campus. Dormitories, placement assistance, financial aid & scholarships available. Contact: **GCC, 6101 Grayson Dr., Dennison, TX 75020.** (903) 463-8653.

FOR SALE

STEEL BUILDINGS

Save up to 50% on Arch Style Buildings. Factory Clearance. 25x30; 40x40; 50x100 & others. Factory Direct.

UNIVERSAL STEEL
1-800-548-6871

POND LINERS

Buy direct from fabricator 20 & 30 mil. P.V.C. Made to order. Under 20 cents per sq. ft. Installation or supervision available. Call...

COLORADO LINING COMPANY
(303) 841-2022

USED GOLF CAR CLEARING HOUSE

All makes & models. Large selection of Yamaha & E-Z-Go gas cars in good condition priced to sell. Delivery arranged. Call...

MID ATLANTIC EQUIPMENT CORP.
1-800-526-7278

TULIP COLORBLENDS — NATURE'S FIREWORKS

Tulips for Fall planting. New ideas and Competitive Prices. GCSAA members have pre-approved credit. Customer Service & Follow-up Assistance, call Toll Free 1-800-877-8637.



SCHIPPER & CO.
PO Box 7584,
Greenwich, CT, 06836-7584
"Our Roots Are Bulbs"

QUALITY TURF GRASSES

Sod or sprigs shipped anywhere, desoiled if necessary. Meyer Z-52, Tifdwarf, Tifway, Tifway II, Tifgreen II & Fescue. Planting avail. for golf courses, athletic fields, etc.

QUAIL VALLEY FARM, INC.
(800) 666-0007
FAX (501) 221-1243

BUSINESS SERVICES



Mid Tenn Turf, Inc.

Golf course, athletic field renovations & new construction. Sodding, sprigging, row planting, fairway renovations. Complete turn key operations. Products include: Vamont Bermuda; Tif & Tif II Bermudas; Meyer Z-52 Zoysia; Blended Fescue.

Mid Tenn Turf, Inc.
Rt. 3, Box 3199
Manchester, TN 37355
Phone (615) 728-0583

The ads in this section reach 22,000 prospects for LESS THAN ONE CENT PER THOUSAND!

GOLF COURSE ACCESSORIES

WHY HASSLE WITH SEVERAL VENDORS?

- Scorecards
- Sprinkler Tagging
- Yardage Books
- Fairway Markers
- Laser Measuring
- Tee Signs (wood or granite)

Call **FORE BETTER GOLF**
1-800-468-8672

SAVE ON PERSONALIZED FLAGS

Buy factory direct & save 40% or more on personalized flags. Flagpoles, tee markers, etc. also available. Fast personalized service guaranteed. Call toll free.



FOUR SEASONS GOLF COMPANY

P.O. Box 78011
Greensboro, NC 27427
1-800-476-7005

CUSTOMIZED YARDAGE MARKERS

- ✓ Sprinkler head yardage tags to fit all automatic systems
 - ✓ Highest quality **bronze** markers for tees, 100, 150 & 200; & cart paths
 - ✓ **Yardage books** — 1 & 4 color
 - ✓ **Laser measure** per USGA standards
- For more information, references or samples, contact:

From Tee to Green, Inc.
1707 Brandywine Trail
Ft. Wayne, IN 46845
(800) 932-5223

LASER MEASURING

ELECTRONIC YARDAGE MEASURING SPECIALIST

Tee to Green
Sprinkler Heads to Green
100-150-200 Fairway Yardage
"THE BEAM TEAM"
(813) 646-3351
1939 Hallam Dr., Lakeland, FL 33813

REQUEST FOR PROPOSALS

REQUEST FOR PROPOSALS

The Board of County Commissioners, Orange County, FL, is soliciting for proposals to provide golf course market demand & financial feasibility studies. Consulting firms desiring to perform these studies may call the Orange County Purchasing Dept. at (407) 836-5635 to obtain a copy of the Request for Proposals & the scope of services. Specify RFP #Y2-608. Proposals must be submitted no later than 2:00 p.m. February 7, 1992.

JANUARY

- 6 — GCSAA Seminar on Safe Pesticide Management in Nashville, Tenn.*
- 6-7 — GCSAA Seminar on Golf Course Restoration, Renovation and Construction Projects in St. Charles, Ill.*
- 7-8 — Wisconsin Turfgrass Association Winter Conference in Oconomowoc. Contact Wayne Otto at 414-242-0142.
- 8 — GCSAA Seminar on Implementing Strategies & Plans for Turfgrass Environmental Systems in Charlotte, N.C.*
- 8 — GCSAA Seminar on Maximizing Job Satisfaction in Pittsburgh.*
- 9-10 — New Hampshire Turf Conference in Manchester.
- 12-16 — Club Managers Association of America Annual Conference and Exposition in San Diego, Calif. Contact Kelly Royce at 703-739-9500.
- 13-14 — GCSAA Seminar on Environmental Considerations in Golf Course Management in Cromwell, Conn.*
- 13-16 — 32nd Va. Turf & Landscape Conference & Trade Show in Richmond. Contact Randeem Tharp at 804-340-3473.
- 14 — Landscape and Nursery Expo in Sacramento, Calif. Contact Kenny Kakutani at 916-442-4470.
- 15 — Professional Turf & Landscape Conference in White Plains, N.Y. Contact 914-636-2875.
- 16-17 — GCSAA Seminar on Introduction to Integrated Pest Management in Tempe, Ariz.*
- 16-17 — GCSAA Seminar on Golf Course Design Principles in Atlanta.
- 16-18 — Mid-Am Trade Show in Chicago. Contact 708-526-3993.
- 19-21 — New York State Arborists Assn. Empire State Tree Conference in Albany. Contact 518-783-1322.
- 20-22 — Massachusetts Horticultural Congress in Hyannis. Contact Debbie Hergenrother, 100 Boylston St., Ste 1050, Boston, MA 02116.
- 20-22 — 62nd Annual Michigan Turfgrass Conference in Lansing. Contact Mike Saffel at 517-353-9022.
- 21-23 — Midwest Regional Turfgrass Conference and Show in Indianapolis. Contact Jo Horn at 317-494-8039.
- 22-23 — Golf Course Development, Financing and Operations conference in Orlando, Fla. Contact Institute for International Research at 212-826-1260.
- 24-27 — PGA Merchandise Show in Orlando, Fla. Contact 407-624-8400.
- 27-28 — Arkansas Turfgrass Assoc. Conference and Trade Show in Little Rock. Contact Angie McSwain at 501-663-8810.
- 29-30 — 28th Annual Northern California Turf & Landscape Exposition in Santa Clara. Contact 415-516-0146.
- 31 — Mid-Florida Turfgrass Conference in Sanford, Fla. Contact Seminole County Extension Service at 407-323-2500 ext. 5559.

FEBRUARY

- 3-5 — Mid-America Green Industry Convention in Kansas City, Mo. Contact Olivia Golden at 816-765-7616.
- 5-6 — Massachusetts Landscape Conference in Boxborough. Contact 617-964-0452.
- 5-7 — American Sod Producers Association Midwinter Conference in Las Vegas, Nev. Contact Thomas Ford at 708-705-9898.
- 10-17 — GCSAA Annual Conference & Show in New Orleans. Contact 913-841-2240.
- 12 — GCSAA Seminar on Wildlife Management and Habitat Conservation in New Orleans.*
- 24-27 — American Seed Trade Assn. Management Academy in West Lafayette, Ind.

Continued on page 61

Golf Course Marketplace

To reserve space in this section, call Simone Marsteller, 813-576-7077



GOLF COURSES FOR SALE

Contact:
Richard M. Farrell
(813) 447-8181



CIRCLE #151




Glued-Laminated WOOD STRUCTURES

Order Direct From The Leading Manufacturer in U.S.

- Complete Prefabricated Packages
- Ready for Fast Erection
- Direct Distribution Throughout the U.S.
- Custom Design & Engineering

UNIT STRUCTURES, INC.

P.O. BOX A MORRISVILLE, N.C. 27560 1-800-777-UNIT

CIRCLE #153/GCSAA BOOTH #1118



PAVELEC BROTHERS

GOLF COURSE CONSTRUCTION CO., INC.

✓ New Construction
✓ Renovation
✓ Field Drainage Systems

TONY PAVELEC
(201) 667-1643

EMIL PAVELEC
(201) 939-6182

98 Evergreen Ave.
Nutley, NJ 07110

CIRCLE #155

Keep That Edge



pinhigh[®]

reel sharpening compound

Contact Your Local Distributor or Call Us
Toll Free 1 (800) 422-4748

CIRCLE #157/GCSAA BOOTH #1348

PUBLIC GOLF COURSES

Golf West Companies provides total golf course development... from preliminary market analysis to the first tee-off. Our turn-key development program delivers first-class 18-hole, par 72 golf course facilities ready for operation.

COORDINATION AND DEVELOPMENT... A FULL-SERVICE, TURN-KEY PROGRAM WITH EMPHASIS ON PUBLIC FINANCING.

PRELIMINARY MARKET ANALYSIS

FINANCING ARRANGEMENTS

DEVELOPMENT AND CONSTRUCTION MANAGEMENT

OPERATOR RECOMMENDATIONS



GOLF WEST

7108 N. Fresno St., Suite 190 • Fresno, CA 93720 • 209/432-1346

CIRCLE #159

THE JANUARY GROUP

Designers of "User Friendly" Golf Courses

- GOLF COURSE DESIGN
- LANDPLANNING
- ENGINEERING
- LANDSCAPE ARCHITECTURE

15150 Preston Road, Ste. 300, Dallas, TX 75248
(214) 490-0626 • Fax (214) 386-5731

CIRCLE #152

Birds or Animals a PROBLEM??

Scare them away with

SHELLCRACKERS[®]

a Pest Control Device

that safely disrupts eating & nesting habits.

For more information call or write:

JPF Distributors
9 Union Square, Suite 184 N
Southbury, Connecticut 06488
203-262-1463

CIRCLE #154

Keep Your Divot Seed Mixture Where It Is Used ...




... in Divot Seed & Soil tee buckets next to the tee markers. Available in Cedar or Redwood slats and with companion Trash™ debris buckets.

Ask Your Golf Course Distributor for
INNOVATIVE MAINTENANCE PRODUCTS

From *Master of the Links*

2807 Lockport Rd., Lockport, IL 60441
(815) 723-4444 • Fax (815) 723-4485

CIRCLE #156/GCSAA BOOTH #1131,1133

SYNTHO-GLASS

PIPE REPAIR KIT

STOPS
LEAKS



SETS IN
MINUTES

WATER ACTIVATED

- Repairs joints and couplings in minutes
- Withstands pressure in excess of 150 P.S.I.
- Sets on wet surfaces
- Easy to apply
- Use directly from package

There is NO mixing and NO measuring—just remove **Syntho-Glass** from its foil pouch and wrap. In 30 minutes your irrigation system will be back in operation.

For more information call:
1 (800) 328-0090

NEPTUNE RESEARCH, INC.
2611 Old Okeechobee Road • West Palm Beach, Florida 33409
Phone 407-683-6992 FAX: 1-407-683-8366
DEALER AND DISTRIBUTOR INQUIRIES INVITED

CIRCLE #160/GCSAA BOOTH #745

Golf Course Marketplace

To reserve space in this section, call Simone Marsteller, 813-576-7077

CALENDAR

Continued from page 60

Contact 317-494-4247.

26-27 — Canadian Golf Forum in Toronto.

Contact 416-849-9700.

MARCH

3-4 — GCSAA Seminar on Golf Course Design Principles in Cincinnati.*

3-5 — Massachusetts Turfgrass Conference and Industrial Trade Show in Springfield. Contact 413-549-5295.

9-10 — GCSAA Seminar on Landscape Design & Plant Materials in Bloomington, Ill.*

10 — GCSAA Seminar on Turfgrass Stress Management in West Chester, Pa.*

16-17 — GCSAA Seminar on Environmental Considerations in Golf Course Management in Minneapolis.*

22-25 — National Club Association Club Leadership Conference in Pinehurst, N.C. Contact 202-625-2080.

24 — USGA Regional Conference in Wakefield, Mass. Contact 908-234-2300.

24-25 — Maine Turfgrass Conference & Show in Portland. Contact Chuck Ravis at 207-395-4298.

26-29 — Golf Asia 92 in Singapore. Telephone 65 2966961

APRIL

6-7 — GCSAA Seminar on Landscape Design & Plant Materials in Bolton, Mass.*

9 — Water conservation and quality seminar in Sanford, Fla. Contact Seminole County Extension Service at 407-323-2500 ext. 5559.

28-30 — Agri-business computer conference in Sanford, Fla. Contact Seminole County Extension Service at 407-323-2500 ext. 5559.

MAY

11-13 — Crittenden Golf Development Expo in Palm Springs, Calif. Contact 800-443-8318.

19 — Diseases of ornamental plants seminar in Sanford, Fla. Contact Seminole County Extension Service at 407-323-2500 ext. 5559.

JUNE

27-July 2 — American Seed Trade Assoc. 109th Annual Convention in Washington, D.C. Contact 202-223-4080.

AUGUST

9-12 — 47th Annual Soil & Water Conservation Society Meeting in Baltimore. Contact 515-289-2331.

OCTOBER

21-23 — National Golf Foundation Golf Summit in Orlando, Fla. Contact NGF at 407-744-6006.

* — For more information or to register, contact Betsy Evans, education coordinator, Golf Course Superintendents Association of America, at 800-472-7878 or 913-841-2240. The seminars are dependent upon the availability of the instructors, and are therefore subject to change. One-day seminars cost \$100 for GCSAA members and \$120 for non-members; two-day seminars cost \$180 for members and \$210 for non-members.

Timber Bridges

by Western Wood Structures, Inc.
Call Chuck Schmokel - 503/692-6900
1-800-482-4004

CIRCLE #161/GCSAA BOOTH #1520

PIPE LOCATOR THE LOCAT™ INEXPENSIVE

Locates, traces underground pipes, including drain pipes, made of PVC, ABS, steel and cement. Finds sprinklers, valves and clogs.

Used by Hundreds of Golf Courses

Satisfaction Guaranteed

Bloch & Company
Box 18058, Cleveland, OH 44118
(216) 371-0979

CIRCLE #163

WATER TREATMENT SYSTEMS FOR ANY ENVIRONMENT

Worrying about wetland & ground water damage due to chemical migration? Using aerators that are expensive to run & still require repeated applications of chemicals to your water system? We have a safe & effective alternative to chemical treatment. Our systems meet the challenging demands of irrigation water storage, including effluent.

Call for details & your local distributor.

E.P.
AERATION



946 Griffin Street
Grover City, CA 93433
805-489-4218; Fax 805-489-3235

CIRCLE #165/GCSAA BOOTH #3936

FIX YOUR DRY SPOTS



This Handi Airifier™ has seven 1/2" tines and attaches to your old cup cutter.

800-456-4351

Miltona Turf Products
P.O. BOX 164 • MILTONA, MINNESOTA 56354

CIRCLE #167/GCSAA BOOTH #3423,3427

MOTOROLA Radyo PORTABLE RADIOS

- Free 2 week trial
- Radios start at \$99
- Up to a 5 year warranty

CALL FOR MORE INFORMATION

PAGE-COM
1-800-527-1670

*OTHER BRANDS AVAILABLE

CIRCLE #169/GCSAA BOOTH #1557,1559

MacCurach GOLF

Construction Inc.
Renovation Specialist

FROM SELECT RENOVATION
TO COMPLETE RECONSTRUCTION.
"Call Us With Your Committee Wish List"

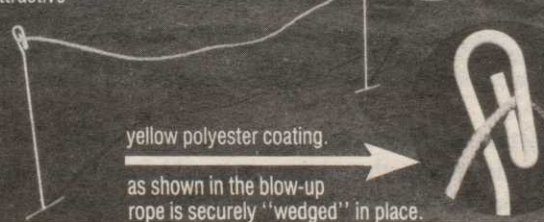
Contact:
Heath J. Cundey
904-646-1581

11231 Portside Dr.
Jacksonville, Fla. 32225

CIRCLE #162

NEW ROPE-LOC™

Finally, a rope and stake system that works! Simple but unique... the ROPE-LOC system eliminates annoying or unsightly rope failures. Simple, clean, durable — ROPE-LOC stakes are made of 3/8" steel and finished in attractive



yellow polyester coating.

as shown in the blow-up rope is securely "wedged" in place.

Call for a special introductory offer.

1-313-429-9571, 1-800-253-2112 or FAX: 313-429-3985

PRECISION TOOL PRODUCTS CO. • 7836 Bethel Church Rd. • Saline, MI 48176

CIRCLE #164



Available in 15", 18" and 24" bars.

ACCU-GAGE™

Accu-gage® is a precision measuring instrument for making highly accurate height-of-cut adjustments on greensmowers or other precision mowers.

GROOMER-GAGE™

Groomer-gage® is a precision measuring instrument for accurately setting the desired grooming depth of groomer or verticutter units.

For more information on this and other precision tools call Toll Free:
1-800-253-2112 or 313-429-9571 FAX: 313-429-3985

PRECISION TOOL PRODUCTS CO. 7836 Bethel Church Rd. • Saline, MI 48176

CIRCLE #166



Golf Course Bridges!
1-800-328-2047

**CONTINENTAL
BRIDGE**

Route 5, Box 178, Alexandria, MN 56308 • (612) 852-7500

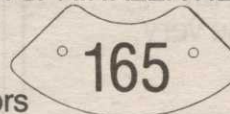
Thousands in use.
Built to last.
Sponsor Member



8-DA-CL

CIRCLE #168/GCSAA BOOTH #3320

ENGRAVED YARDAGE LABELS FOR SPRINKLER HEADS



- Bright colors
- Fasteners included
- Orders quickly shipped UPS

Call
for Free
Sample Kit

1-800-284-YARD

THE YARD EDGE GOLF CO.

P.O. Box 13159

Wichita, KS 67213

CIRCLE #170

Undaunted by winter, a Colorado gamble prevails

Resort finds replacing bunker sand during cold weather less disruptive

By Mark Leslie

The hundreds of golf courses each year that replace their bunker sand — disturbing the turf, angering golfers and losing money along the way — may want to use another tactic.

Taking a pioneering chance, Keystone (Colo.) Resort officials decided to wait until the off-season and disturb the snow instead of the golfers on their Keystone Ranch Golf Course. It has turned the trick, and saved time and money.

"Our great concern was whether we would be able to clear snow and get equipment around without getting it stuck. That has ended up being of no concern at all," said Tom Briddle of Tectonic, Inc. in Longmont, which is providing the sand and two members of the three-man crew. "I take no credit. It was just a gamble that worked."

Keystone Ranch superintendent Steve Corneillier, who agreed to the winter work, said: "I had never thought about doing the job in the winter... But we have found that we're considerably ahead of our goal, and we've spent our money much more effi-



Two Keystone Resort maintenance crew members help a Tectonic backhoe operator clean out a bunker.

ciently this way. If we had done the work during the season, the equipment would sit idle too often waiting for golfers to play through."

Corneillier said he expects half the 70 sand bunkers will be restored this winter and half next winter.

"Our goal in the fall was to do 10 bunkers,"

he said. "I'd be thrilled if I could get that. Yet it started to snow in late October and never stopped. We had the second snowiest November ever in Colorado and we still did 24 bunkers by Thanksgiving."

Heavy late-November snows closed down the operation until January when Corneillier expected the crew to finish the last six bunkers on the front nine.

"Our original plan was to finish the front nine by July 4," he said.

Meanwhile, the heavy equipment hasn't caused any of the turf damage that normally occurs in this kind of work.

"Where we've packed snow down we've been able to make almost a rug of snow cover to protect the playing surface from trucks. We've been able to do it without a mark on the turf," Briddle said.

Added Corneillier: "When this kind of work is done in the spring, summer or fall you're going to have some kind of dam-

age. There's no way around it. But we found we were minimizing our damage with the snowpack. Plus we had the luxury of having no golfers. And, from a budget point of view, we're much more efficient operating in adverse weather than in the summertime."

The crews first worked in critical areas that will be very marshy in the springtime, Briddle said, and "as soon as we get a thaw in the springtime, we will go in and retrench those bunkers and put the drainage in."

He said if the snow clears by May 1, all drainage will be in by May 15.

He said Tectonic is trucking in the sand as needed, because with below zero-degree nights the sand would harden.

OFF-SEASON DECISION

Keystone Ranch, designed by Robert Trent Jones Jr., is rated one of the best resort courses in the country, and officials did not want to interrupt play.

The off-season work fulfilled that goal. Plus, Briddle said, "We felt we could make mistakes without aggravating anybody."

Yet mistakes never occurred.

Indeed, Briddle said he would "absolutely" suggest to other clients that they restore their bunkers during the off-season.

"It has already proven successful," he said.

Corneillier, Keystone's superintendent the last 15 months, said other superintendents would have to evaluate their own circumstances, but for Keystone Ranch, "I'm convinced this was the best way for us to go."

"We have a lot of snowcover. When we get spring runoff our course gets very soft; and we had a lot of rain last summer. I kept looking at the course this fall and wondering how we would get heavy equipment around without tearing it up. If the ground wasn't firm, there would not be a good way."

"This worked. We know we're going to do some reseeded and resodding, but a lot less than we would have otherwise."

The Most Boring Vehicle You've Ever Seen.



With 60, ten inch drills gently penetrating even heavily compacted soil, the Floyd-McKay Deep Drill AeroFier is boring indeed. But the results are exciting.

Instead of compacting the side of the holes like ordinary tines, the drills allow better percolation, increase root growth. And the green is playable almost immediately after treatment.

Call us toll free for a demonstration or an appointment to do all your greens in one very boring day.

Floyd McKay

DEEP DRILL AEROFIER

1-800-835-6080

CIRCLE #148/GCSAA BOOTH #1307-1309

ADVERTISERS INDEX

RS#	Advertiser	Page	Booth
142	The Andersons	53	3061,3063
104	Aquatrols	5	2714,2716
120	B.H.Sales	20	1020,1022
123	Barebo, Inc.	26	2209
130	Best Sand	37	—
163	Bloch & Co.	61	—
151	Bobby Byrd R.E.	60	—
110	Bunton	10	2246
111	Ciba-Geigy	11	3029
168	Continental Bridge	61	3320
137	Cushman	42-43	1920
126	Dura Plastic Products	30	810-814
165	E.P.Aeration	61	3936
114	Enviro. & Turf Services	18	—
138	Flowtronex	44	3746
148	Floyd McKay	62	1307-1309
129	Fore Par	36	3336-3340
131	Golf Asia '92	38	—
133	Golf Course Consultants	40	—
159	Golf West	60	—
107	Grace-Sierra	2	1625,1627,1629
106	Huber Ranch Sod	8	—
108	Hunter Industries	9	1756
124	ISK Biotech	28	2962-2966
150	Jacobsen	64	2546
152	The Don January Group	60	—
157	Jesco Products	60	1348
105	John Deere	6-7	2719
154	JPF Distributors	60	—
102	Kubota	3	1435
144	Lebanon	54-55	2616-2618
162	MacCurrah Golf Const.	61	—
121	Markers, Inc.	21	3080

RS#	Advertiser	Page	Booth
156	Master of the Links	60	1131,1133
167	Milona Turf Products	61	3423,3427
128	Monsanto	34-35	—
140	Montco Products	48	1862
160	Neptune Research	60	745
145	Oregon Fine Fescue	56	3430
169	Page Com	61	1557,1559
146	Par Aide	57	1938
155	Pavelec Bros. Constr.	60	—
136	Precision Laboratories	41	2059,2061
113	Precision Small Engine	18	2572
166	Precision Tool Prod. Co.	61	—
164	Precision Tool Prod. Co.	61	—
149	Pumping Systems, Inc.	63	2202
125	Rain Bird	29	2946
112	Rhone-Poulenc	12-13	2756
127	Rhone-Poulenc	31	2756
147	Roots, Inc.	58	1428
122	Southern Corp. Promo.	21	—
103	Standard Golf	4	2735
134	Syntennico	40	735-739
115	Tee-2-Green	19	3436-3440
139	Textron Financial Corp.	47	2546
143	Toro Comm'l. Prod. Div.	50-51	2120
116	Toro Comm'l. Prod. Div.	54-55	2120
153	Unit Structures	60	1118
141	Verti-Drain	52	2672
135	Watersaver Co.	41	—
132	Watertronics	39	3220
161	Western Wood Struct.	61	1520
101	Yamaha	16	1634
170	Yard Edge	61	—

VARIABLE FREQUENCY DRIVE PUMP CONTROL

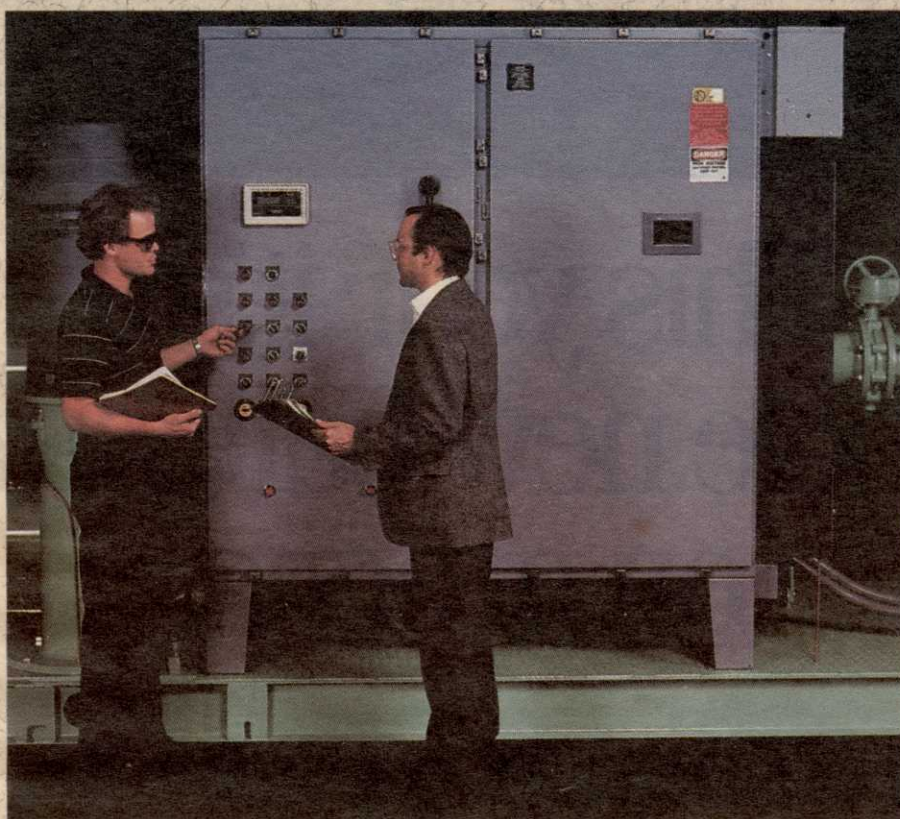
From the Innovative Leader in Prefabricated
Water Pumping System Design

Pumping Systems,

Inc. manufactures

custom made prefabricated water pumping systems that provide maximum efficiency and low operating cost exclusively for turf grass managers. Extensive research has been conducted by PSI engineers over the past seven years to seek improved water pumping techniques including the

design and construction of Variable Frequency Drive (VFD) controlled pumping systems. Since 1988, PSI has delivered VFD systems to turf grass irrigation projects across the United States.



Today, PSI continues this research and development

in order to provide the most reliable systems available. Some standard features include: U.S. manufactured, state-of-the-art VFD; custom designed computer control software; dehumidified air cooler for the control panel; power filter; and a system capacity

relief valve. These features ensure the durability, reliability and operator confidence required for today's turf irrigation pumping systems.

PSI has a factory trained national service network. For prompt service or more information on the finest turf irrigation pumping systems available, contact your nearest dealer or:



Pumping Systems, Inc.

10717 Harry Hines Blvd.
Toll-free (800) 527-0539

Dallas, Texas 75220
FAX (214) 357-5861

(214) 357-1320



This year it's a
whole new ballgame
on greens.

See why
at the GCSAA Show,
Booth 2546
Feb. 15-17.

THE PROFESSIONAL'S CHOICE ON TURF.



Jacobsen Division of Textron, Inc.