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GOLF COURSE NEWS

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INSIDE

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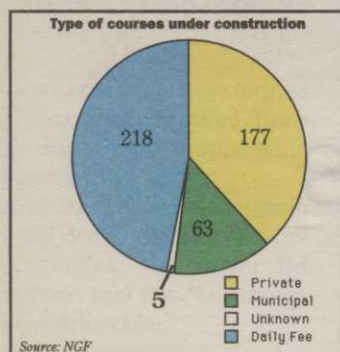
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For coverage of the Golf Course Superintendents Association of America's 61st International Golf Conference and Show, see pages 36-47.

Toro aerator a breakthrough

BY MARK LESLIE

The Toro Company has unveiled a revolutionary machine that aerates greens without disturbing the surface and interrupting play.

The HydroJect 3000, which uses high-velocity spurts of water to aerate greens while leaving no telltale cores behind, was introduced in a dramatic exhibition at the 61st International Golf Course Conference

and Show in Orlando, Fla., in February.

Dana Lann, Toro's head of research, projected late-fall production of the HydroJect 3000 and full availability to golf course superintendents by the summer of 1991.

Dr. Paul Rieke of Michigan State University, who with a graduate student worked on the project with Lann's researchers for three years, said: "The beauty of this (equipment) is that we're able to use it frequently on the

putting surface and thus keep soil in good physical condition.

"We think this is a versatile tool that the golf course superintendent will be able to use in his program to provide better quality turf and to improve the stress tolerance of that turf."

Toro officials hailed the work of the researchers and the impact the machine is

Continued on page 47



When Golfplan Design Group and PGA Tour pro Mark O'Meara got together to collaborate on Redhawk Golf Course at Temecula, Calif., three years ago they were confronted by a 150-acre site with perhaps a half-dozen trees. One of their first steps was to start a 25-acre nursery, above, to grow trees enough to beautify the overgrazed pastureland. The result, Ron Fream says, is "our best course in the United States," boasting hundreds of trees that are now 12 to 30 feet high. For more on new golf courses, see pages 14-15.)



Hawaii lengthens wait

The Honolulu City Council passed an ordinance in late February requiring courses proposed on farmland to go through the lengthy annual review process.

That means it could take up to two years to get the required zoning change to develop a new course, according to Bob McGraw, an aide to Councilwoman Donna Mercado Kim.

"It would be reasonable to characterize that as lengthy," said McGraw.

Proposed sites designated for resort, preservation or park use don't have to go through the yearly review.

Development has been a major issue on the island of Oahu where residents were concerned about the loss of agricultural land and possible ground water contamination from new courses.

A 10-month moratorium on new construction ended Jan. 1. The council considered a bill that was stricter than the old law, but was vehemently opposed as not stringent enough and allowing development in too many zoning districts by citizen groups, like Hands Around Oahu.

The proposal was sent back to the Zoning Committee, which passed the new bill that the council approved in February.

Ordinance No. 90-15 restricts stand-alone courses to a single zone. Approval requires such measures as the use of non-potable water for irrigation, increasing opportunities for public participation and compatibility with the surrounding area.

The council is also encouraging programs for displaced residents and for monitoring golf course chemicals.

UST coverage said crucial

BY PETER BLAIS

It wasn't so long ago at a course called, well let's make it East Overshoe CC, that an underground storage tank (UST) leaked.

The tank's contents contaminated an underground water supply and required the installation of two purifying wells. It's estimated it will take two to five years to clean the water. The course's cost to rectify the situation — \$200,000.

Richard Shanks, president of Financial Guardian Insurance of Kansas City, Inc., related that sorry tale during February's Golf Course Superinten-

Continued on page 39

International superintendents share views

BY PETER BLAIS

Growing memberships and the need for more educational opportunities are among the common threads binding national superintendents associations, reported representatives of a dozen such organizations during February's Golf Course Superintendents Association of America conference in

Orlando, Fla.

Canada, Australia, Argentina, Italy, England, Sweden, France, Germany, South Africa, Japan and the United States were all represented at an international roundtable moderated by GCSAA Immediate Past President Dennis Lyon and President Gerald Faubel.

All described increasing interest in their organizations as a result of the growth of golf in their home countries.

But in many instances, educational opportunities to increase the professionalism of superintendents are still lagging behind the United States. Many of the foreign rep-

Continued on page 46



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Sierra Club about-face angers golfers

San Francisco-area golfers and San Mateo County officials are upset with environmental groups that have reneged on earlier endorsements of a proposed city-owned site for a regional golf course.

Golfers have been pushing for a new public course since the 1960s. Demand is so strong that it is projected 80,000 rounds would be played on a new facility within three years. A petition to build a course drew 35,000 signatures.

San Francisco Mayor Art Agnos has asked the city's Public Utilities Commission to develop the 390 acres of watershed property located along Canada Road north of Woodside. Architect Robert Trent Jones has designed an 18-hole course that would include a club-

Group forms to save course

While opponents of new courses often gain the headlines, in Countryside, Ill., those trying to save a course are making news.

Centrum Properties Inc. of Chicago wants to buy and convert 62-acre Maple Crest Golf Course into a residential/commercial development.

But area residents have formed an ad hoc committee called "Keep Maple Crest Green" to oppose the development.

"(We) don't need another strip mall and don't need another cinema complex," organizer Ed Krzeminski told the "La Grange Park Suburban Life."

New financing bypasses bonds for communities

First Golf Corp. of Phoenix, Ariz., is offering a new financing approach that lets municipalities build golf courses without using their precious bonding capacity.

The First Golf approach allows the city to lease the golf course and make payments from user fees. Payments are based on expected profits. Once the construction costs are paid, the city owns the course.

First Golf's initial project was a course completed in March 1988 in Rapid City, S.D. Boomerang, an 18-hole championship course in Greeley, Colo., and Eagle's Landing, a \$3 million, championship facility in Ocean City, Md., are under construction.

house and driving range.

The Sierra Club's county chapter OK'd the property for a golf course in 1983 after the county agreed not to develop Edgewood County Park, where rare plants and animals were found.

But the environmental group has since changed its position.

"They don't want anything," county Supervisor Bill Schumacher told the Palo Alto Times Tribune. "I don't know how to make an agreement with them."

One of the reasons for the Sierra Club's about-face was the reported sightings of endangered San Francisco garter snakes, although two

environmental studies failed to show their existence.

Scientists have also declared the property an international biosphere reserve, one of 269 in the world, since the Sierra Club's original endorsement.

The initial approval was given by the club's executive committee. A recent poll of the 6,000 local members showed 82 percent opposed the development.

"We made a mistake. We made a mistake," Olive Mayer, chairman of the Sierra Club's local chapter, told the Times Tribune regarding the executive committee's approval of the \$6.5 million course. "The

point is that we don't think we should whittle away at the watershed this way."

Woodside officials and residents are reportedly also concerned about traffic and contamination of Crystal Springs reservoir.

But since the land is city-owned, it will be up to San Francisco and San Mateo County officials, along with the Golden Gate National Recreation advisory board, to make a final decision.

The city could sell revenue bonds to finance the project or find a developer to build and lease it.

NEWS

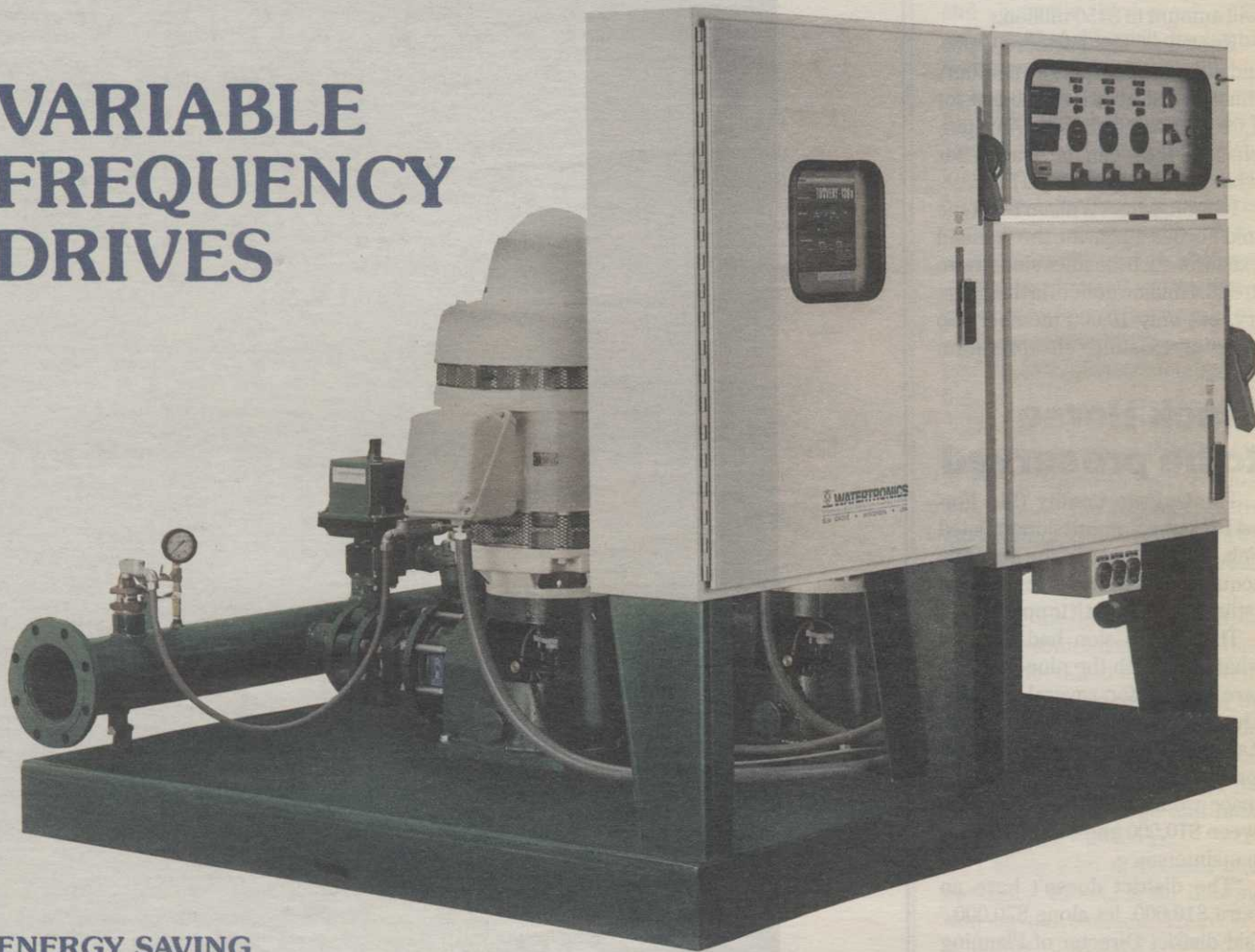
Brits build in Moscow

A British company has been selected to build a \$100 million luxury golf club in Moscow that will include the Soviet capital's first 18-hole course.

Golf Shows Ltd. will build the new facility which features a hotel and conference/business center. It is located 20 minutes from the Kremlin.

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NEWS

Memberships may go on market in U.S.

Golf course memberships that are traded like stocks and bonds, a common practice in Japan, may be coming to the United States.

Memberships in plush Japanese courses trade for as much as \$2.5 million, seven times what they cost in 1985. International Golf Management believes Americans may be willing to ante up similar amounts.

The Pebble Beach, Calif., company plans to build 12 lavish facilities at a cost of \$50 million each in the 1990s. The initial private stock placement to begin construction will amount to \$150 million.

Known as The Partners Clubs, individual and corporate members must invest at least \$150,000 for 1,000 preferred shares. Once purchased, they can be traded for whatever the market will bear.

IGF Chairman William Deakynne told *Forbes* magazine the demand exists for such facilities since there are 23.4 million golfers in this country, but only 10,000 membership slots at existing ultrapremium clubs.

Black Horse to be preserved

The DuPage County (Ill.) Forest Preserve Commissioners voted Feb. 20 to preserve the recently acquired Black Horse Golf Course rather than convert it to open space.

The commission had debated what to do with the nine-hole, 32-acre course for several months. The commissioners opted to leave it as a golf facility since it could pay for itself. Converting it to open space would cost the district between \$10,000 and \$70,000 a year in maintenance.

"The district doesn't have an extra \$10,000, let alone \$70,000," said district Director of Planning and Development Steve Halberg. "The commission decided it was in its own best interest to operate the property as a golf course."

Carlsbad, Calif. narrows choices

An advisory committee has narrowed its choices to two architectural firms to design Carlsbad, Calif.'s new 18-hole municipal course.

A joint venture of Don Collett of San Diego and Ted Robinson is one finalist. Olson Associates of Costa Mesa is the other.

The 185-acre facility is planned along the shores of city-owned Lake Calavera. The championship course will cost between \$6 million and \$10 million and is being financed by an increase in the hotel-motel tax.

The course is scheduled for completion in late 1992.

CC of Miami hunts for resort 'anchor'

The search for a major hotel to anchor a multi-million-dollar golf resort at the Country Club of Miami is near completion, according to developers.

"We're very close to an inclusive agreement with a hotel chain to complete the rest of the group," said PAR Sports Enterprises spokesman Ron Shapo.

PAR Sports, a group of black investors and minority partner of the Professional Golfers Association Tour in the project, has until September to find a lodging chain.

"We're working with the view of meeting that deadline. If everything keeps going at the smooth pace it has so far, we shouldn't have any problems. But it's a complex deal and questions have a way of arising," said Shapo.

The hotel, which will be built on 17 acres on the northern portion of the property, is part of the PGA Tour's plan to return the run-down country club into a money-making resort.

The Tour was given a management contract by the Metro commissioners to run

the facility in the hopes it would breathe new life into the Northwest Dade County neighborhood. Tour officials estimate the project, renamed the Golf Club of Miami, could earn \$15.7 million over the next two decades.

Officials are concerned about the lack of a hotel contract since the county spent \$8.7 million to buy the courses and \$4 million in renovations.

One course is open. A second is scheduled to open in May and construction of a third is moving along well, according to Shapo.

Tour puts B.C. in book as destination

Golf may be worth \$50 million a year to British Columbia now that the Western province has been named the Official Golf Destination in Canada of the PGA Tour and the PGA of America.

The Bahamas, Puerto Rico and the Jacksonville, Fla., area are the only other "official golf destinations."

The PGA will help the province maintain its courses to Tour standards as part of the agreement. Estimates put B.C.'s current annual golf revenue at \$2 million to \$3 million.

Bradshaw leaves NGF

Kit Bradshaw, for two years the public relations manager for the National Golf Foundation, has resigned her position and is working as a freelance writer.

Bradshaw, who has a background in real-estate and development as well as golf, said she will perform public relations and marketing both in and outside the golf industry.

She will also continue as the regional field editor for Florida for "Better Homes and Gardens" magazine, working out of her Jupiter home.

Japanese buy N.Y.C. area properties

Japanese banks and syndication groups have bought nine golf courses or course sites in the New York City vicinity in recent months, and are racing to remodel or build their facilities first.

"Now that they've acquired the property, it's become a race to get facilities remodeled or built first," said Jim McLoughlin of The McLoughlin Group, who has served as a consultant to several of the Japanese buyers.

The latest purchase was Garrison Golf and Country Club in Philipstown. Urban Life Co., Ltd. of Osaka, Japan, bought the 340-acre facility for \$17.4 million from Wil-

liam E. Wilkinson of Syosset, N.Y.

McLoughlin said Americans shouldn't worry that they won't be able to play the courses the Japanese are buying.

"We're telling our clients they can't automatically fill their golf courses with Japanese clientele," McLoughlin said.

He said 1,300 Japanese companies have offices in Manhattan alone and 15,000 to 18,000 Japanese executives live in the New York City area.

Those executives are living in the United States without their families, so they are "essentially bachelors" and form the pool the

newly Japanese-owned courses will try to attract.

But because that pool is limited, McLoughlin said, the Japanese owners are "changing marketing plans for a mix of Japanese and Americans."

Urban Life, for instance, intends to improve the Garrison course but otherwise keep it as it is now—a primarily public club with a limited number of annual private memberships, according to spokesman Yoshitaki Kishi.

For the nine new owners, "It's now a race to get credibility, to get open, and to market their courses," McLoughlin said.

NEWS

Ross Society's first conclave at Pinehurst

The Donald Ross Society has become "a viable entity" in just its first year of existence and will hold its first meeting May 3-6 at Pinehurst, N.C., according to its executive vice president.

Barry Palm, of West Hartford, Conn., said society members will stay at the Pinehurst resort to meet and play in their first Donald Ross Scholarship Tournament on the Pinehurst #2 course.

On Friday night, May 4, Wayne Ashby will host fellow society members at a reception at his home, which is Ross's old house and abuts the third green of Pinehurst #2. Ashby will display his Ross memorabilia, Palm said.

A banquet Saturday night will highlight the meeting with CBS Sports' Ben Wright giving the keynote speech and the society presenting its first Donald Ross Scholarship, of at least \$5,000, to a student of golf course architecture.

Palm said the Ross Society is growing by four to five members a week. As of March, 155 people had paid the \$100 charter membership fee.

Having worked on the first meeting for almost a year, Palm said he is "very gratified and very enthusiastic" about the response to the get-together. He said members will attend from throughout the country.

About the group's growth, he said: "It's something to say we have 155 members and we're not even a year old yet. It demonstrates the feelings for preservation of older courses. A lot of people are very sensitive to preserving what was built 50, 60 years ago and maintaining it the way it was."

"I know a lot of courses have contacted us asking for information on old courses. There is a movement towards restoring courses to their original state, and we have plans and blueprints to restore them."

More information is available from Palm at 7 Fairlee Road, West Hartford, Conn. 06107.

Palmer group inks agreement

Arnold Palmer Golf Management Co. has signed an agreement with the Hansen Group of Ambler, Pa. to operate Ballen Isles Country Club of JDM in Palm Beach Gardens, Fla.

The 10-year contract to operate the former JDM Country Club, also previously known as the PGA National Golf Course and headquarters of the PGA of America, is the fourth Palmer/Hansen accord.

Palmer also operates Philadelphia's Oak Terrace, Commonwealth National and Ballen Rose for Hansen.

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NEWS

Chotokan Group buys B.C. resort

Chotokan Group of Hamamatsu, Japan has purchased Radium Hot Springs Golf Resort in southeastern British Columbia for \$20 million.

Former owner Douglas McIntosh will stay on as general manager. An additional \$5 million in renovations will be done to the resort located 50 miles west of the Alberta border.

LAX course may be grounded

A decade-old plan to build a 27-hole course just west of Los Angeles International Airport may never fly if returned to the city's time-consuming planning process.

Hatched in the late 1970s, the design calls for three nine-hole courses and a jogging track on rolling sand dunes that are home to the endangered El Segundo Blue Butterfly and several rare lizards and plants.

Those believing the course should return to the planning process argue the project

poses environmental problems, is obsolete and would never be a popular course because of jet noise and fuel odors.

Airport officials counter that a golf course is the best way to develop the area. They contend it would fit the natural terrain and revenues could be used to restore the dune's ecosystem.

The airport recently completed a biological study of the dunes and is ready to submit the plan to the California Coastal Commission. But

since the plan has not been re-approved by its originating agency (the City Council) in the past four years, the commission could rule that it return to the Los Angeles Planning Department for review and public hearings.

"I suspect that if it has to go through the governmental merry-go-round again, it could take 10 more years to resurface," airport environmental manager Maury Latham told *The Daily Breeze*. "There are just too many agencies and individuals involved."

Any site will do in Japan

An 18-hole course under construction in land-poor Japan shows to what lengths the Japanese will go to play their national obsession.

According to the monthly magazine *Public Information Abroad*, a Tokyo Metropolitan Government project underway on reclaimed land in Tokyo Bay:

- sits on more than 18 million tons of garbage buried in the 1960s;
- vents 1 million cubic feet of methane a day that are released by 70 shafts spaced throughout its 134 acres;
- is Japan's only absolutely no-smoking course because of the danger of gas explosions from uncontrolled methane leaks ignited by a cigarette;
- enjoys spectacular views of the sea and city.

The "dream islands," as the reclaimed landfills are commonly called, are also the site of city sports facilities and an indoor tropical greenhouse.

The 18-hole course cost \$25 million to build. Japan's top woman golfer, Ayako Okamoto, was one of the primary financial backers.

Jamaica opens facility for teaching

Jamaica became the first Caribbean country with an all-year golf teaching facility when the Jamaica Golf School opened in mid-November.

Director of Tourism Carrole Brady opened the new school which includes practice facilities, lecture room, book and video-cassette library, equipment and 10-bay golf range. Paul Hunt of the United Kingdom is the head professional.

Jamaica has hosted such tournaments as The Mazda Champions and the Jamaica Classic.

Utah withdraws \$1.5M pledge

Springdale, Utah, will have to develop new plans to build an 18-hole municipal course at an entrance to Zion National Park.

The state Community Impact Board withdrew its pledge of \$1.5 million in grants and loans for the project when local developer Dan Marriott, a former congressman and candidate for the 2nd Congressional District seat, was unable to raise his \$1.3 million share of the project.

The agreement between the CIB and town was cancelled because the conditions weren't satisfied. However, the CIB invited the town to re-apply should it find other investors, which it is expected to do.

In other action, the CIB agreed to give the town of Price \$873,400 to expand Carbon Country Club from nine to 18 holes and was told that Hurricane City plans to build a course using \$500,000 from the CIB.

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Winter brings perennial N'east problem

Ravis discusses solutions to supers' woes

BY PETER BLAIS

Dessication, disease and low-temperature kill are the three most common forms of winter damage to turf in the Northeast, according to Chuck Ravis of Augusta (Maine) Country Club.

Simply put, dessication is grass losing water faster than it takes it in, explained Ravis during last month's Maine Turfgrass Conference and Show in Portland. In winter, soil water is often frozen, so no uptake occurs through the roots. But evaporation still occurs.

Visual symptoms are a straw-brown color. Damage can be superficial if it only affects the leaf. Or it can cause death if the crown area is affected. Windy, sunny, cold days with little snow cover are the times of maximum damage. It is a special problem on high, wind-swept sites due to lack of snow cover.

Preventive measures can include windbreaks designed to stop the wind or build up snow cover; straw or brush covers; heavily applied top dressing; protective covers.

Ravis has found covers to be the best. They must be installed in late fall and allow for water passage. The critical factor is when to remove them.

"Remove it too early and the turf is very susceptible to dessication. Remove it too late and there will be an excess of growth or possibly disease damage" said the 12-year head man at Augusta.

Pink and gray snow mold are the most common types of fungus at Augusta. Snow cover and unfrozen turf, this winter's conditions, favor their formation. Most damage occurs in late winter as the snow melts.

"From what I see and hear, it's going to be a pretty difficult snow mold year," said Ravis.

Fungicides are an effective control. Ravis said they should be applied in early-to mid-November, before the snow flies. There are many chemicals on the market. But options in northernmost states, like Maine, are limited to fungicides that are effective from November through April, about five months.

Cool-weather pythium has also been a fungus problem at Augusta. It appears as yellowish-orange patches, occurring most frequently where water flowed or accumulated. It mostly affects poa annua and, in limited cases, bentgrass, said Ravis.

"To my knowledge, little research has been done on cool-weather pythium. And none under Northern climates, where we might have snow cover for four or five months," said Ravis.

Texas A&M University researcher James Beard believes ice may act as barrier to gas exchange,

said Ravis. Bentgrass is fairly resistant to ice. But poa annua can be severely damaged if covered more than 75 days.

While ice can cause damage, Ravis said crown hydration and low temperatures, which he terms "direct low-temperature kill," are the major culprits. Grass becomes hydrated in standing water, ice forms within the plant and cell walls rupture.

Plants are more hardy in early winter than late winter, so most damage occurs in February, March and April. Grass is also more susceptible to the frequent

freeze-thaw-freeze cycle this time of year.

Ice-damaged turf turns dark brown or black with a distinct, septic odor caused by rot. It most frequently occurs in low areas with poor drainage, but also where water flows.

Snow depth helps protect turf through the winter. But late in the season, removing snow from certain areas, greens in particular, may help prevent damage. Snow can be removed by plowing or snow blowing. Sand can then be spread to help melt the ice.

"Removing ice not only removes

potential moisture, it also allows the turf to dry out and avoid repeated crown hydration and re-freezing as the ice melts during the day and cold temperatures freeze it at night," said Ravis.

Success depends on whether snow and ice removal was done before any direct, low-temperature kill occurred, and the weather after they are removed.

"One of the most important things we can do to prevent winter damage is grow bentgrass," said Ravis while showing a winter-damaged section of poa annua next to a re-planted area of relatively

healthy bentgrass.

Height of cut can be an important factor, he added. Taller grass is healthier with better roots and more carbohydrate reserves. Additional plant mass provides additional insulation.

Drainage of wet areas, hand-mowing greens, triplex mowing fairways, light-frequent top dressing, avoidance of over-watering, aeration to avoid compaction and overseeding with bentgrass can all have positive results.

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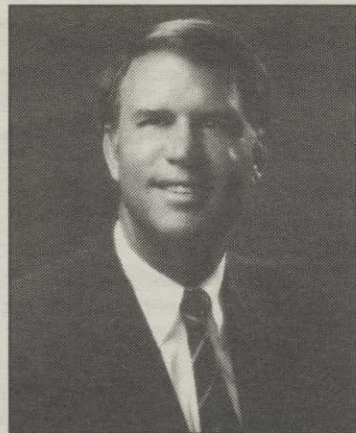
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Sawgrass crew did exceptional job

I mentioned in last month's column that I had an upcoming meeting at Sawgrass prior to The Players Championship. In fact, we did play the Valley Course and Marsh Landing on the Sunday and Monday just prior to The Players Championship. I had the opportunity to look at the Stadium Course and talk to a few of the Tour professionals who would be playing the course over the next few days.

As you know, much criticism came from the Tour professionals regarding the condition of the course — the major concern having to do with several greens that had nearly, bare spots. From my viewpoint, and after talking to a few professionals, the tees, fairways and rough were in fine condition; there were problems with some greens.

In my opinion, Fred Klauk and his staff conditioned the golf course



Charles E. von Brecht

to its best possible shape, under the circumstances, which were:

- Over 40 inches of rain in the fall followed by a hard freeze in December, allowing only a short growing-in time;
- The Players Club is basically a public facility, like the links at Pebble Beach. Thousands of

rounds are played just a week prior to the tournament, allowing very little time for conditioning the course;

• Although the Sawgrass facility is surely becoming one of the best in the country, this north Florida community is certainly not tropical. The growing season usually begins in late March.

I appreciate the Tour's desire to leave the course open as long as possible before the tournament. Perhaps under certain conditions it could be closed a week or two earlier, but that's not my call. Commissioner Beman operates one of the best (if not the best) sports management organizations in the world. The policy board will come up with a solution to the course's condition. I might add that no one was more disappointed in the condition of the greens than the Tour staff.

Tour professionals do have the right to be critical and they will continue to be outspoken on course conditioning. In many cases, constructive criticism provides the impetus to make necessary changes.

It is interesting that this year's champion played the same golf course as everyone else and his putting was exceptional. If the greens were in as poor condition as reported, Jodie Mudd is a miracle worker

Mark Leslie's comment column recounts the many contributions the late Don Rossi made to golf. I'd also like to remember Hal Short, who died suddenly last month. Hal was a principal of *Golf Course News'* parent company, United Publications, Inc. He was a great salesman and influential in the launch of *Golf Course News*. He will be missed.

Rossi irreplaceable in golf industry

BY MARK LESLIE

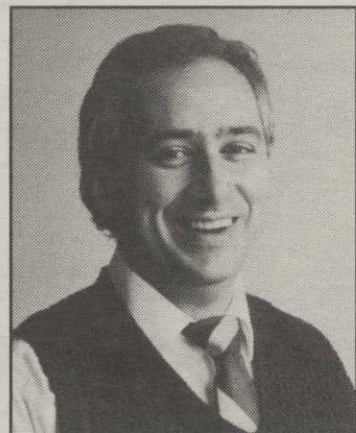
Business guru Peter Drucker once said, "Whenever you see a successful business, someone once made a courageous decision."

Don Rossi once said Bob Rickey took a chance and made a courageous decision by hiring him as executive director of the National Golf Foundation in 1970. If so, that was the chance that led to success at the NGF, and more recently with the Golf Course Builders of America and National Golf Car Manufacturers Association, which he led.

Don would call it a chance. Rickey, and colleagues Herb and Joe Graffis would call it a sure bet.

When Rossi died March 11 he left the golf industry mourning.

One of the last things Don said to



Mark Leslie

me, in February, extolled golf's virtues: "If the good Lord invented a better game than golf, He kept it to Himself."

Now, in Don's passing, the indus-

try extols his virtues. They were many.

A friend at the NGF told me that the people who had worked with Don during his 13 years there were "basket cases" upon learning of his death.

Friends, rest assured in where Don is. You can rejoice instead of mourn, because if there is golf in Heaven, he's probably lining up a foursome right now.

After Don gave abundant credit to Jesus Christ in his invocation at the annual Golf Course Builders of America banquet in February, a companion tugged at my arm and asked, "Is he a Christian brother?"

You'd better believe he was.

Longtime friend Paul Fullmer, executive secretary of the American Society of Golf Course Architects,

called Don the "resident imparter of invocations" at golf dinners.

"He was always called upon to give invocations and they were always appropriate and stirring," Fullmer said.

And that's the highest praise we could give Don Rossi. He loved the Lord, he publicly praised Him for how He had loved and blessed him, and he truly passed that love on.

"Freely you have received, freely give." (Matthew 10:8)

Living the Word, Don freely gave. The stories are countless.

Rickey, the NGF president when Don was hired, later became like a brother to him, and said, "If he was your friend you never had a better one. He'd do absolutely anything for

Continued on page 35

COMMENT

IMPROVED YARDAGE MARKERS PAY BIG DIVIDENDS

What's the single most important golf innovation of the century? Dean Beman, Commissioner of the PGA tour, says that measuring the course—and the concomitant benefit to club selection—has done more to improve the overall quality of tournament play than anything else.

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GRACE SIERRA

Golf world mourns death of Don Rossi

BY MARK LESLIE

One of the most "enthusiastic supporters" of the game of golf—Don A. Rossi—died March 11 after suffering a heart attack at his Palm Beach Gardens, Fla., home.

People from all segments of the golf industry hailed the 71-year-old Rossi, who led the National Golf Foundation for 13 years and, at the time of his death, was executive vice president of the Golf Course Builders of America and executive director of the National Golf Car Manufacturers Association.

Perry Dye, president of Dye Designs, Inc. and the GCBA, said, "To say you're going to miss Don Rossi isn't enough. We are going to feel it as an industry. He had an effect of cohesiveness amongst all groups. He was a great conduit to keep people who didn't even like each other going in the right direction..."

"There are some people who can help fill in the gaps, but nobody's going to replace Don Rossi... He did a lot of great things. I really have to think that the National Golf Foundation's here because he was leading it."

The National Golf Foundation of Japan, which Rossi helped found, named March 11 Don Rossi Day, created an annual Don Rossi Award to be given to a person who has made major contributions to golf, and donated \$5,000 to the Rossi family.

Paul Fullmer, executive secretary of the American Society of Golf Course Architects, who knew Rossi for more than two decades, said: "He was one of the major forces in golf in the last 25 years, not only because of his position with the NGF, the builders and car manufacturers, but because of his tremendous enthusiasm and magnetism."

"His work in organizing the Allied Associations of Golf may well be the most important legacy he leaves behind..."

Bill Bengeyfield, who retired April 1 after serving eight years as national director of the United States Golf Association's Green Section, said: "Don was a dear friend... He was one of those 'doer' guys, one of the 'real' people in the game. He had a marvelous attitude that affected everyone... He and Herb Graffis were the common golfer's good friends."

"He did wonderful, marvelous things with

the National Golf Foundation."

Business partner Jim McLoughlin of The McLoughlin Group said, "Don Rossi brought something to golf like no one else — true friendship."

That sentiment was echoed by Bob Rickey, former president of the NGF and head of MacGregor Sports, who first hired Rossi as executive director of the NGF.

"He was irreplaceable as a human being. That's my loss... If he was your friend you never had a better one. He'd do absolutely anything for you," Rickey said.

Rickey cited Rossi's ability to bring people in the industry together to work for a common goal.

"Within a few years he was as well known as any guy who had been in the industry for 30 years, because he was interested in everything in golf and he made himself available to help," he said.

Rickey said that after Rossi gained the industry leaders' trust — "which he did in record time" — he brought them together.

"Here was a guy who had no ulterior motives or personal ego involved. His only interest was to do what's going to help golf. Getting them together and getting them to trust and join hands was something that had never happened before in the history of the game the United States. And only because of that have we been able to make progress," Rickey added.

John Schilling, executive director of the Golf Course Superintendents Association of America, said: "Our staff is shocked and saddened at the news of Don's death. Don was one of the industry's true gentlemen and one of the game's most enthusiastic supporters. He'll be missed. He was a dependable and valuable resource for GCSAA and its members."

Rossi, who retired in 1983 after 13 years as executive director of the National Golf Foundation, had continued his career in the industry with the builders and golf car manufacturers associations and as president of Don A. Rossi and Associates, consultants in golf enterprises.

Raised in Detroit, the son of Italian immi-

LETTERS

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To the Editor:

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Joe Watts, executive director
Utah Golf Association
Salt Lake City, Utah

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Edward L. Hoffman, CCM
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Dye vows to fulfill Rossi dream

Golf Course Builders of America President Perry Dye said that with the death of executive vice president Don Rossi, the organization will be more determined than ever to achieve its goals.

"We're going to become the biggest and most powerful in the industry in his honor because that's what he wanted done..." said Dye, the president of Dye Designs, Inc. of Denver, Colo. "My determination to make what he visualized happen has increased a hundredfold. How I am going to do that I do not know, but what he visualized will happen, I promise you... We will finish what he started."

Dye said the builders association had "all the potential of being equivalent in

the industry to the National Golf Foundation, and he (Rossi) was marching toward that direction."

In finding a successor, GCBA officials will look for someone with the game goals as Rossi, he said. "I feel an affiliation with the European market is something that is a natural for us ... so we will look for someone with that bent."

"We will have to go step by step. It's a lethal blow but I think Rossi's spirit will go on with us. People won't give up because he's done. They might try harder because he's gone — because we relied on him a lot. People were willing to work harder for Don Rossi than for the Golf Course Builders."

grants, as a boy he worked teeing golf balls for customers at a driving range. He earned his way through Michigan State in the 1930s on a \$35-per-term, one meal-a-day scholarship for boxing and football. He captained the boxing team and played on the football team that made one trip to the Orange Bowl.

He worked briefly as assistant football coach after graduation, then coached football, basketball and baseball, taught history and janitored at Jesuit High School in Dallas, where his football team won the state championship.

Joining the U.S. Air Force during World War II, Rossi served as director of athletics and physical training both at San Antonio Preflight School and Randolph Field.

He then worked as a sales executive for major athletic goods manufacturers, and returned for a second tour of duty as chief of sports worldwide during the Korean Conflict. He retired with the rank of colonel.

He received two medals for work in that post including a special commendation for administration of the Air Force Olympic Programs. He served on the U.S. Olympic Committee from 1952-54 and was parade marshal for the 1952 Olympics in Helsinki.

Rossi was commissioner of the National Industrial Basketball League, the forerunner of the American Basketball Association.

Moonlighting as a football official and winning appointment to the National Football League ranks, Rossi was named the first general manager of the Dallas Texans of the fledgling American Football League.

He was also vice president of Riddell, a sports equipment company.

Rossi joined the NGF in 1970 and was instrumental in setting up the first annual worldwide golf development meeting of officials from eight countries in London. It led to the National Golf Foundation of Japan and the Canadian Golf Foundation.

Under his leadership, the NGF sponsored yearly seminars for golf course owners, operators and employees, created the Joe Graffis Award for achievement in golf education and expanded its clinics for golfers and teachers.

The NGF started a club exchange program so that golfers can donate old clubs to juniors, and developed a Research and Statistics Division to track the growth of the game.

Rossi initiated the golf summits as well as the Allied Associations of Golf.

He also restructured the organization to include on its board representatives of the PGA, PGA Tour, LPGA, American Society of Golf Course Architects and Golf Course Superintendents Association of America.

He is survived by his wife of 48 years, Ruth; a son, Michael J.; and three daughters, Gayle A. Landen, Elizabeth N. Lum and Mary Donn Jordan.

Donations in his memory may be made to: Evans Scholar Foundation, Don A. Rossi Fund, Golf, Ill. 60029.

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EROSION CONTROL BLANKETS

Trumbull CC's Denning still making a difference

BY PETER BLAIS

Someone once asked Dwight Eisenhower what he considered his greatest contribution.

The United States chief of staff during World War II thought about his part in leading the Allies to victory over Hitler, and shook his head.

Then he leafed through his eight years of memories as the 34th president of the United States and again looked elsewhere.

"He felt his greatest contribution was the work he did on his Gettysburg (Pa.) farm because he always left it better than he found it," said Bruce Denning, superintendent of Trumbull Country Club in Warren, Ohio.

"Superintendents tend to look at things the same way. We like to make a difference. It's nice to know that a tree I planted here will provide shade for a golfer long after I'm gone. Being a superintendent has let me leave things a little better than I found them, too."

Golf found Denning 37 years ago. Drafted into the Navy during the Suez Canal Crisis in 1954, the Smethport, Pa. native was assigned to the golf course at the Patuxent, Md., flight test center as assistant superintendent. There he came under the tutelage of superintendent Bill Shriver.

"Bill took a real interest in me. He got me excited about the profession," remembered Denning.

Denning accompanied his mentor to monthly meetings where the apprentice was fascinated by speakers like Pennsylvania State University agronomist Fred Grau. Grau and H. Burton Musser established a turfgrass extension and research team at Pennsylvania State University in the 1930s that was continued in recent years by others like Joseph Duich.

The presence of such men attracted Denning to Penn State after his discharge. He graduated in 1960 with an associate's degree in turfgrass management.

His first head post took him to Frosty Valley Country Club in Danville, Pa., where he helped oversee construction of the William and David Gordon-designed course. He remained there four years.

While at Frosty Valley he first met longtime friend Paul Latshaw (see last month's Super Focus), the only superintendent to host three of the four majors (U.S. Open, PGA and Masters) and current head man at Wilmington (Del.) Country Club.

"Paul was a young kid right out of the Navy and had never been on a golf course before. He was planning on being a chicken farmer or something like that," said Denning, who hired Latshaw onto his grounds crew.

Latshaw was one of a dozen of his assistants Denning estimates went on to supervise their own courses



Bruce Denning out on the course he has babied for 26 years.

"I had to take Paul out and show him what a green was," chuckled Denning. "But he impressed me as a young man who wanted to do something with his life, and he did."

So did Denning who took the Trumbull post in 1964.

"I said when I started out that I'd never stay anyplace more than four or five years," said Denning, now in his 26th year at the Stanley Thompson-designed facility. "But you establish yourself in a community, marry, have a couple of kids, get to know your course."

"The nice thing about this profession, though, is that it's always a challenge. This is an old course (1916) so it always needs looking after. You put in a new irrigation system one year, change the landscaping another year, remodel another. It's always a challenge."

The 6,100-yard course plays to a par 70 from the white tees. Four holes were remodeled by William Newcomb in 1968, including changing the par 3 13th to a par 4.

"The course meets the needs of its members," said Denning of the diverse membership that has bounced back from the dismantling of the steel industry in this northeastern Ohio city. "We have members from three generations of the same family. We're strong with the women and the juniors. People just like the course. There are no unusual features. But it's well-groomed and challenging."

Actually, "well groomed" might be too mild, according to Denning, who believes the biggest change in the game over the past 30 years has been a turf technology that has given birth to a new age of mowers, irrigation equipment and various computer-assisted devices.

"The fairways today are better than the greens your grandfather used to putt on," said the 55-year-old. "Superintendents are striving for perfection."

Which is good and bad.

In their quest for excellence, superintendents are sometimes too quick to reach for chemicals or pesticides to solve a turf problem, said Denning.

"Sometimes what appears to be a problem is just Mother Nature's way of saying that a plant has to protect itself," he said.

But overall, superintendents are excellent stewards of the land, Denning said. They are in the forefront when it comes to knowledge about what will help or hurt the environment.

"I think there are bigger people for them (environmentalists) to go after," said Denning. "But we're under a microscope. There are a lot of homes near our course. If the people who live there see us out spraying, and we're wearing respirators and coveralls, they get upset. We don't have to wear those things. We just do it to be in compliance with the law. The stuff we use any homeowner can buy. In fact, we can't use things the homeowner can, like Diazinon."

Hurting the environment is the last thing Denning, as a superintendent, said he would want to do since "working with Mother Nature" is what he enjoys most about his field. "It's constantly changing. You can never know it all and that keeps you humble."

Being a superintendent has also provided very well for his family. "We have two children. One's in college and the other's a senior in high school who will be going. But we won't be starving."

Family has become increasingly important for Denning over the years. It used to be job first, family second. Now the two are reversed.

"It took awhile to get to where I'd take four or five days off in the summer. But I did and my kids will always have memories of those trips we took together," said Denning.

"If the course can't survive a few days without me, then I've done something wrong. But somehow we get this idea our courses can't function unless we're there 24 hours a day, seven days a week. We've got to learn to delegate authority. Hire good assistants, give them an overview and then give them an opportunity."

As for the future, Denning is optimistic and troubled by what he

sees.

The game's growth should mean an increase in the professional status of superintendents, he said.

But he doesn't like the trend toward management companies taking over courses and putting a director of golf, who may know little about turf management, over a superintendent.

Nor is he happy with the Golf Course Superintendents Association of America Certified Golf Course Superintendent program.

Denning, who is not a CGCS, believes the program could exclude experienced superintendents because of the requirement they have three years of college or have completed Division I and half of Division II GCSAA seminars by 1999.

Also he is troubled by the attesting requirement that two certified superintendents, who may be less-qualified than a non-certified superintendent, favorably review the applicant's course.

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Jeff Groezinger photo

The chart (below) shows all golf course facilities opened or under development during 1989 in different regions of the United States.

It is divided into four columns — those opened in 1989; those under construction; those in the planning stages; and total projects.

ects.

The South Atlantic was easily the busiest region with 30 percent of all projects. The East North Central was a distant second with slightly less than 18 percent.

The figures were provided by the National Golf Foundation.

1989 Golf Facility/Course Development Projects by Region*
(Courses in parentheses)

Region	Status		
	Open	Under Construction	In Planning
New England	14	24	41
Middle Atlantic	9	34	55
East North Central	55 (56)	85	98
West North Central	27	42	49
South Atlantic	100 (102)	131	176
East South Central	17	35	20
West South Central	18	24	21
Mountain	29	36	39
Pacific	15	44	98
(Alaska)	0	0	0
(Hawaii)	3	8	6
Total	287 (290)	463	603

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Florida					
Citrus Hills	Citrus Hills II	N/A	27	State Rd. 486	Arnold Palmer
Naples	Olde Florida GC	P	36	Vanderbilt Beach Rd.	Rees Jones
Hawaii					
Ewa Beach	Hawaii Prince GC	D	27	Campbell Estates Kapolei	Arnold Palmer
Idaho					
Sun Valley	Wood River CC	P	18	N/A	Hale Irwin
Illinois					
Barrington Hills	Carrowmore GC	N/A	18	Penny & Healy Rds.	Thompson Dykes & Assoc.
Long Grove	Royal Melbourne GC	P	18	Royal Melbourne	Greg Norman/Ted Robinson
Massachusetts					
Marston Mills	N/A	M	18	Race Lane & Rt. 149	Joseph O'Brien
Sterling	Sterling CC	P	18	N/A	Richard H. Lowe
Michigan					
Almont	Heather Hills GC	D	9	3100 McKail Rd.	Robert McWilliams
Pittsfield Township	Stonebridge	N/A	18	Stonebridge	Arthur Hills
Missouri					
Lake of the Ozarks	North Port at the Lake	D	18	N/A	Arnold Palmer
Nebraska					
Columbus	Quail Run GC	M	18	2424 14th St.	Frank Hummel
Nevada					
Reno	N/A	N/A	18	Double Diamond Ranch	Robert Helms
Oregon					
North Plains	Pumpkin Ridge	D	36	Old Pumpkin Ridge Rd.	Bob Cupp
Pennsylvania					
Scranton	N/A	P	18	Montage Mountain	Michael Hurzdan
Tennessee					
Nashville	Woodmont CC	N/A	9	1325 Sneed Rd.	Gary Baird

Garl declares 'dynamic growth' ahead

Ron Garl, a Lakeland, Fla.-based golf course designer, reports a busy schedule this year and predicts "dynamic growth" in the 1990s.

Projects in the design phase include an 18-hole championship private course at Timber Pines in Spring Hill, Fla., and an 18-hole championship private course at Thornmark in Toronto, Canada.

Meanwhile, Garl's Links Design, Inc., is also designing nine-hole additions to private Florida courses—Imperial Lakes in Lakeland and Walden Lake in Plant City—and semi-private Florida courses—River Ranch in Lake Wales, Cypress Lakes in Lakeland, and Oakford in Sarasota.

Among Garl's recently completed designs are 18-hole championship layouts at private communities The Links At Stono Ferry in Charleston, S.C., and Brays Island Plantation in Beaufort, S.C., as well as at public facilities in Lancaster, Texas, and Palmetto, Fla. (Buffalo Creek).

Irwin designs signature 18

Sun Valley, Idaho will host the newest Hale Irwin Signature 18-hole golf course being developed in the shadows of Baldy Mountain in the Wood River Valley.

The Wood River Country Club Partners of Sun Valley have commissioned the two-time U.S. Open champion to design the private course to complement an exclusive residential development.

Construction is scheduled to begin this summer with an opening planned for late summer 1991. Home sites from one-and-a-half to two acres will have access to the course, clubhouse and recreation center.

Hale Irwin Golf Services, Inc. is a design and development company based in St. Louis, Mo. Irwin, a winner of 17 Tour championships, heads a firm with projects currently underway in Massachusetts, Virginia, North Carolina, Florida, Indiana, Texas, Missouri, Illinois, Colorado, California and Japan.

Development hot on big island

While much attention is focused on the debate over golf course development on Oahu, the number and quality of courses on the Big Island of Hawaii continues to grow, according to reports.

A recent Honolulu Star article summarized what's happening along the Kona Coast of Hawaii:

- Mauna Kea and Mauna Lani are both expanding to 36 holes. Mauna Lanu recently completed a \$5 million remodeling of its clubhouse and hosted the Senior Skins Game;
- Tom Weiskopf's King's Course at

Waikoloa is open to limited play and the \$5 million clubhouse was scheduled for completion in February;

- Jack Nicklaus will design Hawaii's first PGA Tournament Players Club for the Four Seasons Hotels and Resort Group;

- Arnold Palmer will build a private country club called the Highlands next to Waikoloa Village and another course for Waikoloa Beach Resort;

- Lee Trevino will design Nansay's Kohonaiki Resort Golf Course near the old Kona Airport;

- Regent International, Princess Hotels

and South Kohala Resort are all planning courses;

- Kona Country Club is adding nine holes giving it two 18-hole facilities.

- A new municipal course is planned at Kealahou near Kailua-Kona.

According to Big Island County Planning Board figures, there are 23 existing or proposed golf courses between Kawaihae and Keauhou.

"The billions of dollars in golf will be doubled by the year 2000, and we're ready for it," Jerry Johnston, director of golf at Mauna Lani, told the Star.

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GOVERNMENT UPDATE

N.J. company saves course as open space

Hackensack Water Co. has been granted permission to lease 32 acres of its property to the prospective new owner of an adjoining tract, making possible the preservation of a 132-acre golf course.

The approval by the New Jersey Board of Public Utilities (BPU) of the 99-year lease was a key element leading to the Feb. 22 sale of the adjoining 100 acres by Winthrop Products, Inc., an Eastman Kodak Corp. subsidiary, to an undisclosed buyer willing to continue a country club at the site.

An earlier plan to destroy the course and convert the site to a corporate office building will be abandoned.

Robert A. Gerber, chairman of Hackensack Water, applauded the BPU decision as the second in a series of positive steps this year for recreational open space preservation in northern New Jersey.

"This is a case of 'leveraging,' where our 32 acres were the key to the preservation of the entire golf course. Since the first of this year four golf courses, totaling more than 500 acres, have been preserved through this kind of initiative," said Gerber.

The state watershed property review board ruled in February that the long-term lease could be exempted from a moratorium on watershed land transfers, because the golf course use of the property imposed no threat to the water supply.

In February the BPU approved a plan to permanently preserve three other courses nearby, when it allowed the water company to transfer 290 acres to a non-utility affiliate. As part of the company's Evergreen Formula, it agreed to place perpetual deed restrictions on that land so that it would never be developed.

The River Vale site was not considered for a similar transfer, since part of it overlaps the protective buffer zone that surrounds Lake Tappan Reservoir. Hackensack Water intends to retain permanent ownership of the acreage as part of the 2,500 acres of protective land that surround the company's water supplies in New Jersey and New York.

The company's 32 acres has been leased to River Vale Country Club for more than 40 years to extend its golf course. In 1985, when the country club sold its 100 acres to Sterling Drug Capital Corp. for a corporate office headquarters, the drug company leased the water company's land to ensure an unobstructed view of nearby Lake Tappan Reservoir.

Sterling later sold the 100-acre site to Winthrop. It is zoned for 1 million square feet of office space.

Hackensack Water hopes to contribute up to 50 percent of any proceeds realized from the lease to the approximately \$7 million already available for distribution to Bergen and Hudson counties under the earlier land transfer.

The BPU reserved a decision on

the sharing and the public open space acquisition proposal. It indicated that it would decide in late March.

The three golf courses involved in the January transfer are Emerson Country Club in Oradell and Emerson; Pascack Golf and Country Club in River Vale and Harrington Park; and Haworth Golf and Country Club in Haworth. Only half of the Haworth club is on water company land.

EPA: Cooperation possible

BY PETER BLAIS

Rather than being adversaries, there are many areas where the government and the golf industry can both be part of the solution to environmental problems, an Environmental Protection Agency official said.

Senior Inter-Governmental Liaison Arty Williams made her comments during February's Golf Course Superintendents Association of America annual conference in Orlando, Fla.

The EPA's top two priorities are risk reduction and pollution prevention, she explained.

The major concern in many ar-

eas of the country involves ground water contamination from golf course chemicals. The EPA does not have sufficient expertise to regulate ground water contamination, said Williams. Consequently it leaves regulatory powers to the states, feeling they are better qualified to make decisions for their particular regions.

"The EPA isn't opposed to the use of chemicals," Williams said. "Our job is to balance costs, benefits and the effects on individual and public health."

Currently the EPA is focusing on the re-registration of some 40,000 chemicals, including a

number of pesticides. The goal is to build up a data base to discover if the chemicals are still doing what they were intended and whether they pose an unreasonable risk to public health or the environment.

"Some of these chemicals were registered 40 years ago. We want to find out if they still work," said Williams.

Congress has given the agency nine years to complete the task. To finance the program, EPA was given authority to levy a re-registration fee on manufacturers.

In the first round of billing, 13,000 products weren't re-regis-

Continued on page 17



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As with any crop protection chemical, always read and follow instructions on the label. CHIPCO is a registered trademark of Rhone-Poulenc.

GCSAA installs new leaders

Faubel assumes presidency; Cadenelli beats out Roberts

Gerald L. Faubel of Saginaw (Mich.) Country Club was elected president of the Golf Course Superintendents Association of America during the association's annual meeting in Orlando, Fla., on Feb. 26.

Faubel succeeds Dennis D. Lyon of Aurora, Colo., as immediate past president,

Lyon will continue to serve for a year as director.

Stephen G. Cadenelli of Metedeconk National Golf Club in Jackson, N.J., was elected vice president.

"I'm very pleased and excited to be vice president," said Cadenelli, a superintendent and GCSAA member since 1973.

"I've been involved with the association for a long time. This is a great opportunity to work for the business and profession. I'm really looking forward to the next couple of years."

William R. Roberts of Lochmoor Club in Grosse Pointe Woods, Mich., lost the vice presidential

race but was re-elected as a director and appointed secretary/treasurer.

Also re-elected as directors were Joseph G. Baidy of Acacia Country Club in Lyndhurst, Ohio and Randall P. Zadik of Rolling Hills Country Club in McMurray, Pa.

Charles T. Passios of Hyannisport (Mass.) Club was appointed to the board to fill Cadenelli's vacated director's post.

Gary T. Grigg of Shadow Glen Golf Course in Overland Park, Kan., and Randy Nichols of Cherokee Town & Country Club in Dunwoody Ga., continue to serve as directors.

ASSOCIATION NEWS

W. Va. superintendents expand educational opportunities in turf

The West Virginia Golf Course Superintendents' Association has elected John C. Cummings of Berry Hills Country Club in Charleston, W. Va., as president for 1990.

Serving with Cummings are Charles A. Murray of Edgewood Country Club in Charleston as vice

president; and Arthur Casto of the Kanawha County Parks Commission as secretary-treasurer.

Serving as directors are Carl Buttrey of St. Marys Golf Club, Thomas Coulson of Clarksburg Country Club, Charles R. Knight of Sistersville Country Club, and Gary Roush of Riverside Golf Club in Mason, W. Va. Howard H. Lott of Bridgeport Country Club is immediate past president.

The WVGCSA has mirrored the growth of golf and the growth of the national GCSAA, boasting more than 100 members up 28 percent from 1988.

Recognizing their obligation to their profession, the directors have expanded their regular monthly meeting schedule to accommodate the diversity of education that the superintendency now requires.

In addition, the association will conduct its first annual turf conference at Cedar Lakes Conference Center near Ripley, W. Va. The three-day conference, Nov. 13-15, will include equipment and product demonstrations as well as 2-1/2 days of concurrent educational programming.

Fund-raising for turfgrass research and scholarships will also be a focus for the association. More than \$23,000 has been raised and distributed over the past four years and this year's goal is \$10,000.

Tournament Chairman Charles A. Murray will host the event at Edgewood Country Club on June 11 and plans are underway to expand it.

Murray said: "The WVGCSA board of directors recognizes that we have a very real need to be progressive in this area. Our distributors and membership have responded beautifully in support of this worthy endeavor."

"It is our hope that, with this program, we can contribute to the positive direction that golf is taking within our state."

EPA

Continued from page 16

tered and the right to produce them canceled. Eighty percent of those cancelled hadn't been used in three years, Williams said.

"It's purely an economic decision whether to re-register or not," she said.

The net result has been the removal of many obsolete pesticides from the EPA's approved list, a move that should increase public confidence in pesticide use, she added.

"We've found that risk is a combination of real hazard and public fear. We're trying to reduce the fear component," Williams said.



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mentals, you can depend on it to keep all the grounds you care for healthy and disease-free.

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ASPA awards research grants

Nearly \$20,000 in grants has been awarded six university researchers by the American Sod Producers Association.

The group's Research Committee reviewed 23 projects, from 21 researchers at 16 institutions, requesting a total of \$216,800 before reaching its decision.

Grants will go to:

- Dr. J.M. Goatly Jr. of Mississippi State University for research on "the influence of fall fertilization on the physiology, turf quality and winter hardiness of bermudagrass."
- Dr. A. Koski of Colorado State University to investigate the "influence of a soil-incorporated water-absorbent gel on irrigation requirements of transplanted sod."
- Dr. Harry D. Niemczyk of Ohio State

University for research into "the fate and vertical mobility of insecticides and herbicides applied to turfgrass."

• Dr. R.E. Schmidt of VIP & State University for a study on "bioassay development to measure activity of biostimulants used on turf."

• Dr. Tom Watschke of Penn State University to study "polyacrylamides for turf."

• Dr. H.T. Wilkinson of University of Illinois to pursue "an integrated biological control program to reduce fungicides used for the control of lawn diseases."

Funding for ASPA research grants comes from the organization's general revenues, as well as a \$5,000 contribution from the Ciba-Geigy Turf and Ornamental Group.

Fertilizer Institute elects Rouse president

Allen Rouse, president and chief operating officer of Terra International, Inc. in Sioux City, Iowa, has been elected to a one-year term as chairman of The Fertilizer Institute.

The election, which also included selection of TFI's 1990 vice chairman and executive committee, was conducted during the association's annual meeting, an event which drew more than 1,000 industry representatives to Nashville, Tenn.

"Al Rouse knows the fertilizer industry and has the leadership to provide strong direction for TFI during 1990," said TFI President Gary D. Myers. "We are honored to have Al as our new chairman."

TFI members elected John Anderson, president of Cominco Fertilizer, to serve as vice chairman. Myers was re-elected president and chief staff officer for the institute.

Others elected to the executive committee are Philip Ashcraft, vice president of crop services at Agway, Inc., in Syracuse, N.Y.; Fritz W. Corrigan, president of the fertilizer division at Cargill, Inc., in Minneapolis, Minn.; Michael Hochgesang, president of Jasper Plant Foods Warehouse, Inc., in Jasper, Ind.; Chuck Merrill, senior vice president of the nitrogen group at Unocal, Inc., in Los Angeles, Calif.; Charles Seaton, president, of Kaiser Estech in Savannah, Ga.; and Dean Travis, president of J.R. Simplot Minerals and Chemicals Division in Pocatello, Idaho.

Al Giese, vice president of agronomy at Cenex/Land O'Lakes of St. Paul, Minn., who is immediate past board chairman, serves as ex-officio member.

Other Washington staff officers re-elected are Ron Phillips, vice president of public affairs; Ford B. West, vice president of government relations; and P. Whitney Yelverton, vice president of administration and secretary treasurer.

CMAA certifies 40 club managers

Forty club managers have been accredited Certified Club Managers by the Club Managers Association of America.

Designees include Peter J. Albe of Country Club at Heathrow; Warren L. Arseneaux of Victoria Country Club; Oscar J. Berven of Country Club of Decatur; Gary R. Bousum of Mauh-Nah-Tee-See Country Club; Terry R. Boys of Forest Lake Country Club; Richard G. Bugalski of Bulls Eye Country Club; David W. Clanahan of Tri-City Country Club; Terry G. Conley of Valdosta Country Club.

Also, Scott B. Diamond of Doylestown Country Club; Michel Dubes of Menlo Country Club; Charles W. Duty of Oak Tree Country Club; Glenn R. Ebersole of Country Club of Harrisburg; John G. "Ted" Gillary of Orchard Lake Country Club; Gregory K. Gordon of Point O'Woods Country Club; Frank Gregorich of Des Moines Golf & Country Club; Donald Hames of Isles Yacht Club.

Mary Hastings of Brooklea Country Club; Steve K. Hathaway of Los Angeles Athletic Club; Paul S. Hattimer of Soangetaha Country Club; Scott C. Hobden of Nashua Country Club; Glenn E. Johnson of Corpus Christi Town Club; Issam A. "Sam" Kadi of Country Club of Farmington; Melvin Kahn of Berry Hills Country Club; Caroline M. Kristoff of Mayfield Country Club; Brian R. Kroh of The Los Angeles Country Club; Thomas S. Lee of Indian Hill Club; Thomas McCarville of Elmcrest Country Club.

Patrick McKenna of Mariner Sands Country Club; David A. Nebel of Metairie Country Club; Klaus Plischka of Minnehaha Country Club; Pierre Rubben of Shreveport Club; Hans J. Schaub of Minneapolis Club; Jonathan D. Shear of Golfcrest Country Club; Alan E. Slatin of Glen Oak Country Club; James E. Story of Chattahoochee Country Club; John M. Sullivan of Mission Hills Country Club; David H. Voorhees of Philadelphia Country Club; Jeffrey L. Watkins of Capitol Hill Club; Robert C. Wood of Chilton Club.

The candidates qualified for the certification by fulfilling specific requirements over a period of years in management, experience, education and association activity.

The exam contains 13 subject areas, such as private club administration, managerial accounting, food and beverage operations and principles of management.

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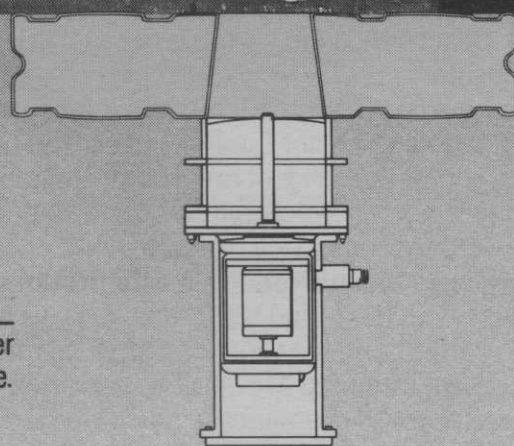


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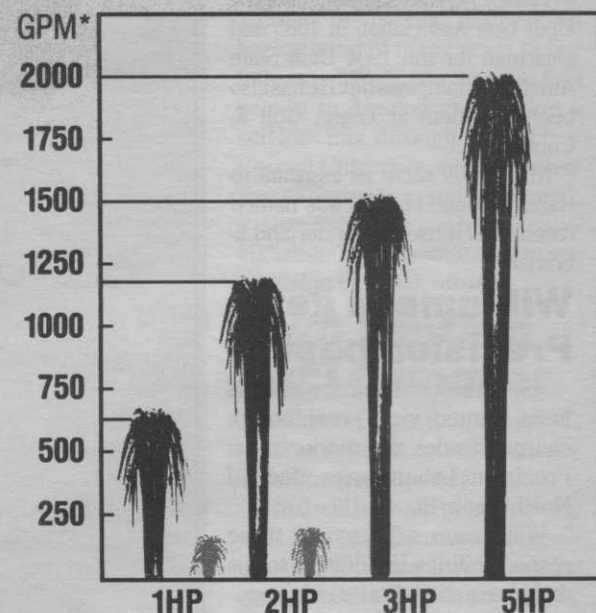
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USGA makes moves

Matheny head of operations ...

John K. Matheny, who has held military-related positions in the United States government for 15 years, has joined the United States Golf Association in the newly created position of director of operations.

USGA Executive Director David B. Fay also announced the appointment of Mark Passey as manager of regional affairs for the new South Central Region and Andrew Mutch as museum assistant at Golf House.

Matheny, 48, will direct equipment standards, regional affairs, merchandising, membership, development, and the USGA Foundation, which includes the museum and library.

He has worked with the Department of Defense since 1982, and played a major role in conventional arms-control negotiations with the Soviet Union during the Helsinki, Madrid and Vienna meetings.

In the mid- and late 1980s he served as director of European security negotiations, directing U.S. conventional arms-control proposals.

From 1975 to 1981 he was military aide to the vice president, first Walter Mondale and later George Bush.

A 1963 graduate of Texas Christian University, he attended the TCU Graduate School in 1964-65 and received a master's degree in 1974 from the University of Oklahoma.

A 3-handicapper, Matheny has won the U.S. Air Force European championship and played in four British Amateur Championships.

Passey will head a new regional affairs office to be opened in Dallas, serving as the primary link between the USGA and the state and regional golf associations in Texas, New Mexico, Colorado, Kansas, Missouri and Oklahoma.

Passey has been executive director of the Utah Golf Association, Utah Golf Foundation and Utah Junior Golf Association since 1985.

He has served on the executive committee of the Utah Open and been on the board of governors of the Senior PGA Tour's Showdown Classic.

Passey served as president of the Utah Golf Association in 1985 and chairman for the 1984 Utah State Amateur Championship. He has also been president at Logan Golf & Country Club.

Mutch will serve as assistant to Karen Bednarski, who was named recently as museum curator and librarian.

Williamson gets Precision post

G. Robert Williamson III has been named vice president in charge of sales and marketing at Precision Laboratories, Inc. of Northbrook, Ill.

Williamson will assume these responsibilities in addition to his duties as national sales manager.

Before joining Precision Laboratories in 1988, Williamson served in executive positions with Oil-Dri Corp. of America and Illinois Central Gulf Railroad.

He is a graduate of Memphis State University.

A 1986 Gettysburg (Pa.) College graduate, Mutch earned a master's of fine arts degree in 1988 from The School of Visual Arts in New York City.

Mutch has been an instructor at the Darlington Fine Arts Center in Wawa, Pa., and has contributed illustrations to two textbooks.

His work is part of the permanent collection at Gettysburg College, and his paintings and drawings have been shown at the Visual Art Museum in New York City. In 1988 he received the award of distinction in cooperation with the Exhibition of Art Nationals in Westmoreland, Pa.

... while Carlson joins as director of broadcasting

Mark Carlson, who spent the last eight years at CBS, has joined the United States Golf Association as director of broadcasting.

David B. Fay, USGA executive director, announced the appointment, which took effect March 12.

Carlson will act as liaison between the USGA and ABC Sports during the network's telecasts of USGA championships.

He will also oversee the planning and production of USGA promotional

messages, and the U.S. Open and U.S. Women's Open videotapes.

Carlson has been with the sports information department of CBS Sports since 1982.

He was the network's primary publicist at many events, including two Super Bowls, six Masters Tournaments, and six NCAA Basketball Championships.

As a spokesman for CBS Sports, he was responsible for coordinating publicity and media relations efforts nationally, including development of a national public relations tour for football and basketball featuring CBS

Sports announcers and college coaches.

Originally from Hibbing, Minn., Carlson attended St. Leo College, near Tampa, Fla., graduating in 1969. He became sports editor of the Fremont (Ohio) News-Messenger in 1969, and left in 1972 to join the University of Tampa as sports information director.

Carlson moved to Tennessee Tech in 1976, and then to the University of Tennessee at Chattanooga. From 1977 until 1982 he served as sports information director of Florida State University.

Some big names have already started arriving for the 1992 PGA

Hosting one of golf's four major championships is a huge job. Just ask Superintendent Tom Van De Walle of St. Louis' Bellerive Country Club—site of the 1992 PGA Championship.

"I came here in 1986 with the major responsibility of getting Bellerive ready for the PGA," says Van De Walle. "Six years sounds like a lot of time, but we've rebuilt greens, tees, bunkers, fairways—even redesigned some holes entirely—and we still have a lot left to do.

"John Deere has played a big role in our success. We mow greens with the John Deere 22s, fairways with a 5-reel 3325 Turf Mower and tees and intermediate rough with a 3-reel 856 Reel Mounted Mower. The condition of the course has improved dramatically since we started using these mowers.

"We've converted almost all our fairways and tees to zoysia—a grass that's great to play on but tough to mow. The John Deere 3325 and 856 are the only mowers we've found that can handle it. Their cutting units stay true and don't let the turf get puffy. Plus, the single lever lift on the 3325 improves our fairways by allowing us to cross-cut more easily. In fact, the 3325 has done so well, we plan to buy another one next year."

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Tom Van De Walle of St. Louis' Bellerive Country Club is using a fleet of John Deere reel mowers to help him prepare for the 1992 PGA Championship.



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ON THE MOVE

National Golf Corp. gets new head

A research consultant with experience in golf course and golf club analysis has taken the reins as vice president and general manager of the National Golf Corp., which the National Golf Foundation formed to accelerate golf course construction in the United States.

Richard L. Norton, 36, former vice president and manager of Economics Research Associates' Fort Lauderdale, Fla., office, will manage the corporation and report directly to NGF President Joseph F. Beditz.

Meanwhile, Beditz also announced the promotion of three senior staff members as part of a

reorganization aimed at enabling the NGF to "better serve the needs of its members and the golf industry at large in the 1990s."

William A. Burbaum has been promoted to vice president of communications and information services in a restructuring involving the Communications, Research and Golf Course Development departments.

Philip A. Arnold, former associate general counsel and vice president for golf course development, has been named legal counsel and vice president for special projects.

David J. Claude has been promoted from comptroller to vice

president and chief financial officer.

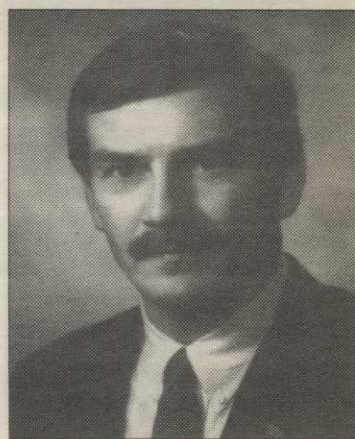
"This restructuring of the NGF refocuses the foundation's energies on its traditional purpose: To promote the growth of golf in America," Beditz said. "Having achieved its original goal of becoming the major source of golf market research and information, the NGF is now working to become recognized as the nation's leading proponent of public golf development."

As head of the National Golf Corp., Norton will lead an organization created in 1988 to specialize in consulting services for developers, municipalities and others interested

in determining the feasibility of creating a golf facility or improving the operation of an existing facility.

Norton was with Economics Research Associates, an international consulting firm specializing in recreation and real-estate feasibility studies, for 12 years. He worked extensively in real-estate and land-use analysis, including market and financial analyses for large-scale developments, theme attractions, and resort and hotel projects in the United States, South America and Europe.

Norton holds bachelor's and master's degrees from Brigham Young University.



Michael W. Harris

Harris vp sales at Club Car

Club Car has promoted Michael W. Harris to the position of vice president of sales.

Harris will be responsible for golf car sales for Club Car, including factory direct sales, distributor sales, and used car sales.

Harris has worked the golf car industry for the past 17 years in manufacturing, accounting, finance, credit processing and data processing. He joined Club Car in 1979 as a senior accountant. The following year he was promoted to general accounting manager.

In 1982 he became controller and in 1988 vice president/controller. Harris received both a bachelor of business administration degree and a master of business administration degree from Augusta (Ga.) College.

"As a company, we committed ourselves to an organized growth plan 12 years ago," said President George Inman. "Michael Harris is an integral part of Club Car's continuing plan of growth and I am confident that his leadership and direction will move that plan forward during the 1990s."

Greensmix names Hilkin

Christine Faulks, president of Greensmix, a division of Faulks Bros. Construction, Inc., has announced the appointment of John Hilkin as national accounts manager and technical consultant.

Faulks said, "John Hilkin brings a broad, unique and professional background of many years to our industry. Mr. Hilkin was the first person to develop and market a soil-less mix through research at Cornell University, and has extensive experience in soil mixtures."

Greensmix is a soil blender specializing in root-zone mixtures, precision blended, offsite.

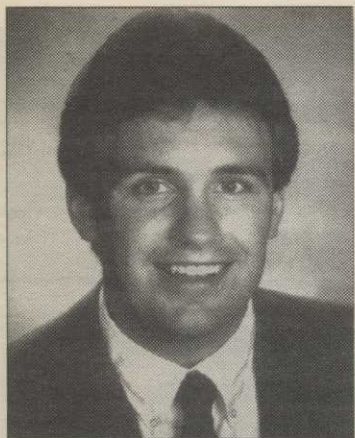
Loyd Eastern reg'l manager

Neogen Corp. has named C. Kemper Loyd as regional manager of the Eastern territory.

Loyd will be working exclusively with the EnviroCaster, Neogen's disease-predicting instrument for agricultural product producers, turf managers and golf course superintendents.

Formerly a sales manager and safety coordinator for Royster Mid-Atlantic, Loyd will be representing the Lansing, Mich.-based biotechnology company. Loyd resides in Red House, Va.





Rick Schroeder

Schroeder, Quick earn Columbia posts

Columbia ParCar Corp. of Deerfield, Wis., has appointed Rick Schroeder to the position of controller/administrative services manager and Steve Quick to the post of product engineer.

Schroeder, who is responsible for all the firm's accounting functions, and personnel and legal administration, served seven years in public accounting as a manager of Price-Waterhouse and Morton, Nehls & Tierney.

A graduate of the University of Wisconsin-Madison, he has specialized in working as a C.P.A. for manufacturing clients.

Quick worked eight years with Briggs & Stratton Corp., two years with Harley-Davidson Golf Cars and seven years with Chrysler Outboard.

His primary responsibilities are management and performance of Columbia ParCar's entire drive/power train system.



Mori Hayashi

Kubota Credit president named

Mori Hayashi has returned to Kubota Tractor Corp. as president of Kubota Credit Corp. and vice president of Kubota Tractor Corp., overseeing finance, accounting, administration and information systems.

Hayashi joined the Comptor, Calif.-based Kubota Tractor Corp.'s parent company, Kubota Corp., immediately after graduating from Okayama University in 1969.

He then joined Kubota Tractor Corp. in 1977 as the assistant to the president, and later was also named vice president of Kubota Credit Corp.

Hayashi left KTC in 1983 to return to Kubota Corp.

The Kubota Credit Corp. was established in 1982 to offer a wide range of financing programs for KTC's diverse customer base.

Vaubel super at new Eagle Crest

Harold Vaubel, who has supervised the maintenance of some of the country's top golf courses, has been hired by Signal Landmark as golf course superintendent for the championship-caliber course being developed at Eagle Crest Country Club in Escondido, Calif.

Vaubel, a certified golf course superintendent, is already involved in construction of the 18-hole course. When completed, it will be the centerpiece for Signal Landmark's guarded Eagle Crest community, which will include 580 luxury residences.

"We are thrilled to have some-

one with Harold's background and qualifications as part of the Eagle Crest Country Club team," said Don Collett, president of Don Collett & Associates, the management firm for the country club. "He is both a certified golf course superintendent and an agronomist—an outstanding combination for this position."

Vaubel earned a bachelor's degree with distinction in agronomy from the University of Arizona, with an emphasis on turfgrass management.

Working for the PGA Tour for more than four years, he supervised Tournament Players Courses at TPC

Starpass, which hosted the Tucson (Ariz.) Open and at TPC Prestancia in Sarasota, Fla. He was also turf agronomist for the Desert Forest Golf Club in Carefree, Ariz.

"At Eagle Crest Country Club, we are incorporating many water elements, native oak trees specialized grasses and a fully computerized irrigation system—all of which require special care," Vaubel said. "Once the course is ready for play, about a year from now, we will have a full-time maintenance staff of about 20 people to maintain the golf course and clubhouse landscaping."

Bach selling for Farmers

Farmers Marketing Corp. of Phoenix, Ariz., has appointed Gerald Bach to market and sell grass seed to golf courses, landscapers, sport field managers and others in Arizona.

Bach is experienced in turf-product sales, and has been an assistant golf course superintendent and landscaper.

Until recently, Bach worked for Lesco, Inc. He will be responsible for helping to introduce and promote NuMex Sahara bermudagrass throughout Arizona as well as testing other material from Farmers' turf-breeding program.



Seed Research fills marketing and research director posts

Seed Research of Oregon, Inc. has hired Steve Poitras as marketing manager and Dr. Leah Brilman as research director.

Poitras holds a bachelor's degree in soil science from Montana State University and a master's in agronomy from Washington State University.

His work experience includes research on seed production, weed control, and prevention of winter injury to golf course putting greens; teaching of weed science and turfgrass science labs at W.S.U.; and nine years of experience on golf courses including three years as a golf course super-



Steve Poitras
intendent.

He has had numerous papers



Dr. Leah Brilman

published dealing with seed production and turf maintenance. He

has received several scholarships including one from the Wyoming-Montana Golf Course Superintendents Association. He is a member of the Golf Course Superintendents Association of America.

Dr. Brilman has a strong background in the breeding of turfgrass species, and received her master's and PhD degrees from the University of Arizona in agronomy and plant genetics.

From 1982-1986 she was research director at Jacklin Seed Co. While with Jacklin, Brilman was instrumental in developing the turfgrass varieties Arid, Mesa, and Wrangler tall fescues; Nassau,

Classic, P-104, Liberty, Huntsville, Dawn, and Destiny Kentucky bluegrasses and All*Star perennial ryegrass.

Brilman will be expanding the research program at Seed Research with continued emphasis on the turf species. Special emphasis will be on the bentgrass program with expanded breeding efforts towards special adaptations within the *Agrostis* species.

Seed Research has two creeping bentgrass varieties on the market, SR 1020 and Providence (SR 1019).



Garland Newman

Newman takes on Oklahoma, Texas region

Garland Newman has joined Master Distributors, Inc. of Denver as regional marketing manager for Texas and Oklahoma.

Prior to joining Master Distributors, Garland worked for an irrigation distributor in north Texas. Garland has 27 years of experience in the landscape/irrigation business. He has been active in the North Texas Golf Course Superintendents Association, Texas Area Landscape Contractors Association and the Dallas Irrigation Association. He has a degree in Park and Recreation Administration from California State University at Fresno and has taught irrigation and landscape design in California junior colleges.

Products available through Master Distributors include Eljen prefabricated drainage systems; Rittersings grass paving and soil support systems; Hisco fiberglass handle tools; Pacesetter self-propelled trenchers; Century tree care products; Polyfelt landscape fabrics; Resinet plastic fencing; and Pik-Stik reaching tools.

Williams joins Irrrometer Co.

Mark Williams, former director of communications and membership for the Irrigation Association, has joined the staff of Irrrometer Co., Inc. of Riverside, Calif.

Williams' responsibilities will include marketing the company's new Watermark Soil Moisture Sensor line in the turf, landscape and golf course industries.

A 1985 graduate of American University in Washington, D.C., Williams was recognized in "Who's Who Among Students in American Universities and Colleges."

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It's all in the family for

BY PETER BLAIS

"In my opinion there are three non-pro golfer 'names' in golf course architecture — Jones, Dye and Fazio."

While Rees Jones' (Robert Trent Jones Sr.'s son) words may, at first glance, seem self-serving, there are few who would argue with that assessment.

Many talented architects are designing gorgeous courses throughout the world. However, any discussion involving course designers often touches on those three families.

Two generations of Joneses, Dyes

'It's natural that a father will pass it down to a son and take the time to give him an opportunity to get into it.'

— Rees Jones

and Fazios are currently in the business and it's very likely a third soon will be making a name for itself.

Why have families rather than individuals become the big names in the field?

Rees Jones believes it is because there are no schools or college programs of golf course architecture. It remains a craft rather than a profession.

"You learn golf course architecture by doing it," he said. "It's natural that a father will pass it down to a son and take the time to give him an opportunity to get into it. It's much harder for someone outside because it takes four or five years in the field to learn what you're doing. That's why it's still a craft."

With that in mind, here's a look at the families Jones, Dye and Fazio.

Joneses 'first family of golf architecture'

The first family of golf architects is the label generally applied to the Jones clan.

Father Robert, and sons Robert Jr. and Rees, have designed and built hundreds of courses throughout the world.

A scratch golfer as a teen-ager, Robert Trent Jones graduated in 1930 from a self-designed course at Cornell University that prepared him for a career in the then relatively new field of golf course architecture.

By the mid-1960s he was the best-known architect in the world. He had designed more than 400 courses in 42 states and 23 countries by 1980. An author of numerous essays and articles, he has received many awards including the American Society of Golf Course Architects' first Donald Ross Award for outstanding contributions in the field of golf course architecture.

At age 83, he is still one of the most active practitioners of his craft, logging hundreds of thousands of air miles annually. He currently has 15 projects in the works and recently returned from a two-week, nine-country tour of Europe.

The elder Jones was a tough act for sons Robert Jr., 50, and Rees, 48, to follow. But follow they did, and quite successfully.

Bobby graduated from Yale University and joined his father's firm, Robert Trent Jones Inc., in 1960. He eventually took over the California office, becoming responsible for the business' Western United States and Pacific Basin interests before establishing his own Robert Trent Jones II Group in 1972.

He became known as an artist who blended his courses with the environment. Spanish Bay Golf Links in Pebble Beach and Sentryworld GC in Wisconsin are two excellent examples of those efforts.

Rees likewise attended Yale and did graduate work at Harvard University's Graduate School of Design.

He went to work for his father in 1964, becoming involved in the design or construction of 50 courses and taking over the East Coast office before striking out on his own in 1974.

Hunger for golf bred into Pete and Alice Dye's sons

"I was born and bred to design golf courses and I had the two best teachers in the business," said P.B. Dye, son of Pete and Alice Dye.

Pete, the elder statesman of the Dye clan, could make the same claim. His father, Paul, designed and built Urbana CC in the 1920s.

"He played golf and was very interested in grasses," remembered Pete of his father. "But it was a hobby for him, so I never looked at it (golf course architecture) as a profession."

It wasn't until the late 1950s that Pete left a successful insurance career to become a full-time architect. Today five Dyes (Pete, Alice, sons P.B. and Perry and Pete's brother Roy) are in the business.

Pete, 64, is the patriarch and the name most people know in the male-dominated world of golf course architecture. But Alice, 62, has had a hand in nearly all of Pete's designs.



Robert Trent Jones Sr., front, with sons Rees, left, and Robert Jr.

Rees is also a writer, co-authoring the influential Urban Land Institute publication "Golf Course Developments" along with landscape architect Guy L. Rando. He is perhaps best known for his renovation of the Country Club at Brookline, Mass., site of last year's U.S. Open men's championship. Haig Point GC on Daufuskie Island in South Carolina and Pinehurst No. 7 have also received very favorable recognition.

"They've done some very good work," said their father. "Most of it has followed along my basic principles."

Rees said there was little pressure for him and Bobby to follow in their father's footsteps. Their entry into the trade resulted from being around the business, even during vacations that were often spent at the sites of their father's courses. Bill Baldwin, one of his father's construction foremen, spent a great deal of time with the younger Joneses, becoming almost a second father, according to Rees.

The youngest Jones believes the most important lesson he learned from his father was controlling not only the design end, but also the construction phase of a project. Thus all three have their own design and construction employees.

"You have to do that or you don't come up

with what you're after," said Robert Sr.

"That's the hardest part, transferring the idea from the architect to the builder and having it come out to the satisfaction of most everyone," agreed Rees.

The younger Joneses also learned from their father and Baldwin how to build a course that was technically correct, "so the course would stand the test of time and hold up without having to be rebuilt quite often," said Rees.

An additional benefit of working for their father was the substantial clients — like Laurance Rockefeller, who built several courses at Dorado Beach in Puerto Rico, and the Aga Khan, who built a seemingly impossible course along the cliffs of the Mediterranean island of Sardinia.

"These were people with the wherewithal (to build an outstanding course). So I learned the proper way by working for my Dad," said Rees.

In fact, the major difference between their father's heyday in the 1950s and 1960s and today, said Rees, is the amount of money available to build courses and the freedom that gives architects to indulge in multi-scene (every hole is different than the preceding one) rather than single-scene (every hole is basically the same) layouts.

Robert Trent Jones Sr. was the only designer at the time with any sort of professional status, according to Alice. Generally the job of laying out a course was turned over to a greenskeeper, who was paid about \$2 an hour.

"Jones elevated golf course architecture to a profession. Jack Nicklaus (who opened his architectural firm in 1974) raised it to a business where you could make a decent living," said Alice.

Fortunately for the Dyes, who were raising Perry and P.B., they still had checks coming in from Pete's past insurance sales. That helped carry them through the early years when they were developing low-budget courses.

Pete and Alice traveled the great courses of Scotland in 1963 and incorporated many of the features they witnessed — small greens, undulating fairways, pot bunkers,

Continued on page 25

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Fazio brothers continue tradition

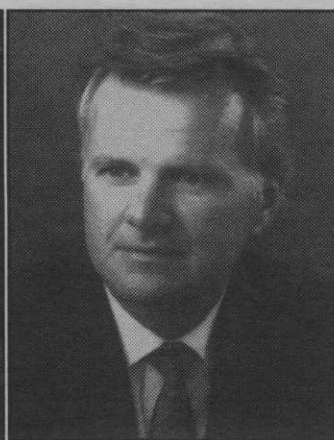
George Fazio's missed putt on the final regulation hole of the 1950 U.S. Open may have been the biggest break of his nephew Tom's life.

"If he'd made that putt it wouldn't have gone to a playoff and (Ben) Hogan wouldn't have beaten him," remembered Tom. "Winning that tournament might have changed his career. He might not have gotten into golf course architecture which meant I probably wouldn't have either. Having him miss that shot might have been the best thing that ever happened to me."

George, who died in 1986, might disagree. But he'd still get a chuckle out of his nephew's assessment.

Despite his overtime 1950 loss to Hogan, George had a successful playing career, winning the 1946 Canadian Open and finishing fifth in the 1952 and fourth in the 1953 U.S. Opens. He was a resident pro at several courses, including Pine Valley, before turning to architecture in 1959.

Tom's older brother, Jim, joined



At left, George Fazio makes a design point to young nephew Tom. Above is Jim Fazio today.

George's firm in 1961. The pair did the bulk of their early work in the Philadelphia area.

Tom, who weeded greens summers and washed dishes in the clubhouse winters while growing up and working at George's Pennsylvania club, came

on board a year later at age 17.

"Golf was always a part of the family. I never thought about doing anything else, never considered doing anything else, never did anything else and never intend to do anything else," said Tom, whose father was a pro at a Pennsylvania club..

In the early days the Fazios dealt in turnkey operations, designing and building a course that was turned over to the owners ready for play. Courses were built for about \$10,000 a hole, a far cry from the millions spent on today's links.

"Of course those weren't the same courses we have today. We didn't build cart paths. We didn't install irrigation systems. We didn't use sod. We didn't have USGA spec greens. We did not move the same amount of earth.

"We did like they did around the turn of the century: look for a good piece of land to put a golf course on. Today you can put a course just about anywhere, it's just a question of dollars. You can create something from nothing," said Tom, referring to Shadow Creek, a Fazio-designed course recently forged out of the Nevada desert near Las Vegas.

Money is the biggest change in the game over the past 30 years, agreed Jim.

"There's too much of it, today," he said. "Something like 47 of the top 100 courses in the country were built before 1940, and I'll bet none of them cost over \$100,000.

"Today it costs six, eight, 10, 20 million dollars. It's a crime. But each developer wants his course to be better than the last one. Anything beyond the rough line is just an added expense to the golfer. All the rest is just eyewash."

The Fazios' early-1960s construction costs often exceeded, sometimes by hundreds of thousands of dollars, the \$180,000 they charged buyers. But George was willing to absorb the financial setbacks in order to learn the business. Fortunately he had offsetting income from several other courses he owned and an automobile business he operated, said Tom.

Jimmy Demaret, a former pro golfer and good friend of George's, got the Fazios involved in their first out-of-

Continued on page 31

Dyes

Continued from page 24

railroad tie bulkheads and deep native roughs — into their own style. Many of those characteristics can be seen on Pete's better-known courses, including Casa de Campo in the Dominican Republic, The Golf Club in Columbus, Ohio, Harbour Town Golf Links on Hilton Head Island and the original Tournament Players Club at Ponte Vedra, Fla.

Roy Dye, Pete's younger brother and a chemical engineer by trade, left that field and joined Pete's design practice in 1969. Roy worked with Pete on several projects before opening his own business, which is located in Carefree, Ariz.

Sons Perry, 37, and P.B. (Paul Burke), 34, became involved with the game and architecture at an early age.

"I had a golf club in my hand for the first time when I was 4 and was on a tractor at 7.

"I've been on a golf course every day I wasn't in school since," remembered P.B., who now runs his own firm, P.B. Dye Inc., in West Palm Beach, Fla.

"They were running the equipment as soon as they were old enough to reach the pedals," said Alice.

"That experience helped them. It's so important in this business to know what equipment can do."

P.B., like his parents, runs a relatively small-scale operation that has concentrated its work in the United States.

"We basically work out of a suitcase," said Alice, who, with Pete, generally has no more than one or two projects going at a time. Pete estimates he has designed 70 courses in 20 years.

P.B., who shares an office with a contractor, said he prefers to have no more than 10 fires in the iron at once and is most comfortable with about six.

P.B.'s first collaboration with his father was Long Cove Club on Hilton Head, voted among America's top 100 courses by Golf Digest magazine just two years after it opened.

The Honors Course near Chattanooga, Tenn., another joint venture with Pete, was



Pete Dye years ago with sons Perry, left, and P.B.

Golf Digest's best new private course of 1984.

Now on his own, P.B. is concentrating on developing affordable, public courses.

Perry, on the other hand, employs about 120 at Denver-based Dye Designs Inc.

A graduate of the University of Denver's real estate marketing program, he has designed and built courses throughout the world.

Perry and his father co-designed the TPC of Plum Creek near Castle Rock, Colo.

Perry is one of the better-known developers in Japan, where his work has received substantial publicity and current president of the Golf Course Builders of America.

"We're just two different people," said P.B. "Perry's an excellent promoter and helps keep a lot of people working. I like to keep things smaller and get more involved with the building myself.

"I told him I'll take everything east of the Mississippi River and he can have everything to the west, including the rest of the world."

The Dyes rarely collaborate on course designs now that banks no longer need to

see the Pete Dye name next to his sons' before providing financing.

"Designing a golf course is like painting. You don't want someone else adding brush strokes. We might discuss ideas. But each of us does our own thing," said Alice.

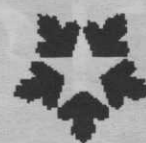
Alice sees similar architectural styles between parents and sons, and is especially pleased with her offsprings' placement of forward tees, an aspect of course design she has long championed.

But there are differences. For instance, the sons may design an 8-foot bunker that is difficult enough to climb out of, let alone hit out of, said Alice.

"Their work is much more severe. Pete may suggest they downplay it a little. But they don't listen. Kids are kids," chuckled Alice.

Growing up with Pete and Alice, Perry and P.B. developed a taste for the classic designs of the old Scottish courses that first attracted their parents.

"If anything, they have a harder time letting go of the past than me," said Pete.



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GOLF COURSE NEWS

Below is a chart listing the results of a survey of the major manufacturers of fairway mowers. Although most of the companies make more mowers for fairways, we asked them to choose two models for this questionnaire.

We have placed the chart in the centerspread so that readers can conveniently pull it out.

Greens care precision and grooming

BY MARK LESLIE

Golf course mower manufacturers are continuing to take their greens-cutting precision and turf care to the fairways.

The two major trends in the fairway mower marketplace, experts say, are use of lightweight mowers and adding turf groomers, which have had so much success on greens.

In fact, superintendents are taking their riding triplex greens mowers and moving them right out onto the fairways.

As United States Golf Association Green Section ex-National Director Bill Bengeyfield said: "Some of these fairways nowadays are

better than the greens we used to put on in the old days."

Mowing

"Everybody's going toward lightweight mowing," said Dave Buchanan at Jacobsen Division of Textron. "The superintendents are more intuned to what the benefits are: less compaction and the ability to add striping, which is a big deal in fairways now. Once a superintendent sees that striping effect on the fairway, he wants it on his own course; and once the golfer sees it, he wants it, too."

"Also it's better for their turf because they don't have to aerate as much because the turf is

less compacted."

Pat Lewis and Chuck Ravis, superintendents at the private Portland (Maine) and Augusta (Maine) country clubs, agree that lightweight mowing on the fairways is making major inroads across the country.

Lewis said that is especially true on Northern courses. He said lighter equipment encourages growth of bentgrass, and many superintendents in the North are overseeding poa annua with bentgrass.

"The actual cutting units on the (fairway) mowers are the same as on greens mowers," Ravis said, "but they've got more reels."

Company	No. models	Chosen model	Year Intro.	Reel type	Front or pull	Engine type	Price	Service centers	No. reels	Blades/reel
Brouwer Turf Equipment Woodbine Ave. Keswick, Ont., Can. L4P 3E9 Ian True 416-476-4311 Circle No. 201	2	720	1983	Belt	Pull	N/A	N/A	110	7	7-8
		M19	1983	Belt	Pull	N/A	N/A	110	5	7,8
Deere & Company John Deere Road Moline, Ill. 61265 Jeff Gredvig 309-765-8000 Circle No. 203	2	3325 Profl Turf Mower	1988	Hydraulic	Front	Diesel/liquid	N/A	80	5	6,8,10
		305 Hydraulic	1987	Hydraulic	Pull	N/A	N/A	80	5	4,6,8,10
Jacobsen Div. of Textron 1721 Packard Ave. Racine, Wis. 53403 Dave Buchanan 414-637-6711 Circle No. 204	14	LF-100	1987	Hydraulic	Front	Diesel/liquid	\$21,500 (2WD)	78	5	7
		HF-15 Turf Tractor	1980	Hydraulic	Front	Liquid or air	\$52,000	78	7	6,10
Kubota Tractor Corp. 550 W. Artesia Blvd. Compton, Calif. 90220 Doug Fencil 213-537-2531 Circle No. 205	13	VR5701	1989	Hydraulic	Pull	40	N/A	N/A	5,7	6,8
		VR5709	1989	Hydraulic	Pull	N/A	N/A	40	5	N/A
Lesco, Inc. 20005 Lake Rd. Rocky River, Ohio 44116 Ned Beach 800-825-3726 Circle No. 206	5	500D	1988	Hydraulic	Front	Diesel	N/A	N/A	5	6,8,9
		Lift 7-gang	1984	Ground	Pull	N/A	N/A	N/A	7	5,6,10
National Mower 700 Raymond Ave. St. Paul, Minn. 55114 John Kincaid 612-646-4079 Circle No. 207	N/A	Power Quint		PTO	Pull	Tractor	\$8,000	30	5	6
		84" Triplex	1954	Belt	Front	Gas	\$7,000	30	3	6
Ransomes Inc. One Bobcat Lane Johnson Creek, Wis. 53038 Maria E. Large 414-699-2000 Circle No. 208	5	Fairway 5000	1989	Hydraulic	Front	Diesel/liquid	\$22,000	45	5	6,7,9
		Motor 350D	1988	Hydraulic	Front	Diesel/liquid	\$37,000	45	5	6,8,11
Roseman Manufacturing Box 158, Rt. 29 Collegeville, Pa. 19335 Bill Rahling 800-752-7673 Circle No. 209	6	HGPF-7	1978	Hydraulic	Pull	N/A	\$24,760	28	7	8
		GMHR-7	1940	Ground	Pull	N/A	\$8,930	28	7	5
The Toro Company 8111 Lyndale Ave. S. Bloomington, Minn. 55420 Dennis Brown 612-887-8805 Circle No. 211	N/A	Reelmaster 223-D	1989	Hydraulic	Front	Diesel/liquid	N/A	54	5	5,8
		Reelmaster 450-D	1986	Hydraulic	Front	Diesel/liquid	N/A	54	5	5,7

move onto fairways at U.S. golf courses

Ravis said that while triplex mowers are being moved off the greens and onto the fairways, newer and lighter five-gang mowers are also providing "superb results."

Maria Large of Ransomes, Inc. said she has also found a strong desire from superintendents for lightweight systems "and ones that are more versatile, that can mow the roughs and tees as well as the fairways."

She added that the feature of easily (hydraulically) converting a mower from three to four or five cutting units—as offered by Ransomes' Fairway 5000—is a strong selling point.

Buchanan said the lighter units are "not

necessarily cutting lower but cutting a better pattern... And instead of 15 pounds per square inch, they have less than 10 psi. That adds up when you go over it every day or two."

Still, many superintendents in the South and at public and nine-hole courses nationwide won't buy into the lightweight market. Superintendents at many courses can't afford the \$20,000 it takes to buy these new units. Plus, more manpower is needed because it takes longer to mow the course.

"We're talking about a 100-inch cut as opposed to a 15- or 25-foot cut on a gang mower," Buchanan said. "It's just not economical for

that smaller course owner to go with the lightweight mower. It takes more time out on the course and in some cases it would take two machines."

Turf grooming

Meanwhile, the more manicured look is also moving onto the fairways.

The newest case in point is the use of turf groomers on fairways, removing thatch, controlling ground growth and upgrading the "feel" of the turf.

The idea is to "manicure the fairways a little bit more and make the grass stand up, in order to have healthier grass plants and give the

golfer a better lie," said Buchanan. "You don't have to have a lower height cut to make the ball sit up on the grass."

The turf groomers coming onto the market for fairways will be heavier duty because of twigs, tees and other damaging objects.

"We'll probably get to the point where everyone is going to manufacture a turf groomer for the fairway mowers, or they'll lose out on that part of the market," Buchanan said.

What's ahead in technology? Here's a hint.

"We're even cutting the rough lower," said an assistant superintendent at Portland Country Club.

Width of cut	Weight	Ground pressure	Acres cut per hour	Height of cut	Traction drive	Reel drive	2,3 or 4 WD	Transport width	Transport speed	Mowing speed	Turning radius	Cab?	Grass catcher?	Turf conditioner?
199"	1,920	9 psi	7	1/2-3-1/4	N/A	Belt	N/A	93"	30	5	N/A	N/A	N/A	N/A
145"	1,400	9 psi	5	1/2-3-1/4	N/A	Belt	N/A	93"	30	5	N/A	N/A	N/A	N/A
138"	3,570	9.7 psi	N/A	3/8-3	Hydrostatic	N/A	2	89"	12	7.2	6"	No	Yes	No
142"	1,830	N/A	N/A	3/8-2-3/8	N/A	Hydraulic	N/A	91"	N/A	N/A	N/A	N/A	No	No
100"	2,100	<10 psi	5	1/4-1-3/16	Hydraulic	Hydraulic	2,4	86"	10	6	20"	N/A	Yes	Yes
180"	4,448	15.5 psi	9.9	3/8-3	Mechanical	Hydraulic	2	96"	20	5.5	108"	No	No	No
134-186"	N/A	N/A	11.3	3/8-3	N/A	Hydraulic	N/A	93"	N/A	4-7	N/A	N/A	No	Yes
134"	N/A	N/A	8.1	0-3	N/A	N/A	N/A	93"	N/A	4-7	N/A	N/A	N/A	Yes
100"	1,950	N/A	4.5	1/8-1-3/8	Hydraulic	Hydraulic	3	72"	10	0-4.5	19"	No	Yes	Yes
171"	3,500	N/A	8.6	3/8-3-9/16	N/A	Ground	2	96"	20	0-5	96"	N/A	No	No
138"	1,200	N/A	6	3/4-2-1/2	PTO	Belt	N/A	96"	10	5	N/A	No	Yes	Yes
84"	900	N/A	3.5	3/4-2-1/2	Gear	Belt	2	60"	7	5	N/A	No	No	No
106"	1,860	N/A	6.4	5/16-1-3/16	Hydrostatic	Hydraulic	N/A	71"	9	6	17"	No	Yes	No
138"	3,571	N/A	7.9	1/2-2-9/16	Hydrostatic	Hydraulic	3	98"	15.5	7.5	N/A	Yes	Yes	No
186"	1,910	5.7 psi	7	1/2-3	N/A	Direct	N/A	98"	N/A	4-7	N/A	N/A	No	No
186"	8,100	N/A	7	1/2-3	N/A	Chain & sprocket	N/A	186"	N/A	4-7	N/A	N/A	No	No
95"	2,200	N/A	5.4	1/4-3/4	Hydrostatic	Hydraulic	2	87"	10	6	N/A	ROPS	Yes	Yes
137"	3,786	N/A	10.5	1/2-4	Hydrostatic	Hydraulic	2	92"	12.5	6	N/A	ROPS	No	Yes

Fast greens a product of technology

BY PETER BLAIS

A seemingly well-placed pitch shot rolls off the back of the green. A 10-foot putt comes to rest nine feet past the hole.

The golfer's fault for misreading the shots? Maybe.

The architects' error for designing greens where it's too difficult to stop the ball? Perhaps.

But increasingly the blame can be laid on improved mowers that allow greens to be cropped closer than originally intended, and on club members who demand it be done.

Until 15 years ago, most greens were cut between 3/16- and 1/4-of-an-inch, according to Jim Snow, an agronomist with the United States Golf Association Green Section. It was virtually impossible for the equipment available then to cut any closer.

But championship bed knives available on today's mowers allow a cut as low as 1/8-inch. What that has meant is much faster putting surfaces, said Snow.

For instance, a 1976 USGA Stimpmeter (a device for measuring green speed) test of more than 1,000 greens nationwide yielded an average green speed of six feet, six inches. But you're more likely to find an honest politician than a "six-six" today.

"I haven't tested one in the last seven or eight years that's been that slow," said Snow. "Most have got to be between 7-1/2 and eight now. Fifteen years ago it was unusual to find an eight. Today, it's common.

"That's quite a substantial difference. It means that on a lot of the older courses styles of play have changed. It requires more skill to hold a ball on the green than it used to."

Sometimes it's the architect who takes it on the chin from the disgruntled golfer who has a hard time playing a course that, before the advances in mower technology, he may have found more enjoyable. But unless a course designer was blessed with the ability to read the future, it appears to be a bad rap.

"A green that was perfectly fair 20 years ago can be pretty fast today. Maybe we should have foreseen the changes (in mowers)," said architect Geoffrey Cornish.

Architect Arthur Hills believes the extra speed generated from lower cuts can be overcome by proper placement of the cups.

"Most greens have adequate cup placements on them," said the Toledo, Ohio designer. "Those areas have to be realized and cups not cut where they shouldn't be. I've seen people who were gleeful after placing cups on top of mounds. I don't think that's fun for anybody and it certainly doesn't meet the design of the course."

Superintendents would appear to have the final say regarding their greens. They realize the danger in keeping greens too short and possibly scaring off the average mem-

ber who can get frustrated with his ballooning scores.

But the superintendent is usually answerable to a greens committee, consisting mainly of a club's better golfers. These low-handicappers tend to like the challenge and prestige of close-cropped greens and instruct the superintendent how to cut them.

"When you talk about speed, what it usually boils down to is you do what your membership wants," said Kevin Ross, superintendent of Falmouth Country Club, where the greens are among the fastest in Maine. "Here they want them

fast, but not too fast. I'll give them whatever they want, as long as it's playable.

"But overall, there's too much emphasis on speed of greens. It's gotten way out of hand over the last five years. I'd rather have a finely cut, true, medium-fast green than a super-fast, super-hard one. Unfortunately, the average golfer is out there three-putting a lot of greens and having a miserable time."

Not only is longer grass more playable, it also tends to be healthier.

"Moss is becoming a big prob-

lem on short-cut greens," said Ross. "Moss grows where nothing else does. But it's tough for grass to survive with just 1/8-inch of photosynthetic surface area. Grass cut that low is subject to a lot more stress. Traffic, heat, moss and algae are more of a problem on short greens."

Ross has also noticed more winter kill than ever at Northeast courses over the past five years. The major damage has occurred at the better courses, where greens tend to be cropped closer, he added.

Ross sees little movement away

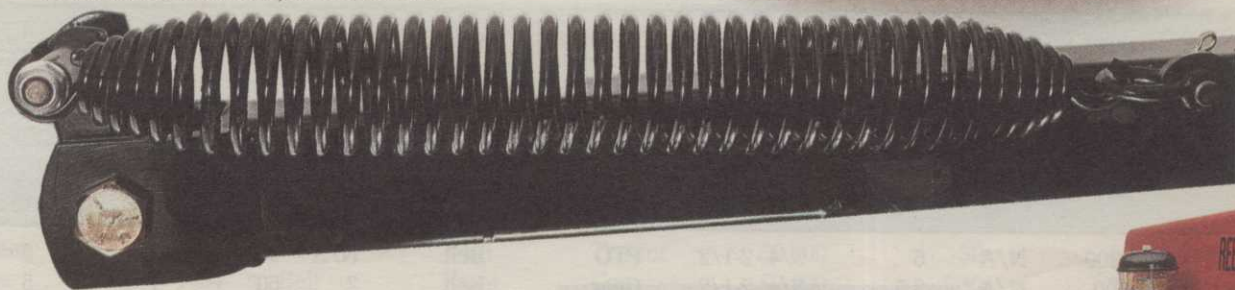
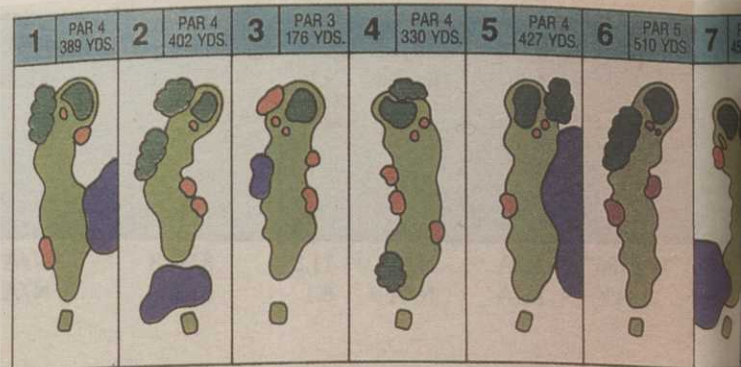
from the more-is-better mentality regarding green speed. He worries what this could mean to the health of his and other courses. But improved technology, which created the problem, could also provide a cure.

"The new groomers on the market can get a little higher cut with better ball speed," Ross said. "Bentgrass usually creeps along horizontal with the ground. The new groomers make it stand up and let you get a better cut at a greater height. We're getting the new groomers on our walking mowers this year."

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Fazios

Continued from page 25

state job at the Champions GC in Houston in 1964. Nevada's Edgewood Tahoe CC in 1967 was their second out-of-Philadelphia-area effort. Jupiter Hills opened the Florida market in 1970.

Jupiter Hills helped launch an era similar to today's construction boom. New courses nationally were being built at a pace of 100 to 200 annually in the 1960s. Those numbers rose to the 200 to 350 range in the early 1970s, similar to the course-a-day goal architects are setting for the 1990s.

Designing and building courses was pretty heady stuff for 22-year-old Tom, who found himself directing construction at the Edgewood Tahoe course.

"Here you had one of the greatest sites in America, right on the lake with giant Ponderosa pines all around. I had a penthouse suite at the Sahara Hotel. Gambling, drinking, great food, women and being just 22. Now that was a lot," he remembered.

Tom sees several key courses that kept the Fazio ship pointed in the right direction. Moselem Springs CC in Fleetwood, Pa., helped launch the company in 1964. Jupiter Hill gave it momentum heading into the 1970s.

Wild Dunes Golf Links in South Carolina put wind in the sails heading into the 1980s. Wade Hampton GC in North Carolina and Shadow Creek will open the waters to the 1990s.

But it all comes back to George, one of the first professional golfers to get into architecture. He was an artist, a dreamer, who enjoyed sculpting his courses, according to his nephew.

If he had a fault, it might have been that he dreamed too much, said Tom. Some players at Jupiter Hills, where George lived the last 15 years of his life, felt he was changing the course too much. But many Pinehurst No. 2 players said the same about Donald

Ross, who liked to toy with the course he designed and lived on the final years of his life.

George was both difficult and easy to work for, remembered Tom.

He was difficult in that he was a taskmaster who rarely took a day off and expected the same of others. That work-a-holic tendency created a bit of a rift between George and Jim.

Jim had to leave the business to join the Naval Reserves in 1964. He met his wife, Amy, and they were married shortly after his discharge a year later.

When raising his three children cut into Jim's ability to work seven days a week, 24 hours a day, George

handed Jim's spot on the company ladder to Tom.

Jim continued to work for Tom and George for several years. Tom and George designed Hidden Springs CC in Horsham, Pa. and Jim built it. Jim stayed as head pro of the 36-hole course for five years, before rejoining the firm and moving to Palm Beach, Fla. in 1973.

"I felt like kind of a fake pro," confessed Jim. "I had a hard time breaking 80."

Tom bought out George, who then retired to Jupiter Hills, in the mid-1970s. The brothers returned to their former arrangement, Tom designing and Jim building. The relationship came full circle when Jim started his own company in 1984 with George as his partner.

Among the courses built under the Jim and George Fazio names were The Reserve Golf & Country Club in Ft. Pierce, Fla.; LaQuerce Golf Course in Rome; St. Lucie West Country Club in St. Lucie, Fla.; Hawk's Nest Country Club in Vero Beach, Fla.; and the Woodlands Country Club in Falmouth, Maine.

"I kept the George and Jim Fazio names on those courses, even though George never got to see them finished," explained Jim, whose uncle died in 1986.

Jim renamed his company Jim Fazio Golf Design and recently appended that to & Sons, with Jim Jr., 23, and Tom, 22, now actively involved in the business. Young Jim is currently working on a pair of courses in Japan and his brother a 36-hole project for fashion designer Laura Biagiotti in Rome.

Now that Jim's kids are grown, he's the one jetting around the world putting in the long days. Tom, whose six children range from 4 to 13, confines most of his work to the Eastern United States, within a two-hour private jet ride of his North Carolina home.

"George's philosophy was great if that (working 24 hours a day) is what you wanted to do. But he didn't change my way of thinking, or Tom's either," said Jim.

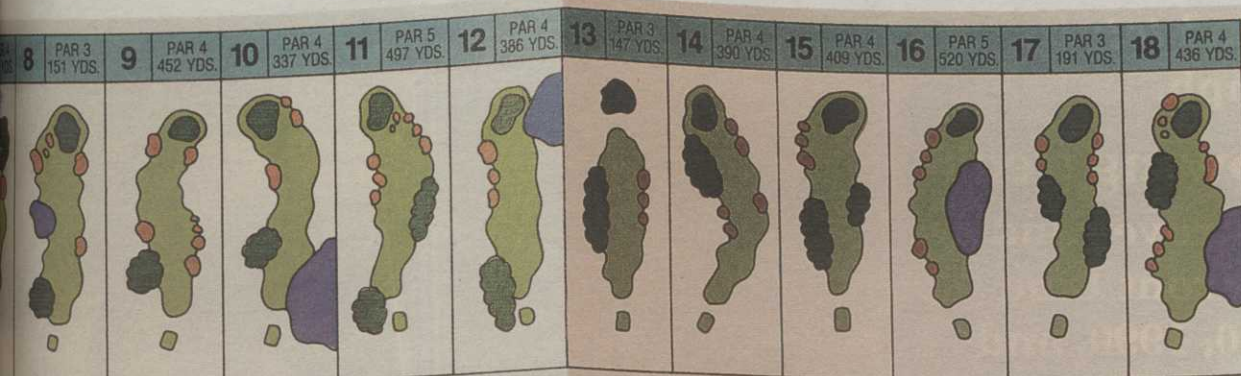
And how about the easy part of working for George? The nice part, and it far outweighed any negatives Tom and Jim agreed, was George's willingness to give his then wet-behind-the-ears nephews immense responsibility and provide almost anything needed to get the job done right.

The biggest design difference between George and contemporary architects is more the result of changes in environmental laws than a difference in philosophy, said Tom. Hole placements around natural areas, protective buffer zones and drainage considerations in contouring fairways weren't things architects had to worry about 15 to 20 years ago.

"I can look at a course and tell what decade it was built in by how it takes into effect environmental consid-

Continued on page 35

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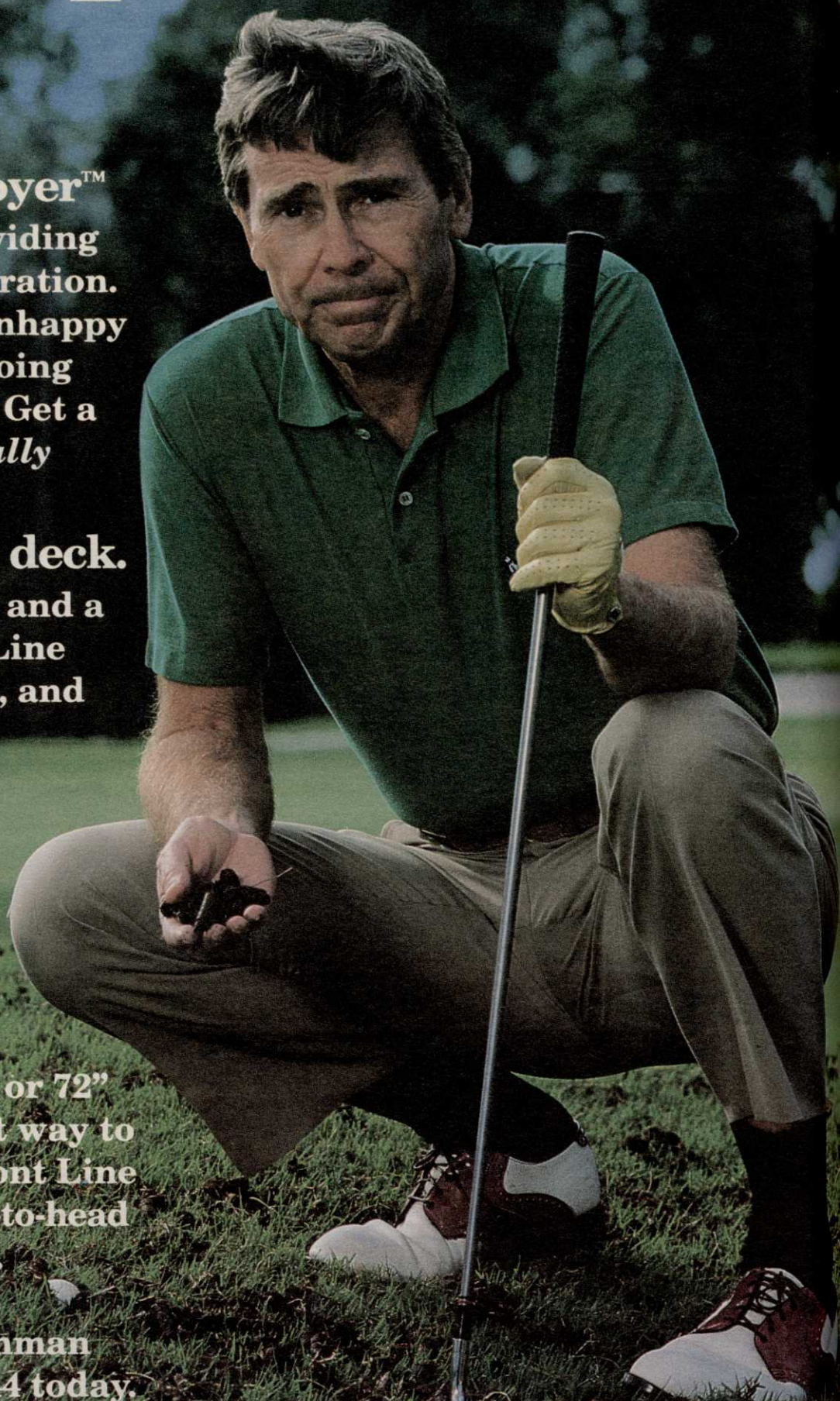
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High-end products said creature of '90s

Land planners predict future

The development of golf course communities was one of the main topics at "Land Planning 90," the 5th annual land planning conference sponsored in January by the National Association of Home Builders in Atlanta, Ga.

David Jensen of Dave Jensen Associates in Denver expects the 1990s to be a time of fewer, but higher-quality projects. Move-up, high-end products will be in great demand.

The growth of golf is pushing the market, noted Jensen, pointing to the doubling of golf's participation rate from 5.4 percent of the U.S. population in 1980 to 10.4 percent in 1989. With 26 million golfers in the country, golf is expected to grow from a \$20 billion to a \$40 billion industry by the end of the decade.

Golf course communities promote lifestyles in total environments, said Jensen. "We are not just selling houses stripped along streets. We are selling places and neighborhoods and villages and places for people to grow old and gentle, with this type of sport," he added.

As for the actual development, Jensen encouraged taking care of the outlying property first. "During the 1950s and 1960s we laid out golf course developments and stripped many lots along the (links-type) golf holes. By doing so we locked off all the stimulators that can come from the corners of the property. The goal today is to stimulate value and sell space and premiums farthest from the course," he said. The rest of the development then takes care of itself, generating the traditional premiums for golf frontage, central location and so on, he added.

In addition to residential, there is a growing interest in office and mixed-use developments, where golf is the focal point, said Fred Jarvis of Land Design Research International in Columbia, Md.

Jarvis sees more opportunities for golf course developers in building new communities in Europe; in re-configuring existing courses to create new real estate development; in constructing low-density communities in rural settings; and in using golf courses to gain rezoning approvals.

Concord, N.H. land planner George Matarazzo warned about inconsistent interpretations between communities regarding what constitutes open space. He told of a community where the 100 acres he'd set aside for a golf course was viewed by town planners as a commercial activity rather than open space.

"So, we did an overlay and created a bit of open space outside the golf course to ensure that new homeowners had their own, private open space. This is an example of the pitfalls you will encounter. They are all

solvable," he assured.

Toledo, Ohio golf course architect Arthur Hills, with 175 new courses and renovations to his credit, noted that successful developments convey quality.

"All have excellent maintenance. Every amenity is perfectly kept. And in planned communities, whether the person is paying \$1 million or \$100,000, he or she feels secure in the investment," Hills said.

Hills also noted that many developments find they need more holes than anticipated. He recommended building 27 holes or at

least planning for 27 and initially building 18. The extra holes allow for more flexibility in play and revenue and provide more golf frontage. There is no significant increase in maintenance or operating costs with 27 holes rather than 18.

As for the appeal of shorter-length courses, Hills said: "People want a championship image, not necessarily length. While this means having back tees of 6,500 yards, most people prefer to play at 6,000 to 6,100 yards. For 95 percent of golfers, that's all the challenge they need. The championship image can and should

relate to the quality of the playing surfaces, the hazards, design and aesthetics of the golf course and its relationship to the development."

Don Whyte, vice president of development for 9,000-acre Tampa Palms in Tampa, Fla., said one of the best things his company did was "bringing in experts from the start. We hired the best greenkeeper, architect and club management."

A lavish clubhouse increased real estate value without increasing golf frontage. A clubhouse ballroom attracted people for special

events who, otherwise, might not have visited the club. Although the club was private, the clubhouse was made available for outside activities on Mondays.

"This helped defray operating costs in the first year and allowed more people to see the course and development. As our membership fills, we are using less and less of the Mondays for outside activities," Whyte said.

Hosting the GTE Suncoast Classic was popular with the members and led to 25 percent of the memberships being sold within the next 30 days, he added.

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Bengeyfield tackled challenges for 40 years

BY PETER BLAIS

April 1 marked the end of Bill Bengeyfield's nearly 40-year association with the United States Golf Association Green Section.

"Why am I retiring? There's always a time and this is it," said the Green Section's outgoing national director.

Simple. The kind of statement you'd get from a man attracted to the down-to-earth quality of the people his organization has served.

"It's been a lot of fun," said Bengeyfield, 67, who first joined the Green Section in 1951. "We've enjoyed working with the staff, the superintendents. These are real people, down-to-earth people who get the jobs done.

"The pros get all the publicity. But all they can really do is hit a golf ball well, very well. But that doesn't make them great architects or agronomists. They're the ones that really make golf go."

Bengeyfield's association with the game goes back to his first job as a door boy at Wheatley Hills Country Club while growing up in East Williston on Long Island, N.Y.

He enrolled at Alfred University before being drafted into the Air Force in World War II. He was a navigator on B-25s while rising to the rank of captain.

After his discharge, he went to Cornell University, graduating with a major in chemistry. After graduation, he became an assistant county agent in New York's Westchester County.

"That's where I really got started in the golf business. There were about 40 courses in the county," said Bengeyfield.

"I remember visiting places like Winged Foot, Westchester Country Club and really being fascinated by the people I talked with," Bengeyfield said.

But a budding golf career had to be put on hold when Uncle Sam recalled him for Korea. Bengeyfield was considering committing to a service career when he heard from former USGA Executive Director Joe Dey.

Dey and Richard Tufts, whose family started the Pinehurst, N.C., resort and served as USGA president from 1956-57, recruited Bengeyfield, who joined the Green Section in 1951.

He worked as an agronomist and Western director of the Green Section until 1978, when he became director of golf courses and park maintenance at Industry Hills Golf Course in Industry, Calif.

"I was like a preacher, giving a sermon at every golf course. But I had never sinned myself," explained Bengeyfield of his decision to leave the USGA. "I had to see if the things I'd been talking about really worked. And by George, they did."

Then-Green Section National

Director Al Radko enticed Bengeyfield back to the USGA fold in late 1981.

Bengeyfield was intrigued by the turfgrass research committee Radko had started to look into new grasses that were more disease-tolerant and required less water.

He replaced Radko as director when he retired in February 1982.

"The USGA has expanded right along with the game. We've played a major role in growing grass for golf.

"The management of water is going to be a big thing in the future.

"Courses will have to use less. We're planning to give them better



Bill Bengeyfield
grass at a lower cost," Bengeyfield said.

The Green Section's commitment to turfgrass research has grown to \$3 million annually under Bengeyfield.

And that figure will increase in the future as the USGA has also committed itself to finding solutions to environmental problems, he said.

Among some of the major USGA-funded, turf research projects expected to bear fruit in the next three to five years, according to Bengeyfield, are:

- Bermudagrasses for Northern courses that are winter hardy and provide a good summer turf.
- Western buffalograsses that can be grown on two-thirds of

U.S. courses and require less than two inches of water a year. That's a dramatic reduction from the 15 inches currently needed by grasses on those courses.

• Bentgrasses for Southern greens that can tolerate the high heat and humidity and provide the smooth putting surfaces Northern golfers are used to.

"Those will be the challenges in the next few years, growing new grasses and environmental issues.

"We think we're the environmentalists. In fact, we're leaders in the field," Bengeyfield said.

Continued on page 35



Bengeyfield

Continued from page 34

Despite his retirement, Bengeyfield plans on staying active rather than viewing the game from the gallery.

He is already involved in consulting projects in Spain and Japan and figures to do more overseas and domestic work in the future.

He and wife Betty will spend May through October running Frankfort (Mich.) Golf Course, a nine-hole "Mom and Pop" affair the couple purchased about 10 years ago.

Winters will find them holed up in their Caldwell, Idaho, home.

Bengeyfield also expects to occasionally be in touch with his replacement, or replacements actually.

Jim Snow is being promoted from

Northeast region director to national director. Mike Kenna, who joined the USGA from Oklahoma State University in mid-January, will be director of research, taking over many of the duties Bengeyfield had as chairman of the USGA/GCSAA Turfgrass Research Committee.

"It's reached the point where one man can't do it all," said Bengeyfield. "There are 13 agronomists on the staff now. We had 600 subscribers in 1981 and now it's up to 1,700."

"The research committee invested \$3 million this year. Next year we'll invest even more with all the environmental concerns. Both jobs are on the incline and I'm on the decline."

Rossi

Continued from page 8

Rickey said that after joining NGF, Don soon proved "a master" at working with diverse people with varied attitudes, and bringing those people together.

Don forever spoke highly of others in the industry. Asked his opinion of the NGF's move into the service field, he refused to pass judgment. "I think leadership at the NGF is extraordinary," he replied.

Rickey told the story of the near-collapse of the NGF shortly after Don took over its reins. At that time most of the funding for the foundation came from testing aluminum shafts.

When the aluminum shaft market collapsed, the NGF lost most of its funding and "Don had to go in and fire all these people we had just hired and trained, which is the toughest management assignment there is. Don had to cut the budget 50 percent. He not only managed that but built a very strong organization and handed over a strong organization on his retirement," Rickey said. "But what always remained with me and showed me the character of the man was the way he took care of the people we had to let go. The way he treated them and worked with them to place them in equal or even better jobs was masterful. He had so much compassion and was a fine human

being."

The "sentimental Italian," Don called himself.

Rossi is credited with fashioning the Allied Associations of Golf largely by his own enthusiasm and his genuine love for other people.

Near the end he took that enthusiasm abroad for the golf industry.

As Fullmer said, "He brought the Rossi radiance to the entire world."

If something was good for golf, he supported it.

From the very beginning, he encouraged Golf Course News and me, not because of me or the newspaper especially, but because he knew that by its very existence, the paper would help the game.

And though he wisely tempered optimism with realism, you couldn't dampen his outlook for the golf industry. In our last conversation of length, I asked him: "What if the stock market goes boom?"

His reply: "During the Depression there was more golf played than immediately before or after the Depression because people had more time on their hands and golf was a great outlet."

Calling him a driving force in the industry might actually be underdoing it. Don Rossi was an accelerating force.

He will be missed dearly. But those of us who will be spending time with him in the future can look forward to that time with anticipation.

Fazios

Continued from page 31

erations," said Tom. An emphasis on quality was the most important thing Tom and Jim adopted from George.

"His favorite saying was 'I never want to hear you say that's good enough.' Every time I hear that expression it rings a bell about George," said Tom.

Added Jim: "He wanted to do a good job, no matter what the cost. He told us money was just a by-product of what you did in life. If you are good at what you do, the money will come. And if it doesn't, don't worry. The pride in knowing you do quality work is more important."

As for the future, would Tom want his children to follow in his family's footsteps?

"I look at Jim and his kids. I look at the Joneses. And I look at Pete Dye with his two kids. I guess it's a natural instinct. But I certainly wouldn't force it on them. I've seen enough to know it's not an easy business," he said.

American Golf buys Riverside

American Golf Corp. has bought Riverside Golf Club outside Dallas Texas.

The par 72, 18-hole course, designed by Roger B. Packard, will be open to the public.

Its facilities include a clubhouse, golf shop, food and beverage facilities and driving range.



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Conference Report

Supers urged to back their mechanics

BY PETER BLAIS

Superintendents should support their mechanics as they attempt to form professional associations around the country, according to a speaker at February's Golf Course Superintendents Association of America annual conference in Orlando.

"The bottom line is that we as superintendents should encourage mechanics in their professional development. The pluses of an association far outweigh the negatives," said Bruce Williams, head superintendent of Bob O'Link Golf Club in Highland Park, Ill.

Williams made his comments

during the superintendent conference's first-ever mechanics session attended by 100 mechanics, superintendents and equipment manufacturers.

"All three groups must work together if we're going to make these associations successful," said Williams.

There are a handful of regional mechanics associations, mostly in the Southeast. Organizers of the mechanics session hope their efforts will encourage mechanics in other regions to form their own associations, which could one day lead to a national organization, like the GCSAA.

But is an association necessary for mechanics? Definitely, according to Williams, who is president of the Midwest Association of Golf Course Superintendents.

"An association is formed by individuals with a common interest. Golf course mechanics need a forum to express themselves and exchange ideas on equipment maintenance and repair. The entire industry and superintendents at the individual courses will benefit from mechanics joining and participating in an association," said Williams.

But there are individual responsibilities in belonging to an association

that Williams has observed as president of the Midwest association and 12-year member of the national association. They include:

- Attend meetings. "An association just can't function without proper attendance."
- Start meetings on time.
- Pay dues. "Don't ask the superintendent for a \$30 check the day your fee is due. Superintendents have to budget for things like that and need to know well beforehand."
- Be supportive. "Be loyal and enthusiastic. There's nothing worse than a group of naysayers that try to drag everyone else down. Be part of

the positive image."

• Complete assignments. "That will take a big load off the association's leaders."

• Get work done. "Don't let your volunteer (association) work interfere with your employment. Some of your association duties have to be done out of the workplace. If you find the association taking up 25 or 30 percent of your time, you've got a problem."

But what are the rewards to the individual mechanic?

First are the obvious ones — improving job skills and developing professionalism.

"It can make your job easier and let you do it quicker. It can make the whole operation run more smoothly," said Williams.

"When superintendents formed their organizations back in the 1920s, many weren't allowed in the clubhouse. They had to meet in the shops. It took awhile to gain professional acceptance. Similarly mechanics will work toward that higher level of professionalism by improving their skills and operating in a business-like manner."

Then there are more personal rewards like making friends, experiencing the joys of accomplishment and developing leadership qualities.

From a superintendents' viewpoint there are many advantages to having a mechanics' association. Williams, who holds a college degree, as do many of his peers, realizes his limitations when it comes to maintaining equipment.

"I need to have the best professional people working for me because I'm not strong in that area, to say the least," he said.

"The role of the mechanic has changed with the growing complexity of equipment. The 1980s saw more and more hydraulic and electronic equipment. We need educated, trained technicians to run them. Better-trained mechanics means less down time for equipment. Well-running equipment makes for a happy superintendent and a happy superintendent makes for a good working environment."

But having a mechanic who is active in an association comes at a cost to the superintendent — a direct cost in dues and educational expenses and a time cost when the mechanic is away at meetings and seminars. Since that time and money aren't available without the superintendent's blessing, there are things the mechanic can do to gain his boss' support:

- Give the superintendent plenty of notice for an upcoming meeting, explain what you expect to learn and report back on what you learned after the meeting. "That's what sells it to me. Any superintendent worth his weight will accept that and approve your going."
- Hold meetings at appropriate times. "For instance, an all-day meeting in mid-August would be a bad time in Chicago. Frankly, mechanics are just too valuable. We just can't afford to lose a mechanic for a whole day that time of year. December,

Continued on page 37

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Conference Report

Ground water studies positive for golf

BY PETER BLAIS

Those in the golf business tend to view the industry as very positive for the environment. Unfortunately many others don't see it that way, especially regarding ground water contamination by pesticides, according to Richard Cooper, Ph.D., a University of Massachusetts researcher who spoke at February's GCSAA annual conference in Orlando.

There have been 26 documented cases of pesticides found in ground water in New England, although none have been associated with golf courses, said Cooper.

But the average person doesn't distinguish between agricultural pesticides (the most common source of ground water contamination) and turf management pesticides used on golf courses. Increasingly it's the superintendent's job to serve as industry spokesman and explain those differences.

To help the superintendent better perform this new role, Cooper reviewed some of the basic facts about turfgrass and the results of recent studies regarding pesticide contamination.

Golf course turf provides a very dense plant population, between 1,500 and 2,000 plants per square foot in the rough rising to 3,500 to 4,000 on the green.

"Grass plants intercept most, if not all pesticides before they reach ground water. That's a very important difference compared to agricultural plants like corn, soybeans, etc.," Cooper said.

Thatch, the layer of decomposing matter below the growing grass, is a strong absorber of pesticides. Thatch is common under turf but not agricultural plants.

Grass also has a deep and extensive root system that can reach down several feet. Roots both absorb and adsorb pesticides.

"The nature of the turfgrass community is that it helps protect the environment," said Cooper. That's why the Soil Conservation Service has long recommended a grass buffer strip be planted near water supplies, he added.

Despite the environmental benefits of grass, there is still some

Mechanics

Continued from page 36

January or February would be fine."

- Discuss appropriate topics at appropriate places. "Someone once suggested having an OSHA (Occupational Safety and Health Administration) representative come by. No superintendent was crazy about hosting a meeting that could uncover a violation and \$25,000 fine."

- Don't use meetings simply as a bitch session. "If you have problems, have a discussion. Try to do it in a positive manner."

- Don't discuss salaries at every meeting. "Schedule a meeting where salaries and benefits are the topics. Everyone attending should be expected to verbally participate. That way you have the facts rather than rumor. Superintendents have been doing it for a long time."

pesticide movement. But many things combine to break down pesticides before they reach ground water, according to the UMass professor.

Volatilization — gaseous losses to the atmosphere — claim up to 15 percent of turfgrass pesticides, according to a GCSAA-sponsored UMass study.

Many fungicides and herbicides are designed to be absorbed by plants and are taken up almost completely. Adsorption to roots and minerals binds the rest to the soil and prevents them from reaching the water supply.

When pesticides do reach water

supplies, they get there in one of two ways — runoff or leaching.

Recent studies at Pennsylvania State University and the University of Rhode Island showed that runoff from turf is not a common event. It takes rain on the order of four to six inches per hour or frozen soil to get pesticide movement through runoff.

"But in the absence of unusual conditions, studies have shown runoff not to be a major avenue of pesticide movement," said Cooper.

Another URI study of 2,4-D and Dicamba placed on sandy soil showed that only one part per billion of 2,4-D leached through to

ground water, well below the federal standard of 100 parts per billion in drinking water. Dicamba showed up at only 1/2 part per billion, again well below the federal standard of 12-1/2 parts per billion.

"Clearly, even with over-application and over-irrigation, we never get close to what is considered a toxicologically significant amount, an amount that we'd start to worry about. Routine applications of 2,4-D and Dicamba do not contaminate ground water," said Cooper.

An Ohio State study by Dr. Harry Niemczyk showed that insecticides, one of the most toxic sub-

stances in the environment, can be recovered at rates of 88 to 99 percent four weeks after application.

A study on the sandy soils of Cape Cod also revealed that pesticides from golf courses rarely leach into ground water.

Cooper said he made a conscious effort not to pick studies that would benefit the golf industry.

"I've reviewed the literature and there are no documented cases of ground water pollution from pesticides to my knowledge," he said. "Instead of polluting the environment, we can make a strong case that golf courses protect the environment."

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Conference Report

Self-audit 1st-year report card: 'Very favorable'

BY PETER BLAIS

"Very favorable" is how Hall-Kimbrell project manager Steve Wharton describes the first-year response to his company's environmental self-audit program.

Courses in 34 states have taken part in the Environmental Compliance Assistance Program since it was launched in February 1989.

"That speaks well of the superintendents across the country and their awareness of their environmental responsibilities," said Wharton.

Still, there are those who have not heard of the program and its potential to help courses comply with environmental, health and safety laws. But that is changing.

"The program was almost ahead of its

The response 'speaks well of the superintendents across the country and their awareness of their environmental responsibilities.'

— Steve Wharton

time last year," said Wharton. "People weren't thinking about environmental issues as much as they are now."

There were also misconceptions about the program, many of which have been dispelled over the past 12 months, according to Wharton. Among them:

- *It would be a struggle to get course boards of directors to approve the self-audit.* In reality, nearly 80 percent of the boards have been strongly behind the program and 15 percent weren't opposed if the superintendent was in favor.

- *The program wouldn't address a course's particular situation.* Over 90 percent of the superintendents participating have in fact commented that all their issues were addressed. Another eight percent wrote that the audit included all but one of their problems.

- *The cost (\$725) was too high or superintendents didn't have authorization for the additional expense.* Actually, cost and authorization have not been issues. This spring's incentive plan lowering the price to \$600 for courses signing up by May 1 has left many

superintendents with extra cash in their budgets for other compliance projects.

- *It will take too much time.* Superintendents have more often said they don't have the time not to participate. The 600-question audit and the final report (usually returned to the course within a month) have allowed superintendents to organize their thoughts and provided an educational tool. In three-fourths of the cases, superintendents have been able to implement any proposed changes themselves, instead of relying on expensive, outside help. And completing the audit presents the course to the public and governmental agencies in a very positive light.

"It allows a course to be pro-active rather than re-active," said Wharton. "If a government agency sees that a course has made a good-faith effort toward complying with the law, it is more likely to issue a warning rather than just automatically levy a fine."

The most common recommendations contained in the audits have involved health and safety issues, worker protection, underground storage tanks and pesticide safety.

"Some of the changes have been simple and inexpensive, like moving where you store something from one part of a room to another or putting up a safety sign. Others have been more complicated and expensive, like building a new type of facility or removing a tank. The advisories don't discriminate as to cost. But the cost of non-compliance generally far exceeds complying," explained Wharton.

Wharton said the program has produced some major accomplishments during its inaugural year, including upgrading superintendents' awareness of their environmental responsibility; providing a program recognized by insurance companies that can lead to premium discounts; allowing re-certification credits for superintendents; and being required as part of the remedy at New Jersey courses where state enforcement of laws is necessary.

"Overall, we're very happy with the way things went this past year," said Wharton. "It's given superintendents a way to figure their way through the complex information coming out today."

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Conference Report

UST insurance

Continued from page 1

dents Association of America annual conference in Orlando, Fla.

It is with the hopes of avoiding situations like East Overshoe's that Shanks' company and the GCSAA have developed the only insurance program specifically for pollution from golf course USTs.

"I read in the newspaper recently that the UST issue is a time bomb waiting to go off. I agree," said the president of the 13th largest insurance broker in the country.

Shanks said it will cost the United States between \$1 billion and \$3 billion to clean up the potential damage from the nation's 2 million USTs. Of those 2 million tanks, 200,000 are leaking. Some of that leakage eventually winds up in ground water that is the primary drinking source for half the people in this country.

Most of those tanks are located under service stations. But many are at golf courses. A Financial Guardian superintendents survey revealed that 84 percent of those responding had at least one UST at their course and 66 percent at least one above-ground storage tank (AST). Of those tanks, 50 percent were at least 10 years old and 54 percent were made of bare steel, which is more likely to leak and has been illegal to install since 1985.

So, the potential is there for some major problems from the 15,000 USTs and 7,000 ASTs. First Guardian estimates are located at the nation's golf facilities.

What does that mean to a golf course?

If the Environmental Protection Agency finds a course in violation of its storage tank standards, it has the power to levy fines up to \$25,000 per day/per tank. Then there is the likelihood of massive court costs fighting lawsuits from landowners whose water supplies have been contaminated.

New EPA regulations that take effect Oct. 26 require golf facilities with USTs to prove financial responsibility of at least \$500,000 per occurrence and \$1 million per year.

The GCSAA-sponsored risk retention group policy provides the EPA-mandated liability coverages and does it one better with an additional \$250,000 for defense costs.

Annual premiums vary although they can

be as low as \$431 per tank if a course takes advantage of credits offered for things like superintendent participation in a correspondence course or GCSAA seminar (10 percent off); controls that exceed EPA requirements (15 percent); and completing and complying with the Hall-Kimbrell Environmental Compliance Assistance Program (10 percent).

"There have been stories that companies were going to charge \$5,000 per golf course. There are some that charge \$3,500 minimum per course. But we're going to do it on a per-tank basis. Your course, if it's average, is paying \$25,000 per year for property and casualty insurance. Some are up to \$60,000, \$70,000, \$80,000, even \$100,000. We're talking about \$431 per year," explained Shanks.

UST insurance costs are lower for golf courses than similar coverage for service stations because the generally smaller and newer tanks at golf facilities are lower risk, said Shanks. Service stations may have trouble even getting insurance now that EPIC, which insures 29 percent of service stations, is going out of business, he added.

Tank insurance is also less expensive and usually easier to acquire than the alternatives for meeting the EPA \$500,000/\$1 million requirements, according to Shanks.

Those alternatives include surety bond, letter of credit, guarantees from parent company, self-insurance (requires \$10 million net worth) or state trust funds (many are under-capitalized and have tight restrictions).

"Because of the lower risks associated with these golf course tanks, we were able to build a lot of nice extras into the program and still make it very affordable for golf courses," said Shanks.

"We're not looking at two feet of concrete sitting over tanks at a gas station in the middle of downtown Orlando that could have leaked into the city's water system. So we feel our losses will be lower and our rates can be held down."

In addition to meeting EPA-mandated coverage and defense costs, the policy provides third-party coverage and clean-up costs, both on and off premises, in case a leak moves onto adjoining property.

The policy does not cover replacement or repairs to existing tanks. Deductibles can be as low as \$1,000. And the policy can be written by a local insurance agent that currently handles course coverage.

A packet should be reaching courses shortly, if it hasn't already. It contains a letter explaining the program and an eight-page application to be filled out by the insurance agent with the help of the superintendent.

After obtaining insurance, at least one of the following will be required:

- for younger tanks, a computerized inventory analysis requiring daily readings that are then sent to a lab to check for leaks;
- for older tanks, a tightness test at a cost to the course of about \$350;
- soil borings if there are any indications of a leak;
- a loss control program at all courses with USTs.

Naturally, if there is already a pollution

problem from a tank, coverage isn't available.

"If the building's already on fire, you don't buy insurance," quipped Shanks.

The deadline for meeting the EPA requirements is Oct. 26. But it can take from 90 to 120 days, with no complications, to comply with the EPA and insurance tests, except in the case of a newly installed tank.

"So you should start the process as soon as you get the packet," suggested Shanks.

One of Shanks' concerns is that some states have yet to begin certifying environmental contractors. Certified contractors are required to do much of the testing to meet the EPA and insurance requirements. Financial Guardian can supply a list of certified contractors.

"The success of this program is that we all ban together," concluded Shanks. "There are many companies that have refused to write golf course tank insurance all together."



Retired Air Force Col. James B. Irwin, the eighth man to walk on the moon, signs copies of his book after speaking at the annual Prayer Breakfast at the GCSAA's 61st annual International Golf Course Conference and Show. John Ebel of Barrington Hills (Ill.) Country Club, who has organized the breakfast for 11 years, asked for "a new young face" to volunteer to take his place.

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Norwood Hills' Null wins 2nd GCSAA title

After a first-round 77 on Orlando's Hunters Creek Golf Course, Roger Null came back with a 72 on The New Course at Grand Cypress to win the 1990 Golf Course Superintendents Association of America Golf Championship.

In winning his second title (he also won in 1983), the superintendent at Norwood Hills Country Club in St. Louis, Mo., took home the Bobby Jones Trophy and the United States Golf Association traveling trophy.

One stroke behind Null, with a gross score of 150, was Chuck Green, superintendent at Florence (S.C.) Country Club. Green's net score earned him the Championship Flight net division title.

The Carolinas GCSA #1 team of Green, Dave Powell, Gary Bennett and Dyrck Fanning won the Scottish Trophy for the gross division of the chapter team competition.

Ray Beaudry, Ted Maddocks, Mike Reeb and Mike Wallace of Connecticut GCSA #5 combined to take the Frank Lamphier Trophy awarded for the chapter team net division crown.

Conference Report

Builders: Many obstacles stand in way

(Don Rossi died March 11. See obituary on page 10 and comment on page 8.)

BY MARK LESLIE

Opponents of the golf industry will likely prevent construction of the facilities needed to meet demand in the decade ahead, according to those selected to lead the Golf Course Builders of America into the 1990s.

Don Rossi, who died March 11 after being promoted from executive director to executive vice president at the annual meeting, and Perry Dye, who was re-elected president, said in interviews that they



Don Rossi

expected several difficult challenges to hinder golf course growth in the years ahead.

Citing figures that show 190 courses were built in 1989 and one course a day is needed over the next 10 years to meet the growing demand of golfers, Dye, of Dye Designs International in Denver, Colo., said: "I've always focused on what we have produced. It becomes apparent that we could at least produce as much as we did last year, if not more. But we're having a harder time producing more because there is some resistance to capital; there is resistance via zoning; there is resistance through environmental



Perry Dye

issues. And other business factors — recessions or maybe natural resource shortages, like water — may cause resistance."

Considering those factors, Dye said, "It's really quite doubtful that we can build as many as we need."

Dye said the golf industry could make major progress by becoming "part of the cure."

"We become the environmental buffers. That means we get to work next to the environmental concerns — which are opportunities for us if we want to be part of the cure versus part of the problem," Dye said. "Golf has to position itself as part of the cure, and in order to do that, you have to figure out how to be part of the cure. I think turf should be a chemical sponge for toxics. It can be. But to be able to prove that in the face of the vast research that the other people have done, is tough."

He said that while university agronomists working on grants from golf industry groups have completed three- to five-year studies showing little or no ground water pollution from golf courses, those studies "don't cut the mustard."

"You're talking about 10-year and 20-year studies by the opposition. It's hard to say, 'We've got a three-year report.' In their realm of understanding chemicals, three years doesn't count. A lot of people spend three years figuring out what they're going to be doing for the next 30."

Organizations like the Audubon Society have spent considerable amounts to fund long-term studies, and "they have some pretty good ammunition, some very good consultants, and they believe in their cause to the point of doing everything they can to promote it," he said.

"That's why, I say, we have to position ourselves as part of the cure. And we'll spend money to figure out where we are part of the cure and prove it to other people. But in the meantime, in this decade, it's going to be hard to build 365 golf courses a year. If we become part of the cure, and were identified exactly as such, from the year 2000 — forever — we could be building golf courses at a high rate because we'd be identified as part of the cure."

The next decade, he said, will tell exactly where the golf industry's position is.

For his part, Rossi said government agencies must realize the importance of golf to the environment, the economy, and to the golfing public which has too few daily-fee golf courses.

The government has "got to help in evaluating the good a golf course does, the ecological benefits, the oxygen issue, the beautiful surroundings, and that they're an asset to a city," Rossi said. "Don't let anyone kid you. If someone is selecting a city for a conference, and it doesn't have golf courses around it, many times it is not selected for that reason..."

"Even in Las Vegas, with the lure of gambling, golf is an asset. Jim Colbert is doing an excellent job in the Vegas area building golf courses as an added attraction."

Continued on page 41

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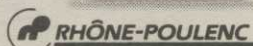
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Conference Report

Wadsworth, PGA Tour honored

BY MARK LESLIE

The PGA Tour and golf course builder Brent Wadsworth were honored at the annual banquet of the Golf Course Builders of America during the 61st International Golf Course Conference and Show in Orlando, Fla., Feb. 24.

The GCBA cited the PGA Tour's "contribution to the growth of the golf industry" through development of its Tournament Players Club courses around the country. Golf Course News presented Wadsworth, president of Wadsworth Construction Co. of Plainfield, Ill., its first annual Golf Course Builder of the Year award.

Bobby Weed, PGA Tour chief designer, accepted the GCBA award from GCBA President Perry Dye and on behalf of Commissioner Deane

Builders

Continued from page 40

Rossi said that in the 1960s the Farmers Home Administration was responsible for 250 to 300 golf courses being built in rural areas.

"Yes, if we're going to have any growth at all in public golf, the municipalities and county governments have to take a lead because land is so expensive," he said.

Builders Association

The Golf Course Builders Association will do everything within its power to improve the situation, from adding educational programs for builders to joining the industrywide Allied Association of Golf and the Task Force on Environmental Concerns, promised Rossi.

"We now have 21 people on our board of directors. All are leaders in the industry and are going to work hard to quadruple our membership in the next two years," Rossi said. "We hope to have over 200 members in two years — all builders, suppliers, associate members. The 58 members at the annual meeting were eager to contribute their time and money to make sure builders make our contribution to the game."

Dye said GCBA membership grew 26 percent last year and forecasted a bright future.

"It took a couple of years to convince the industry that there was a need. Take the total aggregate in dollars of the industry. Golf courses cost from \$2 million to \$5 million to build, times 150 to 200 per year, and it's a billion-dollar industry. And there aren't many billion-dollar industries that don't have some sort of policing group."

He said that previously there was "no need for a policing group because, frankly, it wasn't that bad."

But times, and competency, have changed, he said, and the GCBA's role should be to certify and educate builders. Opponents of golf courses are "entrenched," Dye said.

"They have some reasons that they're there and one of them is abuses by some of the industries. It's our job to position ourselves so that



Builder of the Year Brent Wadsworth, center, with Golf Course News Publisher Charles E. von Brecht, left, and Golf Course Builders of America President Perry Dye.

R. Beman, and expressed optimism for the future of golf.

"Everyone here's got to be just beaming ... with optimism about the next decade," Weed said. "Since Deane became commissioner in 1974 he has added to (golf's) exposure with the regular PGA Tour in the '70s, the Senior Tour in the '80s,

the upcoming Hogan Tour in the '90s, the Tournament Players Clubs, and we're now getting into some public golf."

Weed said: "There's a lot of room for growth... We're all looking forward to the '90s, and with everything we've got going on internationally — in Europe, in Japan, the Far East —

Global spearhead

The Golf Course Builders of America will make international inroads this year. The European market is opening up, President Perry Dye said, and GCBA expects to send a representative to Europe as it strives for recognition as "the international spearhead" for builders.

"Golf is an international, exportable quantity for us. We have a great amount of American product whether it be technology as simple as irrigation or drainage ... because we in the United States are the industry leader," Dye said.

"With (the association's executive director) working a little in Europe and me spending a lot of my time in the Pacific Rim, I'd like to try to bring as many international people here as possible.

"I think you'll see Americans going overseas in consulting roles — whether it be architects, irrigation experts, builders, agronomists — everybody in our industry. The question becomes: How do you make that happen? One thing you have to do is bring those people over here to show them that our product is superior and to help develop the European taste and the Oriental taste to our style of management in golf operations."

we're not abusive. That's where the education and certification comes into play," he added.

"I think with our new board of directors and new subcommittees, that will be the first thing they'll try to establish. You have to set up certain requirements and you become judgmental about people in the industry. But I think it's time to become judgmental about one another," Dye said.

Dye said the organization will now meet twice a year and have regionalized meetings to improve communication.

"That's the key," he said. "The United States is so big and most of

the people in the construction business are regional because of equipment-moving costs. To try to tie east to west and north to south is quite difficult because ... the rules are very different in each region and the costs are very different in each region."

He said the GCBA can "pull some standardizations together, but they will be very regional in nature. They have to be because it's much different building a golf course in Florida than it is in Arizona..."

The Alliance

Dye believes the \$4-billion-a-year golf industry should have a lobbyist in Washington, D.C. That could be the next step for the Allied Association of Golf.

Rossi said the new group will be "tremendously important" to all segments of the industry as they strive "to enhance the processes to get through all the restrictions.

"We all want the same thing: build more golf courses for more people."

"The American Society of Golf Course Architects and the National Club Association have taken the lead in this effort and should be complimented for their efforts," Rossi said.

He pointed toward another important upcoming event, Golf Summit '90, a planning session in November for the industry to devise a plan to achieve goals set for golf.

Rossi also called for the 8 percent of the public who are avid golfers to "make themselves known."

"They need to speak out that golf is the one sport you can play longer than others, like tennis. It's a family game, a game that you can play from 8 to 80 and enjoy it," Rossi said. "It's been said that if the good Lord developed a better game than golf, He kept it for Himself."

"There's no doubt in my mind that golf is going through its biggest boom, but it needs all the help it can get from the media... from governmental agencies, from financial institutions, from people outside the industry who want the game to grow because it is a wholesome recreational activity."

there is a lot of opportunity out there."

Saying that the various segments of the industry are all allies, he added, "There are all the problems upcoming in the '90s, but I'm sure, as long as we stick together, we can overcome any obstacle."

Since the first TPC course — at Sawgrass, Fla. — opened 10 years ago, 13 others have opened in the United States. Another six are in various stages of planning and construction in this country, and another is planned in Bato, Japan.

Charles von Brecht, publisher of Golf Course News, presented the cherry wood clock plaque to Wadsworth, whose company was the overwhelming choice as the best builder of 1989 in a national survey of architects.

Wadsworth thanked his employees around the country "whose efforts allowed us to attain this award" and the architects.

He praised the work of the Golf Course Builders of America and added that his own firm had recently joined.

Also at the dinner, American Society of Golf Course Architects outgoing president, Robert Trent Jones Jr., told the builders: "We admire you. We just design the courses. You're out there and have to live with these (regulatory) conditions. We often admire you for your helpful and responsible work and we look forward to working with you in the future, helping our country to be green and our sport, a grand and glorious game, to continue to grow."

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Conference Report

Jones: Industry must fight misconceptions

BY MARK LESLIE

A preacher preaching the gospel of golf.

That's Robert Trent Jones Jr.'s view of himself at the end of his one-year term as president of the American Society of Golf Course Architects.

Jones, who at the end of March turned over the ASGCA gavel to Dan Maples, heightened the environmental issue in golf to the political level.

The 50-year-old, globe-trotting architect believes the groundwork has been laid for the various groups in the golf industry to successfully keep golf course construction alive.

He spearheaded the move to organize the Allied Association of Golf, pulling together in one effort the ASGCA, National Club Association, PGA of America, PGA Tour, Golf Course Superintendents Association of America, National Golf Foundation, Golf Course Builders of America and Club Managers Association of America.

"There's enough going on in the golf world for us all to succeed, so let's not fail by bickering over small points," he said in an interview.

He said golf organizations should muster their strength and fight the misconception that golf courses harm the environment.

"Because people misuse and abuse chemicals on their own lawns, they think we do the same. But it is absolutely the opposite. Any park is very concerned about the costs and maintenance of the environment, and a golf course is one of many parks where people are more concerned," he said.

Jones devoted his tenure as president to:

- Making government agencies aware of the industry's willingness to cooperate and its interest in preserving the environment.
- Urging golfers to support golf proposals in their hometowns.
- Asking ASGCA members to attend each others' hearings and support them.

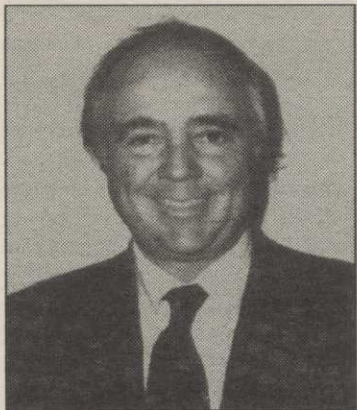
After all, he said: "We're not in competition for jobs any more... It's a little like Patrick Henry said: 'We're either going to hang together or we're going to hang separately, so let's hang together.'"

Jones said it is crucial to prove to the Environmental Protection Agency, the Army Corps of Engineers, and state and local agencies that golf course architects are devising innovative ways to preserve flora, fauna, wetlands and animals.

He said his Spanish Bay Golf Course in Pebble Beach, Calif., is an example of a highly sophisticated and advanced environmental solution to restore desecrated dunes.

Pete Dye's Old Marsh Country Club in Palm Beach Gardens, Fla., is an advanced technical solution to marsh grasses, while Ed Seay's Orchid Island course in Vero Beach, Fla., uses marsh grasses as a filtration system on the edge of lakes, he said.

"We're telling the EPA, 'Show us what you want and we'll do it,'"



Robert Trent Jones Jr.
Jones said.

"After all, architects are each of

us environmentalists. We all want the same general things that anyone is concerned about: clean air to breathe and fresh water to drink. But in addition to that, golf courses provide animal habitats, albeit different from what the land currently bears. They provide bird sanctuaries. And in certain sections of the country they provide filtration systems for wetlands. In fact, we increase wetlands most of the time by building ponds. And in the western part of the country, where fire is a big problem, we provide fire breaks in suburbs...

"In the old word 'conservation'

sense, we conserve land. Pebble Beach would be a subdivision now if it had not been built as a golf course. Courses conserve the natural resource by being useable land, and golf is a sport that provides healthy exercise..."

"So why do those very well-meaning, perhaps, and sometimes not-so-well-meaning people, accuse us of being a toxic waste dump when there really is no evidence to that effect?" he asked.

Saying the golf industry is more concerned than most people about the environment, Jones added, "For example, farmers in their row-

crop farming put in 10 times more fertilizer per acre than a golf course would, and it does go into the water supply. Golf courses show no phosphorus in ground water pollution."

Jones charged people "masquerading as environmentalists" with being a major problem. "They are really no-growth people... who attack the course on environmental grounds because people who are not knowledgeable in that area respond to those kinds of fears," he said.

"They set up a specter that is
Continued on page 43

Chalk up two more All-Americans for Ohio State

Golf traditions run deep at The Ohio State University. Its two 18-hole courses were designed by famous golf course architect Alister MacKenzie in the 1920s. Since then, they've challenged All-Americans like Jack Nicklaus and Tom Weiskopf, and today are recognized as two of the premier collegiate tracts in the country.

Gary Rasor is responsible for maintaining these courses. A job he's done with pride since graduating from Ohio State over 20 years ago. Last year, Rasor's equipment line got a big boost with the addition of another American standout—a John Deere 3325 Professional Turf Mower.

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Conference Report

International conferences scheduled

With the global explosion in golf has come plans for the second new international golf show in a year.

Golf Asia '91 is scheduled for next April 11-14 in Singapore, organized by Connex Private Ltd. Last November the first Golf Course Europe was held in Wiesbaden, West Germany, by convention company Expoconsult of Holland.

Zainal Abidin Shah, Connex exhibition manager, said his firm is inviting potential golf course owners, resort developers, architects and others in the industry to the show at World Trade Centre in Singapore.

The main purpose of the event is "to provide exhibitors and visitors with venues of displaying and observing the most up-to-date equipment and most effective techniques for making golf a better game."

American architect Ronald Fream, who alone is designing four courses in Asia, said there are 38 percent more new golfers every year in Asia, which translates to a demand for more suppliers, driving ranges and courses.

Shah said Thailand and Malaysia are indicative of the growth in the region. Thailand, he said, has 40-odd courses today and another

200 may be completed by 1995. Malaysia, which has 14 courses, has 50 more on the drawing boards.

The Golf Asia '91 organizers are calling it a "golden opportunity" for companies to expose their products and service to "this huge and vibrant golf industry in Asia-Pacific."

Meanwhile, Golf Course Europe, which was visited by people from 23 countries last fall, will be expanded to include more information for groundskeepers its second time around.

Expoconsult's Ellen MacGillavry said that move is in response to complaints that last year's show

was too much geared toward golf course design.

She said more than 1,000 golf courses are being planned in Europe, and the people developing those projects have an "enormous" need for information.

This year's conference and show will be held Nov. 28-30 in Paris.

Shah and MacGillavry are both expecting large turnouts from foreigners at their shows.

People may contact MacGillavry at Expoconsult, Industrieweg 54, P.O. Box 200, 3600 AE Maarssen, Holland (tele-

phone 03465-73777); and Shah at Connex Private Ltd., 3015A Ubi Road 1 #05-11/12, Kampong Ubi Industrial Estate, Singapore 1440 (telephone 7489696).

Jones

Continued from page 42

scientifically not based on fact. But when you've got a cause, fact usually comes in second."

Jones said he has met with congressmen and agencies to make them "aware of our cooperation and interest; to let them know we're different from the farmers, and we are maybe five times the number of farmers. Therefore, while they're super-concerned not to injure farmers' livelihood, they should recognize that golf, too, provides a livelihood for those people who take care of it.

"It's also tourism, and tourism is one of the best dollars you can have because it's a non-cost dollar; it's clean and you don't have to build any social services, schools, hospitals to support it."

He said that for all those reasons, golf courses are economically as important, or more important, than another agricultural crop — "and grass is a crop."

"These are the kinds of interpretive programs I've tried to help people in authority see: that we are the good guys and are with them; and if they explain the rules, we will work with them," he said.

Jones said golfers should attend public hearings to support golf course projects in their communities, regardless of whether they will play there, "because if they don't, and the people who consider them a toxic waste dump have their way, they may pass regulations which will mean their golf courses will be affected."

He said this scenario has been played out in Arizona and California in periods of drought "when they've restrained the amount of water to such an extent that you can't grow grass. It's an easy political thing to do when there is a climatic strain on any system, whether it be sewage or a reservoir."

He said, "If you're a golfer you should take an interest, just as you would about schools..."

His message is getting out and many are interested, because they recognize that there is not enough golf, he said. If there is not enough public golf, private courses might face legislation, he added.

He said he has asked congressmen "to watch bills that might affect us, so they wouldn't throw out the baby with the bath water. If they're going to regulate the farmers and Chemlawn, then they should do it in such a way that those who oppose us for growth reasons, would not have a new arrow in their quiver that was ill intended to be used for the golf world."

At the ASGCA's structural level, Jones said he was recommending two-year terms for officers; and greater clarity regarding membership qualifications.



Conference Report

Builder, blender urge: Do job right or pay more second time

BY MARK LESLIE

Spend a little money to do the job right, or the work will have to be redone later at greater expense, drainage and soil-blending experts explained at the annual Golf Course Builders of America conference.

Troy McNeill, president of Transamerican Soil Blenders of Lubbock, Texas, and Joe Warrenfells, regional engineer for Advanced Drainage Systems, Inc. of Charlotte, N.C., both said they have faced rebuilding greens or re-installing drainage systems that would have been unnecessary if the job had been done right in the first place.

"Cheaply built greens are the most expensive thing you can build," McNeill said. "Why stress quality control? Build them right the first time or we'll be back in 10 years to do them

again."

Greens are "the heartbeat of the course," McNeill said. "Our feeling is, you're spending \$2 million, \$10 million, \$100 million ... on the golf course, and they argue about ... the \$10,000 to \$15,000 it costs to do the blending. Do it right the first time so that you don't have to come back in and do it again."

Warrenfells echoed that sentiment. "Whether you're building or rebuilding, you have to put in proper drainage or you're going to have to do it again," he said.

Warrenfells cited water-collection technology that, if installed correctly, can keep a golf course dry for its lifetime.

Polyethylene pipes — durable, pH-resistant, easy-to-handle, lightweight, flexible, easily cut and customized — lead the list. He also

discussed geocomposite fill drains, geotextiles, surface and subsurface collection systems, and AdvanEDGE — a thin, elongated pipe that is perforated on both sides and can be installed behind a trencher.

"To build a golf course you need land, common sense and drainage. If you lack common sense, put in more drainage," he quipped.

McNeill listed three practices that cause major problems in greens construction:

- Placing sod grown on a silt and clay material on top of a USGA-specification mixture. The USGA-built subsurface may be done correctly, but by putting the sod grown on that material the builder has created a barrier between sod and sand.

• Using a rototiller to mix the materials. By rototilling "you've got your anaerobic material and black layer already formed," he said. "It's a very cheap way to mix it. But one of the most expensive things you can do in the construction of a golf course is to rototill it in. If a guy can't afford to do this, he probably shouldn't be building a golf course in the first place."

• Installing pure sand greens. "It's not fair to the superintendent. He's got enough problems out there without worrying about something that has no water-holding capacity or nutrient capacity," he said.

"Please, Mr. architect," McNeill pleaded, "specify a quality-controlled (soil) blender for USGA greens specs."

McNeill suggests fertilizing blend

Golf course builders should take USGA specifications for greens construction one step further and add fertilizers to the blended soil, according to Troy McNeill, president of Transamerican Soil Blenders in Lubbock, Texas.

Saying that his firm totally endorses USGA Green Section specs, McNeill said: "Let's not only look at the physical characteristics (of a green). Let's look at the chemical characteristics as well."

McNeill said: "The ideal time to put in a starter fertilizer is at the state of mixing, when we can mix it in at an accuracy of .5 percent. You can't walk on the surface and put it out that accurately."

At the GCSAA conference he said nitrogen and other elements that leach out more quickly should not be mixed this way. But USGA Green Section then-National Director Bill Bengeyfield conferred with McNeill later and both supported mixing in the entire fertilizer mix so long as the blend is not stockpiled for several months. (If that were done, the nitrogen would activate organic breakdown.)

Dr. Tom Samples from Tennessee and Dick Psolla of Brookside Laboratories in Huntsville, Ohio, have encouraged this procedure, predicting 30 percent quicker establishment and maturity of the greens, according to McNeill.

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Conference Report

Superintendents asked for 'grow-in' information

BY MARK LESLIE

The president of a major golf course construction company called on the superintendents to help builders determine the cost of "grow-in" for a new course.

Jerry Pierman, president of International Golf Group, asked "the fellows who know" to itemize the costs of repairing minor areas after the contractor has left.

"You need to give us some specifics so we can help you receive a more realistic first-, second- and third-year grow-in budget," he said.

To date, no one has accurate figures, said Pierman. Occasionally no costs for grow-in are included in a project budget. At the same time, developers often have funded no money for grow-in expenses.

Averages, numbers, costs, studies reflecting demand for play, labor costs, golf course costs, equipment costs, design costs — all these figures are at the disposal of developers, Pierman said. But when the course is built, a surprise awaits many of them when "all of a sudden the grow-in budget pops up. Their reaction is, 'I thought that was part of the maintenance budget,' or 'I thought this was covered by the construction figures.'"

Providing these figures would be a good way to improve the relationship between superintendents, builders and developers, he said, since the underlying reason for tension between the three groups is that "the line of responsibility has not been drawn. There must be a start and a stop in each area of responsibility for each individual."

"Let's see some good figures from the fellows who know, yourselves. With your national organization (Golf Course Superintendents Association of America) as strong as it is, you have the ability to show and explain these extraordinary and one-time expenditures. You and your organization can publish them and explain why they are what they are."

"Don't leave it to the designer to plug in a figure," he said. "And, for goodness sakes, don't leave it up to the contractor to try to explain something that, many times, is con-

'You need to give us some specifics so we can help you receive a more realistic first-, second- and third-year grow-in budget.'

— Jerry Pierman

sidered to be part of his construction costs."

Pierman said that just by their conversations with one another and developers, superintendents can accomplish a lot by making the term "grow-in budget" become as much a part of the developer's vocabulary as "golf course costs," "clubhouse costs," "maintenance costs" and "design fees."

"Who will benefit from this?" he asked. "You will. What's also important is that the contractor will, because he will know that there are going to have to be such things as extra fertilizers after the golf course contractor has left, that there is going to have to be some money to clean up those areas outside the rough areas that the golfers see from the course. He's got to understand that minor washout areas are going to occur after heavy rain. Once the contractor is gone, who cleans that up? Who fixes that?"

"I'm talking about minor areas, but somebody has to take care of them. Large areas, the contractor repairs, but minor areas are very important."

"What I'm asking you to do is to let us know, in an itemized way, so that we can help you."

Pierman said educating the industry and developers about grow-in costs is becoming even more important as municipalities get into golf course development and ownership. He said officials need to show voters these figures to satisfy their need to know all the costs and to establish credibility.

"Blow your own horn, and by doing so you would help the golf course developers and builders," Pierman said. "Work with the architects society and the Golf Course Builders of America. We will also explain the term 'grow-in costs' and what it means."



George E. Renault III sits atop a Fairway 5000 at Orlando show.

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George E. Renault III, superintendent at Chevy Chase Club in Chevy Chase, Md., will be enjoying the free use of a Ransomes Fairway 5000 this season, thanks to some good luck and Ransomes, Inc.

Renault's name was randomly selected in a drawing sponsored by Ransomes on Feb. 25 at the International Golf Course Conference and Show in Orlando.

"It feels great to be the winner," said Renault, "and I'm really looking forward to using the Fairway 5000 this season. It will be the first time we've used Ransomes' equipment, so we're anxious to put it to the test."

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Conference Report

International supers

Continued from page 1

representatives appealed to U.S. organizations, like the GCSAA, for guidance.

"Our association is trying to make better superintendents. With your help we should flourish in leaps and bounds," said Doug Robinson of the Australian Golf Course Superintendents Association.

Lyon emphasized the need for international cooperation and offered the GCSAA's help on a worldwide basis.

"We need to work together in promoting our associations and increasing the quality of golf courses throughout the world," said the di-

rector of golf for the city of Aurora, Colo. "We can accomplish more together and I think it's appropriate we (GCSAA) take the lead in this area.

"My eyes were opened when I went to Japan in November. There is a real desire for more knowledge there. Most countries are smaller (than the United States) and they need more opportunities to learn about turf."

Following are the national superintendents organizations that participated in the roundtable and a brief summary of their reports.

• **GCSAA.** The largest superintendents organization in the world has grown to 9,400 members, with

more than 1,100 having passed the certification program, including recent certification candidates in South Africa and France.

• **International Greenkeepers Association.** The German association is 20 years old and two years ago began funding a training program consisting of three, three-week training sessions and an exam. The first German greenkeepers are expected to complete the program in 1991, according to President Claus Detlef Ratjen.

There are 290 courses in Germany and 550 members of the association. Both numbers are expected to increase 15 percent annually through

the 1990s.

• **Canadian Golf Superintendents Association.** Established in 1967, the CGSA has grown to more than 1,200 members. An accreditation program started in 1986 requires 100 points over five years to achieve a Grade A superintendents designation and 250 for a Masters title.

The annual conference Dec. 6-12 is expected to draw participants from throughout the country to the host city of Montreal. Educational seminars have proven very popular and "have been a great asset, especially in the more remote areas," said President Blake Palmer.

• **Australian Golf Course Su-**

perintendents Association. Many of the national association's 500 members also belong to one of the seven state associations. Many newcomers serve a four-year apprenticeship, then attend a three-year technical education program from which they emerge with a certificate in greenkeeping. The designation allows them to work at facilities for lawn ball, golf, tennis or cricket.

President Doug Robinson said the association has floundered without direction the past 25 years and suffered from membership apathy. He hopes young superintendents, many of whom are graduating from government-run programs, will help change that.

The association's biennial conference is scheduled for June in Sydney. It draws participants from Japan, Indonesia, Southeast Asia and the rest of the Pacific Basin, as well as Australia.

"It's meager by your standards. But it fits our needs," said Robinson.

• **Association Argentina de Golf.** Founded the same year as the GCSAA (1926), the Argentinian association represents the South American country's 150 golf courses and 35,000 golfers.

"We're a large country with all types of grasses," said Director of Canchas Richard De Udaeta. "Our problem is there are no turf education courses in our universities. We've been mainly a crop country, not a turf country. So the golf association has taken the lead in turf education. We've gotten much cooperation from the United States Golf Association and researchers at Texas A&M.

"Many of our superintendents are old (former) pros. So education is a must. We're very willing to learn."

• **Italian Golf Federation.** The Italian association was the youngest (3 years old) and smallest (representing 100 courses) at the roundtable.

There are no specific turfgrass programs within the Italian educational system. So the Italian Golf Federation began sponsoring a superintendents program three years ago with the help of Dr. James Beard of Texas A&M.

• **British and International Golf Greenkeepers Assn.** Tracing its roots back 80 years to the founding of the British Golf Greenkeepers Association, BIGGA simply plodded along for decades in search of professional recognition, according to Chairman Paddy McCarron.

That recognition finally started to come several years ago with the development of what McCarron called "the three pillars of strength" — a strong administration headed up by Executive Director Neil Thomas; an extensive educational component under Education Officer David Golding; and a well-written, association-sponsored magazine called "Greenkeeping Management."

BIGGA is now growing at the rate of eight new members a day, according to the magazine. A certification program is gaining popularity, a referral system has been started and a new headquarters opened.

• **Japan Superintendents As-**

Continued on page 47



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319-266-2638
FAX 319-266-9627

Conference Report

Toro

Continued from page 1

expected to have on both manufacturers and groundskeepers.

Mike Hoffman, director of commercial marketing, said: "We consider the HydroJect 3000 to be truly a breakthrough-type product in that it has the potential to cause a significant change in the way aeration practices are performed by superintendents today. And 'breakthrough,' used literally, in the way this product can penetrate through the turf, and any hardpan area that has developed. The Hydroject 3000 is a tool designed to take the stress not only out of the turf but out of the superintendent."

The normal greens aeration cycle involves coring, cleanup and, in some cases, verticutting and top-dressing. Greens can take seven to 10 days to heal from this process.

"That's not something the greens superintendent can do every month and keep his job," Hoffman said. "It's also not something the turf can take in the high-stress period of the dog days of summer."

"In addition, shutting down the golf course can cost from \$2,000 to \$25,000 per day depending on what course it is."

"The most important feature is that the turf can be treated without disturbing the surface," he said. "In the past, aeration was generally known as just a spring and fall application. This is when the roots are developing faster and can recuperate from the stress associated with mechanical aeration. This timing also coincides with reduced golf course play, especially in the cool-season market."

"Aeration and golfers don't mix. Golfers want lush, healthy, smooth putting surfaces. They are not willing to put up with the surface that conventional aeration and top-dressing causes."

"Now there is an answer. A superintendent can treat greens when necessary without con-



Toro's HydroJect 3000

cerns of this conflict. Now aerations and heavy play can both occur on the same day."

Citing a trend toward more frequent aerification, Hoffman said the HydroJect 3000 can be used more often "to keep the soil loose and productive for healthy new soil throughout the growing season and during high-stress periods."

"Turf can be treated when necessary and not just when golfers and timing permit."

Most conventional solid and hollow tine core aerators penetrate no more than three or four inches. The HydroJect 3000 reaches depths of four to eight inches with a single shot of water. To reach greater depths, the operator can either install larger nozzles, or stop the machine in one spot and let several spurts penetrate.

Depths of 30 inches have been reached, Lann said. "It will make a hole in asphalt," he added, answering any question that high-velocity water might have problems penetrating heavy thatch.

Michigan State's Rieke said the more the machine is used, the deeper the holes in the greens will get.

After the jets of water aerate the turf, rollers uniformly smooth out the green. The machine has a quick coupler to the course's water supply and uses four gallons per minute across the typical green.

List price of the HydroJect 3000 is \$18,000 to \$20,000. Its hydrostatic drive means no gears to shift, and it has very few parts to replace. Powered by a 24 HP Onon engine, it travels at 4mph.

Toro Commercial Division General Manager John Szafranski said the company spent several million dollars to design and engineer

the technology into a practical working machine.

Confronted with the initial challenge of finding a better way to pick up the cores, Lann said the Toro research team presented this answer: "The easiest way to pick up the cores is to eliminate them."

Lann and a crew of 10 people worked full-time on the project since 1985. "The technology is simple but the engineering isn't simple," he explained. "Now we have the technical things done and it's just the matter of getting everything into production."

A major problem, he said, was dealing with water. "It's a universal solvent, so it's hard to keep lubrication. And it's corrosive. We solved that by using corrosion-resistant materials used in other industries, but not the turf industry."

Rieke put off a question about the possibility of using the HydroJect 3000 to inject chemicals into the turf, saying he has "concerns" about using chemicals in the machine.

Using a three- by three-inch pattern, the HydroJect 3000 will aerate 13,200 square feet per hour — a somewhat higher productivity rate than Toro's other models.

Changing travel speed alters the amount of aeration. "You can go anywhere from zero to six-inch spacing," Lann said. "There is a nozzle every three inches. But you can plug nozzles if you want."

Toro President and Chief Operating Officer David Morris said the company has formed a business entity called Toro Ventures to focus initially on water aeration, lawn and turf equipment and utility vehicles.

Int'l supers

Continued from page 46

sociation. JSA's membership has increased eight-fold to 800 from its original 100 of 30 years ago, explained Vice Chairman Katsuhiro Owada. Most hail from eastern Japan.

There is no licensing or certification program, although one is in the works. The group meets six times a year and some educational opportunity is available.

Golf is very popular in Japan where 60 courses are being built annually in a nation smaller than the state of California. Superintendents are in short supply, said Owada.

• **Swedish Greenkeepers Association.** The Swedish association's membership has grown to 550 superintendents and course workers since its inception in 1978. Included are 75 trade members (corporations).

There are 220 courses in the Scandinavian country with another 50 under construction. There are 50,000 golfers, a number that has increased significantly in the past 10 years, according to President Stig Persson.

The superintendents association is closely affiliated with the Swedish Golf Association. Together they sponsor a yearly trade show; educational seminars; college programs that allow students to specialize in golf courses their second and third year and will produce their first graduates in 1991; foreign speakers; and a 2,500-circulation magazine.

• **South Africa Golf Course Superintendents Association.** Founded in the 1950s primarily for Johannesburg-area superintendents, the association has expanded into a truly national organization.

Superintendents have traditionally been retired tradesmen from the mining companies that frequently own the country's golf courses. So education, or the lack of it, has been very important.

The South Africans have leaned heavily for their expertise on visits by Americans professors who have conducted South Africa Golf Association-sponsored seminars. The GCSAA recently certified the first South African superintendent.

College programs are geared to agriculture, Continued on page 49

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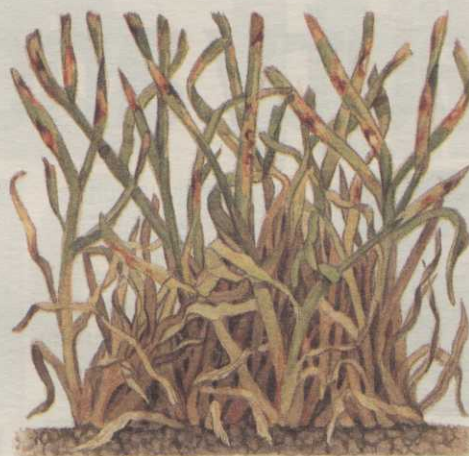
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EQUIPMENT NEWS

DowElanco increases research

Research and marketing programs have been established to help recently-formed DowElanco position itself in the specialty chemicals industry, according to William H. Culpepper, commercial director of DowElanco Specialty Products.

Culpepper discussed the status of the Dow and Elanco joint venture and the company's future in the \$190 million golf and turf and ornamental markets during February's 61st International Golf

Course Conference and Show in Orlando, Fla.

"To be successful in this business, we realize we must be a truly customer-focused organization said Culpepper.

"And to do that, we've created sales, marketing and research groups that specifically address the turf and ornamental business" he added.

The company plans to focus on improvements in fungicides, insecticides and biologicals.



Shuttlecraft's new management team, from left, President and CEO Allen Witters, Vice President of Sales and Marketing Gary Mertz and Vice President of Manufacturing Mike Sjoblom.

Shuttlecraft reorganizing

Allen Witters, who last fall obtained a majority interest in Shuttlecraft, has drafted an aggressive plan for financing and management reorganization of the golf car and utility vehicle manufacturer.

Witters, president and CEO of the Estherville, Iowa, firm, is seeking funds from private investors, local and government funding, and backing from a joint venture relationship with Engineering Products Co., Inc. of Milwaukee, Wis.

Witters has added staff and hired outside consultants for marketing, financial management and production.

"We've been working feverishly to redesign our corporate identity and improving the design of our product," he said. "We'll be into ... full production by the end of the first quarter."

Shuttlecraft's principal product is what it calls a "premium" personal golf car with unique four-wheel independent suspension, channel steel frame and space-age fiber glass body styling. Other products include utility vehicles for golf course and other grounds maintenance.

Witters designed the company's first prototype, developed in 1986. In addition to his involvement with Shuttlecraft, Witters is chief executive officer of DATAMAP of Minneapolis, Minn.

Shindaiwa names panel

Shindaiwa Inc. of Tualatin, Ore., has announced the roster of its newest Distributor Advisory Panel.

Members include Chet Pinto of Tru-Cut, Inc. in Los Angeles, Calif.; Chris Saxton of Plymouth Air Cooled Equipment in Plymouth, Mich.; Tom Petherick of Adirondack East Corp. in Saratoga Springs, N.Y.; Charles Winstead of Tidewater Power Equipment Co. in Virginia Beach, Va.; and Jack Hurst of Dyan-Power Products in Bolton, Ontario.

This group represents all Shindaiwa distributors and makes recommendations on various marketing and general business matters. Shindaiwa officials say past panels have contributed several excellent recommendations and ideas, and they "expect the same to be true of the 1990s panel."

For 37 years Shin-Daiwa Kogyo Co., Ltd. has manufactured power equipment.

Kubota finance rates change

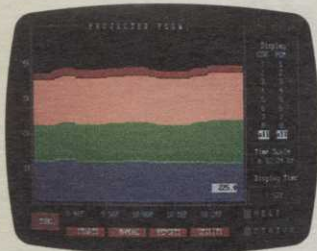
Kubota Tractor Corp. of Los Angeles has announced new financing rates beginning at 2.5 percent A.P.R. through Kubota Credit Corp.

Financing is available to customers buying new tractors and implements. The rates, in effect through June 30, range from a two-year contract at 2.5 percent, three-year contract at 5.5 percent, four-year contract at 7.5 percent, or five-year contract at 8.5 percent.



Palmetto Dunes CC, Hilton Head, SC

Beauty and the Best.



If you want your golf course to sparkle with the beauty and playability golfers expect, then you need the best irrigation system you can find: TORO. Palmetto Dunes chose Toro.

Toro control systems help you develop superior turfgrass and save money at the same time. Toro sprinkler heads, with low precipitation rates, apply water more effectively and more efficiently, taking you another step toward better turfgrass, while saving you water, energy and money.

When Toro created the first fully automatic, ET-driven, computerized control system (Network 8000), it took irrigation control a giant stride forward.

Now, with perfection of the new "4.0" software package, Toro has taken another step ahead of the rest, and you enjoy these four important extra advantages:

1. Flow Control—The central controller schedules all irrigation in user-specified sequence while maintaining sprinkler flow demand within maximum efficiency ranges of the pump station. Result: lowest cost-per-gallon.

For free information circle #140

2. Concatenation—Quite simply, this means your satellite programs are run in the most efficient order. In other words, Toro delivers perfect linkage, again saving you money.

3. Sequential Multi-Manual—Toro also gives you the flexibility to program from the satellites for such vital functions as removing frost or cooling turf. In effect, it can lengthen your playing day.

4. Remote Activation of Central System through Satellites—Up to 15 functions stored in the central may be initiated for the whole system from any one satellite on your course.

When you combine the ultimate benefits of a Toro controller with the efficiency of Toro low-precipitation rotary sprinklers, you have today's most advanced and most cost-effective total irrigation system.

The Toro Company, Irrigation Division,
Dept. GCN-490, P.O. Box 489,
Riverside, CA 92502



Standard Golf catalog goes tee to green

Standard Golf Co. is celebrating 70 years of producing a complete line of golf course accessories with a new 40-page catalog.

Standard Golf's 1990 Catalog is a comprehensive resource of product information — from tee to green, clubhouse, practice range and maintenance shed. It includes a variety of new and improved products.

Among the new products featured are the precision-crafted Yankee line of rakes, squeegees and lutes. Standard Golf has been appointed the exclusive supplier of these tools to the U.S. golf course industry.

Also featured in the catalog are EZ-Reacher, an expanded and improved selection of practice green

Comprehensive turf-care guide prepared

Proven techniques and products for growing and maintaining healthier, more beautiful turf and ornamental plants are detailed in a new, full-color publication available free from Fermenta ASC Corp., the maker of Daconil 2787 fungicide and other turf-care products.

Each of the first three sections in the 32-page Weed and Disease Control Guide for Turf and Ornamentals provides a chart of strategies for preventing or controlling the principal diseases of turf, ornamental plants and conifers in regions across the United States.

The fourth section describes the use of pre-emergence and post-emergence herbicides to control weeds in newly seeded or established turf areas.

For more information contact Fermenta ASC Corp., 5966 Heisley Road, P.O. Box 8000, Mentor, Ohio 44061-8000. **Circle No 251**

1990 Masters Journal ready

The 1990 Masters Journal, a commemorative magazine to be sold at the Masters Tournament in April, will be produced by Golf Digest.

Cadillac Motor Division, The Travelers Companies and IBM are sponsoring the annual magazine and will distribute it privately as well as in national newsstand distribution.

The magazine will serve as an in-depth guide for spectators and viewers of the April 5-8 telecasts.

Int'l supers

Continued from page 47
although a three-week crash course in turf management is available through a technical school.

The organization's president resigned just before the Orlando conference, so the association's future is somewhat in limbo.

• **France.** The concept of a super-intendent is relatively new in France, where the job has traditionally been shared by a greenkeeper and course director.

But golf in France, as everywhere, is growing.

The country recently saw GCSAA certification bestowed upon one of its few titled superintendents.



flags and markers, and hassle-free PVC hazard markers.

For more information and the names of nearby authorized distributors, write Standard Golf Co., P.O. Box 68, Cedar Falls, Iowa 50613; 319-266-2638. **Circle No 252**

Spoon-feeding explained

Effectively "spoon-feeding" high-traffic or problem areas on golf courses is the subject of a new, four-color brochure from Plant Marvel Laboratories, Inc.

The term "spoon-feeding" refers to the concept of applying small amounts of water-soluble fertilizer to selected areas to help turf achieve total nutrient use with even, predictable growth.

A graph shows how better levels of nutritional control are achieved with spoon-feeding.

For a free copy, write to Plant Marvel Laboratories, Inc., 371 E. 16th St., Chicago Heights, Ill. 60411 or call 312-757-7500. **Circle No 257**

NEW LITERATURE

Official Tour guides available

The 1990 PGA Tour and Senior PGA Tour Official Media Guides are now available to the public.

The books contain answers about such professionals as Arnold Palmer, Jack Nicklaus, Greg Norman, Curtis Strange and Chi Chi Rodriguez.

Guides can be obtained for the Regular and Senior PGA Tour for a combined price of \$16.70 (shipping and handling included, Florida residents need to add 6 percent sales tax). Guides for either the

Senior or Regular Tour can be bought separately for \$9.45 each (shipping and handling included, Florida residents add 6 percent sales tax). All overseas orders should add \$9.70 to each book for postage and handling (Canadian orders add \$3.50). Since supplies are limited, the offer expires Sept. 30.

Checks or money orders should be sent to PGA Tour Marketing Dept., 112 TPC Boulevard, Ponte Vedra, Fla. 32082. **Circle No. 253**



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The 18 hp Sovereign OHV engine. New from Wisconsin Robin.

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For free information circle #141

Promark chippers now available

The recently introduced Promark Models 110 and 395 chippers are ideal for landscapers and golf course personnel.

The 110 is designed to chip into a truck, dumpster or garbage can

and provides ideal mulch for landscape applications.

The 395 features a chipping capacity up to 9-1/2 inches. At 175 FPM, it is the fastest disc design chipper in the industry. The 395

also features new safety and time-saving maintenance features. has and diesel engine options are available.

For more information call 818-961-9783. Circle No. 333

Two new products keep turf healthy

National Research & Chemical Co. has released two new products.

"Iron Breakthru" is a sulfuric acid-based product that alleviates the problem of salt and alkali build-up on putting greens, tee boxes and fairways.

It should be used at 16 ounces or

less per 1,000 square feet once every four to eight weeks and can be applied by conventional sprinklers, hand nozzles or injected into automated sprinkler systems.

"Liquid Humic Acid 6%" increases the nutrient holding capacity of sand-constructed greens but will not affect the positive char-

acteristics of good drainage and aeration.

It helps the nutrients resist the natural tendency to leach and helps reduce groundwater contamination.

For more information people may call 800-338-1760. Circle No. 337

NEW PRODUCTS

Star City's Sand Tote handles bulk materials

Star City Fabrication now offers a simplified way to handle bulk materials, such as sand and fertilizer, for filling sand traps and top-dressing fairways and greens.

Sand Tote is a portable hopper that can carry up to five tons of sand or fertilizer. It is used by golf courses to disperse sand evenly into sand traps or simply filling



Sand Tote

top-dressing machines, drastically reducing labor costs.

The placement of sand is controlled with a movable spout that is suspended over the sand trap. Only minor raking is required following the placement of new sand.

Sand is loaded into the Sand Tote hopper using a front-end loader or with another Star City Fabrication top-loading product called Sand Miser. This is a sand storage unit that stores sand neatly and simplifies loading procedures. Sand Miser is available in 30-ton or 60-ton capacities.

For more information write Doug Nelson at Star City Fabrication, 1101 Town Road, Montevideo, Minn. 56265 or call 612-269-5574. Circle No. 345

Renovation slicer/seeder said ideal for landscaping

Ransomes recently introduced a new Renovation Slicer/Seeder.

Its 25-inch turning radius, climbing ability (front-wheel drive and wide tires) and productivity (up to 18,000 square feet per hour) makes it ideal for landscapers.

Out front the machine has a 10 horsepower Briggs & Stratton engine and a slicer assembly designed to plant rows on two-inch centers.

In back is a 41-pound capacity seed hopper with sight glass for easy monitoring of seed level. Seed tubes precisely deliver seed to discs for planting.

A single-lever control handle raises and lowers cutters and engages the seeder. An adjustable-speed meter can be set to spread zero to six pounds per 1,000 square feet. Slicer depth is adjustable to a maximum of 2-1/2 inches.

For additional information contact Maria Large at (414) 699-2000. Circle No. 306

Correction

In March's "New Products" section, a headline reading "Normarc Seed develops new tall fescue" was inadvertently placed over a story about Seed Research of Oregon, Inc.

It was an editing error. We apologize for any confusion this may have caused.



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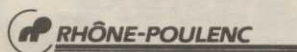
to fight off infection.

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Pythium on a wide variety of ornamental and landscape plantings. So it's easily the most versatile fungicide you can buy. This year, build your Pythium control program on the solid foundation of CHIPCO® ALIETTE® brand fungicide. The one to start with.



Chipco® Aliette®
Brand Fungicide



For free information circle #142

User-friendly trencher developed by Vermeer

A new, fully-hydrostatic walk-along trencher, designed with simple, easy-to-understand operator controls and built-in protection systems was recently introduced by Vermeer Manufacturing Co. of Pella, Iowa.

The Vermeer V-1550 comes with a solid-state ignition, heavy-duty solenoid starter, compact 35-1/2-inch wide frame design and 18 h.p. Kohler magnum engine. The heavy-duty rock and frost digging boom - with a large, seven-inch diameter end idler - can dig four to 10 inches wide down to 48 inches deep.

The 1,480-pound unit features infinitely variable fluid power to both drive and working attachments with a two-speed gear box that's completely enclosed and lubricated within a large 10-gallon capacity hydraulic oil reservoir. The two-speed gear box creates a low-speed range that ensures total operator control in creep. The larger fluid power capacity also delivers substantially more torque to an optional front-end boring attachment.

A mechanical, no-spin differential provides extra traction. In addition, an optional oil cooler is available for heavier, longer usage and hotter conditions.

The V-1550 is design-engineered for utilities and rental operations with user-friendly "operator presence" systems that provide operators with maximum speed control, plus excellent mobility and freedom around the machine.

For more information call Payce Reynolds at 515-628-8378. **Circle No. 342**

Hayes introduces heavy outdoor furnishings

The Hayes Company, Inc. of Wichita, Kan. recently introduced a new line of heavy exterior site furnishings.

The product line consists of park benches, waste receptacles and planters. The benches are fabricated in a variety of woods, supported by steel frames which are powder-coated with a baked resin finish.

The Designer line of benches can be customized with a stock symbol, such as golf clubs, or the buyer's logo can be incorporated into the frame.

For more information contact Joe Hayes at 316-838-8000. **Circle No. 347**

Irrrometer unveils moisture controller

Irrrometer Co. has introduced a new soil moisture control device for automatic landscape irrigation systems.

The Watermark Electronic Control Module (WEM) utilizes the company's non-maintenance Watermark soil moisture sensor to override and control individual valves in an irrigation system.

This module provides designers and users with precise control of water applied by individual valve areas, or zones, based on each valve having its own soil-moisture sensor. The WEM also permits the user to select or change the desired soil-moisture level.

Benefits include reduced water use, lower maintenance and energy-cost savings.

For more information contact Irrrometer Co. Inc., Dept. WEM, P.O. Box 2424, Riverside, Calif. 92516-2424 or call 714-689-1701. **Circle No. 307**

Golf Course Marketplace

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CALENDAR

April

16 — GCSAA seminar on Calculations and Practical Mathematics in Golf Course Management at Renton, Wash. *

18-19 — Crittenden Golf Real Estate Development Conference in Orlando, Fla. Contact Crittenden at P.O. Box 1150, Novato, Calif. 94948; 415-382-2486.

24-25 — Crittenden Golf Real Estate Development Conference in Washington, D.C. Contact Crittenden at P.O. Box 1150, Novato, Calif. 94948; 415-382-2486.

26-27 — Golf Course Development conference, conducted by the Institute for International Research, Inc.'s Real Estate Division, at Stouffers Esmeralda Resort in Indian Wells, Calif. Contact Conference Administrator, Institute for International Research, 437 Madison Ave., 23rd Floor, New York, N.Y. 10022-7001.

May

23 — Crittenden Golf Real Estate Development Conference in Chicago, Ill. Contact Crittenden at P.O. Box 1150, Novato, Calif. 94948; 415-382-2486.

June

11-13 — FIS Congress in Seville, Spain.
14-15 — ASSINSEL Congress in Seville, Spain.

July

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.

September

4-6 — 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.

30-Oct. 3 — Florida Turfgrass Association Annual Conference and Show at the Orange County Convention Center in Orlando. Call 407-898-6721 for more information.

October

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.

November

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.

13-15 — West Virginia Golf Course Superintendents' Association's first annual turf conference at Cedar Lakes Conference Center near

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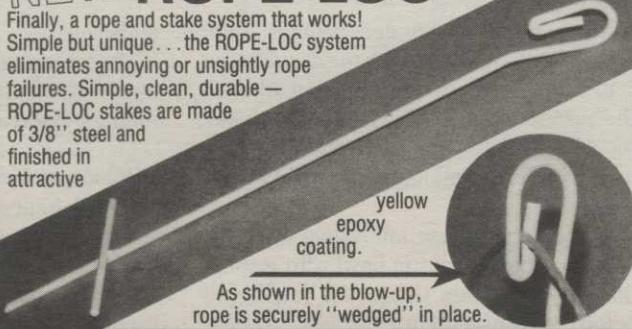
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Continued from page 52

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.

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

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. Contact Jones and Associates, Park Center, Suite 200, N. 908 Howard St., Spokane, Wash. 99201-2261; 509-327-5904.

January 1991

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.

22-23 — Fifth Annual Inland Northwest Turf and Landscape Conference and Trade Show at the Spokane-Sheraton and the Spokane (Wash.) Convention Center. The event is sponsored by Washington State University Cooperative Extension and the Inland Empire Golf Course Superintendents Association. Contact Jones and Associates, Park Center, Suite 200, N. 908 Howard St., Spokane, Wash. 99201-2261; 509-327-5904.

* — For more information or to register, call the Golf Course Superintendents Association of America at 800-472-7878 or 913-841-2240. The seminars are dependent upon the availability of the instructors, and are therefore subject to change.

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At Braelinn, traffic cops need not apply

BY RANDY WAYNE WILSON

Golf car traffic control is a major headache for many superintendents, particularly when their course has a tendency to stay wet long after the rain has stopped.

Traditional methods to steer cars away from easily damaged wet areas involve ropes and stakes. But ropes and stakes suffer at the hands of both maintenance crew and golfers.

The unfortunate rope stakes are often run over by players, blamed for bad shots, and left strewn across the fairway. Maintenance workers often remove stakes in order to mow or spray and, lacking a hammer, have difficulty reinserting them in the original position. As a result stakes are sometimes disfigured and left leaning at crazy angles.

In this era of heightened course grooming standards, an unsightly, bent, rusty, non-uniform rope stake does not reflect well on the superintendent.

Mike Wilson, superintendent at Braelinn Golf Club in Peachtree City, Ga., has implemented an inexpensive, attractive method to solve the rope stake dilemma. After observing drainage patterns and trouble areas, Wilson sunk PVC sleeves in the designated stake position.

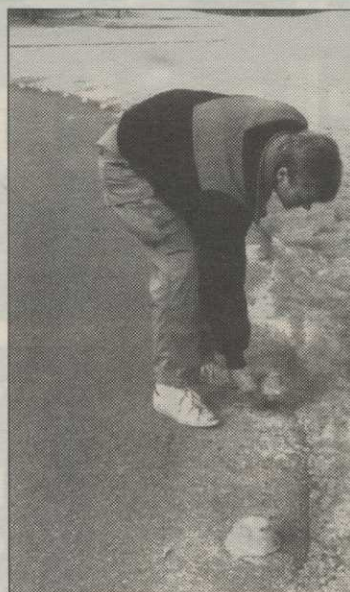
He did this by driving in a steel pipe and removing it, replacing it with a 1-1/4 inch schedule 40 PVC sleeve 10 inches long, to just below ground level. Next, a painted length of 1-inch diameter PVC pipe with a tee glued on top, is inserted into the sleeve.

The player or crew member can easily lower and replace the stake speedily. This method maintains a uniform, professional appearance and removes that "cluttered" look. Out-of-bounds and hazard markers can be installed in a similar way, allowing for cleaner mowing and trimming around lakes.

Entry-exit problem

Wilson uses a method designed to eliminate another car traffic-related problem.

Golf cars naturally seek the same entry and exit points to and from the fairway. To avoid massive kill in these "entry-exit" points,



Photos by Randy Wayne Wilson

At left, Mike Wilson aligns a removable rope stake at Braelinn Golf Club in Peachtree City, Ga. Above, he places a traffic bump on a golf car path to keep cars off the turf.

Wilson positions rounded cement traffic bumps in key places to vary the car patterns. The difference between these and others is the portability; like Wilson's rope stakes, the traffic bumps are removeable for trimming, traffic variation, or seasonal adjustment.

To construct these innovative little turf-savers, choose a plastic bowl with a shape that fits your design. Grease the bowl lightly before pouring cement.

Wilson recommends mixing a dye in the cement, rather than painting the surface. If the bump is chipped, it will still retain a uniform appearance.

Wilson prefers a dye offered by L.M. Schofield Co. called Chromix-Earth Red. The muted earth tones blend well with natural

landscape.

After greasing the bowl (for easy removal), pour in dyed cement. At approximately 15 minutes, insert a 6-inch spike roughly 1 to 1-1/2 inches into the mixture.

Wilson advises placing the spikes in salt water 24 hours beforehand, because the cement adheres more readily to a rusty surface than a clean one.

At this point, select the area you need to discourage cars from entering or exiting the fairway and drill a hole in the cart path to a 4-inch depth.

Wilson reports excellent results with a portable drill outfitted with a 5/16-inch masonry bit.

Traffic bump spacing can be left to your individual preference. It normally only re-

ON THE GREEN

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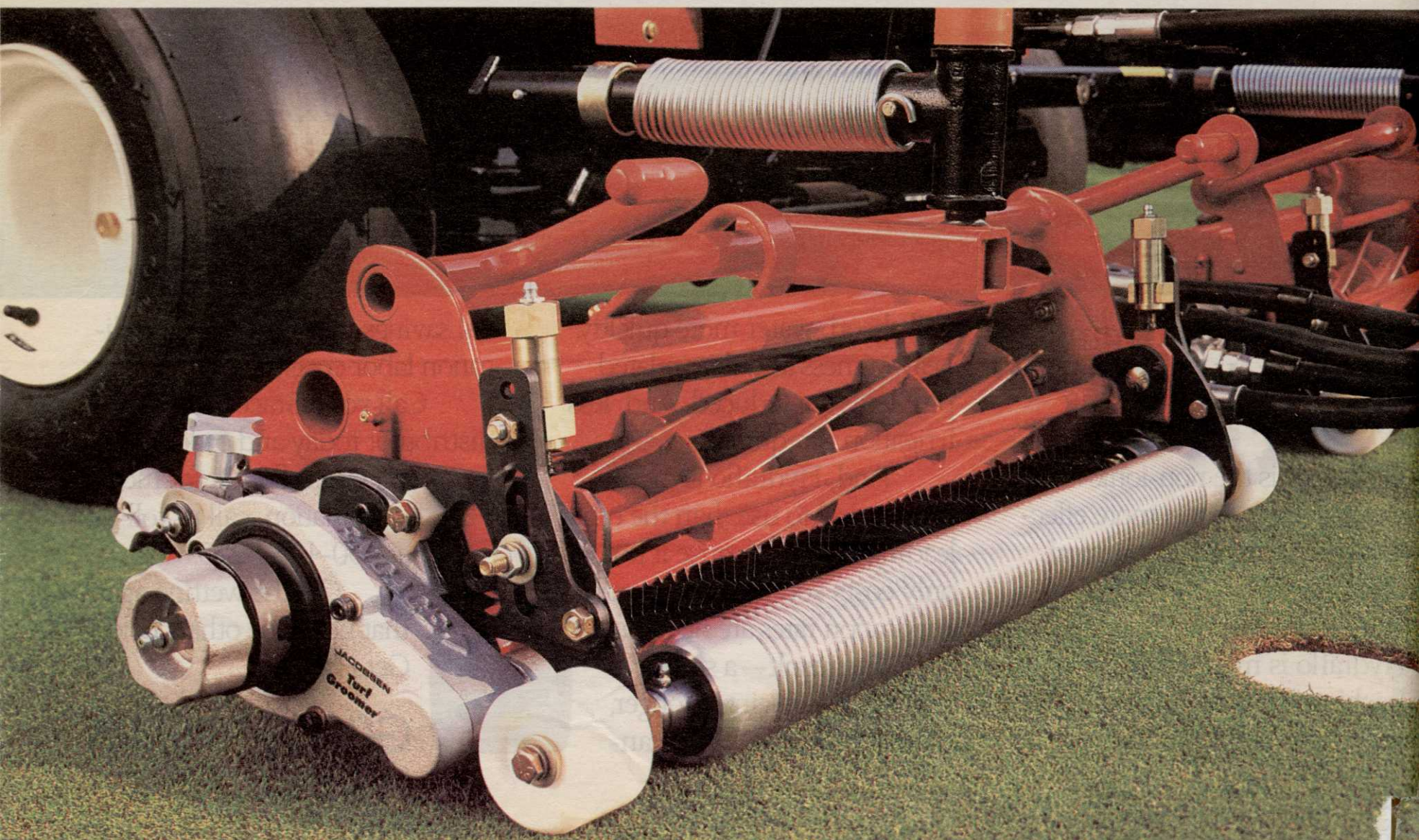


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