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# GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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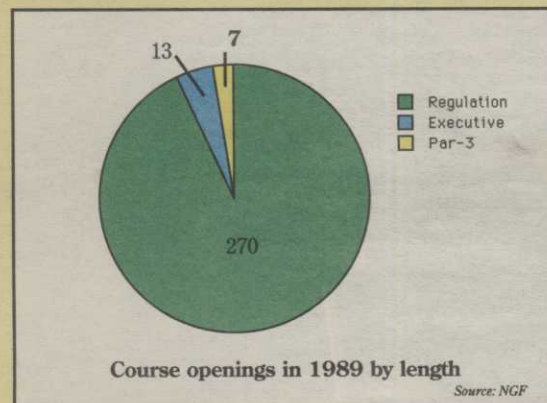
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## Hawaiians just say no

### Committee turns down potential \$291-million profit

BY PETER BLAIS

The Honolulu City Council Human Services Committee has voted against the city's proposed sale of West Loch

Golf Course to a Japanese company, likely killing a deal that would have netted the city \$291 million. Mayor Frank Fasi hoped to use for recreational facilities and three new public courses.

Jurigi Co. bid \$111 million this spring for the new municipal course, which cost the city \$20 million to build, and offered \$200 million in impact fees if

the city eventually approved two other golf course construction applications.

The committee voted 4-1 against Jurigi's offer. Committee Chairman Neal Abercrombie said his committee had two primary objections.

First, Abercrombie explained, the land was originally condemned for a municipal course and should be used

*Continued on page 14*

## Corps major holdup

BY MARK LESLIE

The Army Corps of Engineers has caused more delays in golf projects than any other organization, according to a survey of golf course architects.

Thirty-nine of 40 member firms answering an American Society of Golf Course Architects survey said they experienced difficulties in obtaining permits for courses because of environmental concerns by local, state or national agencies.

Fifty-six percent of the firms cited the primary obstacle as wetlands, which the Corps of Engineers over-

*Continued on page 26*

## Dry spell plagues Florida

BY PETER BLAIS

Late spring showers improved the situation somewhat. But Florida remained in the throes of a second straight early-season drought that left wells at record-low levels in some parts of the state and resulted in water restrictions that threatened many courses.

Because of weather patterns that generally move storms diagonally from northwest to southeast Florida, south-

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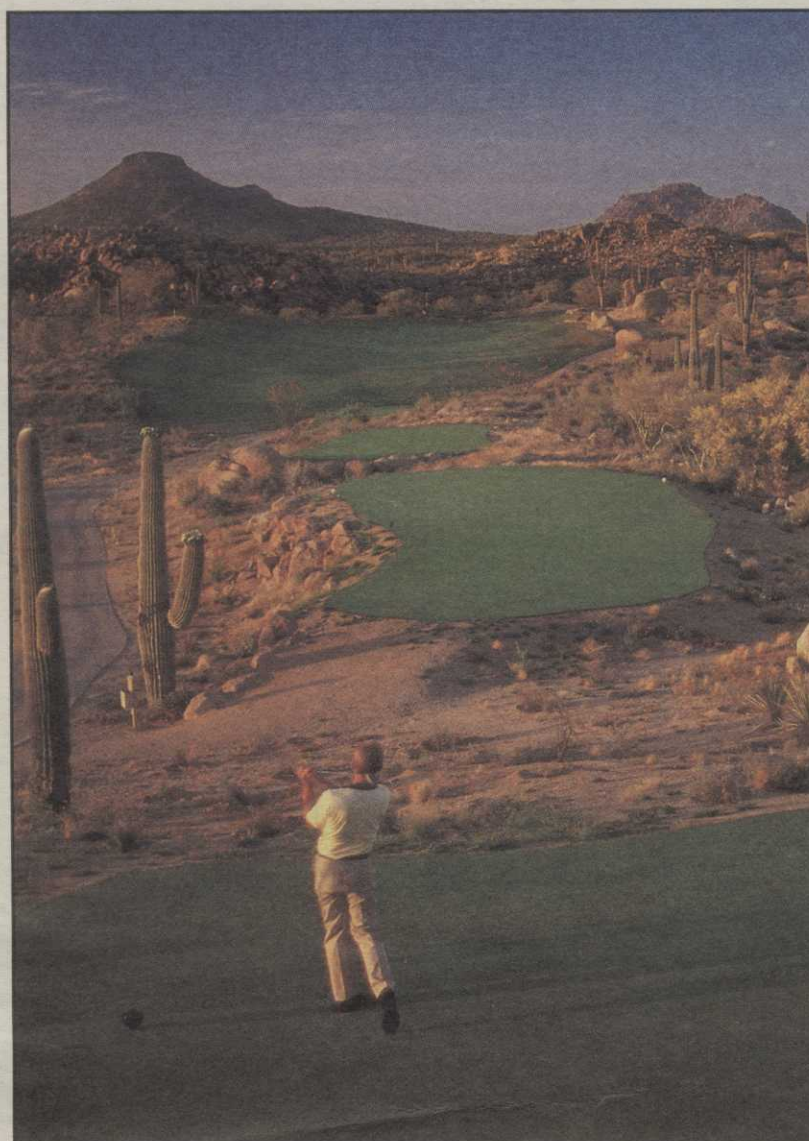


Photo by Tony Roberts

A golfer tees off at Troon North, the latest creation of Jay Morrish and Tom Weiskopf in Scottsdale, Ariz. Developed by Pinnacle Peak Land Co. of Scottsdale and built by Wadsworth Construction Co., Troon North is an 18-hole championship, daily fee course. It is carved out of the desert, featuring saguaro cactus (at left), lots of rocks, and holes that are totally isolated from one another. Its bermudagrass greens read 9 on the stimpmeter. Pinnacle plans a four-season hotel and home development on the site.

## Tainted fungicide damages courses

BY MARK LESLIE

A fungicide contaminated with a foreign chemical killed turf on about 10 golf courses in five states, according to its manufacturer, O.M. Scott & Sons.

Atrazine, the active ingredient in Scott's Bonus S herbicide, mistakenly got mixed into a batch of FF-II, a fertil-

izer-based fungicide used primarily to control snow mold, said Jim Fetter, Scott's vice president of marketing.

The mixing was done last fall but it wasn't until weather warmed up this spring that it was discovered at several courses in Michigan, two in Minnesota, and one each in Pennsylvania,

Ohio and Kentucky.

It is not likely the problem will show up at any other courses, Fetter said. "We feel we know exactly what happened, what (production) run the contamination occurred in, and where it went."

*Continued on page 9*



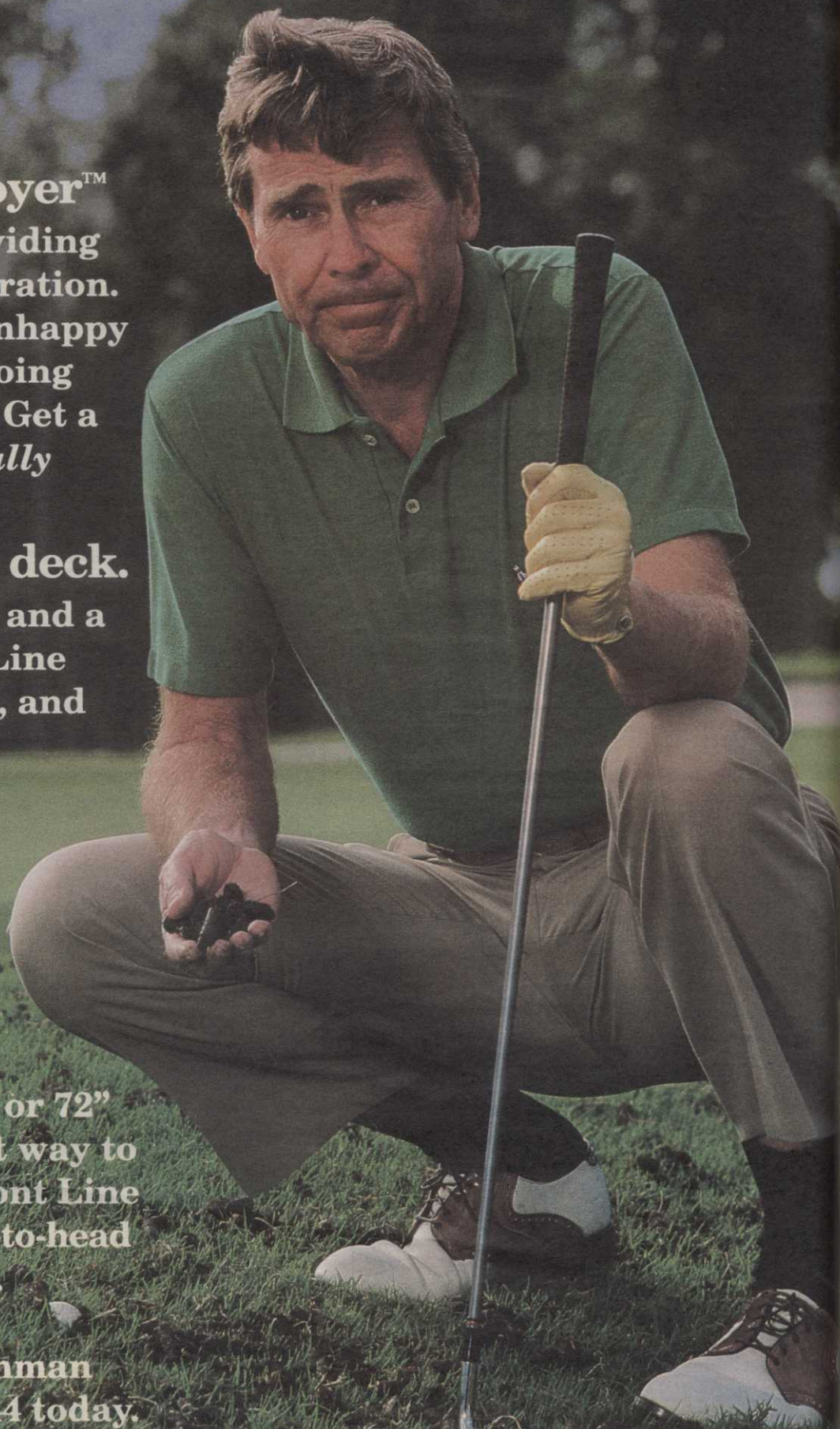
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## Public stock offered for Utah project

Sixteen years after its conception, Quail Hollow Golf Club in London, Utah, is near becoming a reality.

Several million shares of public stock have been offered to raise \$2.5 million for an 18-hole championship course and a nine-hole executive layout — both public. Construction will begin as soon as the money is released from escrow.

Yet raising the money was not the most difficult task, according to Utah PGA pro Jimmy Thompson, who is involved with 13 other principals in the project. Thirty-two property owners had to be convinced to donate or sell land to accumulate the 156 acres needed.

Thompson said Darrell Framp-ton first approached him with the idea for a course in 1974. Framp-ton finally acquired the land in the mid-1980s.

Thompson, who will assist with the design and become Quail Hollow's director of golf, said construction would likely begin first on the driving range and clubhouse, then move onto the executive course.

## Colorado State classes target pesticide use

Colorado State University's Division of Continuing Education is offering four correspondence study courses on pesticide use and pest control.

Developed by Dr. Bert L. Bohmont, a professor in the Department of Plant Pathology and Weed Science, the series includes courses on pesticide management, management and control of turfgrass pests, management and control of wood-destroying pests, and management of on-farm stored grain.

Pest management, which has been available for several years, is a general course that covers all aspects of pesticide use, application and safety.

Management and control of turfgrass pests targets the training needs of pesticide applicators working on golf courses and other green areas. It prepares students to be certified as pesticide users.

Richard E. Thomas, coordinator for distance learning, said enrollment "does not require being absent from the job site, it is self-paced, and does not require admission to the university."

Bohmont has been awarded the Agricultural Spokesman of the Year award by Farm Chemicals Magazine and Chevron Chemical Co., and the Professional Excellence award by the Cooperative Extension. In 1982 he was named a fellow of the Western Society of Weed Science.

He has published textbooks and articles on pest management.

More information is available from the university at 800-525-4950.

## Schering, Sandoz call off negotiations for merger

BY PETER BLAIS

The multi-million dollar agrochemicals business merger of chemical-manufacturing giants Schering AG, the West German parent firm of Nor-Am Chemical Co., and Switzerland's Sandoz AG has been called off.

Schering and Sandoz discussed the deal for months and it appeared imminent.

But Sandoz reportedly wanted to expand the merger to other areas, causing the deal to fall through.

"Sandoz suddenly said it wanted to make the agrichemicals venture dependent on co-operation in all other areas," Mechthild Weber, a Schering official, told the Financial Times.

A Schering supervisory board member said, "In the last stage, Sandoz tried to take us over — the whole shop."

Sandoz acknowledged the attempted takeover of Schering, but wouldn't comment, reported the Financial Times.

Nor-Am is a subsidiary of Schering Berlin, Inc., the U.S. holding company of Schering AG, Berlin, a multi-national company with interests in pharmaceuticals, electroplating, industrial chemicals and agrochemicals. Nor-Am products include Nitroform fertilizers, Turcam insecticides and Prograss herbicides.

Sandoz is a multi-national company whose products include Banvel herbicides and Mavrik insecticides.

## NEWS

### Ciba-Geigy gives to help after Hugo

Ciba-Geigy Corp. reportedly donated \$1,000 to the Myrtle Beach, S.C., area Hugo Economic Renewal Fund following Hurricane Hugo's destruction last fall.

The area's economy depends largely on the golf industry, and courses were hit hard by the storm.

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## NEWS

### GMI plans new clubhouse at Scottsdale CC

Phoenix, Ariz.-based Golf Management International has announced the addition of Scottsdale Country Club to its management division. Golf Management International will oversee the entire golf operation, including merchandising, restaurant and maintenance.

"This property is in a position to realize greater potential," explained the club's general managing partner, Alan Mishkin. "The Golf Management people... know how the resort industry works and what we need to do to fit within their expectations."

The 27-hole Arnold Palmer course currently caters to resorts along the popular Scottsdale Road area east of Phoenix. As part of the management agreement, GMI is planning a new clubhouse and restaurant to be built in the fall.

### Golf House starts 4-month Hogan display

Trophies and memorabilia from Ben Hogan's career will be on display at Golf House in Far Hills, N.J., as part of a special exhibit arranged by Hogan, the Colonial Country Club, and the United States Golf Association.

The USGA exhibit, which will run for four months, beginning July 9, will include 174 pieces from the Hogan Trophy Room at Colonial, in Fort Worth, Texas.

The USGA will send part of its collection tracing the development of golf equipment for a display at Colonial.

### Geneva Nat'l reports \$50M housing sales

While the Arnold Palmer and Lee Trevino golf courses are still under construction, \$50 million worth of vacant homes have been sold at Geneva National resort and recreation development in Williams Bay, Wis.

Anvan Co. reports that one-fourth of its 1,800 home sites are sold. Although a 10-year sell-out period was expected, "2-1/2 years of projected sales were accomplished in the first 100 days," a spokesman said.

Palmer's and Trevino's courses are expected to open for play in the spring of 1991. A third course, designed by Gary Player, will be built later.

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## Lesco, Echo await court's decision in suit

Lesco, Inc. and Echo, Inc. officials were awaiting a court decision in late June on a suit Lesco had filed against the outdoor power equipment maker.

Lesco Executive Vice President Dan Dunston said in mid-June: "It's in the court's hands now. Both sides have filed briefs. All we can do is wait."

It was not known when the court

would decide the case.

At issue is a suit Lesco filed in U.S. District Court for the Northern District of Ohio.

The suit seeks injunctive and other relief from Echo and its distributors to prevent them from breaching or interfering with a Lesco-Echo contract.

Lesco, headquartered in Rocky River, Ohio, said it obtained con-

tractual rights on Feb. 23 to distribute Echo equipment. Lesco introduced the line at its national sales meeting.

However, Lesco claims it was told on March 19 that "it was no longer possible for Echo to sell products to Lesco because of coercion and threats from certain Echo distributors and dealers which encouraged Echo to breach its

agreement and to restrain trade."

Lesco wants the court to enjoin certain of Echo's distributors and dealers "from coercing or encouraging Echo to break its agreement with Lesco."

Lesco is continuing to sell Echo products from its inventory.

Echo is based in Lake Zurich, Ill., and is a subsidiary of Kioritz Corp. of Tokyo, Japan.

## Course neighboring SIUE relocating four holes

Sunset Hills Country Club in Edwardsville, Ill., is relocating four holes immediately next to Southern Illinois University at Ed-

wardsville, where a vocal group has opposed construction of a new university golf course.

The golf holes are being built in

what will be a new residential area.

Local developers Gardner/Baker/Winfield donated land, valued at \$350,000, for the course

expansion.

Club officials plan clubhouse work to begin in September. The total project will cost \$2 million.



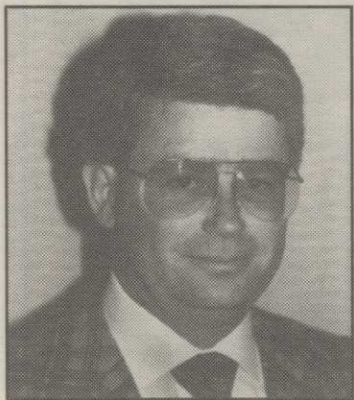


# ASGCA to tackle construction costs

Dan Maples of Pinehurst, N.C., the new president of the American Society of Golf Course Architects, pledged that ASGCA members would focus on controlling construction and maintenance expenses so the cost of play will not become prohibitive.

"The game of golf has experienced a strong surge of interest in the past five years," Maples said, "and everyone associated with the design, construction and maintenance of golf courses must work to keep the cost of play within reach of the general public."

"We cannot slip back into the image of an elitist sport."



Dan Maples

Maples is the third generation to be active in golf course development.

His grandfather, Frank, was the superintendent of construction for famed golf architect Donald Ross at Pinehurst, supervising more than 150 men who used mules to work with the natural contours of the Carolina sandhills.

"My grandfather designed much of the early equipment and was very aware of how the design could be coordinated with maintenance."

He taught my father, Ellis, who soon recognized that severe slopes and deep bunkers required hand maintenance, which can escalate costs in today's environment," Maples said.

Ellis Maples, who was a life mem-

ber of the Professional Golfers' Association and Golf Course Superintendents Association of America as well as president of the ASGCA in 1974, knew all facets of golf course design, construction and maintenance.

"Donald Ross told my father," Dan Maples related, "that he probably made a mistake by designing so many courses without an opportunity to review the construction. He told my father that if he had it to do all over again he would only design courses that he could actually oversee. That's something that all of us should consider in this booming era of golf course development."

## NEWS

### Use current research

The new ASGCA president pointed out that society members have been meeting more frequently with builders and superintendents, as well as the USGA Green Section, to work out technical problems and take advantage of the turf and equipment technology that is now available.

"We are well aware of environmental concerns and are taking every precaution to make sure that our golf courses blend in with the environment. If wetlands are used for a golf course, other wetland areas are developed so the natural habitat will not be disturbed," Maples added.

In addition, the ASGCA Foundation has sponsored research at Cornell University to determine if chemicals affect ground water on golf courses. The research showed that there is no adverse effect if the chemicals are managed properly by the golf course superintendent.

### Morrish out of hospital

Golf course architect Jay Morrish, 53, is home and expected to fully recover from a heart attack and quadruple bypass surgery that occurred in late May, according to his wife, Louise.

Morrish suffered his attack May 19 while doing yard work at his Tulsa, Okla. home. He was taken to nearby St. Francis Hospital where surgery was performed May 25.

"The doctors said he was very fortunate," said Louise, who took her husband to the hospital immediately after he complained of chest and arm pain. "If we'd waited another hour he might not be around today."

"We were planning to leave for Africa May 27. If we'd been over there when this had happened, it definitely would be all over. Jay feels like he's been given a second chance and he's going to do the things he's supposed to do."

Jay and Louise are part of the small, but very successful Tom Weiskopf/Jay Morrish design team. The Morrishes' son, Carter, and a draftsman complete the five-member company.

Last year may have been the best for Morrish and Weiskopf, who first teamed up in 1983. The pair were recognized as the designers of Golf Digest's top two new, private courses of 1989 — Shadow Glen in Kansas City, Mo., and Forest Highlands in Flagstaff, Ariz.

Louise Morrish said they are working on Harbor Club on Lake Oconee near Atlanta, Ga.; Loch Lomond in Scotland, making them the first American architects to design a course in golf's native country; and the Country Club of St. Albans in St. Louis.

Jay Morrish is expected to be back at work full-time by mid-July. He will be able to resume all his duties, although he's likely to delegate more responsibility to the rest of the staff, his wife added.

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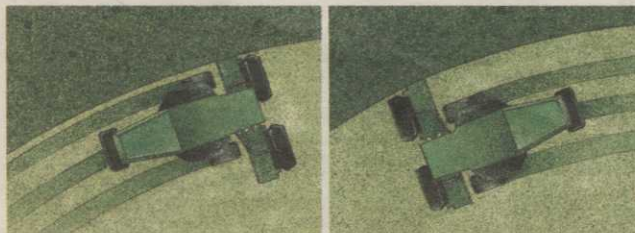
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## NEWS

### Pacific Land, Satol Kogyo begin work on \$150M project

A \$150-million private golf and country club community is planned in Camarillo, Calif., by Pacific Land & Golf Inc. and Sato Kogyo America Corp.

Grading was set to begin in June, with a grand opening scheduled for late 1991 for the project developed by Spanish Hills Development Co., a new joint venture formed by the two companies.

Pacific Land & Golf is a San Juan Capistrano, Calif.-based development company specializing in private golf course communities. Sato Kogyo America is a subsidiary of the Tokyo-based Sato Kogyo Co. Ltd., a construction company that works worldwide.

A \$22-million championship 18-hole ocean-view golf course, and a \$14-million, 43,000-square-foot clubhouse will be cornerstones for the 430-acre development.

### Short course wins approval

The Marin County Board of Supervisors has approved a \$3-million short nine-hole golf course for McInnis Park in San Rafael, Calif.

Many senior citizens have publicly supported the course, since Las Gallinas Golf Course closed in 1985. Las Gallinas was a mainstay for new golfers and seniors.

Molly Lennon, a leader of the Three Par Golf Association who has pushed for development of the course, said ground should be broken by the end of the year.

The county supervisors will seek proposals from golf course builders and operators for the 1,600-yard course.

The county will retain control of the course so that "the greens fees ... don't go out of sight," said Supervisor Robert Roumiguere.

### Cleveland OKs renovations

Cleveland Metroparks commissioners have hired golf course architect Craig Schreiner to plan a renovation of Manakiki Golf Course in Willoughby and approved designs for a \$1-million clubhouse at Sleepy Hollow Golf Course in Brecksville.

Schreiner, of Dublin, Ohio, was retained to prepare a master plan for the Manakiki project.

Voinovich Clubhouse designed a Western Reserve-style clubhouse that will be built on the site of the present clubhouse, which will be demolished after Labor Day weekend.

The new clubhouse is expected to be ready for use next summer.

## Top U.S., UK students attend Jacobsen seminar

Thirty-six of the top students from turf programs throughout North America and two students from the United Kingdom gathered for the 23rd annual three-day Jacobsen College Student Seminar in Racine, Wis.

Students heard from professionals on subjects ranging from preparing budgets and training employees to meeting environmental concerns and preparing for a tournament.

Lecturers included golf superintendents Skip Willms of Onwentsia Club in Lake Forest, Ill.; Mike Handrich of Racine (Wis.) Country Club; Tom Alex of Grand Cypress in Orlando, Fla.; Roger Stewart of Stonebridge Country Club in Aurora, Ill.; and Danny Quast of Medina (Ill.)



Students get hands-on experience at Jacobsen College Student Seminar.

Country Club. In addition, students were addressed by Dr. Wayne Kusow of the University of Wisconsin

and John Przybyszewski of American Golf Corp. Along with classroom sessions,

students gained hands-on experience with the latest in mowing equipment, toured Jacobsen's manufacturing plant, and met with Milwaukee County Stadium head groundskeeper Harry Gill.

Jacobsen President Robert Reid said the seminar is an important link between school and the working world.

"Students who attend the seminar are at the point where they have the basic knowledge to do the job but they don't have a lot of working experience," Reid said. "Here they are encouraged to ask questions and get answers from people who have a great deal of knowledge and experience."



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Greg Norman, right, digs into "a little bit of home" — soil imported from his native Australia — at groundbreaking ceremonies for the Royal Melbourne private golf course he is designing in Long Grove, Ill. Kemper Sports Management's Benny Blake, left, also takes a turn with the spade. Royal Melbourne is also the name of a well-known course in Australia — designed by Alister Mackenzie — and Norman said, "Mackenzie is one of the greatest golf course architects of all time and we hope to take inspiration from his work." The first course Norman has designed on the continental United States, Royal Melbourne is under construction and will be operated by Kemper



Sports Management of Northbrook, Ill.

## American Golf buys Colo. club

American Golf of Santa Monica, Calif., announced it has bought Heatheridge Golf Club, a private country club in Aurora, Colo., and Z. Boaz Golf Course, an 18-hole public facility in Fort Worth, Texas.

Heatheridge facilities include a clubhouse, pro shop, snack bar, full-service dining and banquet facilities, indoor and outdoor tennis courts, indoor and outdoor swimming pools, an 18-hole golf course, driving range and racquet-ball courts.

Boaz Golf Club has a clubhouse, practice area and food and beverage facilities.

## NEWS

## Matthews have three generations in ASGCA

There have been many famous father-son teams of golf course architects.

With the associate membership of W. Bruce Matthews III in the American Society of Golf Course Architects, the Matthews family is the first family with three generations of golf architects who are members of the prestigious society.

W. Bruce Matthews started the tradition 65 years ago and is a fellow member of the ASGCA. His son, Jerry, serves as treasurer for the society and is the past membership chairman. Bruce Matthews III, grandson and nephew, became an associate member this spring.

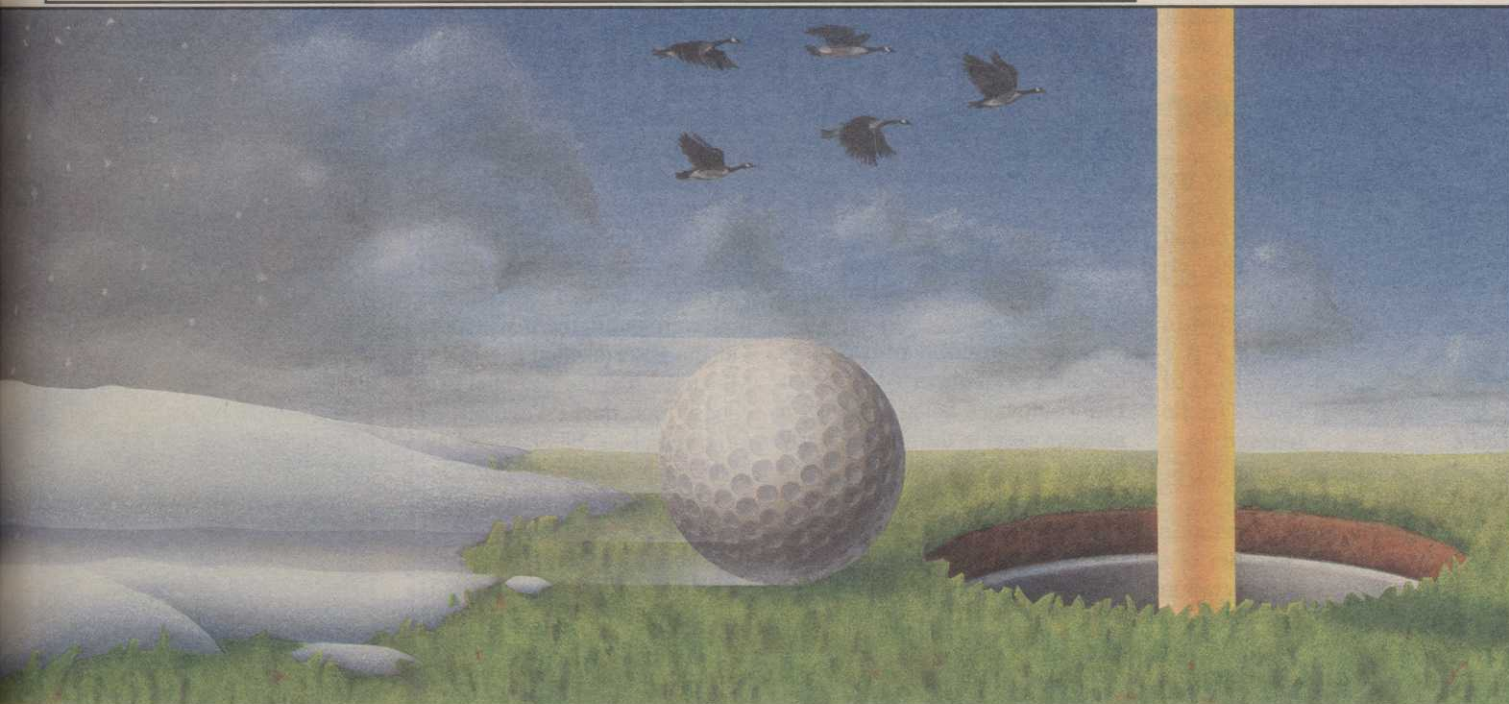
In 1959, Bruce and his son, Jerry, founded what is now known as Matthews & Associates, P.C. with offices in Lansing and Grand Haven, Mich. The firm has designed more than 75 golf courses in the Great Lakes area and remodeled numerous others.

For the past two years Golf Digest, in its annual review of best new courses, has recognized the designs of Matthews & Associates by naming The Lakes at Michaywe Hills Resort in Gaylor, Mich., and Timber Ridge in East Lansing, Mich., among the top new public courses in the United States.

Grand Haven Golf Club, which the elder Bruce Matthews designed and built in 1965, has been selected by Golf Digest as "one of America's 75 Best Public Courses in America" for three consecutive publications of the list in 1981, 1984 and 1988. Bruce Matthews owns and operates this facility.

Other notable courses in Michigan designed by the Matthews firm include Salem Hills Golf Course, Antrim Dells Golf Course and Birchwood Farms Golf and Country Club. Besides the design of numerous courses, the Matthews firm also has completed major renovations of "The Jewel" Golf Course at the Grand Hotel on Mackinac Island, Blythefield Country Club in Grand Rapids, Pine Lake Country Club in Orchard Lake, Midland Country Club and Muskegon Country Club, among scores of others across the Midwest.

W. Bruce Matthews, founding father of the clan, remarked on his family's commitment to the profession: "It's been a great life. And, along with my children and grandchildren, we hope to continue in this most challenging industry and provide golf courses people enjoy playing. After all, that's what it's all about."



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# Course accessory niche growing fast

This month's issue features an equipment update on golf course accessories. This niche of the golf course marketplace is growing with more intensity than the industry itself, with many new ideas in signage, yardage markers and distance measuring methods.

With all that is available for making play more pleasurable, it still happens that players still do not heed the warnings of signage protecting the golf course.

You'll find an up-to-date listing of the major accessory manufacturers on pages 20 and 21 of this issue. While our editorial staff tried to include as many products as



von Brecht

possible, there are just too many to list. Recently, while playing a foursome late in the afternoon, one of our group actually ran over a "No Carts" sign — while we laughed. I quickly pointed out to the person that he would most likely be mentioned in my next column... There is no excuse for this blatant inattentiveness on the golf course. We all must continually pay attention to course rules

and regulations.

This year's U.S. Open was especially exciting. Medinah Country Club Course #3 was spectacular. The weather, cooperating for the most part, allowed perfect greens and different playing conditions all four days.

Mike Donald is a very well-respected player among his peers. He has served on the tournament policy board of the PGA Tour and is known as "Iron Mike" due to his schedule of tournaments.

I've had the pleasure of having a beer with Mike through my association with the JC Penney Classic, which Mike won with Vicki Al-

varez in 1984.

Hale Irwin is the classic Tour veteran, from my hometown of St. Louis. His hand-slapping romp around the 18th green after making that 45-footer on Sunday will be seen over and over again.

Congratulations to both players and the crew at Medinah for a spectacular event.

Golf Course News has a new sister publication. United Publications has acquired Gourmet Today, the latest addition to our growing family.

Sincerely,  
Charles E. von Brecht  
publisher

## Trust is the measure of company's character

BY MARK LESLIE

When the quality control falters, when the government inspection crew misses a beat, when the motor's governor is set too high, that's when a firm's reputation is on the line. And that's when company officials know their response will dictate their future.

The latest example in the golf industry is O.M. Scott & Sons' trouble with a contaminated lot of FF-II fungicide. When Scott discovered there might be a problem with a specific "manufacturing run," or lot, of the product, its officials sent technical representatives out into the field to handle the problem of turf-kill.

Superintendents at courses affected by tainted FF-II were grateful — both for the response and the fact Scott paid the bills for repairing their greens. That cost was substantial — upwards of \$100,000 just at Boyne Mountain Golf Course in Boyne Falls, Mich.

But, then, the response was expected. Superintendents are the men industry suppliers work with



Leslie

day to day, the people suppliers rely on and who rely on them.

Scotsman George Macdonald said: "To be trusted is a greater compliment than to be loved."

Trust. It is a measure of a person's character. And the character of a company's leaders is reflected in the company itself.

"By the work one knows the workman," said Jean de la Fontaine. That's an amen to: "By their fruits ye shall know them."

American writer Elbert Hubbard wrote: "We work to become, not to acquire."

But I say: "Work with integrity and you will do both. Your company, your golf course, your business of whatever type will birth a soul, and you will acquire wealth, both in money and other things."

Scott's response showed its integrity and trustworthiness. Yet in the golf business — unlike some others — integrity is expected.

There are any number of other examples.

Last year government inspectors checking seed imported by seven U.S. companies failed to detect a noxious weed in the shipment. By the time they discovered it, Pennington Enterprises Inc. had sent it to K Mart stores nationwide and it had to be recalled.

Pennington lost \$200,000 and all the companies together absorbed a \$1-million loss, thanks to Uncle Sam.

But their response was quick and without question.

The financial loss hurt them all. But the loss of reputation, according to Sonny Pennington, was most critical.

Loaded warehouses and state-of-the-art research laboratories aside, any company's reputation — its integrity — is its most important asset.

## COMMENT

Early this year, Mitsubishi and Daihatsu were informed their utility vehicles violated Environmental Protection Agency standards.

The vehicles had passed inspection, were out in the marketplace. Yet the EPA decided the Mighty Mits units had the potential to exceed 25 mph, the EPA's cutoff point for a vehicle to be classified as a utility vehicle (not subject to Clean Air Act emission standards) or light truck (subject to standards).

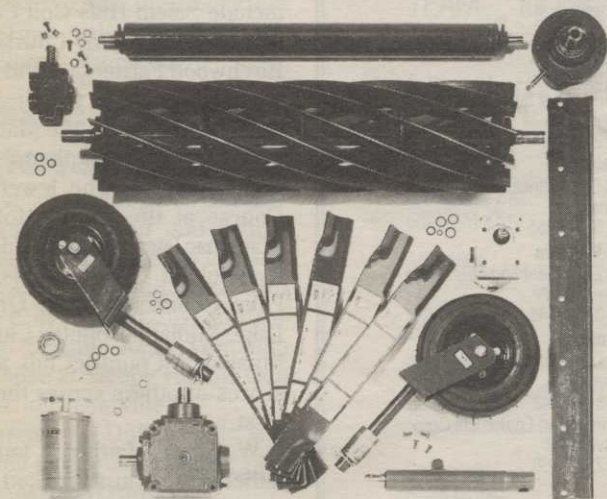
Although the units were made with a governor restricting them to less than 25 mph, the EPA said a mechanic could tamper with the governor and soup up the vehicle.

Shipments stopped for six weeks last summer, and ever since, the companies have been offering free-of-charge modifications to units already out on courses.

Mitsubishi and Daihatsu responded quickly and professionally. Just like Pennington. Just like Scott.

Just like others in the golf industry would do, thank God.

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## FF-II

Continued from page 1

The contaminated FF-II — Lot #092889 (plus three letters) — has been recalled, he said.

Beginning with Eddie Hodgins of Idle Hour Country Club in Lexington, Ky., superintendents started calling Scott reporting dead spots in their greens. The spots were elongated and ran downhill — some two or three inches in size and others "as big as a spatula" at one course.

Hodgins, who lost 1,500 square feet of bentgrass on 18 of 20 greens at Idle Hour, said the cause of his dead spots was puzzling until two colleagues and University of Kentucky Professor A.J. Powell recognized it as an old nemesis. Three years ago a similar contamination had occurred in a Lesco, Inc. product containing atrazine, Hodgins said.

But until that discovery, the problem went from bad to worse.

Hodgins said that in February he started seeing spots. "Then it got all over the greens."

UK's Powell at first thought the plague was chronic ring spot, Hodgins said, and he responded by treating the greens on the front nine with FF-II.

It only got worse.

Finally, he spread sulfur on the greens and believes that neutralized the atrazine.

Scott labs verified the cause after three weeks of tests. Results showed FF-II spread on Idle Hour greens had four times the amount of atrazine needed to kill bentgrass.

Hodgins said 4,000 two-inch plugs were needed to mend the Idle Hour greens.

"They're all fine now," he said. "We finished plugging on Memorial Day weekend." While Hodgins' greens survived with plugging, others had to resod entire greens.

Boyne Mountain Golf Club in Boyne Falls, Mich., was one of those.

Superintendent Blake Woodard used the contaminated FF-II on two of the 10,000-square-foot greens on his championship course and all nine smaller greens on his executive course.

The result? "It was blanket coverage," he said, "like a herd of elk had run all over them."

One of the the two larger greens had to be

stripped 18 inches below the surface "because we didn't know how far down the contamination went."

Five hundred to 600 yards of fill was needed. The cost to sod the two large greens, he said, was \$18,000 for the sod and another \$18,000 to lay it.

Woodard said he will probably use his maintenance crew to lay the sod on the executive course's greens, but the cost could still reach \$50,000.

Scott is picking up the tab, and Woodard said he is happy with the company's response to the outbreak.

"They sent representative after representative and took more and more samples" to test the soil and resolve the problem, he said.

Scott Vice President of Sales Jerry O'Donnell said different courses required different solutions.

"We did several things, depending on the number of spots," O'Donnell said. "Where the spots were few and far apart, we removed the soil plugs and replaced them with good turf."

"Where the damage was more extensive, we sprayed the greens with a liquid or dry form of charcoal treatment, top-dressed them with sand and overseeded with bentgrass."

Meanwhile, Scott has taken steps to improve its quality control and prevent future contaminations.

First, according to Vice President and General Manager Richard B. Stahl, all products containing atrazine will be dyed a bright color so they can be easily recognized.

Second, quality assurance personnel will increase checks on production runs of golf course greens products.

Third, bioassay tests will be conducted using sensitive turfgrasses to provide an additional check on product quality.

(See letter on this page.)

## Correction

In the June issue's story Coeur d'Alene golf course story we misspelled the name of John Barlow, administrative vice president of the Hagadone Corp., which is developing the course.

## LETTERS

## An open letter from O.M. Scott

To Our Customers:

At the O.M. Scott & Sons Co., product quality is of utmost importance. We believe you have enough to do without worrying about the performance of the products you buy. Unfortunately, last fall our quality control system did not identify a potential problem with FF-II. As a result, a limited amount of contaminated product was released to the market.

When such a situation occurs, word spreads rapidly and facts can become distorted. To help ease our customers' fears, here are the facts of the present situation.

- Greens treated with FF-II came through the winter in excellent condition. But when the weather started to warm up this spring, a small number of golf courses noticed spots resembling dollarspot. Our technical representatives took soil and product samples, and identified atrazine on these courses. Scott took immediate action to insure that the golf courses were back in playing condition as soon as possible.

- Our technical representatives were notified as soon as we learned of this issue. They have contacted each customer, individually, who received FF-II from the suspect production.

Since this situation was identified, we have taken the following actions to insure that this type of contamination never occurs again in

Scotts ProTurf or ProGrow products.

1. All products containing atrazine will be dyed a bright color so that they can be easily recognized.

2. Quality assurance personnel will make increased checks on production runs of golf course greens products.

3. Bioassay tests will be conducted using sensitive turfgrasses to provide an additional check on product quality.

We regret this incident and apologize for the inconvenience and confusion it may have caused.

Again, product quality is the highest priority at O.M. Scott, and we stand behind all of our products. As outlined above, you can be certain this incident is not being taken lightly. Please be assured that the Scott products you have now, and will order in the future, will be safe for use.

If you have any questions about this situation, please feel free to contact Scott directly at 1-800-543-0006. Thank you.

Sincerely,

Richard B. Stahl

vp and general manager

Letters to the editor are welcomed. Just write to *Golf Course News*, P.O. Box 997, Yarmouth, Maine 04096.

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# Casas wins raves as super for California mini-empire

BY PETER BLAIS

You listen to Paul Casas and Ken Hunter and you begin to think they coined the expression "mutual admiration society."

"Paul is so enthusiastic, loyal and energetic he's a tremendous role model for everyone he comes in touch with," said Hunter of the man who oversees maintenance at three of his courses.

"Ken's been an inspiration to me," countered Casas of his boss. "It's a really unique situation for a boss and employee to get along so well."

Together, the two Californians have built a golf mini-empire that includes Sandpiper Golf Course in Goleta, ranked among the top 25 public courses in the country by "Golf Digest" and second in California only to Pebble Beach by "California Golf"; La Purisima Golf Course in Lompoc, California's seventh-ranked public course according to "California Golf"; San Geronimo Golf Course in Marin County, a renovated facility 10 miles north of San Francisco's Golden Gate Bridge; and Hunter Ranch Golf Course, a public course scheduled to open next summer in Paso Robles.

Casas oversaw construction and maintenance of the three existing courses as he will at Hunter Ranch,

where construction is scheduled to begin in September.

"I really have my cake and eat it, too," said the 50-year-old director of golf courses. "We do all our construction in-house, except for the rough grading and irrigation. So I get to develop and maintain the courses."

Casas and Hunter first hooked up in 1963 when Casas worked at Elkins Ranch Golf Course in Fillmore. Hunter was the general manager.

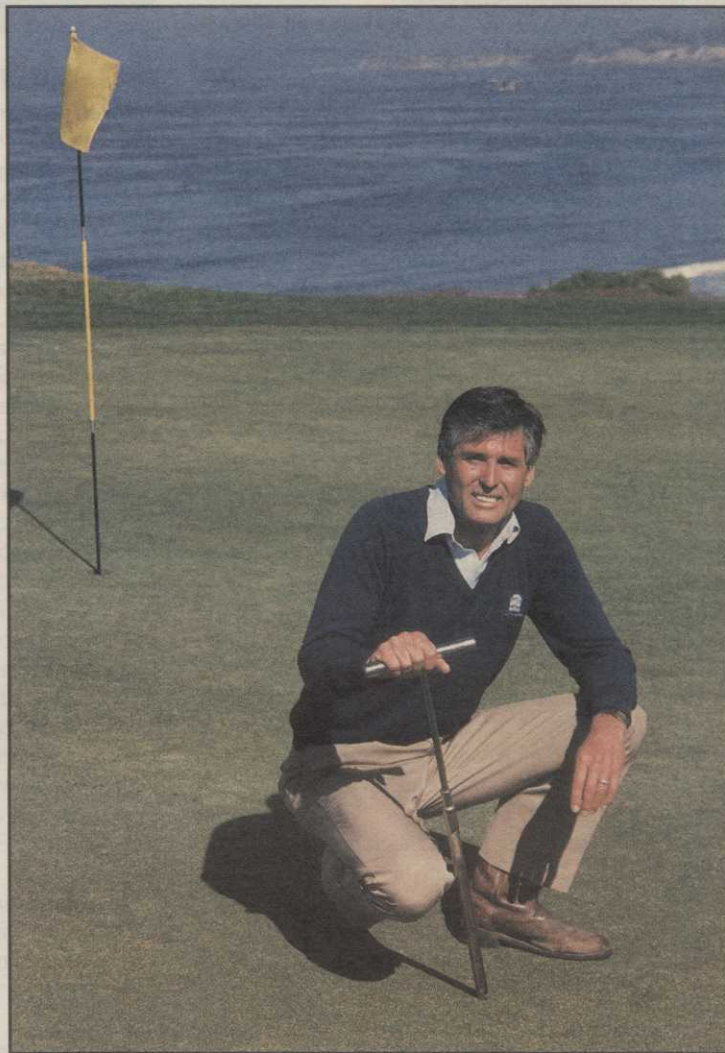
"He was the assistant superintendent," remembered Hunter of Casas, who had three years earlier left a well-paying assembly-line job at General Motors to follow his dream of working at a golf course. "You could see he had great promise and a lot of ability."

At Hunter's urging, Casas attended a nearby community college, taking courses in landscape horticulture and advancing to superintendent at Elkins Ranch.

He remained at the Fillmore course until 1971 when construction started at Sandpiper. It took 11 months to complete.

"Paul lost something like 15 pounds," Hunter said. "He lived at the course for those 11 months. It was a fantastic effort."

Casas was superintendent at Sandpiper until 1985, when con-



Paul Casas relaxes at work.

struction began on La Purisima. Casas moved twice as much earth, 500,000 yards, at the Lompoc course as he did at Sandpiper. But again, 11 months was all it took to open the Robert Muir Graves-designed course. Casas was named director of golf courses and put in charge of the superintendents at Sandpiper and La Purisima.

Three years later, Casas was again directing earth-moving equipment, this time at San Geronimo, which closed for financial reasons in 1986. Casas set about rebuilding numerous greens, 40 bunkers and the long-neglected irrigation system. He added several new tees and a lake. After 5-1/2 months, the course re-opened in 1988.

That brought three facilities under Casas' wing. That will increase to four when Hunter Ranch begins construction this fall.

"That's like asking which of your children you like best," answered Casas, when asked if he had a favorite among the four. "Each one is different."

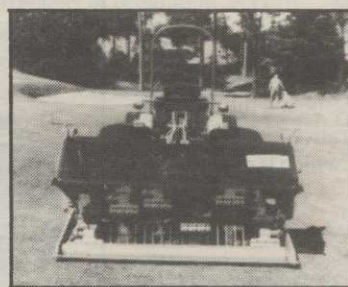
As for real children, Casas and wife Connie, a branch manager at a Wells Fargo bank, have three. Paul, 26, is attending vocational school; Christopher, 23, is a senior at Chico State University; and Melissa, 17, is a junior in high

*Continued on page 11*

The 305.200H and 305.250 both use 16" deep tines. The 305.200H has a working width of 79" while the 305.250 is at 98".



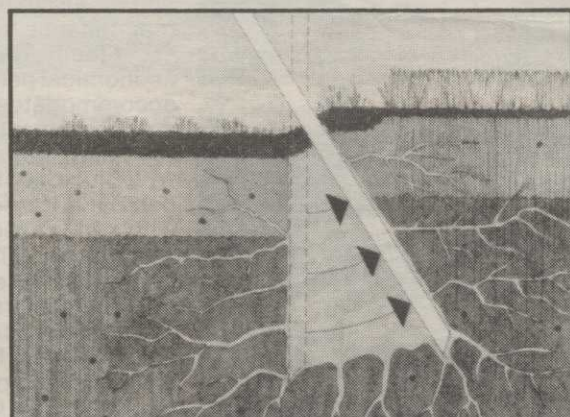
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# Denver speeds up play: Drastic but effective measures

BY PETER BLAIS

Four years ago it took almost 5-1/2 hours to play a round of golf at Wellshire Golf Course in Denver, Colo.

That was before the City Council voted to begin timing players and allowing management to remove stragglers from the Donald Ross course.

The result?

Forty-five minutes were shaved off the average round, according to City Director of Golf Dennis Wong. Golfers who had avoided Wellshire because of slow play began returning. And, most importantly, at least to the Mile High City's pocketbook, speedier play has meant a 20-percent jump in rounds and revenue.

Denver's experiment represents a possible solution to the slow play and crowded conditions that have

accompanied golf's recent growth and threaten its future.

Fifty-five percent of golfers surveyed by the National Golf Foundation said their courses were too crowded when they wanted to play. And one-fourth said crowded courses (a problem involving slow play and course supply) kept them from playing more often.

Golf managers have tried subtle changes to speed up play — more rangers, easier tee markers and pin positions, mandatory use of golf cars, education on the importance of speedier play.

Rarely have they resorted to the radical step of timing players and removing the slower ones, partly because of golfers' reported dislike of the system. Seventy percent of golfers opposed time limits, according to the NGF.

But something had to be done in

Denver, particularly at Wellshire. With its tight fairways and heavy demand, an average round at Wellshire was taking an hour and 40 minutes longer to play than the NGF's national figure of three hours and 50 minutes.

A late-1986 brainstorming session involving city course superintendents, pros and the golf director resulted in the Denver policy, explained Wong.

Beginning in 1987 at Wellshire and John F. Kennedy Municipal Golf Course, tee times were stamped on a group's scorecard at the first tee. The card was checked at the fourth hole at Wellshire, and stamped again at the ninth at both courses. If the elapsed time after the ninth was more than the recommended two hours and 20 minutes, the group was encouraged to speed up play. Course personnel

also had the City Council-approved right, though it has been exercised less often in recent years, to ask the group to leave with no refund.

Wong estimated a dozen groups, mostly beginners, were asked to pack their bags that first summer. Course personnel usually suggested they play the city's par-3 course and return when they had a better grasp of the game. That advice was usually well received, said Wong.

"We timed every group to keep people aware of where they should be on the course. A lot of beginners and novices simply weren't aware. Our intention wasn't to remove people, just to keep them moving," said Wong.

Wong said experienced players occasionally balked at the time limit.

"The men's clubs sometimes felt we were pushing them around the

course," he said. "With all the TV coverage, they'd see a pro standing over a putt forever and think they had to do the same. We have all kinds of literature from the PGA discouraging slow play that we show them. And we tell them about the penalties for slow play on the PGA Tour, how it can be a lot of money out of a pro's pocket if he is penalized a stroke or two."

The occasional complaint aside, the vast majority favored timing players, said Wong. The program was so successful, it was extended to all seven city-owned courses.

Very rarely is a player asked to leave now that golfers are familiar with the system. People are coming back to Denver's courses, particularly Wellshire.

"Word got out that you can play it in 4-1/2 hours or less, again," said Wong.

## Casas

*Continued from page 10*

school. None have expressed any desire to follow in their father's footsteps.

"That's probably my fault," said Casas. "I started a policy that no relatives could work at the golf courses. I kind of regret that now. They might have been interested, but Paul was just 7 and Chris 5 at the time. I never really thought about them working for me."

If they had, they probably would have enjoyed it. Employee turnover at the Hunter courses is nil. Hunter credits Casas.

"Paul's very loyal in his family, social, religious and business life," said Hunter. "He's the same way with his employees. He treats them the way he'd like to be treated."

"He's also bilingual. That's very helpful since some of our employees are Mexican nationals who have

recently become citizens. He helps them with their personal problems and offers guidance with things like buying a home."

Hunter also credits Casas with keeping a tight grip on the company's pocketbook. "Paul saves us money all the time by treating the company's assets as if they were his own," he said.

The latest threat to the company's bottom line is the water bill. Casas

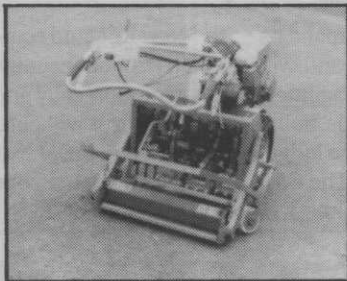
said the price of water has increased eight-fold at Sandpiper over the last 10 years, from \$14,000 in 1980 to \$115,000 this year. The price for one unit (748 gallons) of irrigation water ranges from \$1.01 at Sandpiper to \$2.04 at San Geronimo.

Casas has revised his watering schedule and coverage practices in response to the price increase and the 15 percent cutback in supply imposed by the state because

of the current drought. Last year's 4.35 inches of rainfall was about a third of the average precipitation rate and represented the fourth straight year of drought conditions.

He is also involved in negotiations between the local water and sanitation districts involving the use of effluent on golf courses. With potable water rates likely to rise, Casas sees effluent as a way to keep water costs down.

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## NEW COURSES

### Weiskopf, Irwin return to their roots

Professional golfers Hale Irwin and Tom Weiskopf are designing courses near their hometowns.

Irwin, a Boulder (Colo.) High School and University of Colorado graduate, has been named architect of a municipal course in neighboring Lafayette.

The three-time and reigning champion of the U.S. Open will receive \$450,000 for the project which will accompany a 500-acre residential development.

Irwin, who won the 1967 NCAA golf championship and earned All-Big Eight honors at defensive back while attending the University of Colorado, has also designed courses in Loveland (Colo.), St. Louis, Houston, Boston and Springfield, Ill.

Weiskopf has agreed to design a second, 18-hole layout at Quail Hollow Resort in Concord Township, Ohio.

A former resident of nearby Bedford, Weiskopf attended nearby Benedictine High School and Ohio State University before embarking on a pro playing career and entering the design business with partner Jay Moorish.

The new course will be part of the Hunt Club housing development. Construction is scheduled to start this summer with the course opening in two years.

Meanwhile, Irwin's Panther Creek Country Club is under development in Springfield, Ill. Ground was broken for the 18-hole private course and luxury residential community on May 1.

Helmkamp Construction Co. is the general contractor for the \$3-million project.

The Irwin firm, headquartered in St. Louis, Mo., is also designing The Lakes at Sycamore in Fort Wayne, Ind.; Black Rock in Edenton, N.C.; Cerro Plata in San Jose, Calif.; and Antelope Spring Golf Club in Sun Valley, Idaho.

## Courses newly approved in the U.S.

*Golf Course News* is publishing this list monthly. It includes courses that have been approved around the country in the past month. In addition, the chart on the next page contains the sites and contacts for new courses and renovations in the planning stages. When those courses are ready to begin construction they will be listed again in this "Courses newly approved in the U.S."

chart.

We would appreciate your help in updating this section. To contact us call 207-846-0600 or write *Golf Course News*, P.O. Box 997, 38 Lafayette St., Yarmouth, Maine 04096.

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

Location	Course Name	Type	Holes	Address	Architect/Contact
California					
Wallkill	N/A	M	18	N/A	Hudson Engineering DeveloperGeorge birish
Warwick	N/A	P	18	N/A	
Colorado					
Lafayette	N/A	M	18	Baseline Rd.	Hale Irwin
Illinois					
Chicago	Chicago Heights Park Dist. GC	M	9	Halsted St.	Ken Killian
Mundelin	Countryside Golf Course	M	18	W. Hawley Rd.	Lohmann Golf design, Inc.
West Chicago	N/A	M	18	DuPage airport	Robert T. Jones Jr.
Michigan					
Lambertville	Maple Grove	D	9	N/A	Owner Rick Kimble
Minnesota					
Deerwood	Bay Lake GC	D	9	PO Box 400	Joel Goldstrand
Missouri					
St. Louis	The Legacy	D	18	Granite City	Hale Irwin Golf services, Inc.
New Hampshire					
Lebanon	Benwood	P	18	N/A	Von Hagge Design Assoc.
New Jersey					
Warren County	Crystal Springs	P	18	Hardyston & Locust Lake	Von Hagge Design Assoc.
New Mexico					
Rui Doso	Sierra Blanca GC	D	18	Hwy 48	Jim Colbert
Santa Ana Pueblo	N/A	N/A	27	Bernalillo	Ken Kavanaugh
Ohio					
Concord	Quail Hollow	D	18	Quail Hollow Resort	Tom Wesikopf/Jay Moorish
Oregon	Maumee Bay State Park	M	18	N/A	Arthur Hills & Assoc.
Toledo	Fairway GC	D	18	5151 Monroe St.	Arthur Hills
Toledo	Spuyten Duyval	D	9	West Central Ave.	Owner Gary Shaneck
Oklahoma					
Edmond	N/A	D	18	Heffner Rd. & Kelly Ave.	Planning design Group, Tulsa
South Carolina					
Goose Creek	Crowfield Plantation CC	D	18	PO Box 1990	Tom Jackson
Texas					
El Paso	N/A	M	18	N/A	Finger-Dye

## Cavendish signs to design golf, ski resorts

The Cavendish Partnership, a planning, architectural and landscape architectural consulting firm, has been awarded contracts for planning and designing two golf and ski resorts in the Midwest — The Pine Mountain Resort, in Iron Mountain, Mich., and the Snow Crest Resort in Somerset, Wis.

The Pine Mountain Resort will expand its nine-hole golf course to 27 holes and will add lodging, retail and convention facilities.

Snow Crest will expand its ski trails, building a new golf facility and a new base lodge.

Peter Bourgois, a principal with The Cavendish Partnership, said, "The weakness in

the New England economy has given us the much needed incentive to expand our market geographically and 1990 will be the first year the firm will complete the majority of its work outside of New England."

It is anticipated construction will begin in the spring of 1991.



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# Courses newly proposed in the United States

Location	Contact	Location	Contact	Location	Contact
<b>Arizona</b>		<b>Carbondale</b>	William Spear	<b>Ogdenburg</b>	St. Lawrence State Park
Bullhead City	Architect George Williams	Carlyle	Sen. Frank Watson, Greenville	Orangeburg	Architect M. Kobayashim
Springerville	Gary Panks	Channahon	Dick Nugent	Putnam County	Jack Nicklaus
Yuma	Architect Warner Bowen & Son	Chicago	Blue Island GC	Red Hook	Architect David Horn
<b>Arkansas</b>		Homer Township	Robin Hill Development Co. of Northfield	Rye Brook	Architect Von Hagge Design Assoc.
Hot Springs	William Amick	Lisle	William Spear	Shoreham	Architect Robert Manniello
<b>California</b>		Oswego	Ken Kavanagh	<b>North Carolina</b>	
Arroyo Grande	Architect Cal Olson	Tuscola	First Golf Corp. of Denver	Aberdeen	Jack Nicklaus II
Byron	Architect Michael Johnstone	Wayne	Dick Nugent	Asheville	Architect Von Hagge & Devlin
Camarillo	Architect Jay Revere	<b>Indiana</b>		Calabash	Clyde Johnston
Camarillo	Robert Cupp	Brookville	Sagamore Conf. Ctr & GC	Calabash	Sandpiper Bay Golf & CC
Cathedral City	David Rainville	Elwood	Gary Kern/Ron Kern	Charlotte	Ault, Clark & Assoc.
Chino	Architect Cal Olson	Ft. Wayne	Hale Irwin	Durham	Architect Mike Rubish
Cornwall	Fortune Development Corp.	Greenville	Architect David Frey	Jefferson	Architect Larry Nelson
Coto de Coza	Robert T. Jones, Jr.	Indianapolis	Architect Gene Bates	Ocean Isle Beach	Brick Landing Plantation Club
Cypress	N/A	Mitchell	Architect Stephen Terry	Pinehurst	Architect Gene Hamm
Davis	Davis Community Golf Course	Morresville	Gary Kern	Pinehurst	Gary Player
Delano	Architect Richard Bigler	Patoka Lake	Tillery Hill Resort	Pinehurst	Rees Jones
El Dorado Hills	Ted Robinson	Peru	Michael Hurdzan	Rockingham	Architect Leonard-Hannula
Fremont	Golfco, Jim Summers	Winchester	Beeson Park GC	Salisbury	Architect Pete Tufts
Fresno	Architect Stephen Freshman	<b>Kansas</b>		Sapphire Valley	Architect D.J. DeVictor
Goshen	Lads development Co.	Overland Park	Champions Family Recreation GC	Wilmington	Clyde Johnston
Grass Valley	Robert M. Graves	<b>Kentucky</b>		Winston-Salem	Arnold Palmer/Ed Seay
Green Valley	White Wing Estates	Annville	Annville GC	<b>North Dakota</b>	
Hemet	Greg Nash/Billy Casper	Hebron	Traditions GC	Jamestown	Joel Goldstrand
Huntington Beach	Architect George Williams	Louisville	Architect William Newcomb	<b>Ohio</b>	
Jackson	Architect Von Hagge Design Assoc.	<b>Louisiana</b>		Akron	Mike Hurdzan
Kernsville	Lake Isabella GC	Alexandria	Former pro Jack Slocum	Beaver Creek	Jack Nicklaus
King City	Architect Richard Bigler	Pineville	Fort Buhlow Lake Recreation	Centerville	Centerville Municipal GC
La Quinta	Jay Moorish/Tom Weiskopf	<b>Maine</b>		Columbus	Mike Hurdzan
Lake Elsinore	Architect Karl Litten	Casco	Gary Player	Port Clinton	X.G. Hassenplug
Livermore	Jack Nicklaus	York Beach	Cornish & Silva	Westerville	Jack Nicklaus II
Los Angeles	Robert Cupp	<b>Maryland</b>		<b>Oklahoma</b>	
Los Angeles	Ted Robinson	Bowie	Greg Nash/Billy Casper	Oklahoma City	N/A
Los Banos	Architect Richard Bigler	Frederick	Mike Hurdzan	<b>Oregon</b>	
Mammoth Lakes	Architect Cal Olson	Howard County	County Administrator Buddy Roogow	Bend	Architect Gene Mason
Mammoth Lakes	Ted Robinson	Olney	Ault, Clark & Assoc.	Eagle Creek	Developer Frank Bastasch
Oakland	Architect Michael Johnstone	Owing Mills	Lyonsfield GC	Newport	Wolf Tree
Old Hopland	Valley Oaks Ranch GC	Owing Mills	Tom Fazio	Portland	Perry Dye
Palm Springs	Bradford Benz	Prince Georges	Ault, Clark & Assoc.	Portland	Robert T. Jones, Jr.
Palm Springs	Ted Robinson	Queenstown	Lindsay Ervin & Assoc.	Sherwood	Architect Gene Mason
Patterson	Denis Griffiths & Assoc.	St. Mary's County	Architect Robert Manniello	Troutdale	503-695-2724
Pleasanton	Arnold Palmer/Ed Seay	St. Mary's County	Ault, Clark & Assoc.	<b>Pennsylvania</b>	
Ramona	Lee Schmidt	Timonium	Ault, Clark & Assoc.	Blairsville	Ault, Clark & Assoc.
Rancho Mirage	Pete Dye	White Hall	Algie M. Pulley	Bristol	Jack Nicklaus
Riverside	Ted Robinson	<b>Massachusetts</b>		Buckingham	Architect Gene Bates
Roseville	Greg Nash/Billy Casper	Barnstable	Cornish & Silva	Gladwyne	Philadelphia CC
San Bernadino City	Ted Robinson	Barnstable	Marston's Mills GC	Hanover	South Hills GC
San Diego	Arthur Jack Snyder	Harvard	Cornish & Silva	Lancaster	Ferdinand Garbin
San Diego	Greg Nash/Billy Casper	Mattapoisett	Brandt Island GC	Lititz	Robert C. Walker
San Marcos	Ted Robinson	Mendon	Gary Kern/Norm Palumbo	Oxford	Ault, Clark & Assoc.
San Marcos	W. Wolf Industries Inc. of San Diego	Norwell	Rec. Comm. Chmn Paul Crowley	Pittsburgh	Jack Nicklaus
San Mateo	Architect Michael Johnstone	Oak Bluffs	Oak Bluffs Municipal GC	Stroudsburg	Stroudsmoor CC
San Rafael	Architect Gene Bates	Oakham	Phillip Wogan	<b>Rhode Island</b>	
Santa Maria	Architect Cal Olson	Plymouth	Coachman Village CC Estates	Hopkinton	Philip Wogan
Scotts Valley	Architect Ronald Fream	Plymouth	Rees Jones	<b>South Carolina</b>	
Simi Valley	David Rainville	Rockland	Phillip Wogan	Cheraw	Architect Tom Jackson
Simi Valley	J. Michael Poellot	<b>Michigan</b>		Columbia	Arnold Palmer/Ed Seay
Simi Valley	Ted Robinson	Cadillac	Architect William Newcomb	Fort Jackson	Fort Jackson GC
Simi Valley	Whiteface GC	Fond du Lac	Rolling Meadows GC	Hilton Head	Pete & PB Dye
Solano County	Johnny Miller	Garden	Architect John Lucas	Hilton Head	Robert Cupp
Sonora	Robert T. Jones, Jr.	Gaylord	Treetops/Sylvan Resort	Mt. Pleasant	Denis Griffiths & Assoc.
Sutter	Southbridge GC	Hampton Township	Bay County GC	Myrtle Beach	803-448-2308
Vacaville	Cherry Glen Golf & CC	Kinross	Kincheloe Memorial GC	Myrtle Beach	Architect Tom Jackson
Valley Center	Ted Robinson	Marquette	Architect Warner Bowen & Son	Myrtle Beach	Clyde B. Johnston
Warwick	Parks & Rec. n Comm. Graham Skea	Mt. Morris	N/A	<b>Tennessee</b>	
<b>Colorado</b>		Oscoda	Lakewood Shores Golf & CC	Franklin	Architect Kevin Tucker
Denver	Parks & Rec Director Carolyn Etter	Plymouth	Architect William Newcomb & Assoc.	Franklin	Gary Roger Baird
Ridgeway	Architect Von Hagge & Devlin, Inc.	Resort Township	Three Fires Pointe Resort	Gallatin	Architect Kevin Tucker
<b>Delaware</b>		Shelby	Architect Warner Bowen & Son	Lebanon	Lee Trevino
Odessa	Ault, Clark & Assoc.	Sparta	Architect Warner Bowen & Son	Lewisburg	Architect Gene Bates
<b>Florida</b>		St. Johns	Architect Warner Bowen & Son	Loudon	Ault, Clark & Assoc.
Bonita Springs	Architect Gordon G. Lewis	<b>Minnesota</b>		Tellico Village	Ault, Clark & Assoc.
Bradenton Springs	Cypress Banks GC	Brainard	Michael Hurdzan	<b>Texas</b>	
Daytona	Arnold Palmer/Ed Seay	Cottage Grove	Don Herfort	Copperas Cove	Copperas Cove Municipal GC
Daytona Beach	LPGA Headquarters	Cottage Grove	River Oaks GC	Granbury	Pecan Grove Plantation
Delray Beach	Architect Karl Litten	Eagan/Inver Grove	Architect Matthew Eccles	Lewisville	Lake Park GC
Destin	Robert Cupp	Ham Lake	Architect George Williams	Montgomery	Architect Von Hagge & Devlin
Immokalee	Arthur Hills	Inver Grove Heights	Architect George Williams	Port Isabel	Gary Player
Lake Placid	Architect Gordon Lewis	Northfield	Architect George Williams	San Antonio	Hollering Creek GC
Lake Wales	Ron Garl	Prior Lake	Turtle Bay GC	Texarkana	Bringle Lake GC
Lakeland	Denis Griffiths & Assoc.	Watertown	Rivers Edge CC	<b>Utah</b>	
Melbourne	Suntree West GC	<b>Missouri</b>		Draper City	Johnny Miller
Mulberry	Ron Garl	Arnold	Meyer GC	Lehi	William Neff
Naples	Gordon Lewis	Cuba	Gary Kern	Riverton City	Riverton
Naples	Jack Nicklaus	Elsberry	Gary Kern	Salt Lake City	William Neff
Naples	Lely Resort	Harrisonville	John Nash	Springdale	William Neff
Naples	Sable Bay Resort	Kansas City	Robert Lohmann	<b>Vermont</b>	
Odessa	Ron Garl	Pleasant Hill	John Nash	Brownsville	Ascutney Mtn. Resort
Oldsmar	Gordon Lewis	Washington	Gary Kern	Chittenden	Cornish & Silva
Orange City	Village Greens CC	<b>Nebraska</b>		Richmond	Charles Ankrom
Orlando	Bastian GC	Indianola	Indianola GC	<b>Virginia</b>	
Pasco County	Denis Griffiths & Assoc.	N. Platte	Architect Wyss Inc.	Cape Charles	Architect Stephen Kay/Hale Irwin
Plant City	Ron Garl	No. Lincoln	Developer Larry Maciejewski	Cape Charles	Ault, Clark & Assoc.
Port Charlotte	Architect Gene Bates	Omaha	Bradford Benz	Chesapeake	Ault, Clark & Assoc.
Port Orange	Arthur Hills	Omaha	Eagle Run Golf Complex	Dumfries	Ault, Clark & Assoc.
Sarasota	Gary Player	<b>Nevada</b>		Henrico County	Architect Clark & Assoc.
Spring Hill	Ron Garl	Las Vegas	Lake Las Vegas	Lake Manassas	Robert T. Jones, Sr.
St. George Island	Gordon Lewis	Las Vegas	Ted Robinson	Leesburg	Ault, Clark & Assoc.
Wellington	Architect Karl Litten	Mesquite	Architect Cal Olson	Loudoun County	Rees Jones
West Palm Beach	Architect Karl Litten	Tonapah	William Neff	Manassas	Ault, Clark & Assoc.
<b>Georgia</b>		<b>New Hampshire</b>		Norton	Dogwood Hills GC
Albany	Developer Bob Barkley	Amherst	Souhegan Woods	Roanoke	Ault, Clark & Assoc.
Alpharetta	Denis Griffiths & Assoc.	Lebanon	Architect Von Hagge Design Assoc.	Spotsylvania County	Ault, Clark & Assoc.
Brunswick	Emperors Estates GC	Londonderry	Londonderry GC	Sterling	Ault, Clark & Assoc.
Calhoun	Arthur Davis	Milford	Cornish & Silva	Suffolk	Rees Jones
Cartersville	Willard Byrd	Pittsfield	Phillip Wogan	Virginia Beach	Ault, Clark & Assoc.
Columbus	Arthur Davis	<b>New Jersey</b>		Virginia Beach	CC of Virginia Beach
Fairburn	Robert Cupp	Atlantic City	Tom Fazio	Williamsburg	Ault, Clark & Assoc.
Greensboro	Port Armor Club	Colts Neck	Johnny Miller	<b>Washington</b>	
Macon	Ault, Clark & Assoc.	Fredon	Bear Brooks Village GC	Cle Elum	Two Rivers Recreation GC
Marietta	Architect Gene Bates	Greenwich	Architect Gene Bates	Deer Park	Deer Park GC
Monticello	Architect Mike Young	Hunterdon County	Architect Stephen Kay	Redmond	Ted Robinson
Smyrna	Windy Hill Park GC	Kinnelon	Robert T. Jones, Sr.	Ridgefield	Eagle II Development Co.
<b>Hawaii</b>		McAfee	Architect Von Hagge Design Assoc.	Spokane	509-456-4381
Honolulu	Ted Robinson	Parsippany	Arnold Palmer/Ed Seay	<b>West Virginia</b>	
Kailua, Kona	Jack Nicklaus	Piscataway	Architect Karl Litten	Charles Town	Architect Guy Rando
Koloa	Robert T. Jones, Jr.	Vernon	Architect Von Hagge & devlin	Marlinton	Robert Cupp
Oahu	Arnold Palmer/Ed Seay	<b>New Mexico</b>		Martinsburg	Ault, Clark & Assoc.
Oahu	Jack Nicklaus	Placitas	Developer Ron Bohannon	Ripley	Cedar Creek Links
Wailea, Maui	Robert M. Graves	Taos	Architect Von Hagge & Devlin	<b>Wisconsin</b>	
Waimea	Hamakua Golf Ventures	<b>New York</b>		Kenosha County	Brighton Dale GC
West Oahu	Four Seasons Hotels, Toronto	Eastport, LI	Architect William Schmidt	Madison	Jack Nicklaus
<b>Illinois</b>		Esopus	Stephen Kay	Sister Bay	Dick Nugent
Belleville	Gary Kern	Genesco	Architect Jamie Stanton	Sun Prairie	Architect Art Johnson
				Wautoma	Graef, Anhalt, Schloemer . of Little Chute



# Parks, rec board nixes idea to take over land for course

BY BILL ROLKE

The Columbus (Ind.) Parks and Recreation Board has decided not to use eminent domain to acquire the land needed for a proposed municipal golf course.

Negotiations between the board and owners of the property along the Highway 46 city entryway have lasted for nearly 18 months. While some owners of the land needed for the 18-hole golf course are willing to sell, at least two apparently are not.

Initially the board considered

using eminent domain to acquire the property. A question was immediately raised, however, as to whether or not this procedure could be used for this purpose.

While it has been employed to obtain land needed for highways, bridge construction, airport expansions and similar projects, there was doubt that eminent domain could be used to get land for a golf course.

Eminent domain procedures are also used to determine the fair value of land when a buyer and

seller are unable to negotiate a price.

These jury-decided procedures are often lengthy and costly.

It was reported the purchase of land needed for an Indianapolis airport was delayed by six years of litigation, and the original estimate of \$800,000 was increased 50 percent by the final \$1,200,000 verdict.

The president of the Columbus Parks and Recreation Department announced recently the board will not use eminent domain to obtain

## GOVERNMENT UPDATE

land needed for the golf course from unwilling sellers. He said the eminent domain procedure would be used only when the owner was willing to sell but a negotiated price could not be reached.

The board had originally planned to sell up to \$5.3 million in tax-supported bonds to pay for the course, designed by architect Michael Hurzdan. Officials felt the course would be self-supporting if players were charged a \$16 to \$20 greens fee.

The park board was to meet later in June to vote on a resolution regarding the golf course and bond issue.

Meantime, a local state representative has submitted a bill to the Indiana General Assembly that would prevent appointed bodies from exercising eminent domain procedures and make only elected officials responsible for this action.

*William A. Rolke is a freelance writer based in Columbus, Ind.*

## Hawaii

*Continued from page 1*

for that purpose. Jurigi planned to open the course to the public on a limited basis for the first two years, giving the city the opportunity to build other municipal courses, and then make West Loch private.

"You can't justify the condemnation for one purpose (municipal course) and then sell it for something else (private course). We're still public officials and we have to live up to the faith voters put in us," said Abercrombie.

The committee's second objection was the price Jurigi offered for the 150-acre course, said Abercrombie.

"When you talk about \$111 million, it sounds like a lot. But that's peanuts. You have a company that's willing to pay \$100 million for just a permit. Why should we take \$91 million (Jurigi's \$111 million offer minus the city's \$20 million cost to build the course) for an already-built course and 150 acres. Do you know what 150 acres would cost in Japan? Probably somewhere between \$1-1/2 billion and \$2 billion," the committee chairman said.

On the first point, City Finance Director Ted Jung said it is not unusual for any governmental body, including the city of Honolulu, to condemn land for one purpose only to use it for something else as times and circumstances change.

As for the committee's second objection that Jurigi's \$111 million offer for the course was too low since it was willing to pay \$100 million impact fee for just a permit, Jung said: "The impact fee is not a sure thing. Jurigi would like to build another course. But whether they can or not depends on if they can find the land, if it is suitable for a golf course and if they can get a permit.

The impact fee is a different issue entirely. To put that together (with whether the \$111 million bid for West Loch is reasonable) is ridiculous."

The impact fee is a new concept that is gaining popularity with developers. Pacific Atlas Hawaii, Inc. recently offered a \$20 million impact fee if its proposed expansion of 119-acre Bay View Golf Course is approved.

The \$291 million would pay for 15 years worth of capital improve-

*Continued on page 15*



## Moth, turtle project obstables

The local planning and appeals boards have approved a golf course in South Plymouth, Mass., but state officials may nix it.

The presence of the endangered eastern spotted turtle and the rare barren's buck moth on the 200-acre site of a proposed 18-hole golf course is causing the holdup.

Developer Richard Ridder of Whitman, Mass., must submit extensive environmental impact reports to show how construction and maintenance of the course would affect the habitat, ground water and area ponds on

the land.

Massachusetts Environmental Affairs Secretary John DeVillars said Ridder must prove the project "can accommodate the healthy proliferation of the plants and animals unique to this area."

The project, including 13 houses and a clubhouse, would be in the vast Plymouth pine barrens.

Ridder proposed the course after Plymouth's planning board opposed a 100-home subdivision in the isolated region. The new plan gained planning and appeals board approvals last year. But the state then stepped in.

## 'Model Club Rules' deals with laws facing private clubs nationwide

"Model Club Rules," a compendium of more than 70 suggested rules for private clubs, has been published by the National Club Association, according to NCA President George Squibb.

Written by Fred L. Somers Jr., an NCA director and past president, "Model Club Rules" was compiled with help from more than 50 private club officials in the United States.

"The rules have been crafted with the intent of helping a club preserve its right to privacy, notwithstanding an ordinance such

as New York City Local Law 63," Somers said.

Model Club Rules treats subjects ranging from alcohol to gratuities, reciprocity and valuables.

Model Club Rules is a checklist for the club management team that wants to address all important questions clearly so as to avoid misunderstanding on the part of members and their guest, according to NCA Executive Vice President Gerard F. Hurley.

Issued to all regular NCA members, Model Club Rules is the latest addition to NCA's Club Direc-

tor Reference Series, a collection of extended studies and guides designed especially for private club officers, directors, managers and owners.

Somers is a practicing attorney who lives in Atlanta, Ga., where he is a founding partner of Somers and Altenbach. Somers graduated from the University of Virginia and its School of Law, and is a member of the American, Virginia, Georgia and Atlanta Bar associations. He is past president and governor of Dunwoody (Ga.) Country Club and a governor of the Ravinia Club in Atlanta.

## Residents fly to session to be heard

The developer of two resorts on Hawaii's Lanai island flew 30 residents to Maui to ask the Maui County Planning Commission not to further delay development of the second resort and golf course.

Commissioners wondered if the residents, 90 percent of whom rely on the company to earn a living, were forced into the flight by developer Castle & Cooke Inc. But they said they were not forced.

The commission decided the 154-acre expansion of Lodge at Koele does not require an environmental report. The expansion would enlarge the resort to 632 acres and allow a larger golf course and more land around houses.

The commissioners did, however, require an environmental report on plans to more than double the acreage of the Manele Bay Hotel project from 395 to 868 acres to allow a new 18-hole course.

## Hawaii

*Continued from page 14*  
ment recreation projects, Jung said. The committee's "no" vote infuriated Fasi, Jung said.

"This opportunity to create, for our people, the best recreational infrastructure in the world, may never present itself again," wrote the mayor in a letter to Council Chairman Arnold Morgado just prior to the committee's vote.

The council has until July 15 to act on Jurigi's offer. But it may never reach the full council for a vote if the five-member Budget and Finance Committee fails to recommend its passage.

Two Human Services Committee members who voted against Jurigi's offer also serve on the Budget and Finance Committee. Coupling their votes with that of Budget and Finance Committee Chairman John DeSoto, who has announced his opposition to the plan, already gives opponents enough votes to defeat the measure.

"But it's not over. The mayor plans a full-court press on the public and the council," said Jung.

The budget committee was scheduled to act on the proposal June 26.

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# Keeping up with the Joneses

"Why remodel your course? You should try to make a golf course the best it can be. Why paint your house every five years or refurbish it every so many years? Nobody's hitting golf balls at your house. Nobody's taking divots out of your furniture. Nobody's driving golf carts across it. And old man winter and old woman summer aren't beating on it, either. And...your anatomy has been the same since the 1900s, yet golf balls are flying 300 yards in the air today."

"If your house needs work, why doesn't your golf course, too?"

— Brian Silva,  
golf course architect

BY MARK LESLIE

A golf course remodeling boom is sweeping the United States just as new course construction figures are soaring.

Across the country, public, private and even resort courses are getting facelifts. It can be minor mending, like leveling tees or redraining bunkers. Or it can be major surgery, like rebuilding all 18 greens, adding tees and installing a state-of-the-art irrigation system.

Whatever the extent, remodeling work is rising in all segments of the industry, and the money is big: from \$300,000 to \$500,000 to rebuild the greens to millions for more comprehensive work.

For many courses, the motivation is "do or die."

"Keep up with the Joneses," said one architect, or you lose players to clubs with newer, better greens, playability and landscaping. Eventually you go out of business.

"Some of the older, established clubs were looking at just that," said architect Robert Walker of Atlantic Beach, Fla. "The clubs built in the 1920s and '30s are the ones that have all the old money and the old tradition, and these guys aren't going to let that (going out of business) happen to their clubs. There's too much to lose. So remodeling is the only alternative..."

Walker explained that at San Jose Country Club in Jacksonville, Fla., where he last year finished a complete remodeling, the club had "a standoff" between older members, who didn't want the Donald Ross course touched in any way, and younger members, who are well traveled and have seen changes in design trends that have meant better quality, maintenance and irrigation.

Walker said that if improvements weren't made, San Jose CC might have faced the same fate as another area course about 10 years ago, whose members deserted it. "It's now condominiums," he said.

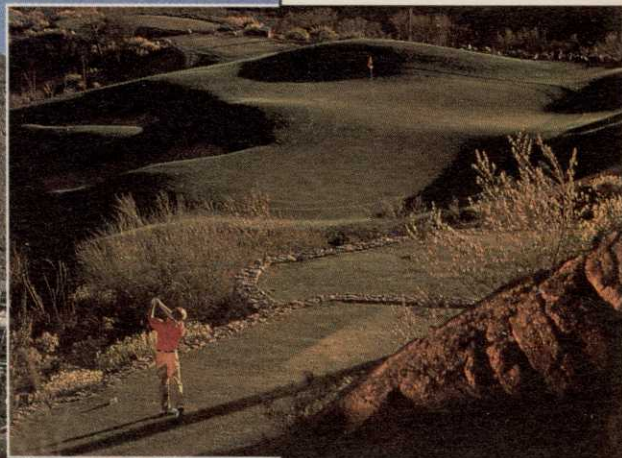
Hundreds of country clubs are aging. Their greens are old and were designed decades ago to withstand much less traffic than they are experiencing today. They have few or no cart paths. They may have just one or two sets of tees. Drainage is insufficient. Improvements in equipment have eroded the shot values of their holes. Their members are demanding superior playing surfaces.

"Golf has taken off across the United States, especially in the Sunbelt," said South Carolina architect John LaFoy. "You have a lot of courses that for years and years were the only game in town, or they didn't have a lot of competition. And with the influx of new golf courses, many of which are top-notch, the older courses are having to renovate basically to keep up with the competition."

"Also, a lot are flat worn-out."

Affluence — and efforts to attract affluence — also are creating renovation projects.

Architect Steve Smyers of Tampa, Fla., who has redesigned Cheval Polo and Golf Club there, said owners wanted a quality golf course



At the Phoenixian Resort in Arizona, remodeling included building nine tees into the mountainside. Note the location of the tees and green in photo at left. Above, a golfer tees off from the mountainside.

to help in selling "very upscale homes around an upscale country club community. They felt the golf course needed a new facelift."

Charles Ankrom, an architect headquartered in Stuart, Fla., added: "Because of the new affluence in clubs, they're saying, 'Let's do it better. A lot of retirees have nothing to do but play golf, so let's make it better for them — better grasses, greens, irrigation — so that there's nothing left to make better.'"

"Five or six years ago, members started deciding they wanted a '9' course on a scale of 10 instead of a '4' or '5.'"

Ankrom said houses in Florida retirement developments once sold for \$10,000 to \$13,000. "Now it's \$300,000 to \$500,000, so the whole method of golf course development has changed. There's more money for developments and for golf courses and golf course remodeling."

"Everyone wants a taste of the good life."

Meanwhile, even resort owners are improving their courses, as witnessed around Phoenix, Ariz., where both Stone Creek, The Golf Club (formerly Anasazi Golf Course) and The Phoenixian Resort have undergone major renovations.

Stone Creek manager Henry DeLozier, president of Resort Management of America, said the facility is a resort course without a resort and it caters to golfers at a dozen first-class resorts in the area without courses.

He said when Westcor bought Stone Creek its motivation to renovate "was primarily driven by the importance of repositioning the golf course in the local and resort golf market. In its previous life it had developed a reputation as being too severe, unenjoyable to play and as having been in poor condition. We determined that in order to overcome that reputation we needed to improve its design. We set out to do that by engaging (architect) Arthur Hills and Associates and Wadsworth Co. to build it."

The Phoenixian hired architect Homer Flint to totally remodel 13 holes and design five new holes.

Director of Golf John Jackson said Flint's design included smaller greens, remounding, rebunkering, sealing lakes, building new cart paths, and planting "an unbelievable number of palm trees."

Why? "It was a different thought pattern than what (ex-owner) Charlie Keating and American Continental had wanted," said David Gilbertson of Evans/Artigue in Phoenix, which handles the resort's marketing. "It wasn't a bad course at all... Flint dressed it up to be a great resort-type course."

## The goal

The aim for course members and officials in remodeling is better playability, maintainability and aesthetics.

"Golf courses either get better or they get worse," said LaFoy, who is remodeling several courses. "If you're not continuously ... improving a golf course — using new technology such as green construction — eventually it's going to get worse."

According to Walker, greens are the priority item for his clients — "then the tees; then bunkers and contouring and drainage of fairways; and a lot of cart path work."

LaFoy agrees, saying most of his clients are rebuilding every green.

Yet Brian Silva, of the architectural firm Cornish & Silva in Whitinsville and Amherst, Mass., said that is not true at courses where he has worked.

"I don't have many courses that re-do all their greens," Silva said. "The bulk of cost is being spent on bunker and tee renovation and reconstruction, and a few greens."

He added: "Forward tees are a big part of renovation work. We pay a lot of attention to multiple tees. Normally we put in four sets of tees."

"I'm seeing 50-year-old golf courses where the average markers for the men are 6,200 yards and the average markers for the women are 6,100 yards."

At many courses, the tinkering starts the moment it opens — and it never ends.

Edward H. Connor III, a Ponce Inlet, Fla., architect who has studied designs of many famous courses of masters like Donald Ross and A.W. Tillinghast, said: "The plain fact is that no course is ever complete. Each alteration, particularly if done by the original designer, brings the picture a little closer to perfect focus."

Ross, for instance, toyed with Pinehurst #2 from the time it opened for play in 1907 until his death in 1948.

Andy Banfield, a senior designer with Tom Fazio Golf Course Designers in Hendersonville, N.C., said he and Fazio have fine-tuned Canada's number one-ranked course, National Golf Club in Woodbridge, Ontario, almost since it opened in 1976.

"We've been doing a little here and there the last five or six years. Various things, from cart path adjustments to greens contours," Banfield said.

When The National changed from a low-membership golfers' club to a corporate-type

facility with many new golfers and a lot of play, it meant some greens were too small.

"They had not been designed with enough size and pin placements to handle the high traffic," Banfield said.

Banfield said that even the best-ranked course is pushed by competition. "The National is feeling that, too, because of the (nearby) Devil's Pulpit course," he said.

LaFoy said Augusta National may be the best example of continual course improvement. LaFoy worked for several years with George Cobb, a consultant with Augusta National for about 20 years.

"Even though from year to year you go there and don't notice any changes, every year we'd get a five-page list of changes to the golf course. It may be just redraining bunkers, redoing drainage work in fairways, recutting and redesigning bunkers, or releveling or rebuilding tees... You're continually doing it just to keep it getting better."

"Your entire purpose may not be to change the course but to see that its quality continues to improve. If you're not improving it, it's getting worse."

Banfield said that in many cases, one planned change leads to others.

While improving the irrigation system, the owner and designer may decide to change a green that doesn't drain well. "Then you regrade that and it's 'Let's add a bunker,'" he said.

Cart paths are another major item.

"Courses built 10 years ago probably didn't have a wall-to-wall cart system," Banfield said. "Probably 60 percent of them do now. With more and more play being with carts, it's almost imperative that you have a cart path system."

Indeed, Southern Concrete Pavers President Pat Bresnahan reports his Lecanto, Fla., company is tearing out the asphalt cart paths at one Doral Country Club course and installing new concrete paths. The price tag: \$175,000.

"It's amazing how many courses want to improve their paths," Bresnahan said.

Meanwhile, some courses, like Cheval, decide a total remake is necessary.

"We totally renovated the 18 holes," said Smyers. "There's not a speck of dirt we didn't touch."

"It cost \$2.5 million. We installed a new irrigation system, contoured all the fairways, filled in some lakes, dug some lakes... built 18 new greens to USGA specs."

And Walker, after showing San Jose CC

Continued on page 25



# Club members' fears a major obstacle

BY MARK LESLIE

Pride. Fear and anxiety. Defensiveness and stubbornness.

The tradition of a golf course is embodied in its members. They are the ones who, first, must be convinced that renovating their course is necessary; and, second, kept involved in the project as they see their beloved greens and fairways dug into by bulldozers.

Speaking of older members at courses designed by "masters" of the craft, architect Brian Silva said, "I'm pretty sure you could kidnap one of their children and get away with less compensation than if you changed one of their greens."

Robert Muir Graves tells people at design seminars: "The most critical communication procedure during actual remodeling and renovation work is to let the players know what's going on ahead of time."

"During that same period, perhaps the most critical construction procedure is to create good temporary tees and greens as required. The better they play the less complaints you get."

Club members can be an obstacle or a help—sometimes both.

Florida architect Robert Walker said mem-

bers at San Jose Country Club in Jacksonville were divided. Older ones didn't want their Donald Ross-designed course touched. Younger ones, wanting a modern flair and better quality turf, felt, "Let's blow this place up or sell it and go some place else; or we're leaving," according to Walker.

Finally, it was a progressive stroke by Greens Committee Chairman Thomas Brown that sold the entire membership on remodeling.

Brown hired a marketing consultant and put on a series of presentations to members in groups of 150 to 200.

The illustrated presentation showed the course's problems, "not only in terms of aesthetics and physical draining and irrigation ... but the playability problems—how we could take care of all those things with a complete renovation," Walker said.

Walker then encouraged members to get involved.

"Some of the most outspoken members would come out to the course and ask why we were doing certain things... In fact, before we broke ground, I got all the members to come in and talk about golf course design," Walker said.

"Some were really concerned that we were

going to do waste bunkers and steep slopes.

"We asked for their input. They felt involved and offered input. Some of the things they wanted were incorporated into the final plan."

Walker also got the women involved.

"They knew they needed ladies' tees and the ladies' course to play at 5,000 yards," Walker said. "But the good lady players were upset. They didn't want their handicaps to go down... So we built red tees that play 4,900 to 5,000 yards. Another set of tees plays at 5,500 to 5,600 yards. The rest can be jockeyed to play at 6,100, 6,300 or 6,625."

Walker said the most important thing was that members "felt better about what we were doing. They knew I wasn't a fan of this contemporary style of architecture. They knew we weren't going to build acres of waste bunkers, step ladders down into pot bunkers, and some of the wild stuff that they didn't want to see."

"That particular style wouldn't fit on this particular piece of ground, which is more like a park."

The problem of playing time while the course was closed was solved by the club making a deal with a new course nearby. San

Jose structured a monthly fee arrangement for its members to use the course.

That kind of commitment and involvement by members is crucial, especially in long-range master plan improvement programs, according to Graves.

Says Graves: "The biggest failure we have observed of the master plan program is lack of commitment by the club officials and staff to keep the program going."

It is particularly troublesome when we have all agreed to certain basic development concepts, such as green or bunker characteristics, and along comes a new president or chairman who dumps the whole process and instigates his own, possibly misguided ideas.

"Continuity and commitment are critical."

## The job: At times challenging, at times frustrating

BY MARK LESLIE

It can be frustrating and demanding, but renovating a golf course is an enjoyable task for many who undertake the challenge.

"I've been real fortunate in that I've gotten to do a lot of historical courses," said architect John LaFoy of Taylors, S.C. "For example, I'm now completely redoing the Country Club of Charleston (S.C.), which claims to be the oldest golf club in United States. The club was built in 1786 and the course was built in the 1920s by Seth Raynor. It's a great old golf course."

LaFoy, who is also remodeling Donald Ross's East Course at the Country Club of Birmingham (Ala.), said: "When you can do those types of courses, it's fun. That's one reason I like doing it. It exposes me to the real fine older golf courses."

Brian Silva, of Cornish & Silva in Whitinsville

and Amherst, Mass., said, "I really enjoy renovation work."

Saying it's "part of an architect's debt to society to do renovation work," Silva added: "Back in the mid-'70s when things were slow, every architect was writing articles about long-range plans and telling clubs how important they are. Now that it's busy three-fourths of us won't return phone calls because there's not enough money in long-range plans and renovation. I don't think that's a correct thing to do."

Atlantic Beach, Fla., architect Robert Walker said renovation work is "a lot more complex than building a new golf course. There's so much more to consider."

Walker said that in addition to the actual golf course questions, the club has to decide: "What happens to your maintenance crew? Are you going to let them all go, or are you going to keep them intact? Are you going to make them

construction workers? What happens to your food and beverage personnel, and your pro shop people?"

San Jose Country Club in Jacksonville, Fla., put the maintenance crew to work, teaching them to build a golf course.

"We put a lot of those guys on equipment and one of them turned out to be a super shaper. I'd offer him a job on one of my courses any time," Walker said.

Silva agreed it is more difficult to renovate than build a new course.

"Permits are difficult on a new job," he said. "But ... renovation is the ultimate in a thankless job. I believe that the best renovation job in the world gets 50-percent approval. Twenty percent aren't going to like it because you spent money. Fifteen percent aren't going to like it because they don't like the (club) president that year."

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The 13th hole at San Jose Country Club in Jacksonville, Fla., is just one hole that took on a dramatic new look when Robert Walker remodeled it — as shown by these “before” (left) and “after” pictures. The course, a Donald Ross design built in 1925, underwent rerouting on several holes, excavation of 11 acres of lakes and lagoons, reconstruction of all greens,



reshaping of all tees and fairways, and installation of a new irrigation system. Originally flat and poorly drained, San Jose now contains many subtle fairway contours, a lagoon system that stretches from one end to the other, and greatly improved surface drainage.

## Mastering the ‘masters’ intriguing pursuit

### Members must know: Things are not always as they seem

BY MARK LESLIE

The real and the perceived are sometimes far apart on golf courses designed decades ago by famous early masters, according to architects remaking those courses.

While golfers are proud that their course was created by the likes of a Donald Ross, Alistair Mackenzie and A.W. Tillinghast, often-times the greens, bunkers and other features may have changed a lot.

“One of the great misunderstandings of all time is that Ross built small greens. That’s very untrue,” said Silva, a student of Ross work. Because of lazy greenskeeping over the years, he said, “I’ve seen some 2,500-square-foot greens that used to be 4,000 or 5,000 square feet.”

Likewise, Silva said in most cases the bunkers have deteriorated or changed so dramatically that “they’re not like Ross and his guys intended. In those cases it’s pretty hard to

restore them.”

“Time physically erodes and changes the course,” writes Geoffrey Cornish in his book “The Golf Course.” “Time also erodes the shot values of the holes.”

Because of these great changes, Silva said that when he renovates a course he tries to add the “flavor” of the original architect’s work.

For instance, at the Country Club of Orlando (Fla.), on which he rebuilt all the greens and did other major renovation, Silva said: “My goal was to re-do the course with the Ross flavor — to build plateau greens that drop off at the fronts and edges the way Ross’ would, to cut bunkers into the sides of the fill pads below the level of the putting surfaces like Ross would, and create features in scale with ... Ross’.”

Architect Robert Muir Graves, who with Cornish teaches a seminar on long-range planning for golf courses, makes a distinction between remodeling and renovation.

Remodeling, he said, “implies that we are going to change the character of some features of the golf course, like redesigning a tee or

green, or installing a new irrigation system.”

Renovation “means to restore a feature to its original state; for example, rebuilding a tee or green to retain its original appearance but perhaps with a better turf-growing medium or better drainage system,” Graves said.

Silva said: “The type of renovation work going on today falls into two types. One is true restoration and that’s very much in the minimum, the kind that wants to get the course back to the original. The second is plain old renovation, either sympathetic or not to the original design, and that’s the great majority.”

“In most of my clubs I don’t use the word restoration. The term I use is ‘sympathetic renovation.’ I like to put back some of the original architect’s characteristics. But I need to keep in mind the game the way it’s played in the ‘90s and the way golf courses are maintained in the ‘90s.”

Silva said some clubs have the architect’s original plans and mistakenly believe those are the answer for a true renovation.

But “plans for the masters were probably as important to them as our plans are to us today. They serve only as a general guideline,” he said.

“I tell my clubs, ‘I don’t know what Donald Ross did exactly on your course 60 years ago. I don’t know if Donald Ross was on your golf course 60 years ago. I don’t know which of his construction superintendents were there. I don’t know if those greens plans you have are of any value.’”

“As an example, Highlands Country Club in North Carolina has their original greens plans. What they show is the shape of the green, the shape of the bunker. And this is the level of detail on the plan: It says, ‘Detail surface of green as naturally as possible.’”

Silva said the Country Club of Orlando was not going to touch its bunkers and the surrounds of the greens.

“They said they had a set of Ross greens,” Silva said. “But half looked a little bit like Ross greens and half had been very much made into contemporary greens... They were shocked to find out they didn’t have Ross greens.”

“What makes them Ross greens are not only the surfaces of the greens but the surrounds of the greens — the bunkers and slopes ... I told them they should do sympathetic renovation and inject more of the Ross characteristics back into their course than they had.”

Silva said there are two greens in the world. “One is a low green with high surrounds,” he explained. “When Ross was at his best, working with a site that drains, the other type was

high greens with low surrounds.

“I don’t have any Ross plans. I’m just trying to get higher plateau-style greens with lower surrounds and bunkers cut into the fill pads so they don’t block the view of the putting surface. We’re also putting some chipping areas around the greens, like Ross did at Pinehurst #2.”

Some greens designed by the old-timers are being rebuilt because the slopes are so severe that, with contemporary putting speeds, the golfer is putting the ball off the greens, according to Silva.

John LaFoy and Robert Walker, two architects involved in renovating Ross courses, also point to changes necessitated by the affects of weather and technology failure on courses.

Walker said the main breakdown at San Jose Country Club in Jacksonville, Fla., involved greens and drainage.

“The greens were all worn out. They were incapable of growing quality turf,” Walker said. “We told the members the aesthetics and playability could improve only if we redid the course and cut the lagoons in there and moved the earth that we wanted to move.”

Walker explained that the course was built in the 1920s “when all they could move was the top 1-1/2 to 2 feet of material, which is basically your organic and hardpan area. They didn’t have the means to go any deeper and hit some sand, so the golf course was built of heavy soils.”

The construction crew drained 11 acres of weed-filled, shallow ponds, dug down 15 to 18 feet in some places, and sculptured a lagoon system throughout the course.

“We hit some of the prettiest yellow sand you could ever imagine beneath those ponds,” Walker said. “We brought some of that sand up and raised all the fairways around the course, and put some contour to them so that they drained properly.”

He said that while the ponds couldn’t be seen from the fairways, the lagoon is now a clean, free-flowing system without weeds and odor and is integral to the course.

The technology, not available in Ross’ day, made the difference.

LaFoy, who is “fortunate in that I’ve gotten to do a lot of historical courses like Ross’ East Course at the Country Club of Birmingham,” said although the “masters” designed their courses, they couldn’t prevent the physical erosion brought on by time.

And as Cornish said: “More often ... the task of updating an architect’s work will fall upon a generation of subsequent designers.”

After all, Ross died in 1948.

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# Super gets head start on Irondequoit remodeling

BY LOIS GREENE STONE

Getting a jump on a possible renovation of Irondequoit Country Club, superintendent Rick Holfoth has his 15-man maintenance crew redoing the Pittsford, N.Y., course's 18 greens.

While waiting for Irondequoit's members to vote this summer on a proposal to renovate, Holfoth decided to get the greens done on his own.

He began the project last fall, "got aggressive about it this spring" and will complete the job by this fall, according to the 22-year-old member of The Finger Lakes Association of Golf Course Superintendents.

Holfth said the Donald Ross-designed course "lost some character" over the years as the size and shape of the greens and bunkers changed.

"Most of our greens — and it's true of a lot of older courses — became round over the years. Yet they were anything but round when they were first built."

Holfth theorized the greens lost their shape when employees found it easier to straighten out an edge rather than mow a difficult contour; and during some of the war periods the club may have chosen to reduce the size of the greens to save money on chemicals.

So "redoing" had to begin with "rediscovering."

After consulting with architect Brian Silva of Cornish & Silva in Massachusetts, Holfth set out to find the original green contours in several ways:

- Taking some of Irondequoit's older members onto the course for their recollections of the former contours.
- Examining the shape and contour of the land to help locate the original fill pads, on which greens are built.
- Locating bunkers and sprinkler heads.
- Searching for peripheral bentgrass on collars and aprons, since the greens have always been bentgrass.

"We're restoring the aprons and rough back to greens" by gradually lowering cutting height and overseeding with Penncross bentgrass on the collars and Pennlinks on the greens, Holfth said.

"We're adding five to seven pin placements on some greens. We're adding 10 feet to the perimeter on a lot of them."

Some greens will have an additional 1,000 square feet when completed, he said.

Subtle undulations in the raised greens have never permitted a weak approach shot to hold, so restoration won't alter precision.

Holfth said the Greens Committee's opinion, not his, carries weight on the issue of renovation.

The Greens Committee gives direction and, in this case, the full membership will decide.

"My input is more concerning

whether any redesign will produce a maintenance problem, or a safety concern," he said, "plus questions on cost breakdown of reconstruction work."

But he would like at least to see tee and bunker reconstruction.

"The tees are not level and not big enough. Bunkers have constantly been changed and are not up to quality," he said.

Holfth added that his crew has done "some tee reconstruction — not redesign — to make them as playable as possible because they're not level. It's a maintenance practice rather than redesign."

Holfth believes if renovation is



Rick Holfoth

approved, four sets of tees will be built. The course now carries a 75.5 rating for women, versus 70.8 for men. It is difficult for all but the longest hitting women to reach most greens in regulation.

Thirty-six years after the front nine's tight, side-hill construction, the wide back nine, with its creek crossing six holes, was designed by Ross associate J.B. McGovern. It sits next to Oak Hill Country Club in Rochester.

Different construction techniques of greens and tees means Holfth has to address different soil and management conditions.

The members know shots exe-

cuted on the front nine require planning since side-hill lies on narrow fairways are unforgiving. The superintendent said this layout even involves different drainage and mowing problems.

Holfth expects added labor would accompany bunker renovation.

The classic Ross green-side bunkers, a combination of grass and sand faces, would be rebuilt. Four- to five-foot bunkers would require hand-raking.

On the other hand, he expects fairway acreage would decrease from 32 to 27 on the 110-acre course.

## How to prevent hostile take-overs.

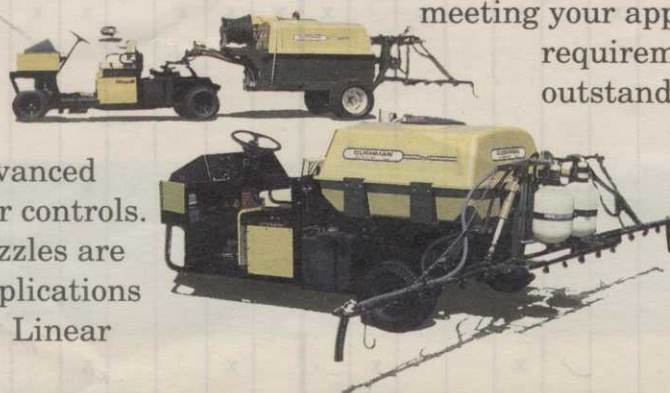
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# GOLF COURSE NEWS

## Exclusive survey

## Accessories are

BY PETER BLAIS

You don't have to sell a \$15,000 mower or a \$200,000 irrigation system to turn a buck in the golf course equipment business.

"We figure the total golf course accessories market at \$18 million a year," said Steve Garske of Par Aide Products Co.

John Kelly of Standard Golf Co. pegs the average cost of outfitting a new, 18-hole course at \$14,000.

With that kind of money available, it's little wonder many new companies have sprung

up the last few years to challenge the likes of such industry mainstays as Par Aide, Standard Golf Co., Fore Par Inc., American Eagle Golf Product (Lewis Line) and Lesco, Inc.

"There are many, many small companies out there," said Kelly. "And most have started up in the last eight or 10 years."

Twenty-one companies responded to this month's survey. Their responses ran the gamut from Accuform Golf Limited, which manufactures one of the 29 products we asked about (fairway rakes), to Standard Golf, which

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<b>Fore-Par, Inc.</b> 16761 Burke Lane Huntington Beach, Calif. Mike Neal 800-843-0809 <b>Circle No. 205</b>		x				x		x					x			x	x				x	x							
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<b>Lesco, Inc.</b> 20005 Lake Rd. Rocky River, Ohio 44140 Paul Morgan 800-825-3726 <b>Circle No. 208</b>	x	x		x	x	x		x	x	x			x	x		x	x	x			x	x	x	x	x	x	x	x	x
<b>Markers, Inc.</b> 33597 Pin Oak Parkway Avon Lake, Ohio 44012 Dale Hlavin 216-933-5927 <b>Circle No. 209</b>						x		x		x		x	x		x														
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# ASSOCIATION NEWS

## GCSAA membership tops 10,000

The Golf Course Superintendents Association of America membership rolls have exceeded 10,000.

Norma M. O'Leary, golf course superintendent at Silver Bay (Minn.) Country Club, became the 64-year-old association's 10,000th member in late May.

O'Leary said her membership in GCSAA "will keep me in touch with current events in turf management, and the education and information programs will help me stay on

top of my job."

In 1983, the association had fewer than 5,000 members.

GCSAA reached 9,000 members in October 1989.

Overall, GCSAA's membership grew 108 percent in the last decade.

John Schilling, GCSAA executive director, said, "This has been a tremendous decade for all of golf, particularly for our members and our association."

## GCSAA announces several promotions at headquarters

The Golf Course Superintendents Association of America has made several promotions in its headquarters staff, involving Diana B. Green, Colleen Smalter Pederson, Tom Akins, Taunya Cole and Robert Sanner.

Green, formerly director of headquarters operations, has been promoted to the newly created position of senior director of operations. Green has been with the association since 1975 in a number of different capacities.

Pederson, formerly director of education, has been promoted to the newly created position of senior director of education/marketing. Pederson has worked with GCSAA's educational and conference programs since 1984.

Akins, formerly manager of government

relations, has been promoted to the newly created position of director of planning. Akins has overseen GCSAA's government relations programs for the past year. He previously worked on the staff of U.S. Rep. Dan Glickman.

Cole has been promoted to manager of accounting/data processing. Cole has served as GCSAA's bookkeeper for the past year.

Sanner has been promoted to sales manager. Sanner had previously been sales coordinator at GCSAA.

Other position changes were also announced: Karyn Z. Davis, formerly director of marketing and sales, now serves as director of marketing; John C. Epperson has been hired as research manager for GCSAA and the Center for Golf Course Management.

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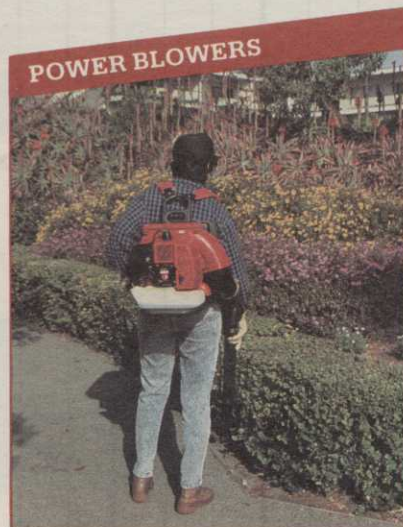


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## Supers' \$35,000 to help research

The Golf Course Superintendents Association of America has donated \$35,000 to the USGA/GCSAA Turfgrass Research Committee to support research into turfgrass breeding and environmental considerations.

"We certainly appreciate the (GCSAA) support — not just the financial support, but also the moral support that golf course superintendents have given us," said Dr. Mike Kenna, USGA research director.

In 1989, GCSAA's Scholarship & Research Fund gave \$25,000 for a full review of all scientific literature on the environmental impact of golf course management practices.

Results of the review are now serving as the starting point in the development of a comprehensive manual of "best management practices." The 1990 contribution will go into the committee's general fund and support research that results from the review's findings.

According to Kenna, even though many superintendents already consider the environmental consequences of their management practices, the manual will provide needed documentation of environmentally responsible pest control.

"I feel confident that we're in good shape to meet the challenges not only of the '90s, but of the next century as well, especially in the area of water use," Kenna said.

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## \$1M endows turf research at Michigan State University

A \$1-million donation from the Michigan Turfgrass Foundation will establish a new endowment to fund faculty and graduate student research at Michigan State University.

"Our members see this as a sound investment in the state's fast-growing turfgrass industry," said Gordon LaFontaine, executive secretary of the foundation, adding that \$100,000 of the \$1-million pledge has been raised.

Annual income from the endowment will enable MSU to attract more graduate students.

### Turf Managers hire executive

Dale F. Keller Jr. has replaced Mark Hodnick as executive director of the Sports Turf Managers Association, and Keller's R/K Communications Group, Inc. of Las Vegas, Nev., has been named the new management firm for the association.

Hodnick, who had filled the post in a volunteer role, remains on the board of directors.

Keller has more than 20 years of public relations management experience. He has directed projects on regional, national and international levels.

A disaster assistance employee for the Federal Emergency Management Agency, he is a former U.S. Army officer.

The association's headquarters has moved from Upland, Calif., to P.O. Box 98056, Las Vegas, Nev. 89193-8056; 702-739-8052.

### Walker leaves GCA leadership

Curt Walker has resigned as executive director of Golf Course Association. Walker served the association first as a founding member in 1982, then as vice president and president and, since 1984, as executive director.

"A search committee has been formed and will be active in finding a replacement," according to GCA President Fred Tingle. Walker's departure will be effective when that person has been chosen.

"GCA will always be home to me," said Walker. "It's financial strength today and its recent growth have assured the association a firm position as a major organization in the emerging pattern of professional golf management organizations."

He said the association's "Marketing Plan Manual," recently published "Accounting for Public and Resort Golf Courses" and soon-to-be released "Management Letters Volume One" have placed GCA "in the center of the emerging demand for better management tools."

"GCA's role as the voice of privately owned public golf courses, and its acceptance by larger golf-related organizations where our interests are similar, has been a key to our recent growth," said Tingle, owner of Springdale Country Club in Canton, N.C.

Joseph M. Vargas, noted professor of botany and plant pathology at MSU, said, "Because our research is so labor-intensive, bright, dedicated graduate students are absolutely vital."

Vargas said the endowment will give MSU "the flexibility to pursue" research into alternative pest management strategies using biological methods to control pests and diseases and to minimize pesticide use.

The foundation will solicit contributions to the fund from its 1,000

members and others interested in turfgrass research. Groups such as the Michigan Lawn Sprayers Association and Michigan Cemetery Association have also joined the effort.

James H. Anderson, vice provost and dean of the College of Agriculture and Natural Resources, said the foundation's involvement is "a prime example of a state industry and the university working together to benefit students, faculty, and, ultimately, Michigan's economy."

## Modified Golf Assn. picks Puckett president

Troy Puckett, president of Cayman Golf Co. in Albany, Ga., has been elected president of the American Modified Golf Association.

Puckett replaced Bill Amick, architect of the first 18-hole course designed exclusively for modified-distance balls, Eagle Landing near Charleston, S.C.

Joining Puckett as officers are Vice President Charles Stine, who was re-elected, and Secretary John Nichols. Puckett remains as treasurer.

New board members are Gil Barfield, president of Hye Precision Products Co. in Perry, Ga.; and Bob Weber, director of product marketing for MacGregor Golf Co.

A Georgia Tech engineering graduate, Puckett was the key person involved in developing and improving the modified ball when in charge of golf ball production for MacGregor.

Cayman Ball Co. manufactures the Mactec ball for MacGregor.

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# Snow takes Green Section into age of ecology

BY PETER BLAIS

Jim Snow has a father's desire to leave the Earth better than he found it for his children, a trait that should help him as the new national director of the United States Golf Association Green Section.

"The environment is the hot topic everywhere you go," said 3-1/2-year-old Kevin Snow's dad. "We have to think about the environment in everything we do while maintaining our courses.

"The environment was barely an afterthought when I first got in the business. But we can't ignore it now. Golf will be trampled if we do."



Jim Snow

Snow, who joined the Green Section in 1976 straight out of Cornell University's graduate school, has been tied up with environmental matters since taking over from the retired Bill Bengueyfield April 1.

In his dual role as chairman of the USGA Turfgrass Research Committee, he has been seeking proposals from 180 researchers to quantify how golf courses affect the environment. Snow planned to present those proposals in early June to the Green Section's executive committee, which will then determine what to fund from the \$750,000 research budget.

The committee will use that information to develop a "best practices manual" describing the best methods for maintaining a golf course while minimizing environmental impact.

"The GCSAA (Golf Course Superintendents Association of America) will incorporate the manual into its seminar program. It should be very helpful," said Snow.

Snow grew up on his family's fruit farm in Trumansburg, N.Y., 12 miles northwest of Ithaca. His first golf course experience was working summers helping to build Trumansburg Golf Course. That

piqued his interest in course maintenance and led him to take turfgrass courses at Cornell.

Snow worked summers at Trumansburg GC throughout his undergraduate days, spending one summer as superintendent.

"That title is a little misleading, though. There were just two of us on the grounds crew," he said.

After graduating with a masters degree in ornamental horticulture and joining the Green Section in 1976, Snow spent the next six years as an agronomist, including a stint under Bengueyfield, who was then the Western region director.

"Bill was kind of a father figure. I've learned so much from him," Snow said. "He's taken us (USGA agronomists) to task on some of our recommendations over the years. We tended to get a little defensive at first. But he'd say 'Just look at it this way for a minute.' Then we'd take what he said into the field and find out he was exactly right."

Bengueyfield, 67, was a father figure and his word the final one to most of the Green Section agronomists, said Snow, who is 39.

"How will I be different than Bill? I guess the biggest difference is that the people on the staff are my peers in terms of age. I guess I'll be more of a brother figure," said Snow.

As national director, Snow will oversee a staff of 15 agronomists spread across the Green Section's seven regions. That's twice as many agronomists as the Green Section had in 1976.

Research money has also grown, from \$45,000 in 1976 to \$750,000 this year. It will escalate to more than \$1.5 million in 1991.

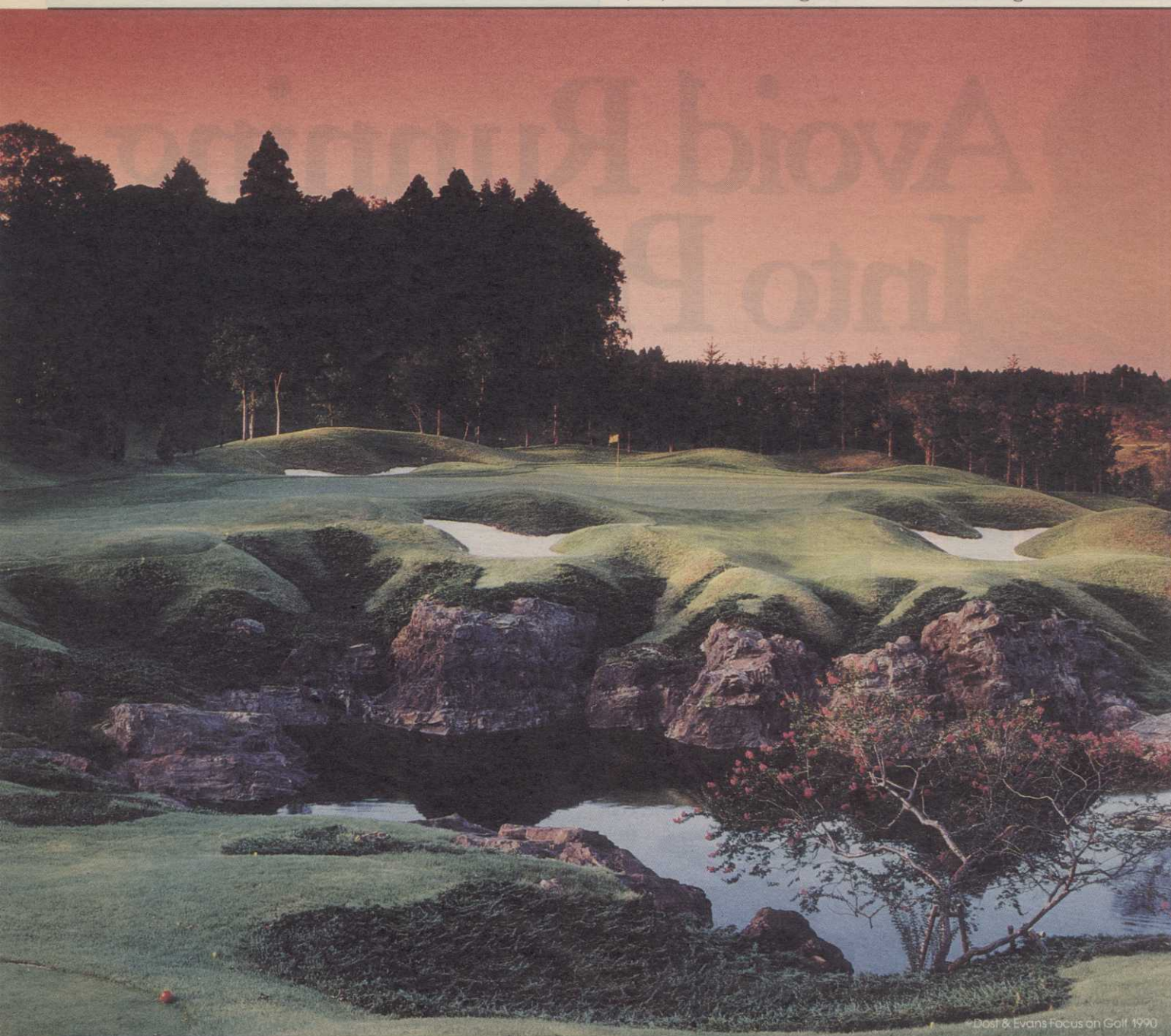
"There's a lot more attention paid to the Green Section than there used to be," said the new national director. "There's more emphasis on turf problems and more respect for the Green Section, superintendents and environmental problems."

The cost to have a Green Section agronomist visit a course ranges from \$600 to \$750 for a half-day and \$900 to \$1,050 for a full day. Despite the cost, superintendents are more receptive than ever to what the Green Section has to offer, as evidenced by the jump from 800 course visits agronomists made in 1982 to the 1,600 they will make this year, said Snow.

"Superintendents are more educated than ever and they realize the benefits we have to offer," he said. "The ones that have been using our services don't mind the expense. Some think it's ridiculously cheap. Others say they can't afford it. It depends on how you view consultants and their value. We believe we can help develop a scientifically based program that will help save a course money."

The agronomists' written report can run to 12 pages, particularly on a first visit. Superintendents

*Continued on page 25*



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## Renovations

Continued from page 16

members the greens and drainage problems, did "a total, total re-do — tear-up and reroute and clear and grub and irrigate and drain and excavate lakes and lagoons."

### Time and acceptance

Walker's comprehensive remake of San Jose took 10 months to complete. While it was being done, members worked a deal with a nearby course and played there.

Hills closed Anasazi in June 1988 and the new Stone Creek opened in January 1989.

"A lot of clubs have a big question on timing," Walker said. "Anybody undergoing a renovation program struggles with the idea: Do you do three holes now and three next year, or do you close down nine and do nine this year and nine next year?"

"Ideally, the best way to do it is to bite the bullet, shut it down, get in there one time and knock it out. It took us 10 months at San Jose; it was a really big project. But for some clubs they could make quite a bit of improvements in a short amount of time, depending on if they are in the North or South. In the South we could do the work in six to eight months. In the North it may make sense to do nine holes at a time."

## Snow

Continued from page 24

have used it to justify major capital expenditures or the need for more labor. But its most important function may be dousing fires.

"We're fire fighters," said Snow. "One club may be having a problem that we've already seen at 20 or 30 other clubs. This year's winter damage is a good example. It was extensive throughout the northern part of the country. But people at one club may not realize other courses are having the same problem. It's a relief to the membership, and particularly the superintendent, to know that."

Snow rarely visits a course now, something he misses. Still he enjoys his new responsibilities, which include editing the Green Section Record.

"I'm going to be requesting a technical editor/writer to help with that," said Snow.

Mike Kenna, the recently named director of Green Section research, has helped remove some of the burden in that area.

Still, Snow admits to being "a bit overwhelmed" by his new position and having gained a new respect for what his predecessor accomplished.

"Maybe I came at this job from a naive standpoint. I didn't realize how much administrative detail there would be. If it were just a matter of editing the Green Section Record, chairing the Turfgrass Research Committee and overseeing the staff that would be OK. But with all these other things..."

"Like a reporter calling for a 10-minute interview that ends up dragging on for 45?" he was asked.

"Yeah, like that," he answered with a chuckle.

In the final analysis, a project's success is measured by the response of the golfers.

Reports at those courses seem to support that more play is a norm after remodeling.

Walker said the response from members at San Jose has been "overwhelmingly positive. That's been the most gratifying and rewarding aspect of the entire project."

Ankrom said he remodeled the North Course Ft. Lauderdale (Fla.) Country Club, and now 75 percent of the play at the club is on that course. "And some of the 25 percent of play on the South Course is because people can't get onto the North Course," he said. "Now they've offered me twice

**'Why remodel?  
Because you should  
try to make a golf  
course the best it can  
be.'**

— Brian Silva

as much for South Course remodeling."

DeLozier at Stone Creek said: "We're extremely happy with the results. It has been very well received by the local golfer, plus we're getting considerable business from area resorts."

DeLozier said a key to success is

having "a very clear-cut objective that ... everyone has bought off on."

"The people at Westcor very clearly understood what they wanted the end result to be. As a result, Hills, Wadsworth and our company were all able to deliver it."

### Who's a target?

Meanwhile, clubs should closely analyze whether they actually need a renovation project.

Silva relates this story:

"One Boston area course wanted to renovate. I told them they had a great example of the 1960s-style cape and bay bunkers and they had done a wonderful job of maintaining them. 'Why do you want to rebuild them?' I

asked. Their answer was 'Because everyone else is.'"

And yet, "there is a significant number of candidates worthy of renovation work," Silva said. "Young players want to do a lot — some of it radical. Older ones don't want to do that much. Probably the best place is right in the middle."

"I hear people say, 'Let's put in some railroad ties' and 'I saw a bunker on a course that was 20 feet deep; can we put one of those in here?' and 'Can't we put in the church pews?'"

"I just say, 'Let's just try to make it appropriate to this club.'"

Silva added: "Why remodel? Because you should try to make a golf course the best it can be."



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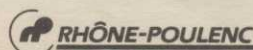
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# ASGCA survey

Continued from page 1  
sees.

ASGCA immediate past President Robert Trent Jones Jr. said two evils that pervade many regional offices of the COE are inconsistent interpretation of the law and lateness entering the political process.

"Local jurisdictions (of COE) are making rulings beyond the federal regulations," said ASGCA Secretary Arthur Hills.

"The solution is to ask the policy-makers in Washington to instruct their representatives under the law to attend the public hearings when they are at issue, and to

make a timely decision. Justice delayed is justice denied," Jones said.

Current ASGCA President Dan Maples said the survey "vividly demonstrates the impact that environmental concerns have on the golf industry, and the need for the industry to work with key agencies to develop mutually acceptable guidelines that will be interpreted uniformly throughout the country."

Yet, Jones said, one set would be confusing because the United States has five "radically different" geographic areas from desert to tree-covered to tropical.

More than wetlands and waterways are at issue in the permitting process. The survey showed other concerns, in order, are habitat, nitrates/chemical contamination, ground-water protection and pesticide use.

The Environmental Protection Agency, Department of Natural Resources, various environmental groups, local planning commissions, town/city councils, wildlife organizations and adjacent landowners were ranked behind the COE.

Architects said they generally contact agencies in this order: local planning commissions, COE,

state commissions, EPA and DNR.

More than 52 percent of the firms said some projects had been delayed from eight to 12 months by the permitting process. One-fourth said hearings caused three- to six-month delays, while 22.5 percent said several of their projects were delayed 15 to 30 months.

Most said the process should take from three to six months, and that time should be factored into the owner's overall planning and financing.

Architects cited cases in which costs soared to more than \$1 million for additional financing, legal and consultant fees and course

rerouting because of delays.

Half felt environmental agencies and commissions impose more stringent provisions on golf courses than non-golf projects.

Hills said, "The Corps and the EPA—if you take their directions literally—are either adding a tremendous amount of cost to development or they're stopping it."

"The pendulum has swung a long way. Someone has gotten their ear, and the translations (of laws) have made it very difficult for recreational and all other kinds of development to be accomplished."

Jones, who strived to improve the regulatory process while ASGCA president in 1989, was adamant that the COE is "missing the spirit of the law as well as the letter of the law."

"The policy-makers... would do citizens (us) a service if they would administrate the general policies more efficiently and quickly," Jones said. "The bureaucrat says, 'I'm busy. I need more staff,' which is a typical response. They can review a project quickly. But in a war of attrition it's easy for some of the administrators to say, 'I have to think about it' and do nothing, then it is to say, 'I approve it with these conditions.'"

## Exceptions

While Jones pointed to the California and New Jersey regions as among the most difficult to deal with, others like the Midwest are relatively easy, he said.

Ron Kern, who with brother Gary has dealt with COE's St. Louis, Louisville and Detroit divisions, said: "Our main problem is not any inability to work with them, but their lack of staff. We always do a lot of point work to try to minimize the time it takes... and so there are no surprises later on."

Jones said he has had many surprises. His Squaw Valley project in California was a classic example, he said.

According to Jones, the local water district notified COE and others before conducting hearings. The COE did not respond. "And at the last minute, after this approval process had been negotiated and permits were being issued, they came and said, 'You forgot us. We have jurisdiction because there is a dry creek in this area, and now you have to go through our process,'" Jones said.

"That is a tactic, or a bureaucratic policy, that seems to be repeating itself throughout the country. They are a late-comer... After the developer has gone through negotiations to accommodate the other boards, the Corps comes in and re-invents the wheel."

The difference between regions, he said, shows "there is no consistency in their interpretation of their mission" which is "the water quality of navigable waterways."

Individual interpretation by COE employees is also puzzling, Jones said. "The guys in the field seem to take wide latitude on whether they think it's of interest or not. And

Continued on page 29

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# Florida

Continued from page 1

ern and western areas have been the driest.

The Southwest Florida Water Management District recorded just 10.5 inches of rain through the first five months of the year, 69 percent of the 15.1-inch average. Last year's five-month figure was even lower, 9.3 inches.

Not surprisingly, the May 21 ground water index, which measures the depth of 51 test wells throughout the district on a scale of 0 to 100, reached record lows of 9 in the northern part of the district and 15 in the south, according to district spokesman Granville Kinsman.

On April 13, seven counties — Hillsborough, Pasco, Manatee, Hardee, Pinellas, DeSoto and Sarasota — were placed on Modified Phase III restrictions. For golf courses that meant watering fairways, roughs and non-playing areas once a week, tees three times a week, and greens only at night.

"The fairways went from green to paper bag brown between early April and late May," said Chip Lewison, superintendent at Dunedin Country Club, just north of Clearwater. "We just haven't got much rain along the coast. You can see a system building. But then you wait and wait and wait, and it never falls."

Pesticide applications requiring water have often been delayed because they require special variances. That has allowed nematodes and mole crickets to do more than their usual damage, Lewison said.

But Lewison prepared early for the tougher restrictions, cutting back watering greens to three days a week in February, in anticipation of a dry spring.

"We got a thunderstorm that dropped one-half inch to 2-1/2 inches last week (late May)," said Lewison. "We got green grass for about three days. But it's started to wilt again. It looks green from a distance. But up close it's sparse."

While ground and surface water are restricted, effluent is not. Dunedin is building an effluent plant that will come on line in two years. "But that's still two more years of restrictions," said Lewison.

The benefits of having effluent available are obvious at Hunters Ridge Country Club near Naples. The Bear course, which uses effluent, has come through the drought in much better shape than The Bobcat, which depends on a restricted 250-foot well, according to superintendent Steve Cardullo.

Hunters Ridge is laboring under a Modified Phase II restriction, allowing greens and tees to be watered every night, fairways and roughs twice weekly.

"Things were starting to look pretty sad around here," Cardullo said. "The greens and tees were in good shape. But the fairways were pretty cooked."

"I spent a lot of time putting out political fires, assuring members that fairways wouldn't die. Green grass is more for aesthetics. Bermudagrass doesn't need as much water as people think."

Fortunately for Cardullo, it rained every day from May 21 through June 4, dropping eight inches on the Bobcat and Bear courses. But district officials aren't about to lift or tone down restrictions.

Only two of the last seven years have seen higher-than-average (53.1-inches) rainfalls. That trend has resulted in lowered water tables. It will take four to six straight months of above-average rainfall before the district would consider easing restrictions, said Kinsman.

"We don't want to take them off and then just have to put them back on again," said Kinsman.

The water shortage is not confined to southwest Florida, according to Florida Golf Course Superintendents Association President Joel Jackson. The last normal, annual rainfall at Jackson's Isleworth Golf & Country Club near Orlando was 52 inches in 1987. It dropped to 43 inches in 1988 and 26 inches in 1989. This year's nine inches through the end of May is about the same as last year.

Isleworth falls within the South Florida Water Management District and hasn't been restricted.

"But we were starting to experience some problems. We were having a problem doing what we needed to do with our monthly allotment," said Jackson, who was grateful for the 1-1/2 inches of rain his course received June 2.

Most rain this time of year falls during

brief but heavy thunderstorms, with much of the water escaping as runoff rather than being absorbed into the ground, Jackson said.

"It's very localized. One course can be doing fine and another one a few miles away is hurting. Overall, central Florida is in reasonably good shape," he added.

The water situation on the east coast has generally been better than on the western shore. But eastern courses are still feeling the effects of the drought.

"We got three inches this week (last week of May)," said Chuck Calhoun, superintendent of the North and South courses at John's Island Club in Vero Beach. "That's about as much as we had gotten all year. We've gotten 8.4 inches total so far this year. Normally we'd have between 12 and 16

inches by now."

Calhoun said his courses are on voluntary restriction. The St. John's Water Management District has requested courses water fairways just three times a week, greens and tees only at night. Still, the South course was down to a one-day supply of water prior to the late May rain.

"The fairways aren't as good as we could have them. But the tees and greens are in good shape. Wetting agents have helped," said Calhoun.

Ironically, John's Island used to have its own effluent plant. But the city disassembled it and moved it to the mainland several years ago, said Calhoun. So, instead of the non-restricted source of water it had before, John's Island now depends on a mainland well that can be restricted.

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## ON THE MOVE

### Hogan brings three new executives on board

The Ben Hogan Co. is expanding its research and development and customer service departments with the addition of three new executives, announced David B. Hueber, president and chief executive officer.

Dr. John W. Jepson has joined the company as executive vice president, and will oversee development of new Hogan products. He will direct the company's research and development and quality assurance departments.

Jepson worked with Acushnet Co. for 22 years, first as head of research and development, then as executive vice president and general manager of Titleist, and most recently as executive vice president of the Acushnet Rubber Division. Before joining Acushnet, he was a research scientist at Bell Laboratories.

Jepson, who holds numerous golf ball and club patents, has a master's degree and a doctorate in mechanical engineering from Yale University.

Teamed with Jepson is Robert Renegar, who has joined the company as director of research and development. Renegar was director of research for Pro Group Inc., a golf equipment and sportswear company based in Ooltewah, Tenn. Before joining Pro Group, Renegar founded and served as president and chief executive officer of Performance Golf Co. in Memphis, Tenn.

Kyle Robinson has been named manager of customer service and direct marketing, a new position within the firm's sales department.

### Hurdzan hires Whelchel as designer

David Whelchel has joined Hurdzan Design Group in Columbus, Ohio, as an associate designer.

Whelchel will work with architect Dr. Michael J. Hurdzan on projects in the United States, Canada and the Far East. The firm is involved in nearly 20 major projects.

Whelchel previously worked with Ron Garl & Associates, a Florida-based golf course design firm. Whelchel played a key role in the design and construction of Golden Ocala in Ocala, Fla.; Buffalo Creek Golf Course in Ellenton, Fla.; Sands Country Club in Atlantic City, N.J.; and other projects completed by the Garl organization.

"David is a seasoned pro who understands the golf business from several perspectives," Hurdzan said in announcing the appointment. "We believe he will be an important contributor to our business, and will complement our existing group of design professionals."

dedicated to improve communications and customer service. Before joining the Hogan Co., Robinson worked in product management for Gearhart Industries.

Robinson earned a bachelor's degree in business administration from the University of Oklahoma and master's degree in business administration from Southern Methodist University.

### Meeks joins Young as vice president

Mike Young Designs/Turf Mark Golf Services, Inc. of Watkinsville, Ga., has hired Tracy Meeks as its vice president. Meeks will oversee day-to-day operation of the company's golf course construction projects, according to President Mike Young.

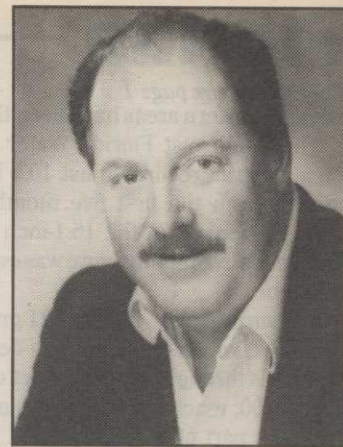
Meeks has been the superintendent at Berkeley Hills Country Club in Norcross, Ga., for five years and was the assistant superintendent for four years at Cherokee Country Club in Atlanta.

Meeks was involved in building a nine-hole addition to the Cherokee's 18-hole layout.

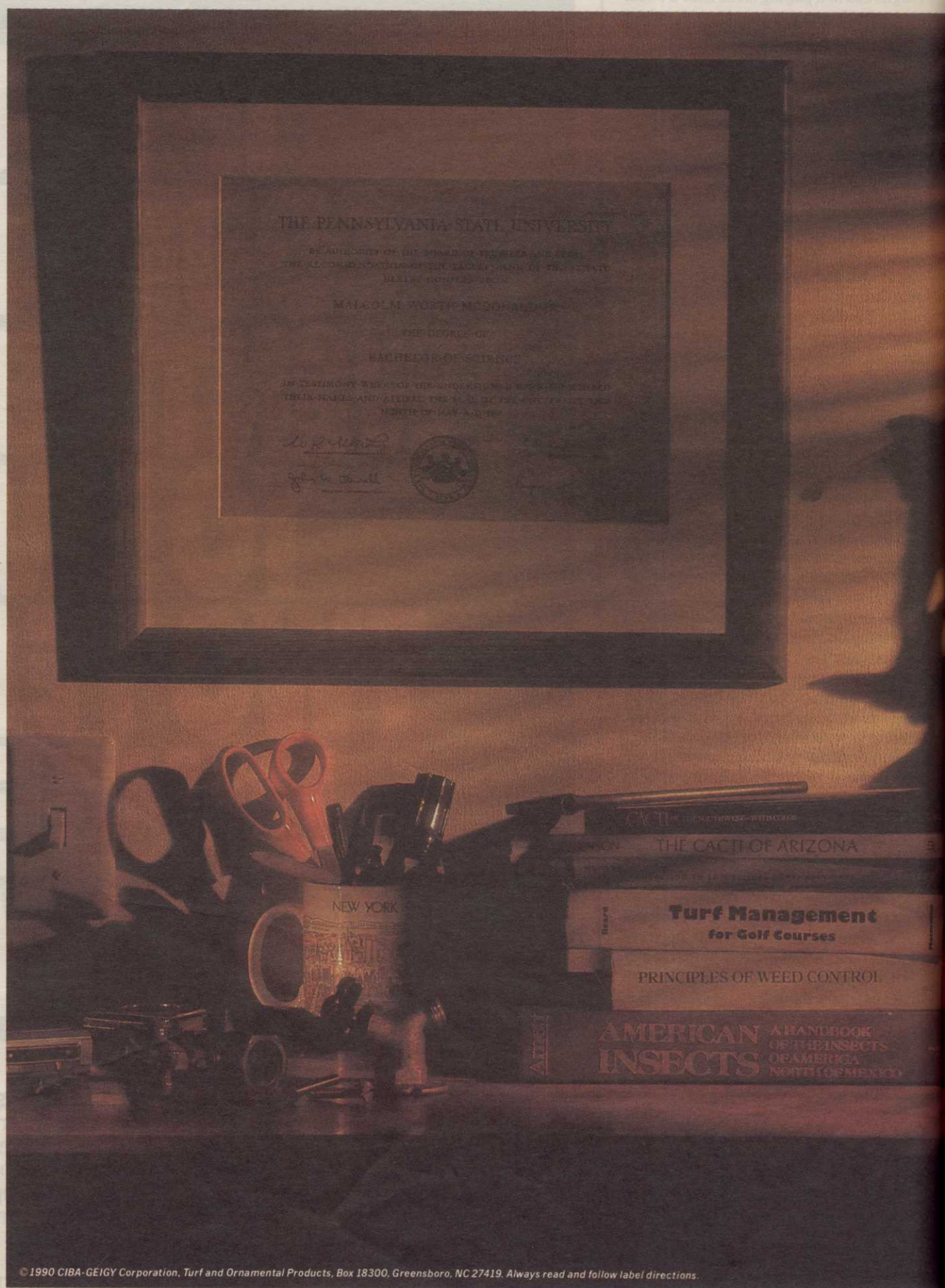
"Tracy's technical knowledge, combined with his practical experience, make him a perfect fit for our organization," Young said. "Our goal is to design and build golf courses that not only look good and are fun to play, but are also practical and economical to maintain."

"By hiring people who are turf maintenance professionals, we can guarantee a quality design backed by solid agronomics."

Meeks holds a bachelor's degree in turfgrass maintenance from the University of Georgia and is a member of the Golf Course Super-



**Tracy Meeks**  
intendents Association of America, Georgia Golf Course Superintendents Association, Georgia Turfgrass Association and National Golf Foundation.

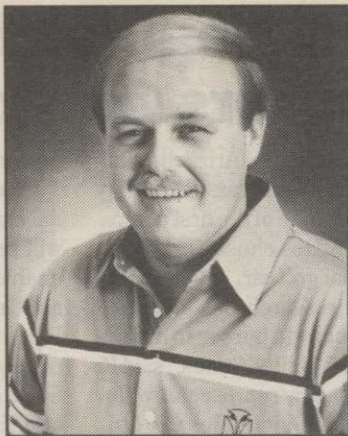




## Blackwolf Run nabs Moorman as head pro

PGA Class A member Jeffrey Moorman, 35, has been named head golf professional at Blackwolf Run, a championship golf course in Kohler, Wis.

Moorman has 10 years experience in the golf industry, including five years as a head golf pro and four years as an assistant head pro at several Midwest courses. He comes to Blackwolf Run from Christmas Lake Golf Club in Santa Claus, Ind., where he had been head golf professional for nearly four years. Moorman was also head pro at Maplecrest Country Club in Goshen, Ind., and assistant pro at Meridian Hills Coun-



Jeffrey Moorman

try Club in Indianapolis.

Moorman has a bachelor's degree in general business administration from Ball State University in Muncie, Ind.

## VanMiddlesworth at Lake Aid

John VanMiddlesworth has been named the national and export sales manager for Lake Aid Systems. VanMiddlesworth was previously the eastern regional sales manager.

VanMiddlesworth will be responsible for a sales force throughout the United States, Canada, Europe and the Orient.

Lake Aid Systems manufactures and sells aeration equipment for both wastewater and fresh-water applications, including wind-power aerators.

## Elsewhere...

Anne C. Seiler has been promoted to marketing manager with Hale Irwin Golf Services, Inc. She manages the marketing programs for the firm's golf course design and development projects.

Birnie Whitlow and Paul Syverson have joined Doug Sault as associates in the golf clubhouse architectural firm of William Zmistsowski Associates based in Boulder, Colo. Syverson is the project architect for Los Angeles International Golf Club and Whitlow was the project manager for Golf Club of Oklahoma and Marbella Golf and Country Club in San Juan Capistrano, Calif.

Art Shepherd has been pro-

moted to Northern District manager of Kubota Tractor Corp.'s Central Division. For the past three years, Shepherd served the Colorado and New Mexico territories as a Kubota regional sales manager. Prior to joining Kubota, he was vice president of sales for Spray Rite Manufacturing for four years.

Tom Gentile, principal of Gentile Associates in Mission Viejo, Calif., has announced that Richard W. Murray has joined his firm in a partnership renamed Gentile Murray Associates. Murray has a bachelor's degree in business management and a 20-year career in sales and marketing, and will expand the representation throughout Southern California for the firm. Drip Equipment.

Kevin Buchanan has joined the staff at LABB Systems as product support manager for TRIMS Grounds Management Software and will be responsible for organizing product training seminars in addition to providing technical support to TRIMS users. Buchanan has a strong background in accounting with special emphasis on DOS, Lotus and WordPerfect.

## ASGCA survey

*Continued from page 26*  
you never know. It's like a lottery whether they will take interest and show up at a hearing," he added.

Repeated attempts to contact COE national headquarters in Washington, D.C., were unsuccessful.

But Rod Howe, assistant project manager with COE's New England Division, said manpower is a national problem.

Howe said his region has "no objection to developing up to the limit of a wetland, or using the wetland as an obstacle."

"We are generally not all that concerned with chemicals, so long as there is not much phosphorous," he said, explaining that wetlands are a natural cleanser.

Howe, who works in Maine and New Hampshire, said delays usually occur when a project affects a salt marsh and therefore its waterfowl.

"If it is very complex," he said, "it could take close to a year. That's where it is very important to contact the Corps right up front."

## Initiative

"Architects have not done a good job of explaining to regulatory agencies, local boards and the general public how golf courses contribute to the quality of life," Maples said. "But we must go one step further and work with the EPA and COE to develop guidelines that will help the architect prepare a plan that will be acceptable without a great deal of revision."

"Key to that, of course, is having national standards on such key issues as wetland mitigation."

He said good preliminary plans must be prepared that are understandable to the laymen who sit on local boards.

"We must become allies, not adversaries," Maples said.

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## BUSINESS NEWS

### P.J. Enterprises authorized for dealership in ParCars

Columbia ParCar Corp. has authorized P.J. Enterprises as its dealership for southern Wisconsin, and Boone and Winnebago counties in upper Illinois.

Bill Strobusch, owner of P.J. Enterprises, purchased this business two years ago, and it has grown to include four full-time and four part-time employees.

P.J. Enterprises is a full-service ParCar dealer stocking an inventory of new and

used ParCars, offering a rental tournament fleet, service to county fairs, parades, and servicing courses and individuals.

Prior to his purchasing of P.J. Enterprises, Strobusch owned and managed a temporary help service, Terra Temporary Services, from 1984 to 1988.

Strobusch continues to own part of Terra Temporary Services with his wife, Mary, managing the business.

### Hyundai begins choosing distributors for golf car

Golf Cars Ltd., a Sun City, Ariz., distributor of gas and electric golf cars and utility vehicles, has become one of the first companies in the United States chosen to distribute the new Hyundai golf car.

"Our marketing research has identified 50 potential areas for us to pursue to distribute our product in the United States," said K. H. Um, senior manager/representative for Hyundai Precision and Industries Co. Ltd., one of the major Hyundai Group companies. "We are carefully reviewing potential distributors and currently have 20 in place."

Jack Pohle, president of Golf Cars Ltd., felt the timing of the Hyundai introduction was opportune considering the booming

golf and retirement industries.

"We believe that the addition of the Hyundai car to our fine existing line of products will be an excellent augmentation that will enable us to expand our marketing potential and increase our business significantly," Pohle said. "The Hyundai golf car is a superbly engineered product combining the finest qualities of the best the market has to offer in both the mechanical and cosmetic aspects of the vehicles. The Korean-based Hyundai Group, a giant industrial complex, brings outstanding technology and production skills to the golf car industry. We are proud to represent them."

According to Um, Hyundai saw the American boom in the golf industry four years ago and began initial design on a golf car. Hyundai Precision and Industries Co. Ltd., a manufacturer of heavy equipment and machinery, was a logical choice to pursue the design because of related products in the division and their engineering capabilities.

"At that time, Hyundai Precision wanted to diversify into the consumer market," said Um. "We always thought that golf cars were an interesting product and with the golf industry being so active right now, we saw this as an outstanding opportunity."

Several hundred of the Hyundai golf cars are in use in Korea and have also been introduced in Europe, Australia and Guam.

### Filtration Irrigation formed as rep for manufacturers

Filtration Irrigation & Fertigation Co. has been formed as a manufacturers' representative organization, it was announced by President Jerome Gutman.

The Reseda, Calif., company was established to provide distributors and dealers the best available products from various represented manufacturers as well as specialized service.

"FIF will optimize the best improved values for the needs of each customer," Gutman said.

Until recently, Gutman had been president of Amiad U.S.A., Inc., manufacturer of filtration and fertigation equipment. He organized and opened its U.S. sales and marketing in 1981, expanding the company nationally. Gutman holds an MBA degree and is a graduate of the University of San Francisco. The FIF office is located at 18155 Elkwood St., Reseda, Calif. 91335; 818-705-0215.

### Artistic Arborist sole distributor for injection items

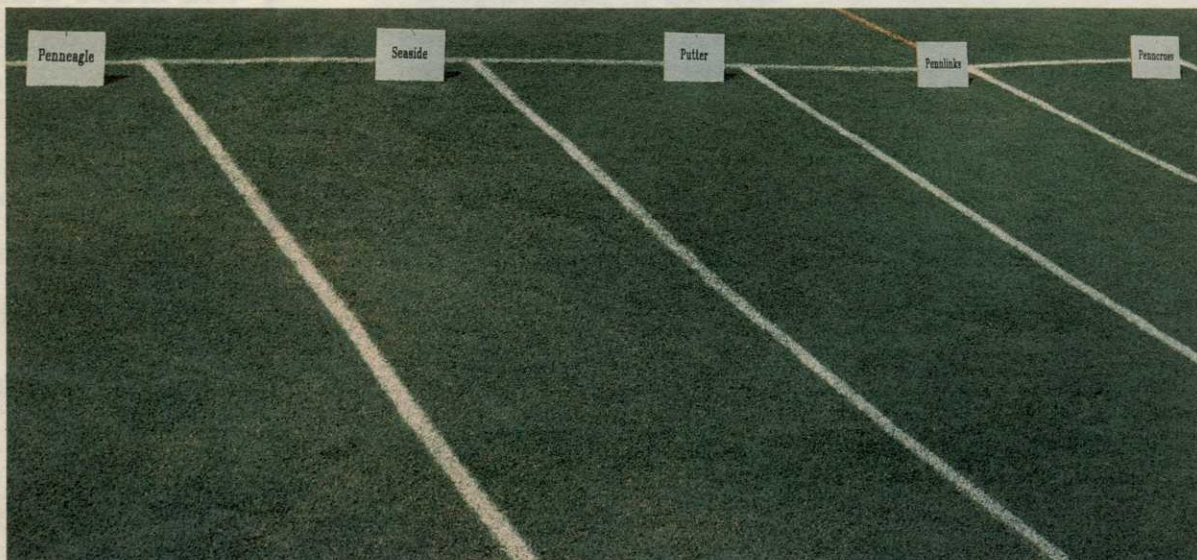
Artistic Arborist, Inc. of Phoenix, Ariz., has become the sole distributor of the Mauget Tree Injection products in New Mexico. Since 1979, Artistic Arborist, Inc. has been the sole distributor of the products in Nevada and Arizona.

The Mauget Tree Injection Process is a method of injection used to correct nutritional deficiencies or to control insects or diseases of trees.

Established in 1978, Artistic Arborist, Inc. is a plant health management company that provides products and services nationwide for government, public and private industry. The company provides training for arboricultural and landscape industries and other interested individuals through educational seminars, consultation, diagnostic services, lectures and training workshops.

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Developed and tested by Dr. Stan Brauen and Dr. Roy Goss, Putter achieved high ratings in overall turf quality in tests for color, density and improved resistance to take-all patch disease at the Western Washington Puyallup Research Station.



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# Research the priority at DowElanco's world HQ

DowElanco, facing "a more competitive atmosphere than ever before," has "taken wing" with groundbreaking on a \$100-million world headquarters in Indianapolis, Ind.

A joint venture of The Dow Chemical Co.'s agricultural products department and Eli Lilly and Co.'s plant science business, DowElanco hopes a massive effort in research and development of new pesticides, insecticides and herbicides will maintain its position as one of the largest agricultural products companies in the world.

Backing up its convictions, company leadership under President and Chief Executive Officer John L. Hagaman made state-of-the-art research laboratories a cornerstone of the 325-acre global headquarters.

Officials said a stronger research and development organization is one of the main reasons DowElanco was formed.

Both Dow and Lilly have strong track records in research and development, but they have tended to focus on different aspects of the process, said Vice President of Research and Development Perry Gehring.

Combining their expertise into new research teams offers nearly limitless potential, he said.

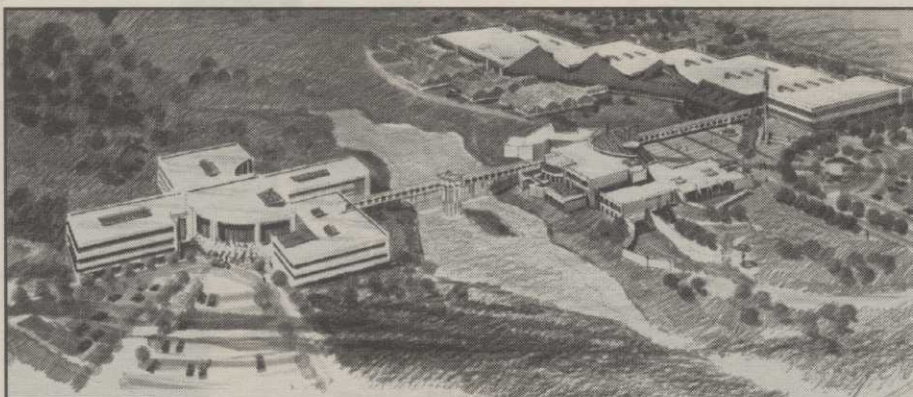
More than 400 scientists and support staff will man the 520,000-square-foot research laboratories and 15 greenhouses, expected to open by the fall of 1992.

A 200,000-square-foot administrative building and 90,000-square-foot employee development center will complete the complex, which will house 1,000 employees. DowElanco's entire workforce is 2,800, supported by another 1,700 from the parent companies.

Speaking at June 5 groundbreaking ceremonies attended by Gov. Evan Bayh and Indianapolis Mayor William H. Hudnut III, DowElanco Vice President of Global Products Clay Williams said, "We feel there are substantial growth opportunities ... in all four of the major global regions we're involved in, and especially in Europe."

Williams noted that DowElanco operates 11 manufacturing plants around the world and conducts research and development field trials at 21 locations in the Northern and Southern Hemispheres, "which gives us the opportunity to test a product twice in any given year."

Hagaman said virtually no overlap between



An architect's rendering of DowElanco's planned headquarters in Indianapolis, Ind.

product lines allowed DowElanco, formed last October, to hit the ground running.

While expecting to introduce one major

new product per year, it has 15 potential products in the "pipeline" in various stages of development, he said.

## The Timetable

- April 1989 — The Dow Chemical Co. and Eli Lilly and Co. announce the joint venture and sign a Letter of Understanding.

- June 1989 — Joint venture transition teams are named.

- August 1989 — The DowElanco global headquarters site is announced.

- October 1989 — Joint venture closing is completed.

- June 1990 — Construction of new global headquarters complex begins with groundbreaking ceremonies in Indianapolis.

- October 1992 — Scheduled completion of research laboratories.

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President George Bush, right, presents Jacobsen Textron President Robert Reid the U.S. Commerce Department's E Star Award for outstanding export sales. At left during the White House ceremony is Secretary of Commerce Robert A. Mosbacher and in the background is U.S. Trade Representative Carla A. Hills. The E Star Award is given only to companies that have previously won the E Award, which Jacobsen received in 1974 for export sales of consumer lawn and garden equipment. The company now makes only professional turf equipment for golf courses and other turf areas. Reid credited an increased emphasis on overseas markets, spearheaded by the firm's International Operations Department, and a strong network of foreign distributors for making the award possible.



## Otterbine/Barebo presents honors

Otterbine/Barebo Inc. presented several awards at its annual distributor luncheon to certain distributors for outstanding service and performance throughout the year.

Aquatic Control of Seymour, Ind., was named Service Center of the Year.

Chicago Turf & Irrigation was overall Distributor of the Year, while Prato Verde of Padova, Italy, was named International Distributor of the Year, a new award.

Cited for Outstanding Distributor Performance for the first through fourth quarters, respectively, were Hector Turf in Deerfield Beach, Fla.; Turf Products Corp. of Enfield, Conn.; Storr Tractor of Somerville, N.J.; and Beckman Turf of Chesterfield, Mo.

The highlight of the ceremony was presentation of an award developed to honor individuals who have made contributions above and beyond the call of duty. Paul Deschamps of Storr Tractor, Inc. was the first inductee.

## RedMax signs on Porter Brothers

Porter Brothers, Division of RSI Holdings, Inc., has been named exclusive distributor for RedMax Products in North and South Carolina. Porter Brothers, headquartered in Shelby, N.C., is one of the largest outdoor power and turf equipment distributors in the nation.

"This is an excellent fit for our company," said Chuck Bolt, president of Distribution, RSI Holdings. "The RedMax line has applications in both turf and outdoor power equipment markets."

Porter Brothers, founded in 1949, operates branch facilities in Hilton Head, Columbia and Greenville, S.C., and Virginia Beach, Va. Branch facilities will be opened this year in Myrtle Beach, S.C., and Raleigh and Greensboro, N.C.

## Golf Cars Ltd. customizing cars

Golf Cars Ltd., a golf car distributor in Sun City, Ariz., reports that it customizes golf cars for the physically handicapped and those with other on-or off-course needs.

The company said cars also can be stretched to accommodate 12 passengers or "souped up" to reach speeds of 24 mph.

## Registrations and labeling...

California has accepted registration of **Tempo 20 WP** insecticide from Mobay Corp. for use on home lawns and ornamentals.

Tempo, a synthetic pyrethroid, controls more than 40 turf and ornamental insects, including aphids, armyworms, whiteflies, thrips and ticks, with significantly less active ingredient than standard insecticides.

Rhone-Poulenc Ag Co. has announced EPA registration of several additions to the **CHIPCO 26019 WP** fungicide label.

The product is now registered to control necrotic ring spot. Necrotic ring spot, a recently identified component of the fusarium blight complex, is a serious disease of turfgrasses, especially Kentucky bluegrass.

**Acclaim 1EC** Herbicide has been labelled for use on bentgrass.

"Now Acclaim 1EC Herbicide may be used to control crabgrass, goosegrass and other grassy weeds in established fairway bentgrass," said Dr. Matt Mohoney, Hoechst-Roussel Agri-Vet Co. field technical representative for the Northeast.



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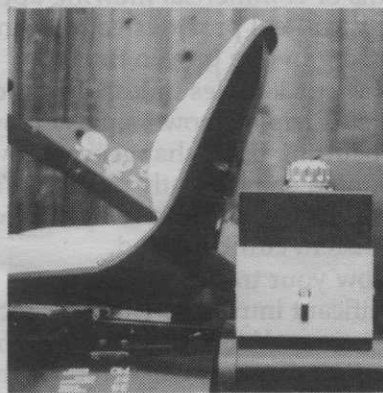


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## 'Dictionary of Golf' defines all you would want to know from A to Z

BY PETER BLAIS

Bob blocked the balata from the bunker with the backscrow of his baffle. Or was it his brassie? But the banana ball burrowed into the Blue grama where billbugs, barley yellow dwarfs and blister smuts blended.

Now, if you translated that bit o' blarney you're either a golf fanatic or you probably just bought "The Dictionary of Golf," a 79-page handbook containing definitions of everything from abiotic disease to Zoysia patch.

The book contains the definitions of myriad grasses, their diseases and insect problems as well as words used for the game, courses, equipment, scoring, competitions and penalties.

Rutgers University academicians and golf buffs Spencer H. Davis, Steven R. Langlois and Louis M. Vasvary have more than 75 years experience teaching superintendents and researching golf course problems.

They pooled their knowledge to produce an entertaining dictionary that should help superintendents, pros, greens committee members and golfers better understand one another through a common language.

Following the definition section are easy-to-read appendices list-

ing the common and scientific names of common grasses, turfgrass diseases and pathogens, as well as past winners, scores and locations of the major men's and women's professional tournaments.

"The Dictionary of Golf" is available for \$9.95 through pro shops and book stores or for \$10.95 from Carlton Press, Inc., 11 West 32nd Street, New York, N.Y. 10001.

Oh yeah.

Remember Bob?

Well, the poor guy pushed his shot by delaying the rotation of his

wrists and hands (blocking). He struck the ball, the cover of which is made from the sap from of a tropical tree (balata), with the screw at the heel (backscrow) of a wooden club, either his 5-wood (baffle) or 2-wood (brassie).

Unfortunately, he sliced it (banana ball) into a semi-arid grass (Blue grama) that was afflicted with weevils (billbugs), a virus-caused disease that yellows the blades (barley yellow dwarf) and black, elongate blisters with chlorotic haloes on the leaves (blister smut).

Ah, but you knew that.

## NEW LITERATURE

### Kit deals with bentgrass sod

Seed Research of Oregon has developed an information kit for sod growers interested in producing high-quality creeping bentgrass sod.

Special requirements for bentgrass sod production include drainage, root

zone mixes and other management techniques after seed has emerged. The kit deals with all aspects of production. Contact Seed Research of Oregon, P.O. Box 1416, Corvallis Ore. 97339. **Circle No. 259**

### New RedMax line unveiled

RedMax has introduced its 1990, 24-page, full-line product brochure. The four-color brochure illustrates RedMax outdoor power equipment. New reciprocators, edgers and

portable gas-powered drills are included.

Contact RedMax, P.O. Box 1545, Norcross, Ga. 30093; 404-381-5150. **Circle No. 258**

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Issue	Feature	Closing Date
August	<b>Turf Update:</b> <b>Zoysiagrass sod; Seed Growers</b>	<b>Friday, July 20</b>
September	Equipment Update: Sweepers, Vacuums & Blowers	Friday, Aug. 17
October	Equipment Update: Irrigation & Pumping Stations	Friday, Sept. 14
November	Special Report: Architects & Builders	Friday, Oct. 19
December	Chemical Update: Herbicides	Friday, Nov. 16

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

### Excel details Hustler line of rotary mowers

Excel Industries Inc. has released literature on the Hustler line of rotary mowers.

The pocket-size brochure details the professional features of all models from the compact 251K through the 640 Hillsider to the Snow Track 440.

Also featured is the line of Hustler attachments such as the Range Wing, Hi-Lift BAC VAC, Edger and the complete line of snow removal equipment as well as snow track grooming accessories.

Contact Excel Industries, Inc., Box 7000, Hesston, Kansas 67062; 1-800-835-3260, in Kansas 1-800-362-1049 or in Canada 1-316-327-4911. **Circle No. 252**

### Bridges topic of catalog

De Bourgh Manufacturing, Town & Country Bridges is offering a new 12-page catalog of pre-engineered/pre-fabricated bridges.

The catalog shows numerous installations including golf courses.

De Bourgh offers Town & Country Bridges in single spans of 10 to 200 feet, widths from 4 to 12 feet standard concentrated loading up to 10,000 pounds.

For a free catalog, contact De Bourgh Manufacturing Co., Town & Country Bridges, 9300 James Ave., South, Minneapolis, Minn. 55431; 800-328-8829. **Circle No. 251**



## Airborne unveils lightning detectors

Airborne Research Associates has begun marketing its M-01 and P-1 lightning detectors that can predict lightning strikes 15 to 20 minutes before they occur.

The hand-held, battery-operated M-01 Intracloud Lightning Detector senses intracloud lightning activity, that is lightning from cloud to cloud or within a single cloud. Ninety percent of all lightning is intracloud.

As thunderstorms develop, intracloud lightning begins. The human eye doesn't see it during daylight hours. But it does see cloud-to-ground lightning that occurs 10 to 20 minutes later.



Airborne M-01

The M-01 detects the earlier intracloud activity and can give a superintendent a jump on getting people safely off his course before cloud-to-ground strikes, the type that kill and injure many golfers,

spectators and golf course employees every year.

The P-1 Atmospheric Potential Probe compliments the M-01, searching for raised electrical fields generated by thunderclouds that can reach up to 10,000 volts per meter. Installed on a clubhouse and connected to a personal computer with special software, it permits a course official to monitor thunderclouds within five miles. Yellow warning and red alert levels display information or can automatically trigger alarms and sirens.

The M-01 and P-1 overcome shortcomings of existing lightning detection systems. According to

Airborne, those shortcomings include:

- U.S. Weather Bureau forecasts are updated only every six to 12 hours based on information from airports 30 to 100 miles apart. They are not site specific.

- Radar is updated every 15 to 30 minutes. But radar tracks rain, not clouds or lightning. Thus radar doesn't provide up-to-the-minute information on developing thunderclouds.

- Lightning mapping systems are of two types. The first is a

## NEW PRODUCTS

national network relying on information from stations hundreds of miles apart that only track cloud-to-ground lightning, not the more useful intracloud variety. The second is self-contained and can be used at the course, but cannot determine distances of lightning strikes.

Using the M-01 to detect intracloud lightning and P-1 to determine the distance of lightning activity "will insure a combined detection capability providing the maximum in lightning awareness," according to company literature.

The USGA invited Airborne to assist in lightning detection at last month's U.S. Open at Medinah (Ill.) Country Club. For the past few months, Airborne has loaned 20 M-01 units to the United States Golf Association, Professional Golfers Association Tour, PGA Senior Tour, Ladies Professional Golf Association, PGA of America and numerous other golf organizations and clubs.

PGA of America Director Ken Lindsay served on the rules committee during May's SEC Golf Championship at Annandale Golf Club in Jacksonville, Miss. He monitored storm clouds that began showing up at mid-morning of the second round.

"I am happy to report that your equipment helped us determine the right time to suspend play (2:12 p.m.) and evacuate the golfers," Lindsay wrote. "By 2:30 everyone was off of the golf course and at 2:37 the lightning began..."

The M-01 permitted officials to extend Saturday's play 10 to 15 minutes longer than they might have otherwise and the device seemed to calm players and coaches, he added.

Both devices will be available by mid-July, said Bergh. The P-1, including computer, software and electronics costs \$12,500. The hand-held M-01 is \$300.

For more information contact Airborne Research Associates, Inc., 46 Kendall Common Rd., Weston, Mass. 02193 or call 617-890-1588. Circle No. 301

## Finn product makes mixing faster, easier

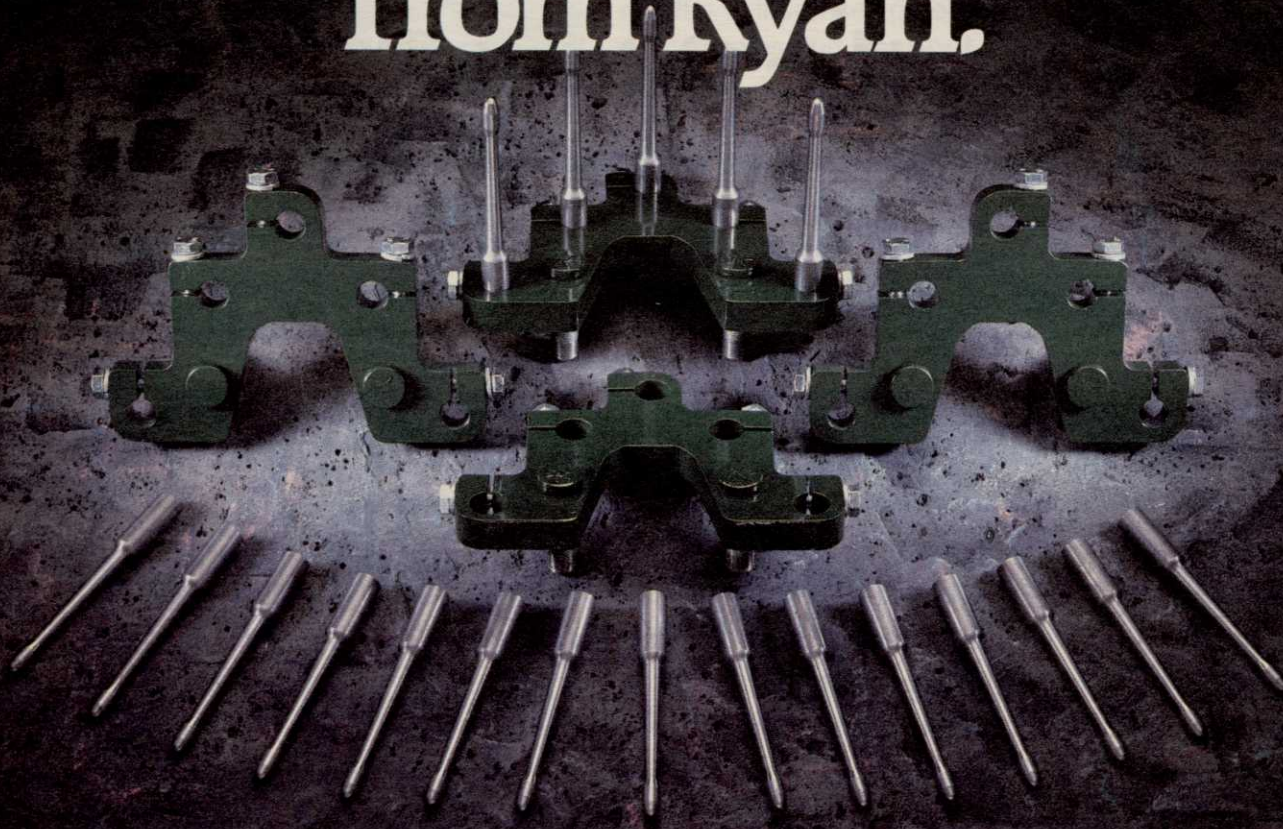
The 300-gallon capacity TL30 is the newest addition to the line of Finn Corporation Hydroseeders.

Designed with economy and performance in mind, the skid-mounted TL30 includes many features unique to larger hydroseeders.

Powered by a Briggs and Stratton 18-hp gas engine, it has a centrifugal pump and both a mechanical paddle agitator and liquid recirculation for fast and easy mixing of seed, fertilizer and fiber mulch. Many options are available.

For more information contact Finn Corporation, 9281 LeSaint Drive, Fairfield, Ohio 45014 or call 513-874-2818. Circle No. 303

# Introducing a new pressure relief package from Ryan.



At \$300, it's just a drop in the bucket compared to the alternative.

The pressure of heavy traffic during peak summer months can cause extreme soil compaction which puts you under a lot of pressure as well. How do you maintain healthy turf without interrupting play and spending a small fortune?

You get Ryan's new Solid Tine Aeration Kit.

The Solid Tine Aeration Kit converts your Ryan GA™30 or Greensaire® 24 to a



supplemental aerator with adjustable depths up to 3" and variable spacing on the GA30. The kits include holders and 1/4" solid tines which easily mount in just minutes. There's no mess to clean up after aeration. No hoses to drag around. No high price to justify.

There's really no reason not to have one. Contact your Ryan dealer or call toll-free 1-800-228-4444 for more information today.

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For free information circle #134



## Fibergrids improve sub-grade soils

Fibergrids is a new development from Synthetic Industries, Inc. for the treatment and improvement of sub-grade soils.

Manufactured of engineered polypropylene fiber, it combines with cement/flyash and native soils to form an all-weather construction platform.

This stabilizes active clay soil permitting construction equipment to move and work on job sites sooner.

Paving may begin earlier or later without hindering traffic flow.

Fibergrids and other additives are blended into the soil with a stabilizer/mixer. The resulting stabilized clay soils exhibit greater load-carrying capacity and impermeability.

For more information contact Wayne Freed, Construction Products Division, Synthetic Industries, Inc., 4019 Industry Drive, Chattanooga, Tenn. 37416 or call (615) 892-8080. **Circle No. 302**

## Plant and insect control made easy with new software

Automata, Inc. has introduced a powerful software program allowing rapid calculation of accumulated degree days. Development stages may be predicted for both plants and insects.

The degree-day option to Automata's basic data acquisition and control software calculates and stores hourly average temperatures from any number of sensors in the system.

With a few key strokes, the operator selects start date along with lower and upper threshold temperatures for the target insect or crop.

Any temperature data file may be reprocessed with a range of parameters to easily develop a model if one is not available.

The degree-day package used in conjunction with Automata's automated insect counter is a powerful insect management tool.

The degree day calculation is based on real-time temperatures, more accurate than averaging, triangulation or sine linear approximations.

For additional information call (916) 273-0380. **Circle No. 305**

## Smoke generators check liner leaks

Easy-to-use, disposable smoke generators for testing the integrity of pond liners during initial construction and post-installation trouble shooting are now available from Superior Signal Co., Inc.

To conduct the test, smoke is forced with a blower beneath the liner. Smoke generators are more reliable than visual detection for locating leaks. They are an inexpensive way to eliminate callbacks, significantly reducing labor costs. They are ideal for locating tears and leaks at overlap sections and where pipes extend through the liner.

Superior smoke generators are also used for testing repairs and transfer piping networks leading to secondary containment areas.

Each unit is a compact 1-1/2-by-6 inches and creates 40,000 cubic feet of smoke in a three-minute cycle. The Superior 3C Smoke Generator has single-wick construction. The model W3C has a wick at each end for tandem attachment (with supplied slide ties) to generate smoke on a continuous basis for as long as required.

For more information contact Superior Signal Co., Inc. P.O. Box 96, Spotswood, N.J. 08884. **Circle No. 306**

# Golf Course Marketplace

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### ATTENTION INDUSTRY SUPPLIERS!

GCN'S August issue, featuring a Turf Update on **Zoysiagrass sod & Seed Growers** closes on **Friday, July 20th.** Call **(813) 576-7077** to place your ad TODAY!!!

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2 year AAS degree program in Golf Course Superintending, Irrigation Management, Landscape Contracting & Park Supervision. Fully accredited, VA approved, expanded learning facilities, new equipment. Graduate job placement assistance available. For more information contact: **Golf Course Operations/Landscape Technology Dept., Western Texas College, Snyder, TX 79549.**

**GRAYSON COLLEGE**, Dennison, TX. 2-year technical program in golf course & turf grass management. 18-hole golf course on campus. Dormitories, placement assistance, financial aid & scholarships avail. Contact: **GCC, 6101 Grayson Dr., Dennison, TX, 75020. (214) 465-6030, ext. 253.**

### NEW

### Golf Course & Landscape Equipment Mechanic Training Program

One year Certificate includes training in Irrigation Repair, Maintenance & Trouble Shooting; Engine & Hydraulic Systems repair, Maintenance & Trouble Shooting; Reel Grinding, Mower Service & Repair. For info. contact: **Mr. Mace McDaniel, Golf Course Operations/Landscape Technology Dept., Western Texas College, Snyder, TX 79549.**

## INDUSTRY INFORMATION

### THOMAS R. WAIT

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# CALENDAR

## July

3-5 — Canadian Seed Trade Association annual convention at the Prince Edward Hotel in Charlottetown, Prince Edward Island.

8-12 — Pacific Seedsmen's Association meeting at Harvey's Casino in Lake Tahoe, Nev.

11-12 — Alabama Seedsmen's Association annual convention at the Hilton Hotel in Orange Beach, Ala. Contact Bob Burdett at 205-821-7440.

18-20 — Northern Seedsmen's Association summer meeting in Winnipeg, Manitoba.

22-24 — North Carolina Seedsmen's Association annual convention at the Sheraton Resort and Convention Center in Atlantic Beach, N.C. Contact Hortense Dilday at 919-782-3673.

25-27 — American Sod Producers Association's Summer Convention and Field Days in Ottawa, Ontario, Canada. Firms will be invited to demonstrate their equipment or exhibit their static displays during two days at the Manderley Farm in Kemptville. Contact ASPA, 1855 Hicks Road, Rolling Meadows, Ill. 60008; 708-705-9898.

## August

1 — University of Georgia Turfgrass Field Day at Griffin, Ga. Contact Dr. Gil Landry or Dr. Tim Murphy at 404-228-7300.6

9 — Rutgers Turfgrass Research Field Day at the Turfcenter, Ryders Lane, Cook College, New Brunswick, N.J. Contact Dr. Henry W. Indyk, Crop Science Department, Cook College, telephone 201-932-9453.

16-17 — South Dakota Seed Trade Association annual meeting at the South Dakota State Game Lodge in Custer (S.D.) State Park.

25-Sept. 10 — Asia Horticultural Tour of Thailand, Hong Kong and Japan. Contact the Professional Plant Growers Association at 517-694-7700.

## September

4-6 — The Institute of Groundsmanship's Sports & Leisure World Trade Exhibition at the East of England Showground in Peterborough, Cambridgeshire, United Kingdom. For more information contact Milton Keynes at The Institute of Groundsmanship, 19-23 Church St., The Agora, Wolverton, Buckinghamshire MK12 5LG; telephone 0908-312511.

18 — Professional Turfgrass Field Day, sponsored by the Metropolitan Golf Course Superintendents Association, at Westchester Country Club in Rye, N.Y. Rain date is Sept. 19. Contact Bob Lippman at 914-248-7476 or Byron Johnson at 201-473-3393.

18-19 — Virginia Tech Turfgrass Research Field Days at the Virginia Tech Turfgrass Research Center in Blacksburg, Va. Contact John R. Hall III, professor and Extension agronomist, at Department of Crop and Soil Environmental Sciences, 424 Smyth Hall, Blacksburg, Va. 24061-0403; 703-231-9736.

27-19 — Golf Collectors Society's 20th annual meeting, including a private auction and two-day public trade show, in Birmingham, Ala. Highlights include a members-only reception at the Alabama Sports Hall of Fame and the Hickory Hackers 18-hole tournament, with players using only wood-shafted clubs and wearing 1900s-style attire. Contact Bob Tidwell at 205-328-3885.

30-Oct. 3 — Florida Turfgrass Association Annual Conference and Show — "the largest warm season turfgrass trade show in the Southeast" — at the Orange County Convention Center in Orlando. Workshops and seminars will cover environmental regulations, enforcement policies, biological control programs and advanced turf management practices; and the IFAS Research Update program of the University of Florida will present current facts for the turfgrass industry from the last year of re-

Continued on page 36

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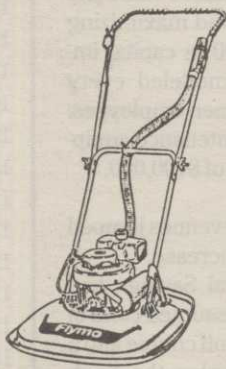
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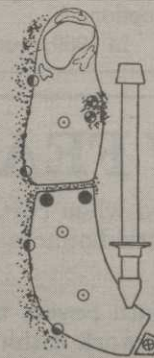


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For free information circle #158

Continued from page 35

search. Call 407-898-6721 for more information.

30-Oct. 4 — Professional Plant Growers Association annual conference at the Marriott City Center Hotel in Denver, Colo. Contact the Professional Plant Growers Association at 517-694-7700.

### October

23-26 — BGIA golf trade exhibition in Birmingham, England. For more information call 0903-883381.

28-Nov. 1 — The 11th Annual International Irrigation Exposition and 3rd National Irrigation Symposium, presented jointly by The Irrigation Association and the American Society of Agricultural Engineers, at Phoenix, Ariz. Contact Lisa Brownell-Pierce at The Irrigation Association, 1911 North Fort Myer Drive, Suite 1009, Arlington, Va. 22209-1630; 703-524-1200.

29-31 — West Virginia Golf Course Superintendents' Association's first annual turf conference at Cedar Lakes Conference Center near Ripley, W.Va. The conference will include equipment and product demonstrations and educational programs. Contact John C. Cummings at Berry Hills Country Club in Charleston, W.Va.

### November

3 — American Seed Trade Association Lawn Seed Conference at Crown Center in Kansas City, Mo. Contact the ASTA at Suite 964, Executive Building, 1030 15th St., N.W., Washington, D.C. 20005; 202-223-4080.

3-6 — Western Seedsmen's Association convention at Crown Center in Kansas City, Mo.

12-14 — Golf Summit 90, the third in a series of industry strategic planning meetings, at Marriott's Desert Springs Resort and Spa in Palm Springs, Calif. Coordinated by the National Golf Foundation, the summit will focus on the progress made in the programs of the Strategic Plan for the Growth of Golf, first introduced by the NGF in 1988. Contact the NGF, 1150 South U.S. Highway One, Jupiter, Fla. 33477; 407-744-6006.

28-30 — Second Golf Course Europe, an international exhibition and conference on the design, construction and maintenance of golf courses and golf club management, at Le Parc des Expositions in du Bourget, Paris, France. Contact Ellen MacGillavry at Expoconsult, Industrieweg 54, P.O. Box 200, 3600 AE Maarssen, Holland; 03465-73777.

### December

4-6 — North Central Turfgrass Exposition at the Ramada Renaissance Hotel and Prairie Convention Center in Springfield, Ill., including educational sessions and exhibits by more than 90 turf industry suppliers. Contact Illinois Turfgrass Foundation at 312-644-0828.

10-12 — 21st Annual Georgia Turfgrass Conference and Trade Show at the Hyatt Atlanta Airport. Contact Karen Lavender at 912-681-5189 or Esther White at 404-447-4985.

12-14 — Second Annual Pacific Coast Turf and Landscape Conference and Trade Show at the Washington State Convention and Trade Center in Seattle, Wash. The conference and show are sponsored by the Western Washington Golf Course Superintendents Association and Jones and Associates, Park Center, Suite 200, N. 908 Howard St., Spokane, Wash. 99201-2261; 509-327-5904.

### January 1991

14-17 — 31st Virginia Turfgrass Conference and Trade Show at the Richmond Centre and Marriott Hotel. Contact Rande Thompson at 804-340-3473.

17-19 — 1991 Mid-America Horticultural Trade Show at the Hyatt Regency Chicago. Sponsored by the Illinois Nurserymen's Association, Illinois Landscape Contractors Association, and Wisconsin Landscape Federation, the show is endorsed by the Indiana Association of Nurserymen and the Iowa Nurserymen's Association. Contact Mid-Am Trade Show, 1000 N. Rand Road, Suite 214, Wauconda, Ill. 60084; 708-526-2010.

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# Making a super's dream come true

BY MIKE RILEY

Most superintendents dream of owning a golf course.

Like my peers, I shared that vision. At times it seemed an obsession.

I searched the farthest and coldest regions of the Earth for anything resembling a golf course. The farther into the boondocks I looked, the more affordable courses became. But even there, the required capital was beyond my means.

Though I didn't realize it at the time, my dream started to become reality in December 1978, when I became superintendent at Larch Tree Golf Club in Trotwood, Ohio, near Dayton.

Larch Tree is an 18-hole, championship course designed by Michael Hurdzan. It opened in 1973 with the goal of becoming the area's premier facility.

Unfortunately, with the faltering economy and demise of a nearby planned community, the club never established itself. The financially troubled savings and loan that bankrolled Larch Tree received virtually no principal or interest payments from 1975-79.

With no golf course management expertise, and no prospective buyers, the bank carried the operation as best it could. In 1980, the S&L reached agreement with the Montgomery County Board of Commissioners to lease the facility to the county for one year. Meanwhile, the county sought a 50-percent matching grant from the Ohio Department of Natural Resources to acquire the golf course for \$1.2 million, the amount of principal and accrued interest at that time.

The agreement allowed the bank to foreclose on the property and turn it over to the county. But the course had operated on a shoestring budget, with no capital improvements or new equipment, for the previous five years.

With the private club now defunct, I accepted a one-year contract as superintendent, with the stipulation that once the county acquired the facility, I would become a full-



Mike Riley at his golf course.

time employee.

Unfortunately for the county, the matching state grants that made the purchase feasible were dwindling. With money unavailable in 1980, the county leased the property for another year and re-applied for state funds. Denied again, the process was repeated yearly through 1984.

Meanwhile, I was in the unenviable position of trying to maintain and improve the course with 10-year-old equipment in varying degrees of disrepair. Acquiring even the most essential piece of machinery was impossible since Ohio law forbid government agencies from making capital improvements or purchasing equipment in a leasehold situation.

As a superintendent without adequate physical resources, I felt my reputation slipping completely out of my control.

I was able to do something. Promoted in 1982 to superintendent of parks with responsibility for the course, 13 parks and more than 800 acres, I was able to re-allocate maintenance equipment to slow the golf course's deterioration. Still, it wasn't enough.

But behind every dark cloud is a silver lining, and mine was about to poke through.

At the end of 1984, the County Commission made a final, token offer to buy the facility, while indicating it was not inter-

ested in any further lease arrangement. I told the bank it was not necessarily up against the wall with no choice but to accept the county's offer. I said I was willing and able to operate the facility with little financial assistance.

A few weeks later, bank officials came back with an offer I couldn't believe, let alone refuse. I would be an employee of the bank, operating the golf course autonomously for the next six years. The bank would finance needed improvements and equipment.

And, most importantly, they offered to let me buy the course anytime within those six years, with 50 percent of the net cash flow to that point applied as a down payment toward a pre-determined purchase price.

Despite my good fortune, I realized the hardest part was yet to come. Though just five years ago, 1985 was a different era than today's golf boom. Most people thought I was crazy to give up a secure government position to take on such a task. Annual revenues were less than \$250,000, hardly enough to accumulate much of a down payment and certainly insufficient to retire the kind of debt I was facing.

I developed a five-year improvement plan designed to achieve an appraised value any bank would find attractive and maximizing net cash flow. With \$125,000 in capital improvement money, we remodeled every building using retired, former employees. Virtually every piece of maintenance equipment was replaced at a cost of \$100,000.

The result?

From 1985-1989 annual revenues jumped to \$650,000, a 160-percent increase.

By this time, the Federal Savings and Loan Insurance Corp. had assumed control of the bank because of the golf course and a speculative apartment complex the bank financed that had gone sour. The golf course was now an enticement, wooing potential buyers of the S&L with an asset that could provide an influx of cash if I exercised my option.

In 1989, four years into our agreement,

the S&L I was dealing with was taken over by a large, West Coast bank. As the golf gods would have it, the new bank was not interested in remaining my partner for another two years.

The bank immediately offered to re-negotiate my contract, enabling me to obtain the necessary financing. The net result was a \$175,000 reduction in the purchase price plus an attractive buyout of my employment contract that served as my down payment.

On Sept. 14, I exercised my option to purchase Larch Tree Golf Course.

The naysayers, who once characterized me as crazy, now say it was mostly luck. Not believing in luck, I prefer to think of the last 10 years as a long and winding road that brought me to a point where my education, experience, persistence and dreams have come together.

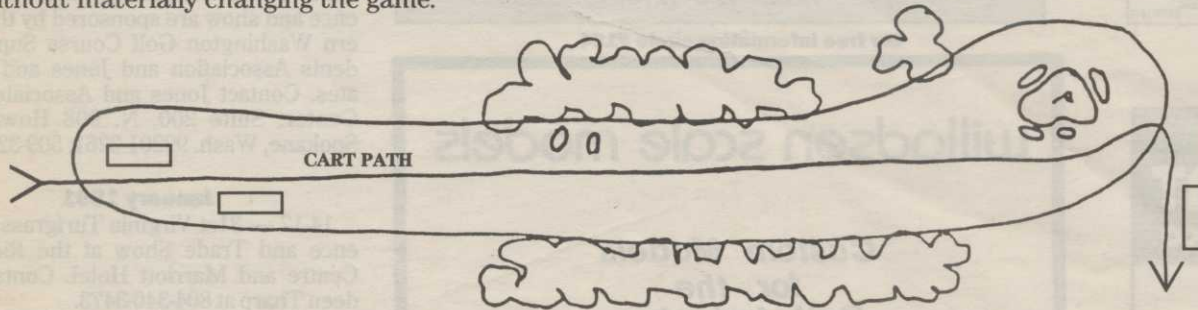
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