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GOLF COURSE NEWS

THE NEWSPAPER OF THE GOLF COURSE INDUSTRY

VOLUME 1 NUMBER 9
NOVEMBER 1989

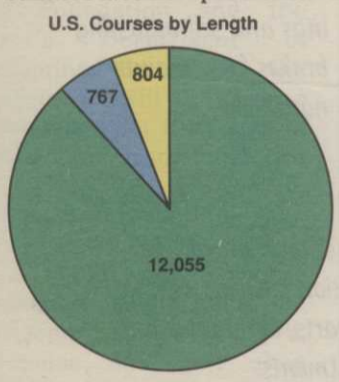
Recovering from Hugo

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takes design back to the future

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- Regulation (5200 yards or more)
- Executive (4000-5200 yards)
- Par 3 (less than 4000 yards)

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Hurricane struck Carolina courses in random fashion

BY TOMMY BRASWELL
With Staff Reports
Some greenskeeping and tree-company crews in the Carolinas continue to clean up golf courses that, in the wake of Hurricane Hugo's 135-mph winds, looked like a giant game of Pick Up Sticks.

Of the \$4 billion trail of destruction Hurricane Hugo left as it hammered the region from Charleston, S.C., to Charlotte, N.C., on Sept. 21, millions of dollars of damage were done to golf courses.

Courses from Charleston to the Grand Strand as well as some 200 miles inland were closed — for days, weeks, months, and some for as long as a year — because of the devastation
Continued on page 34



Photo by Tommy Braswell
A boat rests on the 12th green at Wild Dunes' Harbor Course on Isle of Palms, South Carolina.

Europe opens arms to golf experts

BY JAN BELJAN
Countries from Spain to The Netherlands and from Sweden to the United Kingdom are hoping to go "golf crazy," yet are engulfed in the same mass of red tape that faces golf course builders in the United States, according to experts speaking at

Golf Course Europe '89.
The exhibition and conference in Wiesbaden, West Germany, in October drew some of the top names in the golf industry from around the globe, and in concert they agreed the opportunities in Europe are great.

"There is a pent-up demand for golf in Europe," said Michael Redd, president of Team Plan, Inc., in Florida. "The opportunities for American professionals are great, but along with them come some constraints — elaborate language, time, working condi-
Continued on page 28



PGA World Golf Hall of Fame Shrine Gardens honor superintendents.

Garden honors supers

Shrine Gardens, recognizing golf course superintendents' service and contributions to the game, have been dedicated on the grounds of the PGA World Golf Hall of Fame located in

Pinehurst, N.C.
Developed by founding sponsor The Toro Co., the landscaped gardens are located at the entrance to the shrine
Continued on page 18

Supers' needs foster inventions

By PETER BLAIS
A Florida company has developed a long-sought solution to the problem of fairway grass encroaching into greens and tees.
Boca Raton-based DonuTTrimmer Inc. has installed the \$50,000 system on an experimental basis on four Southern courses.
Despite the hefty price tag, company officials claim Greens Encroachment will pay for itself in labor savings within two years.

"It will really be a big thing for the golf course industry in the coming years. It's something we've needed very badly and should become very popular," said Wilmington (Del.) Country Club's Paul Latshaw, one of the country's best-known superintendents.

The Greens Encroachment product is the brainchild and the latest in a string of labor-saving turf
Continued on page 35

7 Reasons Why Driving For Distance Is A Matter Of Mechanics.

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Baird course first in Turkey

Gary Roger Baird will design the first golf course in Turkey.

Baird of Nashville, Tenn., who has been logging miles and months working on a course he has designed in Thailand, said being chosen for the Turkish course is a privilege he looks forward to. He said Turkish government officials are excited about the prospects of the course, which is being planned as a feature of the new Five Star Ramada Renaissance Resort Hotel at Antalya.

Baird will work with New York-based McLoughlin Group,

which serves as project manager, and with Turkish clubhouse and villa architect Faruk Yorgancioglu for developer Gama Industries of Ankara.

"It looks like we will be literally introducing the game of golf to the Turkish people," Baird said. Yet developers expect many visitors to be Europeans familiar to the game.

Saying the site is spectacular, Baird compared it to Spyglass Hill Golf Links in Pebble Beach, Calif.

"We are carving the course out of a solid pine forest," he

said. "The course is on a bluff overlooking the Mediterranean, and 10,000-foot Mount Olympus rises upright next to it.

"People can ski in the morning, drive an hour to play golf, and then take a swim in the Mediterranean."

Baird said construction on the \$4-million 6,600-yard course will start in four months. He is designing the 18-holer so that it "will not intimidate the many novices we expect would use it" but also to be "in a league to attract the European PGA Tour circuit and befit a major resort."

Sod research funded

The American Sod Producers Association is making \$25,000 in research funds available for 1989-90.

Research Committee Chairman Richard Schiedel said letters of invitation seeking specific proposals have gone to 103 individuals and institutions. The committee has set a Dec. 15 deadline for proposals.

Schiedel said ASPA is particularly interested in

research that focuses on the role turfgrass plays in environmental issues such as water and air-quality improvement and conservation of water and topsoil.

Schiedel, owner of Compact Sod Farms in Cambridge, Ontario, said his committee intends to make its recommendations to the ASPA board of trustees this winter and announce funded projects in early spring.

Conference will focus on management

Experts on various aspects of golf course management will speak at the week-long 7th Annual National Institute of Golf Management starting Jan. 14 at Oglebay Park Resort and Conference Center in Wheeling, W.V.

Sponsored by the National Golf Foundation and the center's Department of Continuing Education, the institute will feature instructors from its Board of Regents and from municipal golf facilities, the USGA, NGF, PGA of America and PGA Tour.

The program will teach such topics as golf course economics, maintenance, the philosophy of public golf, clubhouse and golf shop operations and merchandising, recruiting and motivating employees, and customer relations.

To complete the program, students must attend the institute for two years, attending a different session each year. The course carries five continuing education units from North Carolina State University and qualifies PGA of America members for recertification credits on the basis of three points for each year completed.

Registration is limited, and NGF Vice President of Golf Course Development Angelo Palermo said, "This year we had to turn away people who wanted to attend but who waited until the last minute to contact us."

More than 500 public golf course personnel have attended the institute since its inception in 1983, when it was called the Golf Management School at Oglebay.

To register, people should contact the NGF's Golf Course Development Department at 1150 U.S. Highway One, Jupiter, Fla. 33477, 407-744-6006, or National Institute of Golf Management, Wheeling Park Commission, Oglebay, Wheeling, W.V. 26003, 800-624-6988.

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Mizuno pays \$10M for Showboat

Showboat, Inc. has sold Showboat Country Club and Showboat Sports, Inc. for approximately \$10 million to Mizuno Enterprises, U.S.A., Inc.

Showboat Sports, Inc., is a wholly owned subsidiary of Showboat, Inc. and operates the country club in Las Vegas, Nev.

Showboat, Inc., through its subsidiaries, operates casino hotel resorts in Las Vegas and Atlantic City.

Ken Mizuno is chairman of the board and chief executive officer

Los Coyotes first JCB merchant

Bank of America has signed Los Coyotes Country Club in Buena Park, Calif., as its first JCB credit card merchant.

"Soon all of our clients throughout California will be able to process and settle sales transactions for five major credit cards utilizing one deposit and have their transactions reported on a consolidated monthly BofA statement," said Bank of America Senior Vice President Joe Fontana. The five credit cards are VISA, MasterCard, Diners Club, Carte Blanche and JCB.

OSU given grant money

Seed Research of Oregon has awarded a \$500 research grant to the Oregon State University Department of Horticulture.

OSU will use the money for turf research being undertaken by Associate Professor Tom Cook and his students.

Course plans renovation

River Trails Park District in Arlington Heights, Va., which bought Rob Roy golf course for \$590,000 in August, has started renovation on the nine-hole facility.

Golf Facilities Manager Tom Snyders said crews have finished an initial clean-up for the maintenance garage. More work in the garage, clubhouse and golf shop are planned after the course closes for the season on Nov. 15. before winter.

Lake Nona makes plans

Lake Nona resort in Florida is planning a pay-for-play golf course and a business-style hotel.

The course will be open to Lake Nona homeowners and area residents.

'Green industry' associations join forces

New council will act as voice on landscape and environmental issues

Nine "green industry" associations have agreed to form the Landscape & Environmental Resource Council as a unified voice on issues affecting the industry and to cooperate with each other on joint projects.

The decision was made Sept. 21 at a meeting of elected and staff executives from the American Society of Landscape Architects; American

Sod Producers Association, Associated Landscape Contractors of America, International Society of Arboriculture, Irrigation Association, National Arborist Association, Professional Grounds Management Society, Professional Lawn Care Association of America, and the Lawn Institute.

A March 29 meeting has been set to formalize the coun-

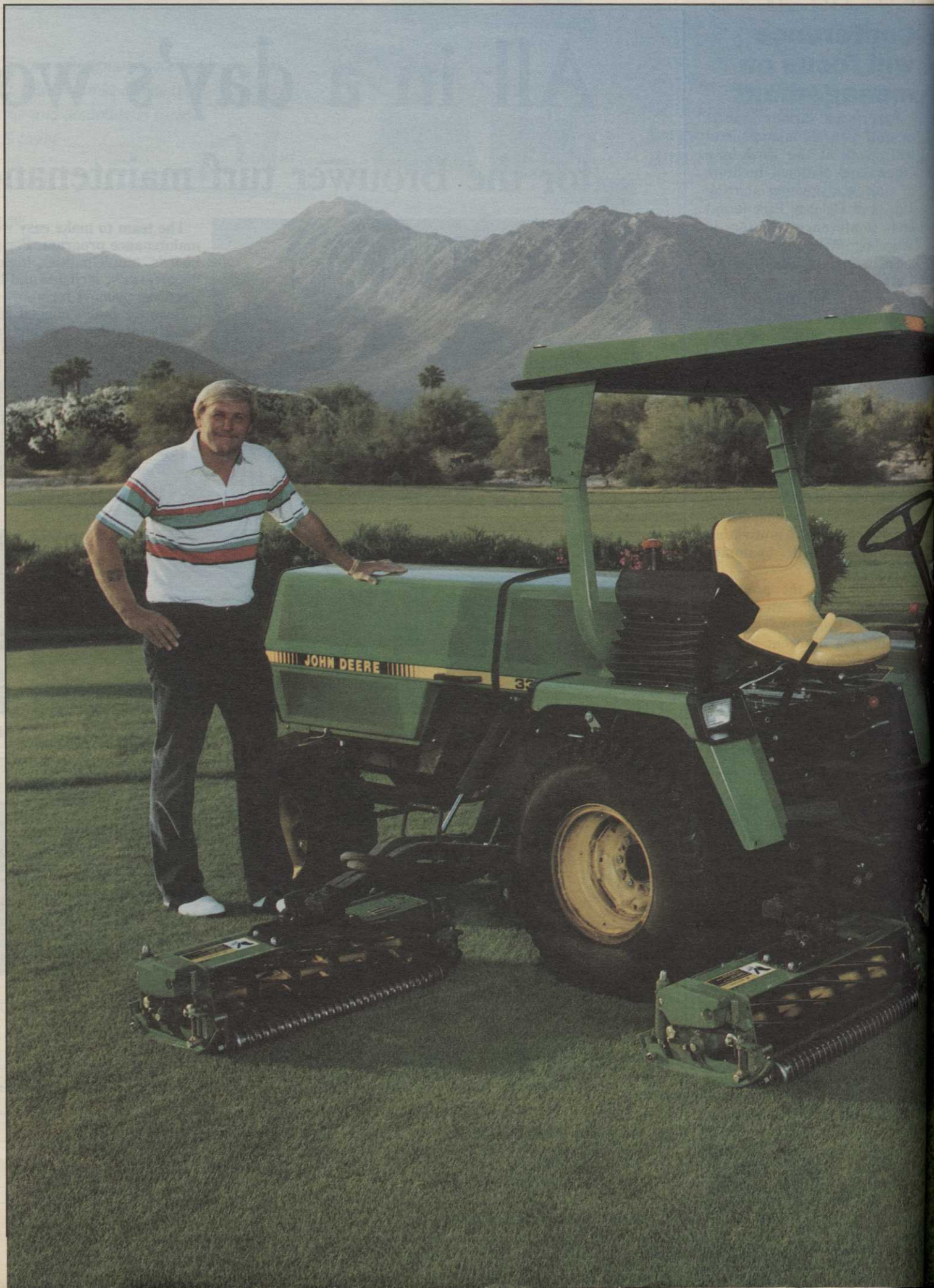
cil and plan its future directions, endorsing a mission statement, developing formal guidelines for governance, identifying issues and acting on reporting, public relations and funding.

The group has already agreed to undertake an economic profile survey of its nine member associations.

It also plans to circulate appropriate publications in de-

velopment for review and potential endorsement, expand its inventory listing of education programs and publications, identify legislative and regulatory issues of potential importance to the associations, and develop computer-linking specifications and procedures.

ASPA President Randy Tischer served as acting chairman at the first meeting.



Orlando project denied

Orange County, Fla., officials denied the request for a project that would have included a nine-hole par 3 golf course, miniature golf and a driving range in Orlando.

Golf Unlimited Inc. had asked zoning approval for the project that would have been located at Lake Underhill Drive just west of Econlockhatchee Trail. The officials said the project was too commercial for the mainly residential area.

GCA focuses conclave on environment

"Your Golf Environment," the theme of the Golf Course Association's annual conference this winter, "strikes at the heart of our members' and society's concerns for this industry," according to the co-chairman of the coordinating committee, Jeff Hoag.

Hoag, the owner of Scott Lake Country Club in Comstock Park, Mich., said the Jan. 9-14 conference in Palm Springs, Calif., will focus on the environment while realizing that operations and maintenance are essential to that environment.

Subject 'strikes at the heart of our members' and society's concerns for this industry.'

— Jeff Hoag

An estimated 250 course owners and wives are expected at the meeting which is "designed for owners, by owners, addressing the unique business problems of the privately owned public golf course," said Hoag, whose co-chairman is Jim Scott, owner of Gull Lake View Golf Club in Augusta, Mich.

"The conference committee looked carefully at past attendees' critique sheets and feel we've retained the most popular elements of the conference while plowing some new ground," said Hoag.

Talks will cover the concept, financing, design, development, opening and status of new courses. USGA Green Section Chairman

Bill Bengueyfield will also speak and other presentations will cover course maintenance, clubhouse design, and course financing.

A roundtable discussion will be devoted to policies and profitability, covering check-cashing to reservations, Hoag said.

The organization will elect new officers and conduct its annual business meeting.

More information is available from the GCA at 8030 Cedar Ave., Suite 228, Minneapolis, Minn. 55425; 612-854-8482.

Landfill site for course

Coal Creek Development Corp. reports it has reached an agreement with Golf Northwest Inc. of Lynnwood, Wash., to develop an 18-hole championship golf course on Newcastle landfill in Bellevue when the 270-acre site closes in 1992.

Coal Creek is reportedly already negotiating with Palmer Design Co. to design the course on the landfill, which Coal Creek owns. Two-year-old Golf Northwest, owned in part by Seattle SuperSonic player Jack Sikma, recently developed Harbour Pointe golf course near Mukilteo, Wash.

"We've wanted to build a first-class golf course on this site for a long time," Razore said.

"With Golf Northwest's expertise, now we can. We believe it's important that the site's final use be one which responds to the community's desires and rewards local residents for more than 16 years of waiting for this landfill to close."

MGM buying land, Tropicana

MGM Grand Inc. has agreed to buy the 700-room Marina Hotel and Casino, the Tropicana Country Club and Golf Course, and 115 acres on the Las Vegas Strip.

MGM Grand Chairman and Chief Executive Officer Fred Benninger said the property will be developed into a movie theme park and 5,000-room hotel and casino, which originally was to be built on the MGM Grand Desert Inn property.

Two associations, one conference

The Green Team Conference and Show organizers and the Professional Lawn Care Association of America will join forces and coordinate a joint convention starting next year.

Officials said the two shows will merge in Nashville in 1990 and be called the Green Industry Expo.

The PLCAA, Associated Landscape Contractors of America and Professional Grounds Management Society will sponsor the event. The PLCAA will manage the show next show and in Tampa in 1990.

How to survive in the desert on only 5 reels a day

The desert is a pretty forbidding place for golf. But thanks to irrigation and the work of knowledgeable superintendents like Robert Stuczynski the desert area around Palm Springs, California, has become one of the country's golf meccas.

Stuczynski supervises maintenance at the 36-hole Ironwood Country Club in Palm Desert, California. And, for the last seven months, he's been using a 5-reel John Deere 3325 Professional Turf Mower on all 36 of his fairways.

"Equipment has to be tough to survive out here," says Stuczynski. "The temperatures, the terrain, the rocks—they're all hard on it."

"Our 3325 works 10 hours a day, seven days a week mowing all our fairways. We've had it for about seven months now and it's held up very well. The quality of cut has been excellent. In fact, it's doing such a good job we'd like to get another one."

"I went out and talked to other people who already owned John Deere equipment before I bought my 3325. People who make their living with equipment just like I do. I heard a lot of good things about equipment quality, durability and parts support. And, after the test we've given it here, the 3325 has certainly lived up to that reputation."

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LETTERS

Widely quoted

To the Editor:
 ... I would like to take this opportunity to tell you that my observations have proven for me that Golf Course News is widely read and digested. Visiting up to a dozen courses weekly around the nation, I repeatedly hear remarks and

quotes concerning its material. Keep up the good work.
 Sincerely,
 Geoffrey S. Cornish
 Cornish & Silva, Inc.
 Golf course architects
 Whitinsville, Mass.

Welcome back, Vern

Dear editor:

Just a note to tell you I very much enjoy Vern Putney's periodic features in your publication.

I have missed Vern's writing since he retired from the (Guy) Gannett papers in Portland (Maine) and I am happy to see him back.

Keep up the good work, Vern.
 Best regards,
 Daniel R. Warren
 Scarborough, Maine

Thanks for space

To the editor:
 I wanted to write and thank you for the article, and for the space for

my comments on the industry. Several of our clients have commented on it; you have an amazingly wide distribution.

The publication has a remarkable standard of excellence overall. I have read the issues with interest; you seem to address all segments of the industry.

This service has long been sorely needed, and I am most pleased that you and your company have addressed the need.

Again, thank you...

Very truly yours,
 Judith Ferguson Gockel
 President, Agri-Systems
 Tomball, Texas

Blais new associate editor

Peter Blais has joined the Golf Course News staff as an associate editor.

Blais, 35, has spent the past 5 1/2 years as a reporter and columnist for the Central Maine Morning Sentinel. In addition to his sportswriting duties, he wrote golf and business columns for the Waterville, Maine, daily newspaper.

Blais has a bachelor's degree in English from the University of New Hampshire and a masters in business administration from Western State College in Colorado.

Vern Putney, associate editor since the newspaper was organized a year ago, will continue work as a special contributing editor. Putney plans to continue writing once he completes his recovery from recent heart surgery.

Western Pumping info unveiled

A printing error in the October issue deleted information on Western Pumping Systems, Inc. in the survey of irrigation pumping systems.

Western has six service centers and has been in business seven years.

Western does offer Variable Frequency Drive, hydraulic pressure regulating valves, self-enclosed landscape booster stations, and station isolation valves.

Options include digital flowmeter with totalizer, self-cleaning filters, pressure-regulating each pump, and UL listed control panels.

Its systems do not have electrically actuated butterfly valves.

Factory authorized start-up cost is included in the price.

Western uses American Turbine, Goulds, Cornell and Grunfos pumps, and U.S. Motors, Newman and G.E. motors.

For information contact Bernie Weber, vice president, Western Pumping Systems, Inc., 17046 S. Weber Drive, Chandler, Ariz. 85226; 602-961-0150. Circle No 279

Lebanon omitted

Lebanon Chemical Corp. was inadvertently omitted from the chart in the September issue listing companies making herbicides for golf courses.

For further information contact Lebanon at 717-273-1685 or 800-233-0628. Circle No 359

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Product features to update readers

As the northern courses don winter coats and warm-climate courses are overseeded for winter play, *Golf Course News'* managing editor, Mark Leslie, is planning the 1990 schedule of features so that you may be continually up to date on industry news.

In the July issue, Mark compiled the first of several feature reports on golf industry business. These features are produced monthly in the middle pages of *Golf Course News*. This month

we offer you a rundown of golf course architects and builders.

The topics of the 1990 editorial calendar have been carefully selected to help you in your purchasing decisions. These features are divided into four categories: chemical updates, equipment updates, turf updates and special reports. Here's a month-by-month rundown.

January — Chemical Update: Insecticides.

February — Equipment Update: Aerators. Also,

GCSAA Show Preview.

March — Equipment Update: Utility Vehicles.

April — Equipment Update: Fairway Mowers.

May — Equipment Update: Spreaders and Top-dressers.

June — Chemical Update: Fungicides.

July — Equipment Update: Golf Course Accessories.

August — Turf Update; Zoysiagrass Sod; Seed Growers.

September — Equipment Update: Sweepers, Vacuums and Blowers.

October — Equipment Update: Irrigation and Pumping Stations.

November — Special Report: Architects and Builders.

December — Chemical Update: Herbicides.

Your particular interests are important to our selection of features, so please take some time to review these selections and let us know of any topics you would like to see in future issues.

Sincerely,
Charles E. von Brecht
Publisher



Slip-Fix: A Step Beyond Traditional Unions

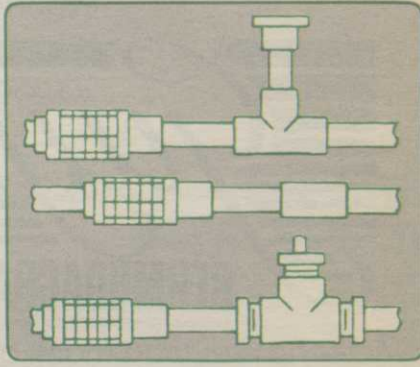
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NCA files brief in high court on Portland GC tax decision

The National Club Association has filed a petition asking the U.S. Supreme Court to review the 9th Circuit Court of Appeals decision in the case of Portland Golf Club v. the Commissioner of Internal Revenue.

The Circuit Court in June reversed the Tax Court's decision which allowed the club to offset its losses from certain non-member activities against taxable investment income.

NCA's briefs states that the high court should hear the Portland Golf Club case because the lower courts disagree.

A Supreme Court decision is necessary "to insure the consistent enforcement of the laws in accordance with the intent of Congress," the brief says.

NCA General Counsel Thomas Walsh said that due to the conflicts on Rev. Rul. 81-69 decisions in the different circuits, the financial planning of clubs is in limbo.

"Our member clubs need the court to settle this issue and tell them in absolute terms how the law will be applied to their

activities," Walsh said.

In enforcing its Rev. Rul. 81-69, the Internal Revenue Service has argued that clubs must show a profit motive.

NCA, during its 10-year involvement in this issue, has countered that it is enough to demonstrate that the outside activities are intended to benefit the club. NCA argues that a club may not realize a profit for tax purposes, due to paper losses, but could still realize an economic gain.

NCA's brief says many large for-profit companies never pay taxes, due to paper losses, but nonetheless stay in business by making real gains. Thus, the brief concludes that the club "merely asks that its taxable activities be taxed using the same economic profit standards applied to for-profit corporations."

This issue must be resolved so that tax-exempt social clubs can determine the application of unrelated business income provisions, said Walsh.

Connecticut superintendents, company give sod cutter to experiment station

Dr. James Hanula of the New Haven (Conn.) Experiment Station received a sod cutter from the Connecticut Association of Golf Course Superintendents and Turf Products Corp. of South Windsor, Conn.

Scott Ramsay, chairman of the CAGCS's S&R Committee, John Ferry of Turf Products, and CAGCS President Robert Chalifour presented the sod cutter to Hanula, who will use it in his research.

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ASSOCIATION NEWS

Lawn Institute board honors 51 grasses

Fifty-one proprietary grasses have received recognition for excellence in 1989 by the The Lawn Institute's Variety Review Board.

Twenty-two Kentucky bluegrasses, five fine fescues, 12 turf-type perennial ryegrasses, seven turf-type tall fescues, one

colonial bentgrass and four specialty grasses were selected following extensive evaluation.

For a Lawn Institute Special Topic Sheet that identifies these grasses, request LIST-S-L and enclose a self-addressed, stamped, No. 10 envelope to: The Lawn Institute, PO Box 108, Pleasant Hill, Tenn. 38578.

ASPA organizing midwinter conference in Florida

Orlando, Fla. is the site of the American Sod Producers Association's annual Midwinter Conference and Exposition, Feb. 14-16. The Hilton at Walt Disney World Village has been selected as headquarters hotel.

"Spotlight on Sod" is the theme of this year's conference. Legal issues, public relations and the media, and Southern and Northern production will be the primary topics.

Exhibitors from throughout the world will also give ASPA attendees the opportunity to see and hear the latest in technology, equipment and products.

Prior to the opening ceremonies, an ASPA-sponsored members-only seminar on sod production fertility will offer seven presentations on increasing profitable production and maintaining environmental quality.

Seminar faculty include Dr. James Beard of Texas A&M, Dr. Anthony Koski of Colorado State University, Drs. J.B. Sartain and Robert Dunn of the University of Florida, Drs. Robert Isaacs and Bill Segars of the University of Georgia.

Also, Dr. Ray Hoyum of IMC Fertilizer, Inc., and Dr. Nobel Usherwood of Potash & Phosphate Institute.

For more information on the conference, seminar or ASPA membership, people may contact ASPA, 1855-A Hicks Road, Rolling Meadows, IL 60008, or call (312) 705-9898.

Fertilizer, Chemical groups create network

The Fertilizer Institute and National Agricultural Chemicals Association have formed an information network designed to keep regional and state fertilizer and chemical associations informed on national news and events.

The network will use facsimile (FAX) machines so that information can be disseminated quickly about regional and national legislative regulatory, food safety and other information.

The FAX network can also receive information from the local associations and re-distribute it nationwide.

"This two-way communication will double our ability to spread news quickly and accurately," said Billy Joe Miles, chairman of TFT's Retail Business Council.

A newsletter and bulletins will also get news out the members.

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For free information circle #107



Superintendent Richard Christian checks out a green at Pine Valley.

Christian takes challenge to be the best at the best

BY PETER BLAIS

The next Eberhard Steinger, that's who Richard Christian would like to be.

Steinger was the superintendent for nearly 40 years at Pine Valley Country Club, recently voted the world's top course for an unprecedented third straight year by Golf Magazine. He retired in the mid-1970s.

Several superintendents succeeded Steinger before Christian took over in 1988.

"I see myself staying here a long time, God willing," said the 24-year-old caretaker of the world's finest 18. "I would love to retire here. It's just beautiful. I've never seen better."

Neither have the 68 panelists — who included the likes of touring pros Ben Crenshaw, Raymond Floyd, Jack Nicklaus, Greg Norman, Arnold Palmer and Jan Stephenson — who comprised Golf Magazine's selection committee.

Being the best year after year brings its own set of problems — high expectations. Finish second in the world next year and the question Christian will hear most often is "What happened?"

That's a load for a superintendent with a quarter-century's experience to bear, let alone a young man just four years out of college. But Christian seems to have the confidence and philosophy to handle it.

"I'm never 100 percent happy with the condition of the course. If that wasn't my philosophy, I'd be in trouble. I strive for perfection in whatever I do," said Christian.

Christian credits his 28-man crew (18 in the winter) with keeping playable the oases of fairways and greens among the deserts of sand barrens that are Pine Valley. He and his troops battle thinning greens and crabgrass like everyone else. But the bunkers present a special challenge.

There are desert courses with more sand. But there the bunkers tend to run level and long, allowing for perfect grooming. At Pine Valley, sand runs up and over the side of hills making erosion control a problem. The vegetation

that grows in the sand must be pruned, but can't be removed because the roots hold the sand in place.

"I read recently that some architect wanted to develop a course just like Pine Valley because it would be easy to maintain. He obviously didn't know what he was talking about. These hillside bunkers require an incredible amount of maintenance. If he tried to copy it, it would probably be the last course that architect would ever design," said Christian.

But it is the presence of those very bunkers, and the overall design of the course that developer George Crump and architect H.S. Colt designed in the early 1900s, that are mainly responsible for the club's No. 1 ranking, according to Christian.

"It's the perfect golf course," said Christian. "We owe those two a lot of thanks."

Crump and Colt will never thank Christian for the compliment. They both went to whatever eternal place course designers and developers go long before Christian first appeared on the scene in his hometown of Litchfield, Conn.

Christian worked on the ground crews part-time and summers for five years at Litchfield's Stonybrook Golf Course before attending the University of Massachusetts. One of his professors, Joseph Troll, set him up with a summer placement at Pine Valley between the first and second year of his two-year associates of science in turf management program.

Christian reveled in the experience and, when he graduated in the summer of 1985, he applied for the assistant's post under then-superintendent Dick Bator. He worked for Bator 2 1/2 years before taking over the head position on Jan. 1, 1988.

"I wanted to go somewhere I could work a lot of hours and learn as much as I could," said Christian, adding that he wasn't intimidated by the prospect of eventually taking over one of the world's top courses.

Christian got his work wish. He often puts in 12-hour days. And he is learning, especially about the weather and how it can lay to waste the best-laid plans.

"The weather is one of the hardest things about this job," said Christian. "I joke with the members that it's the only thing I haven't gotten control of, yet. But fortunately this is one of the best courses in the area for drainage. We got two inches of rain the other night. It was still raining and the greens were underwater at 8 a.m. An hour-and-a-half after the rain stopped, people were playing. Being built on that native sand makes a big difference."

And what is the most satisfying part of his

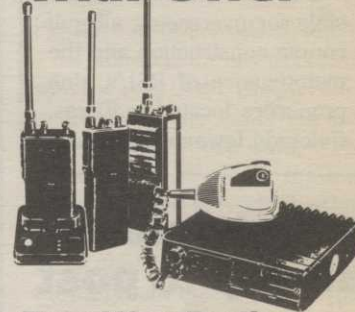
job? Simply seeing the enjoyment people get out of playing on one of the world's best courses.

If you know of a standout golf course superintendent who is long over due for peer recognition, please let us know. Golf Course News welcomes nominations for such accolade.

Super Focus is a monthly feature. Just write to us at P.O. Box 767, Yarmouth, Maine; or call 207-846-0600.

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Rec Services nabs Goettsch

Roger Goettsch has been named director of course construction and maintenance with Recreational Services Ltd., a golf course management company.

Goettsch was formerly superintendent of the Marriott Corp.'s Arnold Palmer-designed Golf Club at Fossil Creek located in Fort Worth, Texas.

A 1988 recipient of the "Most Outstanding Superintendent" award presented by the North Texas Golf Course Superintendents Association, Goettsch has more than 15 years of golf course superintendent experience.

He has a degree in turf management from Iowa State University and is secretary/treasurer of the NTGCSA.

Goettsch will be responsible for overseeing all golf course construction and the maintenance of RSL's nine properties located in Texas, Colorado, Iowa and Nebraska.

Kubota names Bishop to post

Curtis Bishop has been appointed national distribution manager and Becky Knighton retail/wholesale finance manager with Kubota Tractor Corp.

Bishop will be responsible for national operations of distribution-related computer systems, inventory control and product traffic coordination. He has been with Kubota three years, previously serving as distribution systems manager.

The Placentia, Calif., resident was Case International Harvester's Southeastern region distribution manager for 16 years prior to joining Kubota.

Knighton will be responsible for the training and development of financial services staff and management of national accounts and dealer collections.

A 13-year Kubota Financial Services department employee, she will also be responsible for the home office operations of Kubota's captive finance company, Kubota Credit Corp.

King joins MacGregor

Louis R. King has been put in charge of MacGregor Golf Co.'s domestic marketing efforts on an interim basis.

King, serving as consultant to the president, will be responsible for the overall marketing strategies for all MacGregor products.

He brings more than three decades of sales management experience, having served as senior vice president of Amana Corp., vice president of sales for Pillsbury and executive director of the PGA of America.

Stonecreek appoints Minshall superintendent

Stonecreek, The Golf Club, in Paradise Valley, Ariz., has named Dale R. Minshall superintendent.

Announcing Minshall's hiring, Resort Management of America President Henry DeLozier said, "It is a rare opportunity to be able to work with someone with the level of experience of a man like Mr. Minshall.

"His expertise in the area of golf course maintenance will enable us

to meet and exceed the goals we have set for Stonecreek."

Minshall has held superintendent positions at Arrowhead Golf Corp., Columbine Country Club and Tamarron Golf Club in Colorado and at Briarwood Country Club in Sun City, Ariz.

He is a graduate of Colorado State University with a degree in turfgrass maintenance and is certified by the Golf Course Superintendents Association of America.

ON THE MOVE

Hall takes irrigation expertise to Best

Wes Hall has joined Dallas-based Best Equipment Co. as a golf course pump station sales representative based out of southern California.

A 23-year veteran of the golf course irrigation and pump industry, Hall's sales

territory includes California's San Diego County, northern California, northern Nevada, Washington and Canada.

Hall was most recently the western United States sales representative for Western Pumping Systems.

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worms, and more than two dozen other insects. CHIPCO® SEVIMOL® gives you the added advantages of improved handling and superior formulation characteristics. Plus, a unique attractant system effective against selected insect species. And, as effective as CHIPCO® SEVIMOL® brand is on turf pests, it's equally reliable against 86 insects known to attack a wide variety of trees

OSHA discovers 49,098 violations

Employers have been cited for 49,098 violations of the Hazard Communication Standard since Nov. 1, 1985, according to recently released information from the Occupational Safety and Health Administration.

Approximately \$1.5 million in penalties have been assessed against employers violating those standards.

The most common violations are:

- failure to establish a written hazard communication program;

- failure to establish an employee training and education program;

- failure to comply with labeling requirements; and

- failure to maintain records of material safety data sheets;

The Golf Course Superintendents Association of America in Lawrence, Kansas, and Professional Lawn Care Association of America in Marietta, Ga., have information available to help golf course superintendents comply with the laws.

Seed group formed

The American Seed Trade Association is forming a committee to serve as a source of information on environmental issues and the application of laws that affect the industry.

Jim Fangman of Ciba-Geigy Seed Division will chair the Environment and Safety Committee, which will hold an organizational meeting at 4:30 p.m. Dec. 6 at the downtown Hyatt Regency Hotel in Chicago, Ill.

GOVERNMENT UPDATE

PLCAA challenging local authority

The Professional Lawn Care Association of America has begun to file lawsuits challenging the authority of local governments to regulate pesticide use.

While not opposed to regulation or legislation of pesticide use, PLCAA does oppose regulation by

local governments — more than 88,000 communities in the United States.

The trade organization contends that current federal regulations (Federal Insecticide, Fungicide and Rodenticide Act) preempt any local statutes. Individualized regulations would make it extremely difficult for lawn care companies operating in more than one municipality to comply.

"It (local regulation) increases the cost of doing business and doesn't provide any additional protection for the public," said PLCAA director of state government affairs Thomas Delaney.

Federal Judge Horace W. Gilmore recently ruled in the PLCAA's favor in Milford, Mich.

"It looks like the city will appeal, with the help of the (Ralph Nader-founded) Public Citizens's Congress Watch," he said. "That doesn't surprise us. We think the decision will be upheld. They have no real basis for the complaint. It's just a question of jurisdiction and the judge saw that the federal statute preempted the local one."

The PLCAA was heartened by Gilmore's decision to consider the 1986 Maryland Pest Control vs. Montgomery County case in his ruling.

"It's important to have cases at the federal level so precedents are set. If we win enough of these cases, and can build up enough precedents, then it takes little time for a judge to remove a case involving a local regulation," said Delaney.

The PLCAA is considering filing for a summary judgment to throw out a local regulation in Mayfield, Ohio.

"We're on hold there," said Delaney. "The federal judge has a large docket at the moment. Timing is very important in a case like this and we want to make sure it's the right time before we file."

The PLCAA dropped its proposed suit in Mashpee, Mass., when the city voluntarily removed its ordinance.

Delaney said his group is considering where to file its next suit.

"We want to show that if localities can pass regulations, there will be no uniformity in what a lawn care specialist can do from county to county or town to town. . . It's a tough way to do business, having to figure out where a customer is and what you can do there before deciding if you can take the job."

"That's not what Congress intended. They wanted it to be a federal issue that would involve the states. Having it decided below that level is onerous. . . The federal government and states have the experts with degrees in the field. They should be making the decisions, not municipalities that don't have the expertise."

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damaging insect pests. Make it a part of your arsenal by calling your turfcare supplier today.

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The Prince Course's 'Eagle's Nest' 12th hole is a panoramic thing of beauty.

NEW COURSES

Jones adds Prince to Kauai scene

Nature and Robert Trent Jones Jr. joined forces for the second time on the Hawaiian island of Kauai, and the result is the Prince Course.

Jones called the new course, which pairs with his acclaimed Makai Course, "one of the top five courses I've ever designed."

The front nine holes have opened and the back nine will open in December. Highlights include the 383-yard 12th hole, known as

"Eagle's Nest," where the tee area sits 100 feet above a fairway traversed by the Anini Stream; the 13th where a waterfall provides a backdrop to the green; and the par 3 7th which passes over a large ravine with Anini Beach and an ocean reef to the side.

The links-style Prince Course will play 7,309 yards at par 72 at championship length, but each hole has five sets of tees and some have as many as nine teeing areas.

It is situated on 145 acres of rolling tableland overlooking the Pacific Ocean and bisected by deep ravines, natural streams and waterfalls.

The Princeville Corp. developed the course as part of its Marage Princeville Resort, which for four years has hosted the Women's Kemper Open on its Makai Course.

Johnston layout uses wetlands

Weaving 18 championship holes around and over marshland, forest, water hazards and rolling fairways, Clyde Johnston has designed his first course on the Grand Strand — Ocean Harbour Golf Links in Calabash, N.C.

Ocean Harbour has grown in, opened to play on Sept. 10, and is gearing up for full-scale marketing for the spring season.

Johnston took strategic advantage of the site, which is nestled between the intracoastal waterway and Calabash River, and sculpted the course through marshland, ponds and a forest of oak, pine, maple and cedar trees.

The course features bentgrass greens, 419 bermuda fairways and tees and many grass and sand bunkers.

A golfer can drive the ball from North Carolina to South Carolina and back over the layout which measures 7,004 yards from the farthest of four tees.

Odell Williamson is the course developer; Robert Wilson, formerly of Sandpiper Bay in Calabash, is its superintendent; and Kent Chismar is its professional.

Palmer course a centerpiece

Palmer Course Design Co., Arnold Palmer Golf Management and R.C. and Craft Land Co. are collaborating on a planned country club community in Gulf Shores, Ala., called Craft Farms Golf and Country Club.

The Palmer-designed Cotton Creek course will be the centerpiece of the 600-home development, according to Robert Craft, president of Craft Land Co.

Courses newly planned in the United States

Location	Course Name	Type	Holes	Address	Architect/Contact
Alabama					
Buck Island	Gunter's Landing	P	27	PO Box 152	James Kenamer
Huntsville	Guntowne GC	D	18	N/A	Gary R. Baird
Arizona					
Camp Verde	Cherry Creek Camp Verde	D	18	500 Jacks Canyon Rd	Arthur J. Snyder
Green Valley	Quail Creek CC	P	18	N/A	Ken Kavanaugh
Prescott	Antelope Hills	M	18	N/A	Gary Panks
Scottsdale	Ancala at Taliesin	P	18	East Shea Blvd	Perry Dye
California					
Carlsbad	Canyon Oaks GC	P	18	N/A	Arnold Palmer/Ed Seay
Del Rey	Lake Nacimiento	D	18	PO Box 308	Richard A. Bigler
Fairfield	Rancho Solano	M	18	1000 Webster St	Robert Muir Graves
Jackson	Gold Creek CC	D	18	Highway 88 at 49	Hale Irwin
Lodi	City of Lodi	M	19	N/A	Richard A. Bigler
Los Banos	Los Banos GC	M	18	City Hall	Richard A. Bigler
Malibu	Rancho Malibu GC	P	18	N/A	Robert Trent Jones Sr.
Palm Springs	Playa del Sol CC	P	18	N/A	David A. Rainville
Palm Springs	TBD	N/A	18	N/A	Gary Player
Palos Verdes	Ranchos Palos Verdes	P	18	N/A	Gary Player
Sacramento	Hansen Ranch Municipal GC	M	18	City of Sacramento Parks & Rec	Golf Plan/Ronald Fream
Sea Ranch	Sea Ranch GC	D	9	PO Box 16	Robert M. Graves
Yountville	Vine Valley GC	D	9	PO Box 2773	Robert M. Graves
Colorado					
Grand Junction	The Ridges GC	D	18	405 Ridges Blvd.	Hale Irwin
Pueblo	TBD	M	18	Off Hwy 47	Arthur Hills
Connecticut					
Manchester	Manchester CC	M	18		N/A Cornish & Silva
N. Franklin	Hundred Acres Woods GC	P	18	Hollow Rd.	N/A
Florida					
Cape Coral	Royal Tree CC	D	9	16801 Pine Island Rd NW	Gordon G. Lewis
Cape Coral	Sabal Springs	P	18	3106 Country Club Blvd	Gordon G. Lewis
Delray Beach	Polo West	P	54	Linton Blvd	Karl Litten
Destin	Tidewater Beach & Golf Resort	P	18	PO Box 1632	Charles F. Ankrom
Jacksonville	Julington Creek	D	9	7111 Durbin Creek Blvd	N/A
Lake Worth	Wycliffe Golf & CC	P	18	Lake Worth Rd. & 441	Karl Litten
Naples	Lely Estates	P	54	8825 Tamiami Trail East	Robert T. Jones Sr.
Naples	Brettonne Park	P	18	N/A	Mark McCumber
Palm Coast	Cypress Knolls	P	18	1 Corporate Dr.	Player/Litten
Port St. Lucie	Southwest Port St. Lucie	D	18	Darwin Blvd	Robert C. Walker
Punta Gorda	Marina South	P	27	3150 Matecumbe Key Rd	Mark McCumber
Sarasota	Sorrento Valley CC	P	18	PO Box 15530	William W. Amick
Sarasota	Florida Palm Aire	P	18	N/A	Player/Litten
Vero Beach	Orchid Island	P	18	N/A	Palmer Course Design
Homestead	Keys State GC	P	18	N/A	N/A
Mount Dora	Mount Dora CC	N/A	18	New SR 500	N/A
Sanibel Island	Beachview GC	D	9	1100 Parkview Dr.	N/A
Sarasota	TBD	P	18	Florida Palm Aire	Player/Litten
St. Augustine	Ponce De Leon Resort CC	D	9	US1, North Box 98	Joseph Lee
St. Augustine	The Fountains	P	18	N/A	Gary Player
Georgia					
Atlanta	Eagle Watch	D	18	N/A	Palmer Course Design
Covington	Covington GC	D	18	Dearing Rd.	Clyde B. Johnston
Gainesville	Chicopee Woods GC	M	18	PO Box 977	Denis Griffiths
McDonough	Lake Dow GC	D	18	N/A	Denis Griffiths
Hawaii					
Honolulu	Royal Hawaiian CC	P	36	1334 Manoui St.	Perry Dye
North Shore	Kuilima at Turtle Bay Resort	P	18	Kuilima Resort	Palmer Course Design
Oahu	Ewa GC	M	27	N/A	Palmer Course Design
Illinois					
Alton	Spencer Tolin Community GC	M	18	N/A	Palmer Course Design
Arlington Heights	Arlington Hills GC	M	9	N/A	David & Garrett Gill
Edwardsville	SIU Edwardsville GC	D	18	Highway 157 & 159	Hale Irwin
Godfrey	Rolling Hills GC	D	9	Rt. 2 Pierce Lane	Gary Kern
Huntley	TBD	D	27	N/A	Robert M. Lohmann
Kappa	El Paso GC	P	9	El Paso	William J. Spear
Lake In The Hills	Boulder Ridge	P	18	N/A	Robert M. Lohmann
Marengo	Marengo Ridge GC	D	9	9508 Harmony Hill Rd.	William J. Spear
Naperville	White Eagle GC	P	18	N/A	Palmer Course Design
Northbrook	Sportsman's	M	9	1710 Pflingsten Rd.	Roger B. Packard
South Barrington	Unknown	P	18	N/A	Robert M. Lohmann
Streamwood	Oak Knoll GC	M	9	N/A	Robert M. Lohmann
Wadsworth	Midlane CC	D	9	N/A	Robert M. Lohmann
Indiana					
Charlestown	Bogey GC	D	9	Borden & Sellerburg Rds.	N/A
Corydon	Corydon CC	P	9	Highway 62 east	Gary Kern
Kokomo	Woodhaven GC	P	18	3541 S. LaFountain St.	N/A
Lafayette	Plum Tree GC	D	18	N/A	Gary Kern
Marion	TBD	D	18	N/A	Gary Kern
Mooreville	TBD	P	18	N/A	Gary Kern

Continued on page 13

Rees Jones took Haig Point challenge

Saying it is a challenge to add nine holes to a course that is already well received, Rees Jones nonetheless believes he has accomplished just that at Haig Point Club on Daufuskie Island across Calibogue Sound from Hilton Head, S.C.

Jones' unique 20-hole layout of the

original Haig Point course has received acclaim as one of the best in the country. He said, "I think the new nine will complement the other two very nicely. It has the same degree of difficulty, the same sculpted character. I don't think this nine will take a back seat to either of the others."

The new nine covers 3,500 yards from the back tees and, like the existing course, features two holes where players will be given an option of routes to reach the same green.

The 20th hole is a par 3 whose peninsula green is surrounded on three sides by water. One set of tees allows

an approach over the narrow neck of land leading to the putting surface, but the other teeing areas leave no choice but to carry the water.

Similarly, the fourth hole, No. 22 overall, offers two distinct teeing areas — one of which carries over a wetland — for the long par 4.

Nappanee	Nappanee Municipal GC	M	9	N/A	Gary Kern
Louisiana					
Shreveport	Castle Creek GC	D	36	N/A	Dave Bennett
Tammany	Tammany Highlands	P	18	St. Tammany Parrish	Palmer Course Design
Maine					
Livermore Falls	Maple Lane GC	D	9	RFD 2 Box 925	Arthur Chapman
Massachusetts					
Harwich Port	Cranberry Valley GC	M	9	PO Box 306	Cornish & Silva
Lunenburg	Maplewood GC	D	18	78 Wkhiting St.	Cornish & Silva
Michigan					
Ann Arbor	The Settlement	P	18	PO Box 974	Robert T. Jones Sr.
Deerborn	Deerborn Public GC	M	18	N/A	Warner Bowen & Son
Gaylord	Wilderness Valley	D	18	Rt. 2 Box 100	N/A
Glen Arbor	The Homestead	D	18	State Rd. 675	Robert C. Walker
Muskegon	Chase Hammond GC	M	9	2454 N. Putnam Rd.	Mark DeVries & Assoc.
Minnesota					
Lutsen	Lutsen GC	D	18	N/A	Don Herfort
Moorhead	Village Green GC	M	9	3420 Village Green Dr.	George Williams
Rodeau	Oakcrest GC	D	9	PO Box 69	N/A
Missouri					
Eureka	Country Club at the Legends	P	9	521 Bald Hill Rd.	Robert T. Jones Sr.
Flint Hill	Autumn Glen GC	D	18	N/A	Gary Kern
Kansas City	Worlds of Fun Theme Park	D	36	N/A	Donald R. sechrest
Kansas City	Swope Memorial GC	M	18	Blue River Rd./Swope Park	Hurdzan Design Group
Nebraska					
Columbus	Columbus Municipal	M	18	N/A	N/A
Gretna	Gretna CC	P	9	N/A	N/A
La Vista	Prairie Garden GC	P	9	N/A	N/A
Ogalla	Ogalla CC	P	9	PO Box 95	N/A
New Hampshire					
Atkinson	TBD	D	9	N/A	Cornish & Silva
Bretton Woods	Bretton Woods GC	D	27	Mt. Washington Hotel	Cornish & Silva
Derry	Hoodkraft GC	D	9	PO Box 266	N/A
Dunbarton	Valley View CC	P	18	RFD 1	Marvin F. Armstrong
Nottingham	Nottingham CC	D	18	N/A	Marvin F. Armstrong
Peterborough	Maplecrest CC	P	18	Jaffrey Rd.	Marvin F. Armstrong
Raymond	Carriage Hills	P	18	N/A	Gary Player
New Jersey					
Cape May	Cape May CC	N/A	18	N/A	Karl Litten
Clinton	Southgate at Beaver Brook	P	9	Country Club Dr.	Nicholas T. Psiahas
Jackson Township	Westlake Village	P	18	N/A	Mark McCumber & Assoc
Knowlton Tnship	Yards Creek (Knowlton Village)	D	18	N/A	Stephen Kay
Manchester Tnship	Leisure Glen	P	18	N/A	Mark McCumber & Assoc.
New Mexico					
Alamogordo	Holloman AFB	P	18	833rd Air Division Tactical	N/A
oSanta Anna Pueblo	Valle Grande GC	D	27	N/A	Dave Bennett
New York					
Cheektowaga	Cheektowaga Municipal GC	M	18	N/A	Kidwell & Hurdzan
Freehold	Pleasant View Lodge & GC	D	9	N/A	Stephen Kay
North Carolina					
Highlands	Cuilasaja Club	P	18	N/A	Palmer course design Co.
North Dakota					
Grand Fork	Lincoln Park Municipal	M	18	N/A	Don Herfort
Mandan	Mandan Municipal	M	18	N/A	Don Herfort
Ohio					
Cincinnati	Glenview GC	M	9	10965 Springfield Pike	Hurdzan Design Group
Columbus	Bolton Field GC	M	9	Alkire Rd.	Kidwell & Hurdzan
Galloway	Bolton Field GC	M	9	6005 Alkire Rd.	Hurdzan Design Group
Middletown	Quail Ridge GC	D	18	N/A	Denis Griffiths & Assoc
Springboro	Heatherwoode GC	M	18	Highway 741	Denis Griffiths & Assoc.
Toledo	Kenton CC	P	9	N/A	Hurdzan Design Group
Van Wert	The Woods GC	D	9	RR5 Box 79	Denis Griffiths & Assoc
Zanesville	TBD	D	18	Maysville Pike	Kidwell & Hurdzan
Oregon					
Brookings	Jack's Creek	P	18	N/A	Bob Baldock & Son
Grants Pass	Paradise Ranch Golf Resort	D	18	7000-D Monument Dr.	Robert M. Graves
Hillsboro	Meriwether National GC	P	18	Rt. 6 Box 895	Robert M. Graves
Lyons	Elkhorn Valley GC	D	9	1, Box 32295	Don Cutler
Pennsylvania					
Ambler	Comonwealth National	D	18	N/A	Arnold Palmer/Ed Seay
Ligonier	Rolling Rock Club	P	9	PO Box 747	N/A
Pittsburgh	Treesdale	P	27	N/A	Arnold Palmer/Ed Seay
Sheppton	Eagle rock Resort	P	36	Rt. 924 So.	Arnold Palmer/Ed Seay
York	Briarwood West GC	D	9	4775 West Market St.	Ault, Clark & Assoc.
South Carolina					
Beaufort	Secession GC	P	18	Gibbs Island	P.B. Dye
Frogmore	Dataw Island	P	9	1 Club Rd.	Arthur Hills
Hollywood	TBD	D	18	901 Fairway Dr., Edisto Beach	TBD
Loris	Hidden Lakes Plantation GC	N/A	27	Rt. 1 Box 320	Clyde B. Johnston
Myrtle Beach	River Oaks	D	9	3400 Highway501 N.	Tom Jackson
Myrtle Beach	Longwood Plantation	P	18	N/A	Gary Player
North Myrtle Beach	Long Bay Club	P	18	PO Box 790	Jack Nicklaus
Pawley's Island	Wilbrook Plantation & CC	P	18	PO Box 379	N/A
Ware Shoals	Ware Shoals GC	P	9	PO Box 155	N/A
Tennessee					
Brentwood	Governors Club	P	18	Concord at Crockett	Arnold Palmer/Ed Seay
Crab Orchard	Laurel Hills GC	P	18	Cumberland Gardens Resort	Bob Renaud
Texas					
Austin	Heritage Trail GC	M	36	City of Austin	Jay Morrish & Assoc.
Bay City	Bay City Municipal	M	18	N/A	Dave Bennett
Utah					
Draper City	Traverse mt.	P	18	Traverse Mt.	Johnny Miller
Logan	Logan Municipal GC	M	18	61 W. First North St.	Robert M. Graves
Virginia					
Abingdon	Lost Creek GC	P	18	N/A	Gary Player
Prince William	Robert T. Jones Int'l GC	D	36	Rt. 29 & 211	Robert T. Jones Sr.
Richmond	Sherman Hollow Resort	D	18	RR 1 Box 175	Charles P. Ankrom
Williamsburg	Whitakers Mill	P	18	208 C Packets Ct.	Mark McCumber & Assoc.
West Virginia					
Hedgesville	The Woods Resort	P	9	PO Box 5, Mountain Lake Rd.	Ray Johnston
Wisconsin					
Madison	Fox Run CC	P	18	PO Box 5068	Robert M. Lohmann

From Golf Course News and National Golf Foundation sources.

Garl takes on 27-hole Oak Ford course

Architect Ron Garl is designing a 27-hole course that will be a focal point of Oak Ford, a residential development that includes a 400-acre wildlife preserve in Sarasota, Fla.

"The great majority of this golf course will play through completely natural settings, land that has been set aside as a wildlife preserve," said Garl, adding that he aimed to design a challenging and enjoyable course that enhances the natural beauty of the site.

He said the course is unique for its quality of oak trees. "There is no other course in that part of the country that comes close to having the number of mature live oaks as Oak Ford," he said.

The project is being developed by Oak Ford Partnership, a group that includes Homestead Service Corp., a wholly owned subsidiary of Homestead Savings Association of Middletown, Pa.; Dr. James Fricke, the owner of Hawk Valley Golf Course in Denver, Pa.; and El Jobean Philharmonic Group of Sarasota.

McCumber handling Mississippi site

Mark McCumber & Associates has been commissioned to design an 18-hole championship golf course at Timberton, a 4,500-acre residential development in Hattiesburg, Miss. The announcement was made by J. Christopher Commins, vice president of the parent firm, McCumber Golf of Middleburg, Fla.

Timberton is being developed by Golf Course Development Corp., a subsidiary of Timberton Realty Corp. The 400-acre site chosen for the golf course has a naturally rolling terrain and good tree cover.

It will be located within the Timberton residential community and is scheduled to open in autumn 1990. PGA of America Immediate Past President James Ray Carpenter is serving as a consultant on the project.

Let us know

Each month Golf Course News — in cooperation with the American Society of Golf Course Architects — will publish news stories on new courses being built.

We are asking people who are planning or have begun construction on new courses, or rebuilding or expansion of existing ones, to write to:

Golf Course News, P.O. Box 997, Yarmouth, Maine 04096.

Please include such information as type of course, number of holes, terrain and other interesting facts.

Laosian officials eye golf possibilities

By PETER BLAIS

It wasn't so long ago a bunker was a place Laotians hid from U.S. bombs. Soon it could be the place a ball seeks shelter from the blast of a U.S. golfer.

Fred Downes recently returned from a scouting trip of the Southeast Asian nation. His mission: to seek out the best location for that country's first golf course.

Downes, the director of golf at Sugarloaf Golf Course in Carrabassett Valley, Maine, visited Laos in September at the behest of Scott Co. Ltd., a U.S. real-estate

development company in Southeast Asia. Owner Don Scott is well known for his humanitarian efforts in Southeast Asia, particularly Vietnam.

The Laotian government approached Scott last year about building resorts in the hotel room-poor country. Officials later suggested a golf course and Scott sent Downes, a construction foreman for many years for architect Robert Trent Jones Jr., to find the most cost-efficient site.

The government, which offered land as its part of a joint venture with Scott investors, designated

four potential sites. Downes immediately eliminated two—the first because the 80 rolling acres were simply too small for an 18-hole course and the second because of an ugly approach that led to an area of alkaline soil.

The two best locations are within a stone's throw of Vientiane.

Building a golf course over flooded rice patties may seem an impossible task. But Downes learned an important lesson while working for Jones, who floated over the site of Thailand's Navatane Country Club by boat before having it drained and turned into

one of the world's top courses.

"You can build a course anywhere," said Downes. "All you need is land and money."

The main problems developers will encounter in Laos have less to do with the land than with a bureaucracy that is just starting to open the nation's doors to the rest of the world after 14 years of post-Vietnam War isolation, according to Downes.

"They're the type of problems that will be resolved. The government seems committed to change. But I wasted a lot of time just waiting. I could have done in

three or four days what actually took me 11," he said.

The first developer is likely to run into supply problems, Downes predicted. Heavy equipment, piping and pumps are rare, often requiring trips into Vietnam or Thailand to procure. Land and labor (the average wage is \$11 a month) are more plentiful.

There is no set timetable for Laos' first 18. A design decision is still a year away, according to Downes. Then there is the matter of lining up investors and gaining approval from the government for the necessary foreign expertise to enter the country.

Working a plan through various environmental agencies, which can take years in the United States, should be a relative breeze in Laos, where there is no Environmental Protection Agency, Department of Environmental Protection or similar governmental watchdog.

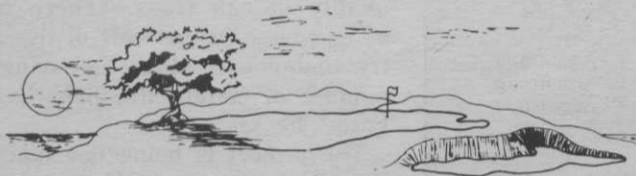
"There are no environmental laws, so we'll pretty much monitor ourselves," said Downes. "I'm sure we'll set some good standards, things they probably have never thought of."

Construction should take no more than nine months, assuming adequate supplies, especially to do the extensive ponding required to carry off rainy-season downpours. Bermudagrass 328 plant cuttings, the most commonly used turf in that area of the world, take less than a month to reach mowable height.

And who will use it? There is an expatriate population of about 200, consisting mainly of Australians, French, British, Dutch, Scandinavians, Americans, Russians and Japanese, all of whom are excited at the prospect of a golf course.

The Japanese also figure to be one of the major visitors.

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Back to the future

'You can call us protectionists,' says Ed Connor

BY MARK LESLIE

Pete Dye, Tom Fazio and their compatriots are taking golf course design into the 21st century. Ed Connor and his compatriots are "going the other way."

"We're protectionists, champions for the dead architects," Connor said. "You could call us the Dead Architects Society."

Connor, whose Golforms firm is headquartered in Casselberry, Fla., has taken a new computerized technology to several courses to help preserve the original design of their greens, bunkering and traps. If PGA and other officials who have seen the results are correct, Connor will be busier in the months ahead.

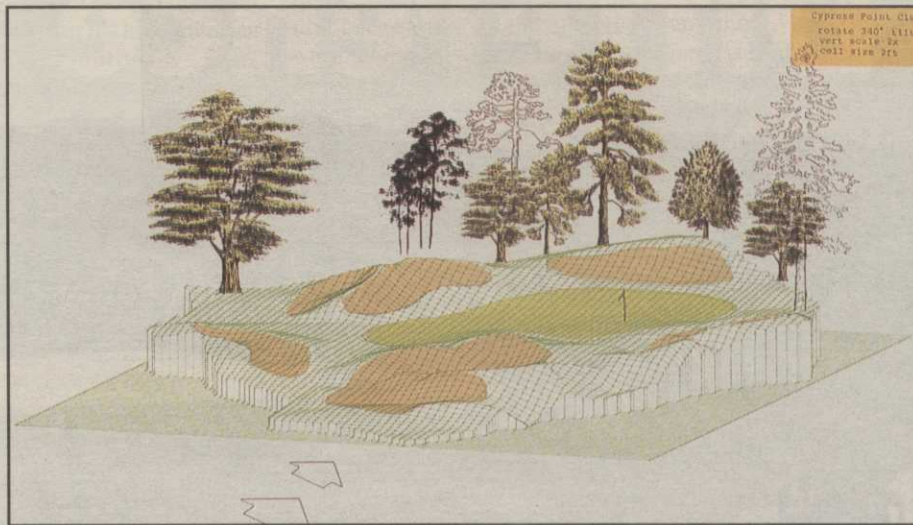
"I think it is of the utmost importance that the work of the masters (of golf course design) — who were many years before their time — is preserved," said Peter Stillwell, director of the PGA World Golf Hall of Fame in Pinehurst, N.C.

Stillwell, who paid close attention when Connor helped Pinehurst #2 management reconstruct all its greens four years ago, added: "You're preserving a masterpiece. It's like saving a Mona Lisa, preserving it and putting it in the condition it was originally meant for; the same is true of golf course architecture."

The technology — which uses a field surveying instrument called a laser theodolite to turn physical data into a gridded topographical chart of a playing surface — is an important advance for everyone, Stillwell said. "The greats in architecture today ... will someday be gone, and now their work can be preserved," he said.

Connor said, "There are just too many instances in which capricious changes were made" to courses designed by Donald Ross, A.W. Tillinghast, C.B. Macdonald, Alister Mackenzie and other famous architects of the past.

He is devoting his energies to compiling contours of the old masters' courses along the East Coast that haven't yet been changed, working at courses where officials want to



Cypress Point's 15th hole is now preserved for posterity on a computer disc.

renovate the greens or trapping, and researching original sketches and data on the more famous courses where management wants to undo changes.

A common manifestation at older courses today is putting surfaces that have developed a hard layer, making them impermeable to moisture and oxygen to the root zone, and whose grasses have been encroached upon by other types.

"In the case of Pinehurst #2, they wanted to replace the grass on the greens entirely with another strain of Pennecross bentgrass," Connor said. "They had been advised that in order to attract a major tournament they would have to go back to bentgrass greens, and they had been in bermuda for about 10 years. At the same time they wanted to improve the subsoil stratification with the USGA specifications, so we went in and made electronic images of the putting surfaces and stored them on a floppy disc and estimated the putting surfaces down to about 20 inches and made a replica of the original putting surface and subgrade. Then we put in drain tile and new layers of rock and sand to USGA specs, and replaced the exact same putting surface using data off the floppy disc and translated to our survey program."

At Sedgefield Country Club in Greensboro, N.C., management wanted to rebuild all the greens and "put back the original bunkers and traps," said General Manager Drew Boyland.

Sedgefield's greens committees over the years had made many changes to the Ross layout. So officials called in the Golforms crew and went to the

archives at the PGA Hall of Fame to change back to the original trapwork and greens, Boyland said. "The (theodolite) technology worked well for us... I think for a lot of older courses this could be a tool of the future to put back what's been torn out."

Connor said research found that a number of bunkers as well as greens had been altered at Sedgefield, destroying the Ross design.

"One of the features of the course was these marvelous depth-perception bunkers that were placed 20-30-40 yards out from the green but obscured the ground between the putting surface and the bunker and forced you to fight the tendency to underclub ... which would get you into Ross' classic chipping game, ending up in one of these little hollows around the green and trying to chip to the hood of a car. But all that was eliminated because the greens chairmen felt, at various times, 'Well, those don't come into play; let's save some money on maintenance.'

"That happened enough that all the holes were starting to look alike," he said. "The greens chairman would say, 'Let's take this bunker out because it's out of play; let's put two little sliver bunkers in here on either side of the green, because that's where bunkers are always put.' It didn't have any thought to it; it was just a way of letting people know who was in charge at the time."

Connor said finally Sedgefield "got a group in there who said, 'Wait a minute, let's stop this nonsense. Having a Ross design is a positive asset, something we want to protect and preserve.'"

An example of preservation Connor

Continued on page 18

Technology changing design

Technological advances in the field of civil engineering are changing the golf industry, as witnessed by Golforms' work in preserving the designs of famous courses along the East Coast.

Golforms President Ed Connor, who for 18 years worked on course renovations the hard way, is pioneering work on golf courses with a technology which he says has been around for about five years, being used mainly in subdivision and major highway work.

"At the time August National was done, about four years ago, the equipment was still too expensive for this type of application," Connor said. "But it has come down in price to a point where it is still not cheap but at least it is reasonable — about \$20,000."

In previous attempts at replicating putting surfaces, the traditional method was used: Crews would "measure out some type of grid on the putting surface, take shots with a level and make volumes and volumes of notes."

"The advantages of this (new computer) method are that you don't need any marks on the ground," Connor said. "You can shoot it while it's under play. All the data is done by lasers, measuring devices built into the theodolite, and all you do is tell this instrument where you're standing. Give the point you're standing on some kind value; it can be arbitrary or it can be tied to a benchmark on the course. Give it an elevation and give it a directional reference point. It takes a series of shots; you walk around the area you want to describe with a prism that selects points for data, that can be entirely at random."

"All the information is stored in a little black box called a data collector — a computer."

Sedgefield CC's #14:

Both before...



... and after Connor's reconstructive work

Saving masterpieces of the masters

Ross Society championing a call to preserve famed courses

By PETER BLAIS

They grew up playing Wampanoag Country Club in West Hartford, Conn., and came to appreciate the subtle, contoured greens requiring well-placed pitches and deft putting strokes.

As adults they traveled the country, finding other Donald Ross-designed courses as much, or even more to their liking. They also found, much to their dismay, that the architect's classical work had often been tampered with.

"Many of Ross' courses have been changed over the years and bear no resemblance to what was there originally. There is a strong movement to get back to the original lines of golf courses which were playable for many different levels of player. Restoring and preserving them to stay in line with Ross-ian ideas are among the things we are trying to do," said Barry Palm, executive vice president/corporate secretary of the Donald Ross Society.

Hartford natives Palm, Steve Edwards, Michael Fay and Bruce Taylor founded the organization in January. It has grown to 125 members and includes such notables as Ben Crenshaw and CBS commentator Ben Wright.

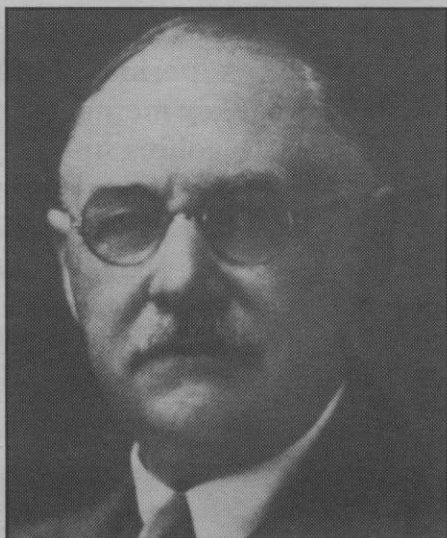
Prior to the Depression, Ross was directly involved in the construction of most of the courses bearing his name. From 1930 on, his crew, which numbered around 3,000, did most of the work while he oversaw projects from Pinehurst.

Since preservation was not a major issue in the 1930s and 1940s, many of the original blueprints weren't preserved, according to Palm. However, the society can help put course officials in touch with the Tufts Family archives at Pinehurst's Given Library, which still contain 100 or so original designs of Ross' earlier work. The Scotland-born architect considered those his best.

The society is also establishing a scholarship fund financed by membership contributions and a percentage of the entrance fee from next May's three-day society tournament at Pinehurst. More than \$8,000 has already been raised, with Plainfield (N.J.) Country Club, a Ross course, kicking in \$1,000.

"The money will go to a worthy student who embraces the classical school of thought involving golf course architecture. It will be based on financial need and love of the game," said Palm. (Golf course design is not a course of study at any college. Most architects come from landscaping backgrounds.)

Ross first became involved with the sport in his native Donroch. The son of a stonemason, he was an apprentice carpenter before Donroch Golf Club secretary John Sutherland, who gave him his early lessons about turf and



Donald Ross

course design, urged Ross to go to St. Andrews. There he learned club-making from David Forgan and studied golf under "Old Tom" Morris.

In 1898, at age 26, Ross emigrated to Boston where he became pro/greenskeeper at Oakley Country Club. He met members of the wealthy Tufts family of Medford, Mass., who made him the winter golf professional at a resort they were developing in Pinehurst.

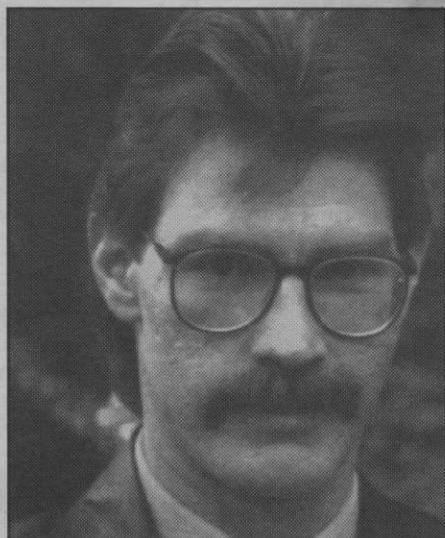
His design and refining of Pinehurst complex courses made him one of the nation's most sought-after architects from 1912 until his death in 1948 at age 72.

Along the way he designed such well-known courses as Seminole GC in North Palm Beach, Fla.; Oak Hill CC in Rochester N.Y.; and Salem CC in Peabody, Mass.

Ross is credited with developing between 400 and 600 courses, although the exact number is unknown.

"We've verified 390 to this point," said Palm.

Many of those courses are private. One of the society's most successful projects has been setting up a network that lets members at various Ross courses help one another get



Ross fan Barry Palm

onto their home turf.

Approximately 50 Ross courses have been the sites of United States championship events.

The society is putting together a book concerning the tournaments held at those facilities.

While Ross courses have proved a challenge to the nation's best golfers, one of their major assets have always been their playability for all skill levels, according to Palm.

"One of Ross' favorite sayings was that 'golf should be a pleasure, not a penance,'" said Palm, a six-handicapper.

"On a Ross par 4, I might hit a driver and a 3-iron where a 20-handicapper would hit a driver and 3-wood. But both of us could still be on the green or in good position to pitch up and get a par. Many courses today are penal for the high-handicapper. His courses are enjoyable for everyone."

The other major characteristic of Ross courses is the greens.

"They're very subtle and require a deft putting technique. He always located his greens first and then worked from there backwards along the fairways. In many cases the greens are crowned, like an inverted saucer. They

require a knowledge of where to hit your shot or it might just roll off because of the pitch," said Palm.

Palm's knowledge comes from playing approximately 50 Ross courses. Pinehurst No. 2, followed closely by Salem Country Club, are his favorites.

"Some people want to play the top 100-ranked courses in the country. My goal is to play all the Donald Ross courses before I die," said Palm.

For more information on the Donald Ross Society write 7 Fairlee Road, West Hartford, Conn. 06107; or call 203-561-2431.

The Value of Strategy



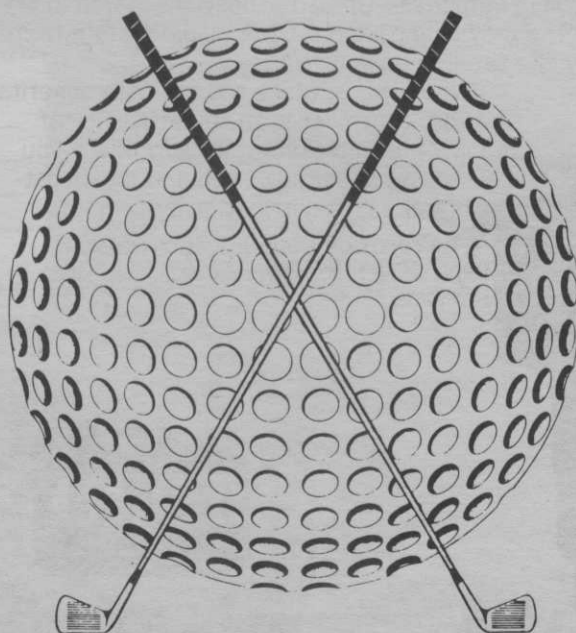
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Travis Point members OK major renovation

Members of Travis Pointe Country Club in Ann Arbor, Mich., have voted to spend \$1.4 million to renovate the clubhouse, funding the project entirely through assessments of the 800 members.

The member-owned club expects "significant savings" from the remodeling, according to board president George Lind-

strom. The work will consolidate all food-service operations on the main floor of the club, refurbish and redecorate the clubhouse, create new social and informal dining areas and reorganize lower-level spaces such as the tennis and golf pro shops.

The renovation will be done over the first four months of 1990.

Shrine Garden

Continued from page 1

building, replacing a moat that encircled the area. A plaque dedicates the gardens to golf course superintendents around the world.

The project began in 1988, was completed in August and was publicly dedicated Nov. 2.

The project is an attempt to give superintendents more of the recognition they deserve, said Mike Hoffman, director of marketing for the Toro commercial products division.

'Golf course superintendents are key members of the golfing industry...'
— Mike Hoffman

"Golf course superintendents are key members of the golfing industry who have made major contributions to the game," Hoffman said. "Through the Shrine Gardens, we hope they receive the

recognition in this special Hall of Fame that they have earned through their hard work, expertise, and commitment to the game."

The majority of the superintendents in the United States, or 9,000, are members of the Golf Course Superintendents Association of America.

The Professional Golfers' Association of America, the world's largest sports organization, consists of more than 16,000 members and apprentices and is represented at more than half of the nation's 13,400 courses.



Palmetto Dunes CC, Hilton Head, SC

Connor

Continued from page 16

foresees are the special trademarks of the various masters — just like Ross' bunkering. The industry should save those trademarks, he said.

"Part of the reason Seminole and Pinehurst dropped out of the top 10 courses was erosion of their architectural integrity over the years," Connor said.

"Golf courses are living, changing things .. always being changed by top-dressing, weather, what-have-you. Having the courses permanently recorded on a computer disc is a very valuable tool because those measurements never change."

Connor also bemoaned his feeling that "so many dead architects are getting compromised on a lot of these courses (that are being renovated)."

He hopes officials at old courses decide to retain the features that are trademarks of their designers rather than hire a present-day architect to add his or her touch to the courses.

"What we think we've brought to the industry with this type of technology is the chance for an old club to make alterations," Connor said. "Say you have a Ross bunker that's beautifully shaped and proportioned and nicely contoured and you're very happy with it except it's in the wrong location.

The new clubs and shafts and balls have made the location of the bunker complex 200 yards off the tee completely out of play. All the new guys are driving the ball right past that bunker, so you want to move it down 30 or 40 yards but save its basic shape and configuration.

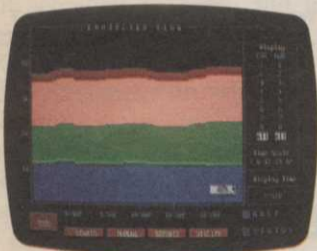
"This is a tool you can use to do that. Just make a computer image of it and you can go down the fairway and rebuild it.

"It takes the subjectivity out of the process of restoration."

The PGA's Stillwell added, "For somebody to take a bulldozer, tear up a green and replace it the way it used to be, that's a magical feat.

"It is a way of the future."

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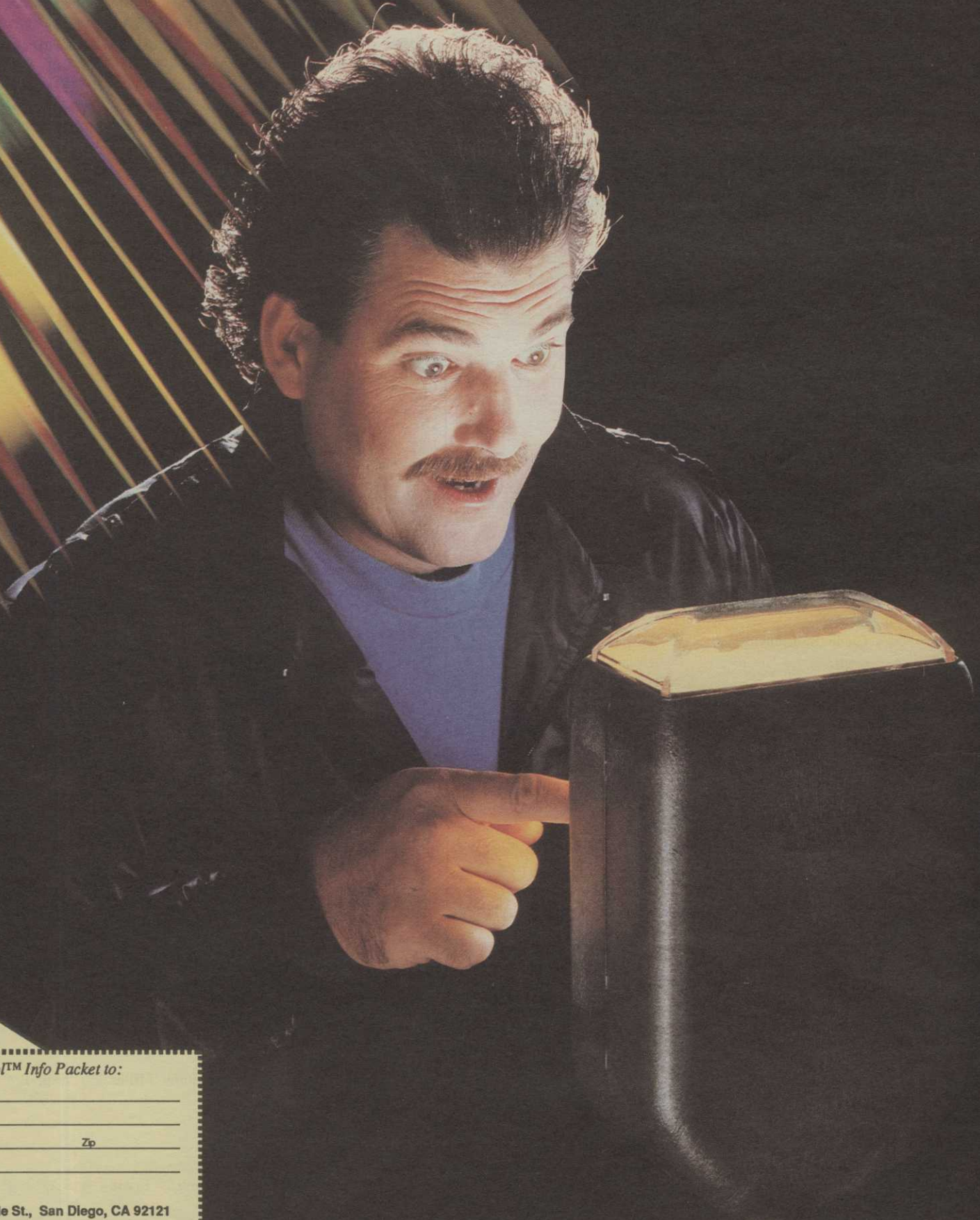
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GOLF COURSE NEWS

Changing worries, laws

Red tape hampers architects but new development plans

Below is a chart listing information from architects who responded to our survey. A list of others is on page 22. Abbreviations here include: Ag (agronomy); GCM (golf course management); Eng (engineering) LA (landscape architecture); LP (land planning); MS (master's degree); OH (ornamental horticulture); Park A (parks administration); Pro (professional golfer); T (turf management); Aust (Australia); Car (Caribbean); East (Eastern U.S.); Eur (Europe); MA (Mid-Atlantic); NA (North America); NE (North-east U.S.); Pac (Pacific); SE (Southeast U.S.). Course numbers are 1) total number designed; 2) courses that opened in 1989.

If interest rates remain "reasonable" and golfers continue to flock to courses in record numbers, officers of the American Society of Golf Course Architects expect new course development to accelerate rather than plateau.

ASGCA President Robert Trent Jones Jr. has projected that 5,000 new courses will be needed by the year 2000, but he now believes that demand could even be greater in the 1990s.

"All segments of the golf business — juniors, young adults, middle-age males, women and seniors — are growing dramatically, and we must

build the facilities to satisfy these eager golfers," Jones said.

"Obviously, we need more public courses and we are gradually seeing more being built," he said. "These courses, however, will be much more challenging than those public-fee courses of a generation ago. In fact, some of the new public courses are among the best designs coming on line."

The California-based architect also noted that today's golf course architect has learned to work with various governmental agencies to satisfy all the environmental concerns associated with wetlands and

endangered species. He said many courses are being built successfully in environmentally sensitive areas with excellent results.

Focus on 'playability'

ASGCA Vice President Dan Maples, who works out of Pinehurst, N.C., and designs many courses for resorts and developers in tourist destinations, believes architects designing for this ever-growing market will be concentrating on "enjoyable, but not boring courses."

"We work on making courses playable so that the golfers enjoy their round," he said. "Aesthetics

Company	Architect	Education	Region	Courses Total '89	Company	Architect	Education	Region	Courses Total '89
Arthur Davis, Inc. 455 Church St. Gainesville, GA 30501 404-287-1906	Arthur Davis	LA	US, Asia, Eur	100+ 2	Gary Roger Baird, Inc. 2505 Hillsboro Rd., Ste 301 Nashville, TN 37212 615-298-3537	Gary R. Baird	LA	Global	100+ 8
Arthur Hills & Assoc. 7351 W. Bancroft St. Toledo, OH 43615 419-841-8553	Arthur Hills Mike Dasher	LA, Agric CE	US SE	70+ 10 15 5	Gene Bates & Assoc. 1150 U.S. Highway One, Ste 304 Jupiter, Fla. 33477 407-744-0350	Gene Bates	Exp.	Global	11 5
Ault, Clark & Assoc. 2311 University Blvd. W. Wheaton, MD 20902 301-942-0716	Brian Ault Thomas E. Clark William E. Love	CE LA LA	Global Global Global	50 4 50 4 30 3	Golfplan-Fream Design Grp. P.O. Box 1823 Santa Rosa, CA 95402 707-526-7190	Ronald Fream Fred Bliss	OH LA	Global	100+ 6
Casper, Nash & Assoc. 8611 N. Black Canyon #116 Phoenix, AZ 85021 602-864-0444	Greg Nash	LA	SE	38 1	Golfscapes 2225 E. Randolph Mill Rd., Ste 218 Arlington, TX 76011 817-640-7275	Jeffrey Brauer	LA	US	20 3
Charles Ankrom P.O. Box 170 Stuart, FL 34995 407-283-1440	Charles Ankrom	T, Art	East	60+ 4	Gordon G. Lewis 2022 Constitution Circle Fort Myers, FL 33908 813-267-3322	Gordon G. Lewis	LA	SE	20+ 3
Clyde B. Johnston P.O. Box 6242 Hilton Head Island, SC 29938 803-842-3367	Clyde B. Johnston	LA	SE	36 4.5	Graham/Panks International 7819 E. Greenway Rd., Ste 1 Scottsdale, AZ 85260 602-483-9500	Gary Panks	Exp	N.Am, Asia	20+ 1
Cornish & Silva, Inc. Fiddler's Green Amherst, MA 01002 413-253-3913	Geoffrey Cornish Brian Silva	MS, Exp LA	US, Eur, Car	230 10 22	Hassenplug Assoc., Inc. 1300 Freeport Road Pittsburgh, PA 15238 412-781-6994	X.G. Hassenplug Edward Beidel Jr	CE, TM, LP LA, CE	East NE, M-A	60 1 14 3
Denis Griffiths & Assoc. P.O. Box 327 Braselton, GA 30517 404-867-4480	Denis Griffiths	LA	SE	50+ 4	Hurdzan Design Group 2280 W. Henderson Rd. Columbus, OH 43220 614-457-9955	Michael Hurdzan Craid Schreiner	GCM, LA, TM LA, TM	Global Midwest	150 8 11 1
Earl Stone & Assoc. P.O. Box 61225 Mobile, AL 36616 205-344-1921	Earl Stone	Eng	SE	38 1	Jack Nicklaus Golf Services 11760 U.S. Highway One North Palm Beach, FL 33408 407-626-3900	Jack W. Nicklaus	Exp, Pro	Global	63 9
Fairway Architects, Inc. RR3, Box 209 Miltona, MN 56354 218-943-1391	Joel Goldstrand	Exp, Pro	N'Central	63 3	John Watson Golf Design Ltd. P.O. Box 481 Lachute, Quebec J8H 3Y1 514-562-3414	John Watson	Exp	Canada	50+ 5
Fairway Design Int'l 8519 Woodall Ct Tampa, FA 33615 813-425-2849	Steven Smyers	BA, Exp	US, Austr.	60 4	Johnny Miller Design Ltd. 2049 Century Park East Suite 1200 Los Angeles, CA 90067 213-553-0330	Johnny Miller	Exp, Pro	Global	4 2
Fazio Golf Course Designers 17755 S.E. Federal Highway Jupiter, FL 33458 407-746-4539	Thomas Fazio	Exp	US	110 3	Lindsay Ervin & Assoc. 16 Village Green, Ste 202 Crofton, MD 21114 301-793-0310	Lindsay Erwin	LA	Global	30 5
Ferdinand Garbin R.D. 2, Box 186 Export, PA 15632 412-327-4704	Ferdinand Garbin	LA, Ag	NE	100+ 2	Lohmann Golf Designs, Inc. 800 McHenry Ave., Ste H Crystal Lake, IL 60014 815-455-0445	Robert Lohmann	LA	Cent. US	12 2
Finger Dye Spann, Inc. 1001 S. Dairy Ashford Suite 213 Houston, TX 77077 713-496-4300	Kenneth Dye Jr.	LA	Americas	25 3	McCumber Golf P.O. Box 490 Middleburg, FL 32068 904-282-5511	Michael Beebe	LA	US, Far East	10 1
Flatt Golf Services P.O. Box 7497 Overland Park, KS 66207 913-381-9537	Larry W. Flatt	Park Ad	US	3 0	Nelson and Wright 680 Ala Moana Blvd. #200 Honolulu, HI 96813 808-521-5361	Robin Nelson	LA	Pac, Eur	N/A 4

plague architects and builders

of all types abounding worldwide...

are important to developers around the world."

Maples pointed out that society members are now working throughout the world and most clients want a "U.S. championship course, which in their mind means challenging, not intimidating, and fun to play."

More ASGCA members are working internationally, especially in Europe, as the U.S. golf boom continues to roll out in other areas of the world.

More variety in nines

Tom Clark of Wheaton, Md., ASGCA secretary, explains that many developers are asking for 27 or 36

holes initially, with different degrees of difficulty on each nine. With this layout, beginners can build up their confidence on the easiest nine and progress to the others.

Clark said this also helps speed up play on the tougher nines.

Clark thinks many courses will soon be seriously considering a policy that requires new players to complete certain proficiency tests, including on golf etiquette. If multiple courses are available, only those with lower handicaps, for instance, would be allowed to play the more difficult courses.

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... while builders decry tougher financing and environmental laws

BYGARYBURCHFIELD

While golf course construction is indeed a boom cycle, golf course builders warn that financing, environmental requirements and design restrictions are much tougher than in the past.

"A lot of golf courses are being built today, but probably 80 to 90 percent of them are being built in connection with some kind of real-estate development. It's sometimes hard to tell if they're being built to meet the needs of golfers or the needs of the developers," said Don Rossi, executive director of the Golf Course Builders of America, headquartered in Palm Beach Gardens, Fla. "But, there are a lot of cities that have new courses on the drawing boards, so it looks like the trend will continue."

Bill Kubley, president and founder of Landscapes Unlimited of Lincoln, Neb., said, "We have more work today than I've ever seen. I think the outlook for the next 10 years is excellent. In fact, there are a lot of new companies coming into the course construction business because of the boom. I look for some of them to get into financial trouble because they're trying to grow too fast."

"The statistics certainly indicate a boom period," said Perry Dye of Dye Designs, Inc., of Denver, Colo., and president of the Golf Course Builders group.

"As our population ages, more people are playing more golf, especially in the Sunbelt areas. We find this true not only in the United States but internationally as well," added Dye, who has been building a lot of courses in Japan.

Paul Eldredge, president of the Midwest Division of Wadsworth Golf Construction Co. in Plainfield, Ill., agreed a boom is on. "I see it continuing for the next couple years anyway," he said, "but I'm not sure it's going to last 10 to 12 years" as many are predicting it will.

"After being somewhat stagnant for several years, the Midwest has become very active now. Where most of the work was in the southern areas a few years ago, the boom now seems to have moved back north," Eldredge said.

Dave Canavan, a former president of the builders association and president of Moore Golf, Inc., of Culpeper, Va., said, "The construction of new courses has been 'hyped' as a boom market, but a lot of it is being done in conjunction with real-estate development. A golf course can satisfy the requirement for 'green space' to get permits for cluster zoning to build townhouses, etc.

"In some areas, like New Jersey, development is so expensive that a golf course is added to help generate income to pay development costs like wastewater management.

Today's problems

Environmental concerns create most of the problems today, according to Eldredge.

"But, financing is tougher now, too. With the savings and loan disaster,

banks have gotten more restrictive on their loans. The last couple of jobs we've done, the owners had to jump through hoops to get their loans. And we have to provide back-up for our billing, too.

"We can usually handle the field problems OK, but it's the problems we don't have control over that drive us crazy."

Course construction costs have gone up "300 to 400 percent in the last 10 years," according to Canavan. The environmental restrictions are tougher, he said, plus things like insurance have risen as much as 400 percent.

"Now, you also have to be concerned about hazardous waste," Canavan said. "If you're building a course on an old landfill and uncover something like asbestos, the responsibility for taking care of it falls on the contractor.

"Planning today takes three to five years, to get wetlands clearances, etc. Twenty years ago, construction would usually be underway 30 days after the final plans were approved. The last course we built in Florida required 37 permits from various agencies."

"One big problem today," said Dye, "is that good, premium land for courses just isn't available. Golf course developers had a good choice of quality land 10 to 20 years ago. Today, we end up building golf courses on 'unusable land' around marshes, flood plains, etc. and that means we've had to increase our understanding of environmental issues tenfold. And, it's not only true in this country, but many areas overseas, especially in Europe."

Kubley said a new course Landscapes Unlimited is building near Baltimore, Md., is "going to cost us \$400,000 just for environmental protection. We have installed more than 8 miles of silt fences for a new course we're building for the city of Reno, Nev., too. Plus, we have to keep three water trucks going all the time during construction just for dust control.

"In the past, you could usually open-burn cleared brush. Now, it's either pit burning, or you have to chip it and haul it away. Clearing costs alone can range from \$400 to \$8,000 per acre today, depending on state requirements."

More complicated

Dye contended that construction hasn't changed much in the last 10 years, "but there is a much longer-term involvement for both the builder and architect, from planning clear through after-construction maintenance practices.

"Today, there is more planning required and the whole process is much more 'structured.' The builder and designer have to demonstrate what the end result will be, and that the environmental restrictions have been adhered to."

Rossi said the actual construction is no more complicated "because technology has increased so much.

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Company	Architect	Education	Region	Courses Total '89
Palmer Course Design Co. P.O. Box 1639 Ponte Vedra Beach, FL 32082 904-285-3960	Arnold Palmer	Exp, Pro	Global	150 14
	Ed Seay	LA	Global	200 14
	Harrison Minchew	LA	Global	35 6
	Erik Todd Larsen	LA	US, Asia, Eur	20 8
Pete Dye Inc. 3247 Polo Dr. Delray Beach, FL 33483 407-276-9728	Pete Dye	Exp	US	65-70 1
	Alice Dye	Exp	US	w/Pete
Philip Wogan 17 Walker Road Topsfield, MA 01983 508-887-3672	Philip Wogan	Bio, For	NE	43 3
ProGolf Designs 1157 N. Beverly Arlington Heights, IL 60004 708-506-0444	Bruce Borland	LA	Midwest	10 3
R.T. Jones II International 705 Forest Ave. Palo Alto, Calif. 94301 415-326-3833	R. T. Jones Jr.	N/A	Global	N/A N/A
	Kyle D. Phillips	LA	West, NE, Eur	26 4
Richard Bigler Assoc. P.O. Box 308 Del Rey, Calif. 93616 209-888-2882	Richard A. Bigler	LA	West, Pac.	N/AN/A
Richard M. Phelps Ltd. P.O. Box 3295 Evergreen, CO 80439 303-670-0478	Richard Phelps	LA	Americas, Eur	60 3
Robert C. Walker, Inc. P.O. Box 1066 Atlantic Beach, FL 32233 904-241-3500	Robert Walker	Eng, LP	US, Asia	95 2
Robert Muir Graves P.O. Box 2156 Walnut Creek, CA 94595 415-939-6300	Robert Graves	LA	West, Eur, Asia	370 5
Scott Miller Design Inc. 7505 E. Main St., Ste 400 Scottsdale, AZ 85254 602-946-2586	Scott Miller	LA	Global	35 3
Stephen Kay P.O. Box 81 Purchase, NY 10577 914-699-4437	Stephen Kay	LA, TM	Global	74 2
William Amick P.O. Box 1984 Daytona Beach, FL 32015 904-767-1449	William Amick	T	East, Eur.	60+N/A
William J. Spear & Assoc. 16 N. First Ave. St. Charles, IL 60174 312-584-8200	William J. Spear	LA	Midwest	75 4
Williams, Gill & Assoc. 421 N. Main St. River Falls, WI 54022 715-425-9511	Garrett Gill	LA (MS)	US	45 4
Wyss Assoc., Inc. 522 7th St., Ste 214 Rapid City, SD 57701	Patrick H. Wyss	LA	US	25 3

Architects

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The majority of new courses in recent years have been built in conjunction with real-estate developments, and Clark said that trend will continue. In most cases the courses are open to the public until the development is filled, at which time it becomes a private club.

"We see this same pattern becoming more popular with municipalities in the next decade," Clark added. "The typical scenario is for the developer to give the necessary land for the golf course to the municipality in return for the right to build housing units around the course."

Television has impact

ASGCA Treasurer Arthur Hills, who is based in Toledo, Ohio, but works throughout the country, said, "People want the championship-type courses they see on television, but they want fair and realistic courses without gimmicks."

"The bottom line is that there is a gradual return to a more traditional approach to design, with realistic placement of bunkers and greens that allow the player a fair putt without worrying about severe breaks or multiple levels."

Hills believes golfers appreciate that courses serve as "green belts" in

communities that need open space and oxygen. He added that architects have worked successfully in environmentally sensitive areas, often providing additional wetland areas when wetlands are needed for the strategic playability of the golf course.

Design for site

Jones summed it up by stating that the golf courses of the future will "fit with the lay of the land. Designers are conscious of their responsibility to the community and players to build a course that 'fits.' There's no doubt that owners and the golfers who play

their courses want better courses than ever before," he said.

"We know that golfers will pay a fair price to play a well-designed course. Courses built by 'amateur architects' and that are poorly maintained will not be successful."

With the world's concern about water conservation, many new courses will have a more natural look, Jones agreed, but he suggested that this also fits in with designing with the lay of the land.

"U.S. design has been accepted internationally," Jones said, "but that does not mean that there is a certain

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A list of golf course architects not found in the chart on pages 20 and 21

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Builders

Continued from page 21

There is better machinery, the people are more skilled and, with computer-aided design, a lot of the work is done before the builder moves his machinery onto the site.

"But, all that costs a lot of money, too."

"Course design has changed a lot in the last 15 years," said Kubly. "There is more emphasis on fancy contouring, so it takes more of a specialist to build it the way the architect envisioned it. You can't just send in a bulldozer operator any more.

"It's harder to find good on-site labor nowadays, too. And, bonding requirements are tougher. Because of the high cost, some owners today don't require bonds. But, we prefer to work with a bond. It means better control on the financing."

Eldredge said today's construction standards are more complex because of the more dynamic design of many courses.

'... builders go through hell today.'
— Don Rossi

"Probably 70 percent of the courses we build today require very detailed shaping," he said. "Plus, owners want more today, too, like continuous cart paths, more sodding, and double-row or triple-row irrigation systems."

"With the environmental concerns and the complicated financing like bond issues, etc., builders go through hell today," Rossi lamented.

But Dye said put it in what the industry hopes will be the perspective for the 1990s: "It's rewarding being in a business that is recognized as a growth industry."

Architects

Continued from page 22

style. Architects will continue to evaluate each site and produce a design that accentuates its best features and

provides a layout that will be environmentally sensitive and challenging to the golfers who will be playing it for generations to come."

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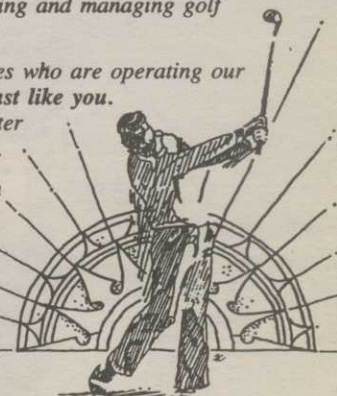
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The 'name' sells the course for many

Pros, ex-pros cashing in on celebrity

BY MARK LESLIE

The market. Image. Personality. Expertise. Money. The bottom line is most often money for golf course developers pondering who they will hire to design their course.

And nowadays the highest fees are being commanded by famous professional golfers who earned their reputations with clubs, rather than drafting pens, in hand.

One million dollars will buy you Jack Nicklaus' services. A million will get you Arnold Palmer. A \$500,000 check will bring in Gary Player. A mere \$200,000 nabs Lee Trevino.

One company, Arvan Development Co. in Lombard, Ill., indeed hired Palmer, Player and Trevino to design three courses in one project in Lake Geneva, Wis.

Is this high cost worth it?

"Of course it is, or they wouldn't pay it," said Ed Seay, a former president of the American Society of Golf Course Architects who has worked alongside Palmer designing courses since 1971.

"Yes," agreed Rick Robbins, vice president of Nicklaus-Sierra Development Corp. in Tampa, Fla. "Using 'name' architects is important," more than paying back the extra investment through higher land prices.

Robbins qualified his statement, saying, "It (hiring famous pros) is not for all developments. It depends on the market you're targeting. You don't always need a big name. If the market can't afford it you can't justify it."

"It (high fee) is all relative," said Harry Knight, vice president and general manager of Kingsmill on the James in Williamsburg, Va., which has hired a resident, pro Curtis Strange, to join forces with architect Tom Clark in designing a third course at the high-end development.

Hundreds of developers must feel they have that high-end market because hundreds are hiring pros

from Palmer to Ben Crenshaw to Tom Watson.

Jim Applegate, an ex-pro himself and president of Gary Player Design Co. in Palm Beach Gardens, Fla., said his firm has 35 projects underway around the world, and "the only reason we don't have more is we've limited ourselves to six or seven at one time being under construction."

Palmer, with a bigger staff, has 66 courses in various stages of planning or construction.

Nicklaus has been involved in the design of more than 100 courses over the last 20 years.

Tom Weiskopf has been busy since setting aside his professional play and joining forces with architect Jay Moorish.

Seve Ballesteros and Bernhard Langer are signing contracts to put their names on courses in Europe.

Lesser-known pros as well are getting into the business.

None have the education in landscape architecture or agronomy that is normal for golf course architects. Rather, they are selling their knowledge of the game — and their names.

"It's a heavy 'celebrity' business," says Seay. "Naturally the play of the 'name' is a marketing and advertising decision... If they have Arnold Palmer involved in their golf course people know it's going to be pretty spiffy, pretty nice..."

"For the immediate, past and for a long time in the future, Arnold's the king. They know what he's meant to golf... That feeling of caring and involvement gives a project credibility."

"You add an unbelievable amount of credibility," agrees Robbins, adding that with the Nicklaus name his firm has "been able to sell faster and with much larger prices than equivalent developments in the same areas."

"One of the major things in real-estate or resort development is 'value-added,'" Robbins said. "What added value do you get for using a name architect? Having Jack Nicklaus be a part of our developments has meant a lot in



How much marketing is too much? Arnold Palmer reportedly was taken aback by the crossed sabres at his press conference announcing Lake Forest Country Club in Louisville, Ky., but he walked his walk.

housing prices and lot prices and in gaining respect within the community..."

Arvan Development Co. Vice President William Bissett, who is overseeing the Wisconsin project, explained the choice of three pros:

"A couple of things that we considered to be important were at play here. On the one hand we wanted a golf course architect that would give us a playable course that could handle a 20-handicapper one day and a tournament the next. We ... thought that after interviewing a number of architects these three represent the best mix for us. They were willing to work with us, to do what we wanted to do; they believe in playability of courses; and they were the best mix in terms of competitive spirit — we could pit the three of them against one another and tell them to build the best golf courses they could.

"That's one end of the spectrum. The other end of the spectrum is that this is a residential, recreational community and we felt that it was important to us to have name recognition for golf course architects, and we were also trying to market a number of residential lots and we thought those names could do us more good in that realm than a Pete Dye or a Jones or those guys who weren't professional players and didn't have the name recognition to the non-golfer who wanted to buy a lot in a golf course community."

Too much to pay

Yet the number of developers hiring pros is far fewer than those who are signing architects.

"I have a problem with paying that much money," said Kin Clifton, project manager for the real-estate development that will feature Cape Charles Golf and County Club in Virginia.

Clifton and the Houston, Texas, firm of Brown and Root, which is developing the project, chose Ault, Clark & Associates of Wheaton, Md. And Clifton has no regrets.

He said, "Conventional wisdom might say to hire a (famous pro).

We may be losing some degree of marque value, but we've more than made up for it in quality, service, responsiveness, and expertise in the development process. There are no ego problems whatsoever. It's been a wonderful relationship."

In the Kingsmill on the James case, Strange lives in the community, adding a different angle to his participation in the new course.

"He's well respected here and very much enjoyed by our membership and residents," said Knight. "Curtis adds a dimension that might not be added by going with another golfer. He lends the value of his name and it also makes him a bigger part of our development."

Expertise

Arvan's Bissett commented on the crucial issue of expertise that has been questioned by people who oppose the idea of pros designing courses.

"These three people we hired had the right support groups," he said. "We liked their support groups. We liked their attitude. It was the best mix for us, not strictly in terms of building playable golf courses but also in terms of the support that we wanted from them."

Player Design's Applegate said, "There's no question that in today's highly technical system you need to know how to deal with the environmental and land-use laws, the sophisticated irrigation systems, and you have to have trained experts. That's what we provide Gary."

"When you get into a business without a strong support team you won't succeed. A number of 'name' players are designing courses. I'd go to their offices and look around and see if they're staying in step with the engineering involved and with the law."

Seay of Palmer Course Design agreed, saying, "Architecture involves 20 or 30 different disciplines... There have been lots of pros who tried this business and one of the reasons they failed was

they didn't hire experts in the business."

He said Palmer is involved "in every aspect of the business... His library is the same as mine, with books on layout work, greens, everything he needs to know about the business."

Seay added, "When people hire Arnold Palmer Design they know they're going to get treated exceptionally well. We don't have a B team. We've got an A team and that's all we've got."

At what point involvement?

The norm with pros' design firms is that the "support team" does the preliminary work — from examining the site to negotiating the contract, and perhaps even designing the routing plan — before bringing the pro into the project.

For instance, Player's initial visit to the site is at the point the course is announced to get the optimum marketing value form his participation.

He'll next visit the site when the builder starts moving dirt; then 60 to 90 days later, during shaping to "finetune" it.

"A process that goes unseen and unsaid is the countless hours Gary spends with the design staff ... so that we are extensions of his philosophy," said Applegate.

Player will actually play each hole while it is being shaped, hitting flubber-type shots so that it can be designed with the ordinary golfer as well as the expert in mind.

As Seay said, the developer should keep several things in mind in deciding which architect to hire. "People are going to be living with us for two years. We're going to go beyond the client relationship. We'll become your friend, You'll see more of us than you probably care to.

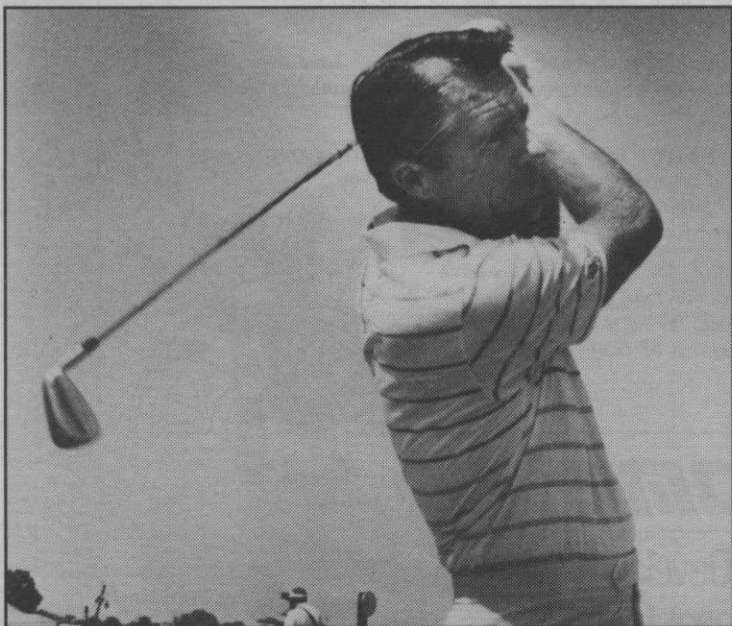
"We're going to spend a great deal of your money. It involves a tremendous amount of trust. You're looking at, Who am I going to entrust this \$10 million to for the next three years? And the product they give me has to make it a pretty solid investment."

The long haul

Speaking of pro golfers and their commitment, or lack of commitment to the professionalism in design, Seay said, "They're going to get more interested or they're going to get out because that's the nature of this beast.

"Every day you learn a little bit more, and a little bit more, and that compounds energy and excitement, or it compounds frustration and a pain in the neck."

Robbins of Nicklaus/Sierra summed up his feelings on the question of professionalism in the golf course architecture business: "A lot of guys are calling themselves golf course architects who don't deserve to be in the business. I think that's the same with guys who aren't pros as well as those who are."



For years, Gary Player won big money playing on courses. Now he's earning big money designing them.

The pros:

Are they a good choice to design?
There's disagreement in the industry

Hurdzan says: 'No'

BY DR. MICHAEL HURDZAN

It would be foolish to suggest that the world's best golfers should not be involved in golf course design. First of all, they obviously know a lot about the game, having played it on the best courses around the world.

Secondly, golf course design is highly subjective, a combination of art and science, and anyone with a basic understanding of the game is likely to have a few ideas that can make any course design more interesting or more fun to play.

Having participated in about 150 golf course design projects in the United States and elsewhere, I learned long ago that no one has all the answers. Thus, as golf course architects, we always remain open to suggestions from our clients, and from others. Golf course development has to be a team process.

However, I do object to celebrity golfers who almost magically take on the label "golf course architect" when they clearly lack the training, experience and technical competence implied by that designation.

Playing excellent golf, even winning major championships, no more qualifies a person as a golf course "architect" than being a champion race car driver qualifies a person to be a highway engineer. The driver may have a good feel for surface conditions, but probably doesn't have a complete understanding of the more complex "big picture" beneath the surface — "for using" and "producing" are two different things.

I would expect someone who intends to take credit for designing a golf course would, at a minimum, be able to handle the following:

- Analyze a site from a contour map and aerial photos, create a base map, and lay out a golf course on that map, insuring that the course will have adequate water, drain properly, be compatible with the environment, and meet the needs of the client with respect to land use, playing characteristics, and budget.

- Formulate detailed construction plans and specifications to insure that the course can be built as designed, and within budget.

- Supervise construction on site, from selecting contractors and reviewing bids, through effective oversight of actual activity.

- Provide agronomic advice and consultation through the establishment and maturation of the course, to insure a successful opening.

All of the architects I know, and I know most of them, can handle all of these tasks and a great deal more. They all have had some formal training in design, served an apprenticeship, and obtained hands-on experience in course construction before they presumed to hang out a shingle as a golf course "architect." Some of them also happen to be excellent golfers, but it is not their playing skills, in my opinion, that qualifies them to design golf courses.



Dr. Michael Hurdzan

Wait a minute, you might ask, if all that is true, how do all these pro golfer "signature" courses come into existence? And why are so many of them fine courses?

The answer, in many cases, lies somewhere between plagiarism and ghost writing. Some celebrity golfers (now I hear we even have a couple of television announcers involved) design courses in the same way that Hollywood stars write books. They affiliate themselves with someone with the technical competence and experience to see that the job gets done right. The "star" makes a contribution, to be sure, but the real architect usually stays behind the scenes.

Another method common to celebrity designed courses is to bring in a competent builder, a company that is so good it will not let the so-called architect make any serious mistakes. In effect, the contractor actually does the technical design.

A third method, one that is all too common, is to make up for lack of technical design skill with a fat budget. With plenty of money, mistakes can be corrected and faulty design can be fixed by trial and error and building golf features over and over until they turn out right. Given enough money, anyone can create a fine golf course.

Now, to make sure the record is straight, I want to say that there are a few world-class golfers who have earned the right to call themselves golf course architects. They have studied, committed the time and effort, have the experience and know what they are doing. But I emphasize the words "a few."

In most cases, when you see a pro golfer's name on a design, you might as well take it for what it is, a marketing strategy. Nothing more and nothing less. The course is probably not any better or any worse than it would be if the pro golfer had not been involved.

In closing, I would offer a quote from one of history's greatest golfers, who collaborated with one of history's greatest golf course architects, Dr. Alister MacKenzie, on the Augusta National Golf Club:

"I think MacKenzie and I manage to work as a completely sympathetic team. Of course, there was never any question that he was the architect and I his advisor and consultant. No man learns to design a golf course simply by playing golf, no matter how well."

— Robert Trent Jones Sr.

COMMENT



Jim Applegate

Applegate: 'Yes'

BY JIM APPLGATE

Golf's rapid rise in popularity and the subsequent demand for additional facilities, both public and private, is both undeniable and well documented. Accompanying this demand has been a relative proliferation of individuals and firms offering golf course design services.

Any prospective owner or developer of property that would include a golf course or courses is faced with a myriad of questions, problems and options. Frequently, the first question asked relates to the choice of the golf course design firm.

While there are many very competent firms that do not offer the "signature" of a professional golfer, we at the Gary Player Design Co. feel that, under appropriate and controlled conditions, a design firm that includes a knowledgeable, dedicated professional along with a technically and professionally competent design staff offers the prospective owner/developer the very best alternative. Some individuals might immediately ask, "Why?" In our case, Gary Player's personal accomplishments in the game are well documented. No one has ever won more tournaments in more countries under as many different conditions (both good and bad) than Gary. Personal ability and professional accomplishments are only part of the ingredients, however. We feel that Gary's personal experience and knowledge gained from playing courses all over the world in every conceivable condition is invaluable in producing a finished product of the highest and most appropriate quality.

For more than 30 years he has played with amateur golfers of all abilities in the weekly pro-ams and understands, with certain knowledge, what the amateur golfer — who is certainly the driving force and as such the single most important aspect of golf's popularity — can and cannot accomplish on the golf course.

Courses that are designed to reflect the professional's personal game are not appropriate for the average player. The experience gained from years of professional play are, however, an invaluable asset in designing courses that are at once memorable, beautiful, functional, and perhaps most importantly, playable.

It is our position that Gary's vast experience allows us to offer courses

that are truly playable. This experience must, however, be combined with a talented staff of designers and technical experts to insure the very best finished product. Our staff includes individuals who are in the forefront of all segments of the golf course design industry from agronomy to engineering to computer aided design (CADD). These professionals are well versed in Gary's personal design philosophy and produce designs that reflect that philosophy.

It is, of course, critical that the "signature" be personally involved in all aspects of the design and production of the course. On-site visits at various stages of development insure that the design is faithfully created and constructed.

A final site visit prior to grassing allows us to provide the owner with Gary's personal touches and finishing which we believe are an invaluable benefit to the course and its developer. Many golf course developments today are real-estate oriented or driven. In these instances name recognition of the professional designer invariably produces a marketing advantage for the owner/developer both in the sale of real estate and equity memberships when appropriate.

Why should an owner/developer choose a "signature" design? We feel the reasons are self-evident. The combination of playing experience, technical competence and expertise, the dedication of the professional and his reputation for excellence, and the increased marketability of the finished product are clear and irrefutable reasons for making such a choice.

Dr. Michael Hurdzan is a former president of the American Society of Golf Course Architects. Jim Applegate is president of Gary Player Design Co.

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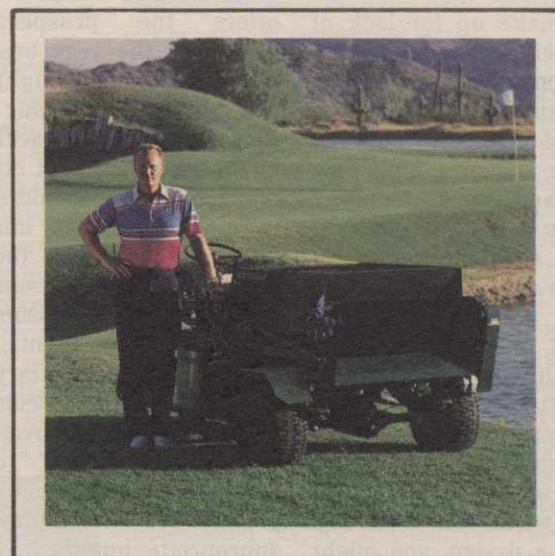
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Europe

Continued from page 1
working conditions, expectations, money, et cetera."

Experts in ecology, environmental and hazardous-waste safeguards, governmental regulations and turfgrass management agreed about the constraints. Yet there is no mistaking that the demand for more courses spans the continent.

Howard Swan, chairman of the National Turfgrass Council in England and founder of the British Association of Golf Course Constructors, said the English Golf Union, which controls and

administers the game in that country, predicts that 675 courses are needed to sustain the present demand, "let alone to satisfy it in the years to come.

"This, in all, with the fact that we have around 2,000 in the United Kingdom already in operation," Swan said.

L. Poignant, reporting on the state of golf in Sweden, said, "Almost all clubs have long queues with people who want to become members. Clubs usually set a limit of 1,000 members per 18-hole course. Time for waiting can, in some places, be up to 10 years ... even longer."

H. Chesneau, general manager

of the French Golf Federation, reported that golfers in France numbered 43,613 in 1979 and today surpass 155,000. He said 134 courses are in planning or under construction in France.

Mr. Libor of the German Golf Federation said a 10-percent per-year increase in construction of 18-hole courses through 1999 seems "realistic."

Spain, said Mr. Lambao, witnessed growth rates exceeding 12 percent per year from 1985 through 1988 and "to keep the number of players by golf course in the year 2000 it is necessary to inaugurate 23 to 27 courses a year."

S. Dhondt reported that in

Belgium the number of players has quadrupled in the last nine years.

And J.K. Kokke said golf in The Netherlands is "as promising, as rapidly developing ... as in other European countries."

European and American developers at the conference said the shadow of complicated permitting processes hovers over the expectations of the golf boom. And how those processes are handled today will affect the game in the future.

"You get volume up for buildability through credibility of previous projects," said English developer Nigel Smith.

U.S. land planner Ed Stone said, "What is happening now is an incubator for opportunities in golf."

"A great handicap in this country is the enormous and complicated sorts of permissions," said West Germany's Libor. "If you are fast like a champion you may be successful after two years."

Nevertheless, David Stubbs of The Golf Course Wildlife Trust in London held up hope for the marriage of golf and ecology.

"Golf should be considered as being at the threshold of one of the great opportunities of our age, and this realization was the principal motivation behind establishing (the trust)," he said. "... Golf, with its requirement for relatively sizeable tracts of land, has enormous potential for working in partnership with conservation to achieve a more sustainable and stable environment..."

The missing ingredient in the boom, at least in Continental Europe, is the expertise to deal with developing golf courses and the real-estate around them.

Team Plan's Redd said Europeans are buying America's professional talent, "be it marketing, master planning or management. Most of the golf course architects doing work in Europe are Americans and they have been designing European courses for some time. Europeans are also looking to us for planning expertise."

Redd said, "Europe doesn't really have a stable of land developers, vis-a-vis the United States. In many cases the government will build the housing. Larger companies are now opening real-estate branches.

"Southern Europe, compared with the rest of the continent, is a quantum leap ahead in development and building. The Costa del Sol makes a typical American building boom look stagnant. And golf course resorts are a big part of this activity."

Stone said the golf-related developments in Europe will be different than in the United States in some ways, however. He said Europe is more family-oriented and some Europeans spend one or two weeks for a golf trip whereas Americans more often take long weekends.

He said he hopes that in the rush, Europeans don't overbuild and that they nurture the youth of Europe and make sure people understand golf can be a family sport, as happened in tennis in Europe.

What they really need, Stone said, are "sophisticated developers with vision and they must take a long-term approach."

Smith, the English developer, said a lot of banks financing projects are from the United States and Far East. European banks are not willing to invest in an unknown, he said.

Smith said the "One Tax" law brought on by the European Economic Community in 1992 will create a 10-year boom. The cost of construction is about \$6 million

Continued on page 36

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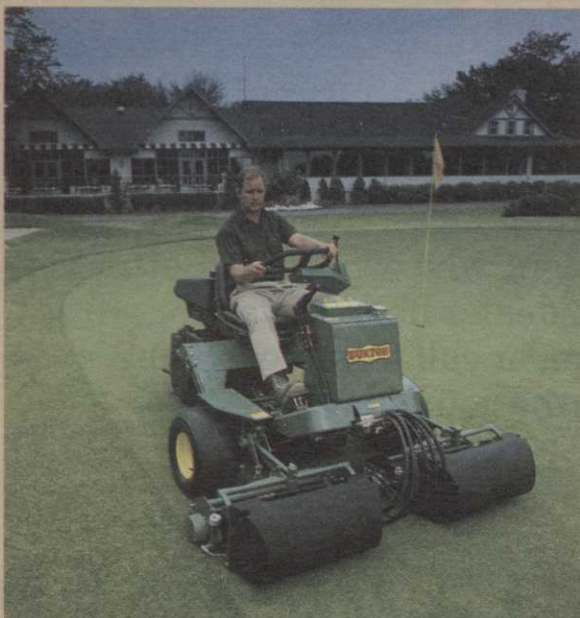
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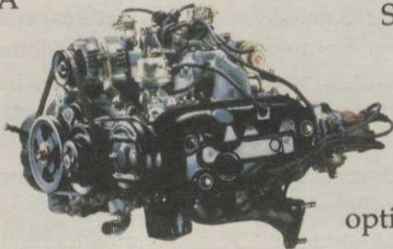
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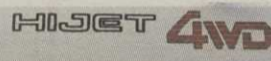
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NuMex Sahara success encourages FMC

Substantiated by the successful introduction of NuMex Sahara Bermudagrass, Farmers Marketing Corp. of Phoenix, Ariz., has extensively broadened its grass research program by acquiring 10 bermudagrass genotypes from New Mexico State University.

Varietal development will be under the direction of Dr. Arden Baltensperger, formerly a professor of agronomy at NMSU, who began his warm-season, turf-grass research at the University of Arizona.

He is joined by Dr. Lincoln Taylor of Virginia Poly-Tech University, who brings additional expertise in cold tolerance breeding. The bermudagrass germplasm, representing many years of research, are being tested at the University of Arizona Research Farms in Tuscon and Yuma, as well as several other locations.

NuMex Sahara, the first improved seeded bermudagrass released exclusively for turf,

was developed by Baltensperger and released by NMSU. Commercially introduced this year by Farmers Marketing, the first seed production was harvested and certified in July following three years of favorable test results in the National Turfgrass Evaluation Program. The company reports that seed from 100 acres of NuMex Sahara have already been booked, including current shipment for immediate seeding by several prominent country clubs.

A USGA/GCSAA-funded and sponsored variety, NuMex Sahara is recommended for use on new turf areas as well as renovations of existing turf wherever common bermudagrass is currently being used. The new variety is acclimated as a major improvement over common and is protected by the U.S. Variety Protection Act, PVP #8800010.

Roseman inks pact to supply Kubota

Roseman Manufacturing Co. of Glenview, Ill., has announced that it will supply Kubota Tractor Corp. with hydraulically driven reel and verticut mowers for Kubota's new five- and seven-gang Verti-Reel product line.

"Kubota selected Roseman as an OEM (original equipment manufacturer) because of our reputation and track record for high-quality products and support," said Roseman President John Clough. "This type of partnership should be especially beneficial to turf maintenance equipment customers because it will ensure that they receive a total quality mowing unit."

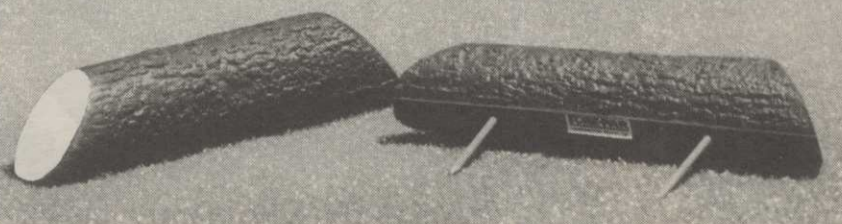
Clough said Roseman intends to

remain an independent company and expects "to continue our pattern of sustainable growth well into the future."

"Since Kubota will be marketing the new Verti-Reel line through its established nationwide dealer network, there is every reason to believe that Roseman's exposure within the marketplace will be increased as well. This is certainly a plus for our own dealers," Clough said.

He added that the two companies' engineers are working together to develop new reel and verticut mowing products for more effective and comprehensive turf management.

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For free information circle #127

Outdoor Equipment opens facility

Missouri plant combines offices, showroom, warehouse, maintenance

Outdoor Equipment Co., a St. Louis supplier of turf maintenance equipment, irrigation products, fertilizer, chemicals

and seed, opened its new \$1.5-million office/showroom/warehouse/maintenance facility in Chesterfield Valley, Mo., on Nov. 1.

The 57-year-old firm relocated from Maryland Heights to a newly constructed 32,600-square-foot building at 17485 North Outer 40 Road, just west of Boone's Crossing off Interstate 64.

"Our new facility is designed to provide one-stop convenience for our customers," said Thomas C. Walker, president of Outdoor Equipment.

The new facility includes a 5,700-square-foot showroom, an express

drive-through, and large turf test plots. The building also contains an 18,000-square-foot warehouse facility and 3,000-square-foot office area for the firm's 28 employees.

Outdoor Equipment's clients include golf courses, lawn care companies, developers, property management firms, institutions, estates and retail customers. The company is the Bi-state representative for Jacobsen and Cushman/Ryan turf equipment products.

The company's telephone number has also been changed. Its new listing is 314-532-6622.

Echo names new distributors

RKB Enterprises Inc. of Elmira, N.Y., and PMA Outdoor Power Equipment of St. Charles, Ill., have been named new distributors for Echo Inc. Power Equipment of Lake Zurich, Ill.

RKB will handle sales in northern Pennsylvania and central and western New York, while PMA will distribute in the northern and central portions of Illinois, two counties in northwest Indiana and three counties in northeast Iowa.

RKB has been in business for 125 years. PMA opened in 1971 and has grown to 400 dealers.

Agri-Diagnostics firm makes Union Carbide, DNA partners

DNA Plant Technology Corp. and Union Carbide Chemicals and Plastics Co., Inc. have become partners in a biotechnology joint venture, Agri-Diagnostics Associates, which is located in Cinnaminson, N.J.

Officials at Agri-Diagnostics, which markets onsite test kits for disease in turf, feel they will broaden their portfolio and accelerate their marketing with "Union Carbide's active support, international presence, and chemical industry expertise."

"The two partners will enhance ADA's capabilities in the detection of agricultural diseases, pesticide residues and other pollutants in the environment, and contaminants in food," said Joseph Soviero, president of Union Carbide's Specialty Chemicals Division.

ADA is developing kits for detecting certain pesticides in water, soil and food.

Based on analytical diagnostic techniques widely used in the medical diagnostics field, the rapid tests in the kits are highly accurate and sensitive in detecting low levels of disease pathogens in plants.

Union Carbide's participation came about through its purchase of Koppers Agri-Research Co. (KAR), a subsidiary of Beazer Materials and Services, Inc. ADA was formed in 1984 by KAR and DNA Plant Technology Corp.

Mobay's Tempo wins approval from EPA

The Environmental Protection Agency has accepted registration of Tempo insecticide from Mobay Corp. for use on homelawns.

Tempo, an advanced-generation pyrethroid, was introduced for indoor pest control and ornamental insect control in 1988.

"Tempo offers lawn care operators new insecticide chemistry for broad spectrum control," says Mobay marketing manager Hal Paul. "Tempo can be used effectively at lower rates of active ingredient than most organophosphates, carbamates and other pyrethroids on the market."

Tests show Tempo can be compatible with commonly-used fungicides, liquid fertilizers and other insecticides in tank mixes.

Mobay will also promote Tempo for tick control in response to concerns about Lyme disease.

Registration for use on commercial turf and golf courses is pending.

Mobay Specialty Products Group, based in Kansas City, Mo., manufactures and markets insecticide, fungicides, herbicides and nematocides for the turf, ornamental and pest control markets.

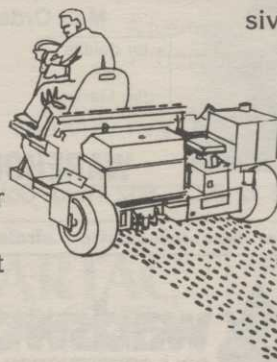
For more information write Mobay at Box 4913, Kansas City, MO 64120. Circle No 357



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New Products



GA 60 Fairway Aerator

Cushman fairway aerator promises high production

Cushman has announced the GA 60 Fairway Aerator, a high-production coring-type aerator designed to cover large areas quickly.

The GA 60 can aerate up to 1.3 acres per hour, covering a 60-inch swath with a 2 1/2-by 4 1/2-inch coring pattern at a depth up to 4 inches.

The GA 60 is powered by a 33-horsepower liquid-cooled engine mounted on the unit, and towed behind a Cushman Turf-Truckster with a rubber-isolated fifth-wheel attachment.

The fifth-wheel hitch is easily removable without tools by pulling one pin and backing off one hand screw.

Standard coring tines are the new non-plugging, open-back tines Cushman is introducing for its line of Ryan aerators.

Contact the Sales Department, Cushman, Inc., P.O. Box 82409, Lincoln, Neb. 68501; 800-228-4444. **Circle No 336**

Broyhill tanks use steel agitator

Broyhill Company's 3000 Series in 120- or 170-gallon fiberglass or polyethylene, and 300-gallon polyethylene tanks are designed for grounds maintenance, tree spraying or general turf work.

The new 1-inch stainless steel agitator and gland assembly requires little maintenance. Use of graphite (or rope) packing and double bearings maintain proper agitation alignment.

Boom options include a new low-profile, rear-folding boom that covers 24 feet with 20-inch nozzle spacing. Rope, eight-way and electric boom controls are available.

Contact the Broyhill Co., Dakota City, Neb. 68731-0475. **Circle No 311**

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Mowing Machine Ltd's Base Leader has a new modular design concept.

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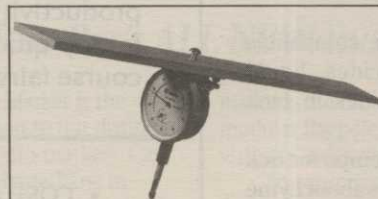
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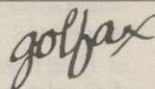
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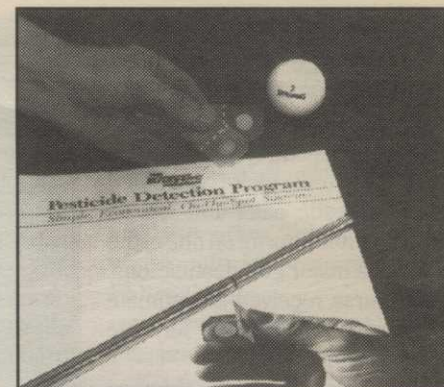
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EnzyTec System

Pesticide detection kit available

A new test for detecting the presence or absence of insecticide residues is available to golf course superintendents and grounds maintenance personnel nationwide.

Midwest Research Institute originally developed the product for the U.S. Army and the product is now marketed and sold by EnzyTec, Inc., Inc., of Lenexa, Kansas.

The EnzyTec Pesticide Detection System detects 80 percent of the insecticides registered for use in the U.S., namely the carbamate, thiophosphate and organophosphate insecticides.

A simple, compact "testing ticket" can detect within three minutes the presence or absence of these pesticides in a range of 1 to 10 parts per million or parts per billion if so desired. The ticket detects pesticides in air, water, soil or on surfaces depending on the technique used.

Workers can place the ticket inside face-masks, away from the nose and mouth, and the detector discs will indicate the effectiveness of his respirator and filter and whether it needs to be changed.

For more information write EnzyTec, Inc., 8805 Long, Lenexa, Kansas, or call 913-541-8585 or 800-634-2607. **Circle No 329**

Club Car unveils Tourall carrier

Latest addition to the Club Car utility line is the Tourall, a personnel carrier available in both electric and gasoline models.

It offers exclusive engineering features standard in Club Car golf cars.

A major force in the golf and recreational market, Club Car entered the utility vehicle market in October 1985 with the Carryall II, which gained quick converts from work environments such as golf courses, construction sites, landscape and nursery business, farms and sports stadiums.

The Carryall I, introduced in April 1988 in both gasoline and electric models, is considered ideal for small space operations. Its self-adjusting rack and pinion steering allows for an incredibly tight 17 feet, six inch clearance circle.

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Hugo

Continued from page 1

left by the Force 4 hurricane.

Hugo snapped 100-year-old pine trees like toothpicks, uprooted many majestic oaks and left its own indelible imprint on one of the country's major golf destinations. One course received an estimate of more than \$300,000 for tree removal alone.

Huge tidal surges, reaching as high as 19 feet, cut their own trail through some of the golf courses, exposing irrigation lines, undermining cart paths, leaving a 32-foot boat perched on a green, washing away dunes and removing part of the 17th green and tee at one course with surgical precision. Some of the millions of trees left standing are "in shock" and it may be a year before golf course superintendents will know if those trees will indeed survive the root damage and possible rot or disease infesting their broken limbs.

Much of Hurricane Hugo's fury hit two Tom Fazio-designed courses at Wild Dunes Resort on the Isle of Palms, just a few miles north of historic Charleston.

The seaside 17th and 18th holes of Wild Dunes' world-ranked Links Course were severely damaged, and there still remains some question as to whether the holes can be rebuilt because of the state's recently enacted Beachfront Management Act.

Already, Fazio has visited the course to survey the damage and begin formulating a plan for rebuilding.

The damage estimate on Wild Dunes alone may run more than \$2 million. The irrigation system received severe damage. Pump stations were submerged in saltwater and now are useless. Many of the control boxes were uprooted and almost all were submerged. Much of the irrigation pipe itself remained intact and is expected to be salvageable.

Many bridges on the Harbor Course also were destroyed in the hurricane, some of them washing across the Intracoastal Waterway onto neighboring Goat Island.

Cleanup efforts began almost immediately, but greens superintendent Mike Fabrizio was forced to search throughout the island for maintenance equipment, which had been commandeered by National Guard troops protecting the island while martial law was imposed for more than a week after the storm.

Wild Dunes laid off all but 62 of nearly 500 employees in the aftermath of the storm. Director of golf Terry Florence, Links Course head professional Steve Behr and Harbor Course head pro Tommy Young remained on staff, but the rest of the assistant pros, shop personnel and others were laid off.

Fabrizio and about half of his 24-man grounds crew were retained.

"We're going to rebuild, but we have to see what we can do," Florence said. "With the exception of the trees, we can strengthen the golf course. We have to do something to overcome the loss of the trees."

Fabrizio estimated that well over 50 percent of the course's trees had been destroyed, trees that cannot be replaced. In addition to the replacement of the trees, he faces another, more immediate problem: how to dispose of the downed trees. He hopes he will be allowed to burn the trees, for trucking the debris off the island will be an expensive and time-consuming process.

A tree service has been consulted and soon will begin a renourishment program for the remaining trees.

Fabrizio said he is uncertain what will happen with the par 4 17th hole, where both the tee and green were claimed by the ocean. Enough remains of the par 5 18th that it can be rebuilt.

Both maintenance buildings received heavy damage, and most of the equipment, too, will have to be replaced.

A reopening date has not been set, although Florence said he hopes to put together 18 holes, probably in some combination from the two courses, for play by spring.

Some 3 1/2 miles inland of Wild Dunes, across the massive but shallow expanse of Gray Bay, lies Charleston National Country Club, which was scheduled to open just a week after the storm. Charleston National is planned as an equity membership club, and club officials are still striving to retain that format as they dig deeper into their pockets to keep things going for an opening delayed some six months.

The course, designed by Rees Jones, received little structural damage. The 18 holes are intact, although there was one small breach that allowed saltwater to intrude into one of the lagoon systems. Heavy rains after Hurricane Hugo helped leach the

Hurricane Jerry easy on Texas

Most golf courses in the Galveston, Texas, region escaped heavy damage from Hurricane Jerry, which touched down about 9 p.m. Oct. 15 and was gone three hours later.

While superintendent Hank Rhodes of South Shore Harbor Country Club next to Clear Lake reported "significant tree damage," spokesmen in the maintenance departments at a number of other courses said Jerry did little harm.

"The eye passed right over us," Rhodes said. He said his course lost about 100 pine, oak and Chinese tallow trees, mostly 6- to 8-inch diameter, costing about \$50,000 in tree damage, he said.

The storm also leveled four partially built homes in the golf course community, including two in the \$500,000 range that were framed.

Rhodes' 11-man crew was cutting and hauling the downed trees.

He said that although the area had received 25 inches of rain in a

tropical storm in July and 22 inches from Hurricane Chantal in early August, the 2 1/2 inches from Jerry put a welcome end to a dry spell.

A spokesman said Bay Forest Golf Course in La Porte lost about 25 trees, following the 45 it lost in Hurricane Chantal.

Elsewhere, spokesmen at Golfcrest CC in Pearland, Clear Lake CC, and Galveston CC all said the worst damage they suffered was a few lost trees.

saltwater, which covered seven or eight of the marsh-side holes, from the soil.

No equipment was lost to storm damage. The heavy equipment had been moved to the highest point on the golf course — the middle of the fifth fairway — and escaped the saltwater and falling trees.

Jones visited the course after the storm and said the damaged trees would actually open the marsh vistas on some holes. Charleston National official Tom Dyer said nine holes would reopen within a couple of weeks and the club planned to hold its first member-guest tournament before Christmas.

The devastation of Hurricane Hugo was random. Patriots Point Golf Links in Mount Pleasant, a public course that overlooks Charleston Harbor, was the first Charleston-area course to reopen, 2 1/2 weeks after the storm. The green on the par 3 17th at Patriots Point sits out in the marsh on the edge of Charleston Harbor, but according to golf professional Dave Nelson, the green apparently was covered by the tide before the storm surge hit, protecting the green. The heavy rains helped leach the salt from the soil.

Most other Charleston-area courses received heavy tree damage. The three courses at

Kiawah Island had lots of downed trees. A spokesman for the resort said reopening the resort was being delayed until all the cleanup work had been finished "in order not to compromise the guests' stay."

Osprey Point was to reopen Nov. 1 and Marsh Point a couple of weeks later. Turtle Point will remain closed while some renovation work, including expanding some of the greens, is taking place.

A spokeswoman for Landmark Land Co., which owns the Kiawah resort, said the Pete Dye-designed course being built for the 1991 Ryder Cup Matches has few trees and was unhurt by the storm and construction resumed after just one day.

Courses further south of Charleston received only minor tree damage and reopened almost immediately.

Hope Plantation on John's Island near Kiawah and Seabrook Island resorts, kept its early November opening on schedule.

"We were extremely fortunate not to have sustained any real damage from the storm," said Hope Plantation head golf pro John Roperta.

Haig Point on Daufuskie Island, S.C., also escaped tHugo's wrath and expected to open its third nine on schedule in late fall.

Other courses in the golf-happy Grand Strand region received minor damage and most were reopened within a few days after Hurricane Hugo, although they are battling an image problem painted by the national news media which led people to believe the entire South Carolina coast was leveled.

Debordieu in Georgetown received extensive saltwater damage and some downed trees, but general manager Wallace Street said the course would reopen within 45 days, even if some of the greens had to be resodded.

Pawleys Plantation also received some damage and was temporarily closed, but reopened in mid-October.

The Dunes Club in Myrtle Beach received some saltwater damage on three holes and was closed for a couple of weeks.

Other courses in the Grand Strand actually benefitted from the respite in play, which allowed superintendents to get them in the best condition they've been in for several years.

Charlotte hurting
But 200 miles away, Charlotte courses were heavily battered.

Perhaps worst hit was Myers Park Country Club, where, according to superintendent Dave Powell, 800 to 1,000 trees were

Continued on page 35



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DonuTTrimmer

Continued from page 1
management inventions by company founder Thomas Wait. With tongue firmly planted in cheek, Wait claims the concept for Greens Encroachment, like his other inventions, took root in his own laziness.

"Anything I can find to make my job and others' easier intrigues me," he said.

The need for a more efficient way to maintain some of the Sunshine State's median strips led to the company's flagship product — the DonuTTrimmer edging blade.

In talking to course superintendent and partner Joseph DeMino of Rochester, N.Y., Wait discovered the circular blades (which come in diameters of 3, 4, 5, 7 and 8 inches) could also be used to edge around sprinkler and mist heads, bunkers, cart paths and sidewalks in a fraction of the time and cost. Wait and DeMino determined there was a need for the product after attending the 1988 GCSAA International Golf Show in Houston, Texas, and they patented the blades.

To gain exposure, they volunteered to detail the courses at several tournaments including the 1988 Honda Classic held at TPC at Eagle Trace in Coral Springs, Fla., and other 1988 and 1989 major tournaments.

Their efforts were well received by course superintendents attending those tournaments. The response was overwhelming in April 1988 when the first advertisements for the blades appeared.

"Our marketing company told us a new product did well if it got eight to 10 responses a month from a single ad," said Wait. "We were getting that many a day."

Meanwhile, the second product was invented by a local

superintendent and was developed and marketed by DonuTTrimmer.

The Aqua-Quick is a disc made of solid aluminum that can instantly turn any Toro or Rainbird valve-in sprinkler into a 1-inch water source. It can be used with a standard swivel or quick coupler valve. It can also be used directly for syringing greens, tees, hot spots or connecting a temporary sprinkler.

"We had the drought last summer, so it was a good time to be introducing a product like that," said Wait.

Meanwhile, Wait was devising two other products — the Level-Eez and Greens Encroachment.

The Level-Eez allows the superintendent and his staff to drastically cut the time to complete one of their distasteful tasks, raising sunken valve-in-head sprinklers, quick coupler valves and valve boxes. The everything-you-need kit reduces the time to raise a sprinkler head from about 90 minutes to as little as 5 without digging. The stainless steel and aluminum kit raises the object by forcing water around it and pulling it upward with a platform puller. This procedure does much less cosmetic damage than the traditional method of digging and setting the object being raised.

"It looks like your course is full of potholes when the sprinkler heads sink," said Wait. "Carts and mowers are always running over them and can be damaged. Also, a golfer can twist an ankle in one of them. Raising a sprinkler head is one of the worst jobs on a golf course. This makes it a lot easier."

As useful as the other three products are, they don't compare to the possibilities of Greens Encroachment, according to Latshaw, the only superintendent to oversee three of the four major tournaments, the 1978 PGA



Paul Latshaw, right, oversees Greens Encroachment installation.

Championship and 1983 U.S. Open at Pittsburgh's Oakmont CC and the 1987-89 Masters at Augusta National. Latshaw became a consultant and stockholder with the company last June 1.

Fairway grass encroaching on greens has been a problem that has long defied solution. It has been particularly troublesome on Southern courses where the typical bermudagrass fairway chips away at the size and quality of the typical bentgrass and bermuda greens.

The idea for Greens Encroachment came, oddly enough, while Wait was peeling the top off a 12-pack of chewing gum. It occurred to him that a device that would lift an offending grass off the course, like the string lifted the top off the gum package, might do the trick.

He devised a two-piece plastic border, about 8 inches in depth and 1/2 inch in width, that is buried about 1 inch below ground level around the fringe of the green. A manual edging device that fits in between the track is pushed around the green, lifting out the encroaching grass including the stolons that try to root themselves

to the putting surface.

The product will come two ways, the first being a complete package including material, installation equipment and training so the superintendent and crew can install it themselves. The company will also install it, bringing in a four-man crew to put the border around all 18 greens (and tees and other areas if necessary) of an average course in about 20 days, without interrupting play and leaving little or no evidence of the installation.

The cost of the procedure will start at \$50,000 for an average 18-hole course. Greens Encroachment will pay for itself in labor savings within two years based on replacement costs of contaminated sod, Wait predicted.

The company and products were introduced formally at February's GCSAA annual convention. Lines formed at the DonuTTrimmer booth to get a look at and discuss Greens Encroachment, Wait said. The response was so great that Wait and DeMino had to take names and telephone numbers and promise to call back.

The product is currently installed on a test basis at Carolina

Country Club in Spartanburg S.C., Plantation CC in Ponte Verde, Fla. and Loxahatchee CC in Jupiter, Fla.

"That's where we are with it right now," said Wait, who has begun marketing Greens Encroachment and the other three products vigorously in preparation for February's annual superintendent's show in Orlando, Fla., his home state.

He predicts DonuTTrimmer 1990 revenues will exceed last year's 70-percent increase, mainly because of Greens Encroachment.

But Wait said he'll be looking for more ways to make his job, and those of other people in the turf profession, a little easier.

"I've got another five ideas or so rolling around in my head right now," he said, "but our company's goal is to market these four products so everyone in the turfgrass industry can take advantage of these labor-saving devices. I think the industry focuses on safety first, budget second and product performance third. I know our products fit into these categories."

Hugo

Continued from page 34

uprooted or broken to the ground.

"I've never seen any storm of this caliber in my life," said Powell, who has been the club's superintendent for 20 years. "There are huge haps where trees once stood. You could call it a major thinning."

Some of the trees were 90 or 100 years old, Powell said, estimating their value at \$250,000.

The timber company contracted to remove the debris was expected to be 4 1/2 to five weeks on the job.

Powell and his 15-man crew opened the front nine on Oct. 14 and the opening of the back nine hinged on the Greens and Ground Committee's decision on whether to wait for the trees to be hauled off.

Powell attributed much of Hugo's damage to soft ground, saying he thought many of the big trees would not have been uprooted if the summer had been drier.

A few miles away, Quail Hollow CC was in "perfect" condition on the eve of the Senior Tour's Payne-Webber Invitational when the storm tore into town. The result: a canceled tournament and more than 700 down or damaged trees, according to assistant superintendent Mark Harris.

"The press tent was demolished and everything went down," Harris said, but the overall look of the course has not changed because most of the larger trees that fell were along the tree line of the tees and fairways.

The clubhouse also lost part of its roof, but head superintendent Ray Avery's 22-man crew had the front nine holes open seven days later and the back nine open in two weeks.

Tommy Braswell is a golf writer for the Charleston (S.C.) Post-Courier papers.



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CALENDAR

November

13-14 — GCSAA seminars on Negotiating and on USGA Intermediate Rules of Golf at Goat Island, Newport, R.I. *

15 — GCSAA seminar on Golf Course Safety, Security and Risk Management at Painesville, Ohio. *

16-17 — GCSAA seminar on Irrigation Part II: Systems Design and Management at Painesville, Ohio. *

27-30 — Third Asian Water Technology Exhibition, Kuala Lumpur, Malaysia. For further information contact International Conferences and Exhibitions, Ltd., 29 Deering St., London W1R 9AA, United Kingdom.

28 — GCSAA seminar on The Biology of Turfgrass Soils at Grandview, Mo. *

29-30 — GCSAA seminar on Insects of Turf: Principles of Control at Lincoln, Neb. *

December

3-4 — Southern Grounds & Turf Maintenance Exposition and Conference (TURF), including educational seminars and exhibits, at the Myrtle Beach (S.C.) Convention Center. Contact Susan Jennings at 803-737-8356.

4-7 — Ohio Turfgrass Conference and Show, sponsored by the Ohio Turfgrass Foundation and featuring more than 200 exhibitors as well as lectures, at the Ohio Center in Columbus. Contact Phyllis Poureh, Ohio Turfgrass Foundation, 2021 Coffey Road, Columbus, Ohio 43210; 614-292-2601.

4-7 — New Jersey Turfgrass Expo '89, the

Annual Turfgrass Educational Conference and Trade Show, sponsored by the Rutgers Cooperative Extension in cooperation with Cook College-Rutgers University and the New Jersey Turfgrass Association, at Resorts International Hotel in Atlantic City, N.J. Contact Dr. Henry W. Indyk, Crop Science Department, P.O. Box 231, Cook College, New Brunswick, N.J. 08903; 201-932-9453.

5-6 — GCSAA seminar on Public Relations and Public Speaking at Atlanta, Ga. *

5-7 — Pacific Coast Turf and Landscape Conference and Trade Show at Washington State Convention and Trade Center in Seattle, Wash., including talks by national and regional experts on plant diseases, toxic waste disposal, groundwater contamination and use of pesticides and fertilizers. The event is sponsored by the Western Washington Washington Golf Course Superintendents Association, Washington State University and Jones and Associates. For further information contact Jones and Associates, Park Center, Suite 200, N. 908 Howard St., Spokane, Wash. 99201; 509-327-5904.

8-9 — GCSAA seminars on Golf Course Construction Techniques and Management and

on Golf Course Restoration, Renovation and Construction Projects at Tuxedo, N.Y. *

10-13 — The 41st Turfgrass Conference and Show at Metro Toronto Convention Centre, sponsored by the Canadian Golf Superintendents Association. Further information is available from CGSA at 2000 Weston Road, Suite 203, Weston, Ontario M9N 1X3; 416-249-7304.

11-12 — GCSAA seminar on Business Communication and Assertiveness Techniques at New Orleans, La. *

11-12 — GCSAA seminars on Golf Course Construction Techniques and Management and on Golf Course Restoration, Renovation and Construction Projects at Tuxedo, N.Y. *

14-15 — GCSAA seminar on Basic Principles of Turfgrass Management at Albuquerque, N.M. *

January 1990

7-8 — GCSAA seminar on Basic Principles of Turfgrass Management at Nashville, Tenn. *

9-14 — Golf Course Association's 8th Annual Conference at Wyndham Hotel in Palm Springs, Calif. Contact GCA, 8030 Cedar Ave., Suite 228, Minneapolis, Minn. 55425; 612-854-8482.

0 — GCSAA seminar on Safe Pesticide Management at Raleigh, N.C. *

10-11 — GCSAA seminar on Golf Course Construction Techniques and Management at St. Charles, Ill. *

14-18 — Seventh Annual National Institute of Golf Management at Oglebay Park Resort and Conference Center in Wheeling, W.V., sponsored by the National Golf Foundation and the center's Department of Continuing Education. Contact the NGF's Golf Course Development Department at 1150 U.S. Highway One, Jupiter, Fla. 33477, 407-744-6006, or National Institute of Golf Management, Wheeling Park Commission, Oglebay, Wheeling, W.V. 26003, 800-624-6988, ext. 278.

15 — GCSAA seminar on Employee Training at Richmond, Va.

* — For more information or to register, call the 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.

Europe

Continued from page 28

per course with a clubhouse and maintenance facility.

He said Central Europe is a very exclusive market, and 90 percent can afford an upscale product.

"It's very difficult to get permitting for housing developments in France," he said, adding that Spain and Portugal are much easier because they are in a sunbelt market, with a lot of second homes.

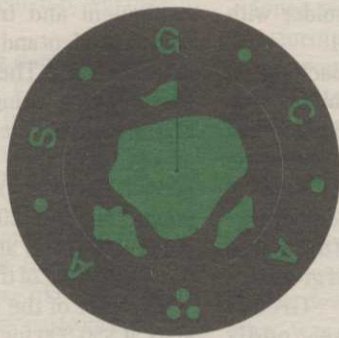
Smith said that with the advent of the EEC, a lot of people will be able to move businesses to warmer climates, so there are now a lot of options on land being scooped up and waiting for that event.

England's Swan warned that while hundreds of courses are needed to fill the demand, the situation "is a worrying prospect as I recall only too well that in the early '70s when demand was high in my country we had some indifferent golf courses designed and built and irrigated; and since then those greenkeepers who have tried to maintain them, some well, some indifferently, some badly, have struggled because the basic concept and engineering was indifferent and defective."

He said the English Golf Union has formed a Golf Technical Committee comprised of experts in sports turf, ecology, environment, construction and design, and "it is our intent to attempt to look towards providing minimum standards and guidelines for performance in the provision of golf courses."

Europeans hope that with the EEC, all the countries can come together and do research to form information outlets similar to the National Golf Foundation in the United States.

Jan Beljan is a designer with Fazio Golf Course Designers, Inc.



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Super swats gnats with bats 'n birds

By PETER BLAIS

Black flies and bats. Now there's a combination that'll bring the toughest Mainer to his knees.

But at Sugarloaf Golf Course, head superintendent Ed Michaud is on his knees praying one will help control the other.

The Carrabassett Valley resort had 100 bat houses built two years ago to encourage the winged creatures to nest among the trees that line this mountain valley course.

If bats found the neighborhood appealing, the hope was they would help control the swarming insects that can turn a pleasant round of golf into a mad dash to the clubhouse.

Has it worked?

Michaud said tests have shown two-thirds fewer black flies near the bat houses than nearby areas without the houses.

"The trouble is 10 black flies can seem as much of a problem as 30," said Michaud.

But Michaud isn't discouraged, especially considering there are still many vacancies in the bat houses.

"I have seen a few more bats in the evening," he said. "But not a big increase. If we get a few more to move in, the population could skyrocket."

That could prove a boon in an environmentally conscious state like Maine, where any type of artificial insect control is likely to be frowned upon.

Last spring, the state banned Sugarloaf's three-year testing of B.t.i. in the nearby Carrabassett River, where black flies breed. The naturally occurring bacteria changes the pH in the stomach of black fly larvae, causing them to literally explode, according to Michaud.

"B.t.i. doesn't affect fish or humans. But people don't realize that. The public just didn't like the idea of putting something into the river," said Michaud.

With the B.t.i. ban, the bat experiment has become even more important.

"There are about 15 days a year when it's overcast with no breeze and the black flies are a real problem. We're hoping the bats will help," said Michaud.

Despite their rather unsavory reputation, bats are very beneficial to humans.

Fruit-eating bats pollinate more than 130 types of trees and shrubs. Bat guano is still an important source of fertilizer in some undeveloped countries. Bats are also valuable in scientific research.

But more importantly, at least to Sugarloaf, bats eat insects. Large numbers of insects.

For example, a single gray bat may eat 3,000 insects in one night. A free-tailed bat colony in Texas consumed 500,000 pounds of insects in a single evening. Little wonder Sugarloaf is optimistic about establishing a permanent bat community.

Retired University of Maine at Farmington Professor Dr. Robert Martin, who has studied bats on six continents, helped Sugarloaf set up the residences.

Martin said there are two types of bats likely inhabiting the houses at Sugarloaf—little brown myotis and big brown bats.



Bat houses welcome inhabitants in the trees around Sugarloaf Golf Club.

About 60 of the little browns, or about 30 of the big browns, can occupy a single house.

It takes about two years for the bats to fill a residence—the first year for the bats to find the house and the second for their offspring to reach adult size.

A single big brown will eat the equivalent of between 1 million and 3 million mosquitoes (even more of the smaller black flies) in a single Maine summer.

"That means one house of big browns will eat between 30 million and 90 million mosquitoes in one summer. That's a lot for a very small investment," said Martin.

The resort installed 50 male and 50 female bat houses in the spring of 1988. The 10-by-10-by-6-inch houses are made out of rough-sawn cedar and cost around \$4 to make, according to Sugarloaf director of golf Fred Downes.

"The houses basically maintain themselves," said Michaud. "The feces drop through the slits the male bats enter. We have to loosen a screw and let the bottom swing out (once a year) to clean the female houses."

"The bats don't like bright colors, so we never have to paint the houses. The only thing we ever have to do is cut down a tree if one with a bat house dies."

"Hopefully this will eliminate the need to

ever use B.t.i. (which may have also been partly responsible for the two-thirds drop in the black fly population). Now we'll be able to tell if it was bats that kept the black flies down."

One hundred swallow houses were installed at the same time as the bat residences. Swallows also are voracious insect eaters. The small birds quickly took to the man-made nests and are a much more common sight than they were two years ago. In fact, they are more visible than the bats, but that's probably because swallows feed by day and bats by night.

"We looked at the possibility of importing bats," explained Downes. "But they like to go back to where they were born once they are old enough, so there didn't seem much point."

"We've had nesting in just about every house we built. So over the next four to five years, we should have a lot more."

An increasing bat population should not be a problem for golfers since the winged mammals hunt at night.

"Most people are off the course by the time it's dark," said Michaud. "If people play late it might be a bother. But you're likely to see bats anywhere up here in the summer."

Martin said Sugarloaf is the only golf course he is aware of that has built bat

houses to control insects. But he is certain it could prove beneficial in other areas where a natural means of insect control is preferable to an artificial one.

Pre-manufactured bat houses are on the market for \$34.95 apiece, said Martin.

Free construction plans for houses, which can be built for about \$5, are available by sending a stamped, self-addressed envelope to BATS in Maine, 820 Lakeview Ave., Winthrop, Maine 04364.

On the Green

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Tell us your story

If you have a solution to a problem, or an innovation, or "a funny-thing-happened-to-me" story to share with other superintendents, please write: *Golf Course News*, P.O. Box 997, Yarmouth Maine 04096. We'll pay \$50 for stories or articles we use.



We blew a few holes through conventional financing.

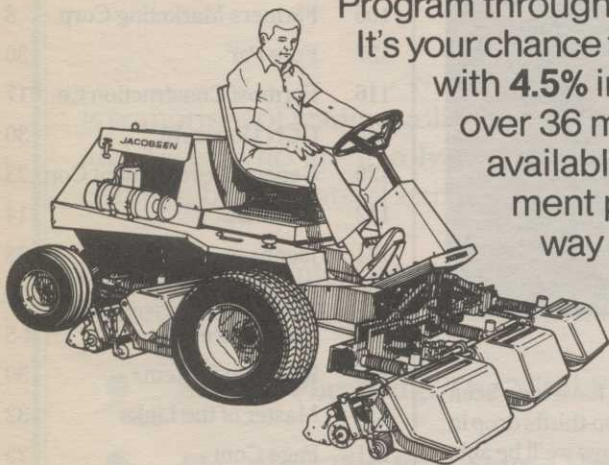


Introducing the
Jacobsen 45 Special Finance Program.

Only 4.5% Interest.

Take delivery now on a Jacobsen Tri-King, LF-100 or any other Jacobsen reel mower and pay for it later with our *45 Special Finance Program* through Textron Finance.

It's your chance to get a great deal with **4.5%** interest, financed over 36 months. And it's available with skip payment programs. It's our way of blowing a few holes through



conventional finance programs. The *45 Special* is available only at your participating Jacobsen distributor on deliveries taken between September 1 and December 31, 1989. Give him a call. Or visit his showroom. He'll show you how we're blowing holes through conventional finance programs.



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Program requires 4.5% down payment and 4.5% pre-paid buyout.

Special 6% program available in Canada.

Now it's easier to make your greens come true.

We improved the only true Greens Conditioner.

No one else offers the patented features of the Jacobsen Turf Groomer™ greens conditioner. And now, we improved on the best. We did it by making the Turf Groomer easier to use and more durable. And that makes a big difference when you've got a lot of ground to cover.

The improvements begin up front. The exclusive front roller has a larger diameter for reduced rolling resistance, higher side frame clearance and improved durability. It works even better to "pucker up"

horizontal runners and plant leaves, readying them for clipping. And now Jacobsen offers two blade spacings: the standard .280" for most green applications, and an optional .500" which works well where nearby traps have coarse grain sand.

The Turf Groomer's larger, thicker, six point knife blades are even stronger for longer life.



They rotate *through* the slots in the front roller, cutting horizontal runners and cultivating strong, erect grass plants.

A quick up/down blade adjuster has four positions in 1/8" increments so you can condition each green exactly the way you want. Or, you can raise the blades to skip grooming. And a Micro Depth Adjustment dial lets you fine tune cutting heights by increments of .007" without tools.

Every Turf Groomer greens conditioner comes with a sealed aluminum drive housing to prevent grass, debris and moisture build-up in the heavy-duty 1" belt drive system.

For faster, truer putting and healthier, harder greens, look to the new Jacobsen Turf Groomer. For a free demonstration, contact your Jacobsen distributor.

Or contact Jacobsen Division of Textron Inc., Racine, WI 53403.

Now it's easier to make your greens come true.

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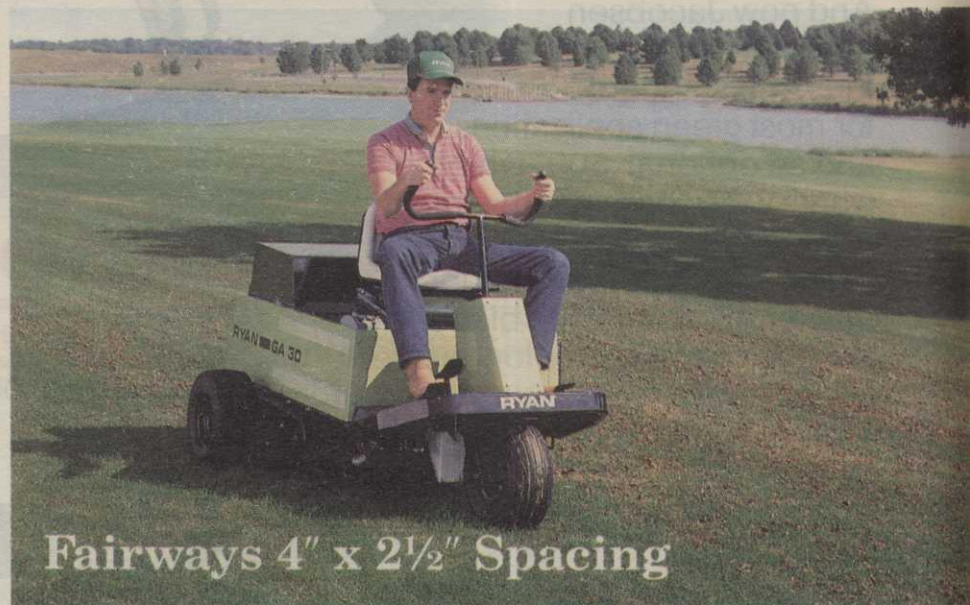
Full-course aeration made easy.



Greens 2" x 2½" Spacing



Tees 3" x 2½" Spacing



Fairways 4" x 2½" Spacing

The Ryan GA™ 30 aerates on the greens and in between.

Now you can deliver "greens-quality" aeration to your entire course with a single piece of equipment. Variable core spacing makes the GA 30™ aerator as good on fairways as it is on greens. Simply move the spacing adjustment control from 1"-5" or anywhere in between, lock it in place, and you're ready to go without leaving your seat.

Spacing 2.50 in. x () in.	Production sq. ft. per hr.	Yield holes/sq. ft.
1.00	5,625	57.6
1.50	8,440	38.4
2.00	11,250	28.8
2.50	14,060	23.0
3.00	16,875	19.2
3.50	19,690	16.5
4.00	22,500	14.4
4.50	25,310	12.8
5.00	28,125	11.5

The GA 30 aerator also helps you get on and off the course more quickly. Its 18 hp engine with a six mph transport speed is two-three times faster than other aerators. So why waste time walking when you can ride to work?

No other aerator delivers Ryan quality.

Ryan's crank drive penetrates straight in at a depth of up to 3-3/4 inches. The tine-ram, ground-driven, reversing gear box pulls cores straight out to better protect your turf from damage—no matter what the spacing.

For a feel of the most cost-efficient aerator money can buy, contact the Ryan dealer nearest you for a free demonstration. Or call toll free: **1-800-228-4444**.

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