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 sprays 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 expected to have on golf courses.

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.

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 reps...
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Sierra Club about-face upsets 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.

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.

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."

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

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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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.
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 William E. Wilkinson of Syossett, 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., 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 Ballenlsles 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.
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 investments 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 dunes 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."

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Any site will do in Japan

An 18-hole course under construction in land-poor Japan shows 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 landfill is 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 $863,400 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.
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.

“ar 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 a 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, 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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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 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.

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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.

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 Richey 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. Richey, and colleagues Herb and Joe Grafis 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 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 industry 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?"

Yes, without a doubt, 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.

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

Continued on page 35

COMMENT

Mark Leslie

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A 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 cohesionism 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 (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.

Full Puller, 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—he was 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 not only because of that he was 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. Mr. Rossi will be irreplaceable as a human being. He was one of the industry's most enthusiastic 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... 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 didn't want us to fight harder because he's gone — because we relied on him a lot. People were willing to work hard for Don Rossi than for the Golf Course Build- ers."

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 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.

Under his leadership, the NGF sponsored yearly courses 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.

He also served on many industry committees 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 survived by his wife of 46 years, Ruth; a son, Michael J.; and three daughters, Gayle A. Lunden, 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.

Welcome in Utah

To the Editor:
Just a note to congratulate you on the very fine newspaper you are publishing.

It is a great service to golf and we here in Utah wish you the very best success with it.

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

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."

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Go to Utah Golf Association.
Trumbull CC’s Denning still making a difference

BY PETER BLAES

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 leaped through his eight years of memories to 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 superintendent. There he came to the golf course at the Patuxent, Md., flight test center as assistant superintendant. There he came to oversee construction of the William Trumper, Jr., training center as assistant superintendent. There he came to meet longtime friend Paul Latshaw.

“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 Masser established a turfgrass extension and research team at Pennsylvania State University in the 1930s that was continued in recent years by other Penn State turfgrass researchers.

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 major championships (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 workers Denning estimated to want to supervise their own courses.

“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.

“It was a learning experience for me,” said Denning. “I said when I started out that I’d never stay anywhere 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.”

“Hurtling 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.”

As for the future, 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 land half of Division II GCSSA 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.
Gregg Grenert and the Cushman Custom Applicator™
Samoset Golf Resort
Camden, Maine

Gary Dalton and the Cushman Quick Aerator
San Diego Country Club
San Diego, California

Jim Wyllie, CGCS, and the Cushman Broyhill Sprayer
Baysview Golf & Country Club Ltd.
Thornhill, Ontario

Joe Hahn, CGCS, and the Vicon Spreader
Oak Hill Country Club
Rochester, New York

Dean Baker and the Cushman Core Harvester™
Glen Abbey Golf Club
Oakville, Ontario

Charles Gardner, CGCS, and the Cushman Carrier Set
Oyster Harbors Golf Club
Osterville, Massachusetts

Doug Petersan and the Cushman Dump Bed
Prairie Dunes Country Club
Hutchinson, Kansas

Prentis Knotts and the Cushman Top Dresser
Red Mountain Ranch Country Club
Mesa, Arizona

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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.

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

<table>
<thead>
<tr>
<th>Region</th>
<th>Open</th>
<th>Under Construction</th>
<th>In Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England</td>
<td>14</td>
<td>24</td>
<td>41</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td>9</td>
<td>34</td>
<td>55</td>
</tr>
<tr>
<td>East North Central</td>
<td>55 (56)</td>
<td>85</td>
<td>98</td>
</tr>
<tr>
<td>West North Central</td>
<td>27</td>
<td>42</td>
<td>49</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>100 (102)</td>
<td>131</td>
<td>176</td>
</tr>
<tr>
<td>East South Central</td>
<td>17</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>West South Central</td>
<td>18</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td>Mountain</td>
<td>29</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>Pacific</td>
<td>15</td>
<td>44</td>
<td>98</td>
</tr>
<tr>
<td>(Alaska)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(Hawaii)</td>
<td>3</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>287 (290)</td>
<td>463</td>
<td>603</td>
</tr>
</tbody>
</table>
Newly planned courses in the U.S.

<table>
<thead>
<tr>
<th>Location</th>
<th>Course Name</th>
<th>Type</th>
<th>Holes</th>
<th>Address</th>
<th>Architect/Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Gulf Shores GC</td>
<td>N/A</td>
<td>18</td>
<td>P.O. Box 499</td>
<td>Gary Baird</td>
</tr>
<tr>
<td>Florida</td>
<td>Citrus Hills II</td>
<td>N/A</td>
<td>27</td>
<td>State Rd. 486</td>
<td>Arnold Palmer</td>
</tr>
<tr>
<td>Naples</td>
<td>Old Florida GC</td>
<td>P</td>
<td>36</td>
<td>Vanderbilt Beach Rd.</td>
<td>Rees Jones</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Ewa Beach Golf Club</td>
<td>D</td>
<td>27</td>
<td>Campbell Estates Kapolei</td>
<td>Arnold Palmer</td>
</tr>
<tr>
<td>Idaho</td>
<td>Sun Valley GC</td>
<td>P</td>
<td>18</td>
<td>N/A</td>
<td>Hale Irwin</td>
</tr>
<tr>
<td>Illinois</td>
<td>Barrington Hills GC</td>
<td>N/A</td>
<td>18</td>
<td>Penny &amp; Healy Rds.</td>
<td>Thompson Dykes &amp; Assoc.</td>
</tr>
<tr>
<td></td>
<td>Long Grove CC</td>
<td>P</td>
<td>18</td>
<td>Royal Melbourne</td>
<td>Greg Norman/Ted Robinson</td>
</tr>
<tr>
<td>Massachussetts</td>
<td>Marston Mills</td>
<td>N/A</td>
<td>M</td>
<td>Race Lane &amp; Rt. 149</td>
<td>Joseph O'Brien</td>
</tr>
<tr>
<td></td>
<td>Sterling CC</td>
<td>P</td>
<td>18</td>
<td>N/A</td>
<td>Richard H. Lowe</td>
</tr>
<tr>
<td>Michigan</td>
<td>Almost</td>
<td>H</td>
<td>9 3100 McKay Rd.</td>
<td>Robert McWilliams</td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>Pittsfield Township</td>
<td>Stonebridge</td>
<td>N/A</td>
<td>Stonebridge</td>
<td>Arthur Hills</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Lake of the Ozarks</td>
<td>North Port at the Lake</td>
<td>D</td>
<td>18 N/A</td>
<td>Arnold Palmer</td>
</tr>
<tr>
<td></td>
<td>Columbus</td>
<td>Quail Run GC</td>
<td>M</td>
<td>18 2424 14th St.</td>
<td>Frank Hummel</td>
</tr>
<tr>
<td>Nevada</td>
<td>Reno</td>
<td>N/A</td>
<td>18</td>
<td>Double Diamond Ranch</td>
<td>Robert Helms</td>
</tr>
<tr>
<td>Oregon</td>
<td>North Plains</td>
<td>Pumpkin Ridge</td>
<td>D</td>
<td>36 Old Pumpkin Ridge Rd.</td>
<td>Bob Cupp</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Scranton</td>
<td>N/A</td>
<td>P</td>
<td>18 Montage Mountain</td>
<td>Michael Hurzdan</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Nashville Woodmont CC</td>
<td>N/A</td>
<td>9 1325 Sneed Rd.</td>
<td>Gary Baird</td>
<td></td>
</tr>
</tbody>
</table>

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 Lani 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 Nano's Kohonani Resort Golf Course near the old Kona Airport;
- Regent International, Princess Hotels and South Kohala Resort are all planning courses.

Waikoloa is open to limited play and the $5 million clubhouse was scheduled for completion in February. 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 Nano's Kohonani Resort Golf Course near the old Kona Airport.

Garl declares 'dynamic growth' ahead

Ron Garl, a Lakeland, Fla.-based golf course designer, expects 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 Thornmorn 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 Bras 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. Hole 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.

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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 50-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 an example 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 lease transfers 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-still 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.

Senior Inter-Governmental Liaison Art 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 areas 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-registered.

Continued on page 17

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**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.

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Continued on page 17

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APRIL 1990 Golf Course News

**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. Baldy 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.

**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.


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

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 3-1/2 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
terred and the right to produce them canceled. Eighty percent of those canceled 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.
ASPA awards research grants

Nearly $20,000 in grants has been awarded 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. Goately Jr. of Mississippi State University for research into "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 soil incorporations on 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 herbicides and herbicides applied to turfgrass."
- Dr. R.E. Schmidt of VIP & State University for a study on "biosynthesis 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 TFIs 1990 vice chairman and executive committee, was conducted during the associations 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."

CMAA certifies 40 club managers

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


Mary Hastings of Brookside Country Club; Steve K. Hathaway of Los Angeles Athletic Club; Paul S. Hattimer of Saugatuck Country Club; Scott C. Holden of Nashua Country Club; Glenn E. Johnson of Capacrust Country Club; James A. "Sam" Kaul of Country Club of Farmington; Melvin Kahl of Berry Hills Country Club; Caroline M. Kristoff of Mayfield Country Club; Brian R. Krueh of The Los Angeles Country Club; Thomas S. Lee of Indian Hill Club; Thomas McCarville of Deer Creek Country 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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Designed specifically for aeration. Runs longer and cooler at 1725 RPM. Easy to maintain. Rebuildable, not disposable.

Lubricating Oil:
Developed by a major oil company for lubricating and very low dielectric capabilities. Acts as heat transfer.

Power Control Center:
Exclusive Westinghouse motor controls provide maximum built-in protection. UL, CSA and ETL approved. Standard equipment, not an option.

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All Otterbine aerators are safety tested and approved by ETL.

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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 manager of museum and library.

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 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.

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's 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 we haven'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."

For the name of your nearest distributor, or free literature on all John Deere's Golf and Turf Equipment, call 1-800-544-2122 toll free or write John Deere, Dept. 956, Moline, IL 61265.

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 Golf Railroad.

He is a graduate of Memphis State University.

ON THE MOVE USGA makes moves

... 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.

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.
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. Burbbaum 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 1983 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 plant 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.
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 gated Eagle Crest community, which will include 580 luxury residences.

“We are thrilled to have someone 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 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 Starr Pass, 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 products 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 superintendent. He has had numerous papers 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 1983-1986 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; Nassan, 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 (SR1019).

Steve Poitras
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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; Ritterings grass paving products; Polyfelt landscape fabrics; Resinet plastic fencing; and Pik-Stik reaching tools.

Williams joins Irrometer Co.

Mark Williams, former director of communications and membership for the Irrigation Association, has joined the staff of Irrometer 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."
It’s all in the family for Jones

Jone's first family of golf architecture

The first family of golf architects is the label generally applied to the Dye family. Father Robert, and sons Robert Jr. and Rees, have designed and built hundreds of courses throughout the world. The younger Robert Trent Jones Jr. 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.

"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." —Rees Jones

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 Joneses, Dyes and Fazios who are currently in the business.

Two generations of Joneses, Dyes and Fazios are currently in the business and it's very likely a third soon will be making a name for itself.

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

It wasn't until the late 1950s that Pete left a full-time 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.

Alice left the insurance business in 1952 to help with the younger Joneses, becoming a golf course designer in 1954.

Pete and Alice met while both were attending Rollins College in Winter Park, Fla. They were married in 1950 and moved to her hometown of Indianapolis.

Both embarked on successful insurance careers and worked on their golf games. Pete won the 1958 Indiana men's amateur and twice finished second. Alice became a legend, claiming seven Indiana amateur titles, three Florida amateur titles, five Western Senior championships and two USGA Women's Senior Amateur Championships.

"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 the business where you could make a decent living," said Alice.

Fortunately for the Dyes, who were raised in the business, insurance was 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.

"It's all in the family," said Jones. "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.

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.

"They were people with the wherewithal (to build an outstanding course). So 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.

"I'll be working all day on a bunkers and they'll come by around 9 or 4 p.m. and say, 'Why did you do this or that?' It helps to have someone you have tremendous respect for take a fresh look at things. Usually what I've done is easy to modify and I'll make the change," said Pete.

Pete and Alice met while both were attending Rollins College in Winter Park, Fla. They were married in 1950 and moved to her hometown of Indianapolis.

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some clans in design
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 there 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 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 intended to do anything else,” said Tom, whose father was a pro at a Pennsylvania club.

Continued from page 24

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 29 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

Continued on page 31

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 offspring’s 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.

“They’re 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 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.

A younger Alice Dye with one of her many golfing trophies.

At left, George Fazio makes a design point to young nephew Tom. Above is Jim Fazio today.
Introducing New Liquid Flowable Vorlan® and Fungo® Turf Fungicides.

For years, they've been top performers on courses everywhere. Now they're in even better form - safer, easier-to-use liquid flowable.

New Vorlan Flo gives you superior control of Dollar Spot, Leaf Spots, and other tough diseases. The unique chemistry makes it both a curative and a preventive. And, protection is long-lasting - up to 28 days.

New Fungo Flo gives you broad spectrum control of most major turf diseases, including Brown Patch and Fusarium Blight (Summer Patch and...
Liquid Flowable Systemic Turf and Ornamental Fungicide

GRACE SIERRA

Necrotic Ring Spot). Systemic action provides effective disease control for up to 14 days.

And, for unequalled control of the six toughest turf diseases — Dollar Spot, Brown Patch, Anthracnose, Red Thread, Leaf Spot, and Melting Out — simply tank mix Vorlan and Fungo at low rates. It’s a twosome that can’t be beat.

Vorlan and Fungo. Safe for use on all turfgrasses. Proven effective. And now available in liquid flowable form. Contact your Grace-Sierra distributor today and order new liquid flowable Vorlan and Fungo. Or, call us toll-free at 1-800-492-8255. And get their winning form going for you.
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 triplex greens mowers and moving them right out onto the fairways.

As United States Golf Association Green Section ex-National Director Bill Bengseyfield 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 isn’t 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.”

<table>
<thead>
<tr>
<th>Company</th>
<th>No. models</th>
<th>Chosen model</th>
<th>Year Intro.</th>
<th>Reel type</th>
<th>Front or pull</th>
<th>Engine type</th>
<th>Price</th>
<th>Service centers</th>
<th>No. reels</th>
<th>Blades/reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brouwer Turf Equipment</td>
<td>2</td>
<td>720</td>
<td>1983</td>
<td>Belt</td>
<td>Pull</td>
<td>N/A</td>
<td>N/A</td>
<td>110</td>
<td>7</td>
<td>7-8</td>
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<td>Woodbine Ave.</td>
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<td>M19</td>
<td>1983</td>
<td>Belt</td>
<td>Pull</td>
<td>N/A</td>
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<td>110</td>
<td>5</td>
<td>7,8</td>
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<tr>
<td>Keswick, Ont., Can. L4P 3E9</td>
<td></td>
<td>Ian True</td>
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<tr>
<td>Deere &amp; Company</td>
<td>2</td>
<td>3325 Profi Turf Mower</td>
<td>1989</td>
<td>Hydraulic</td>
<td>Front</td>
<td>Diesel/Liquid</td>
<td>N/A</td>
<td>80</td>
<td>5</td>
<td>6,8,10</td>
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<td>305 Hydraulic</td>
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<td>Pull</td>
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<tr>
<td>Jacobsen Div. of Textron</td>
<td>14</td>
<td>LF-100</td>
<td>1987</td>
<td>Hydraulic</td>
<td>Front</td>
<td>Diesel/Liquid</td>
<td>N/A</td>
<td>82,500</td>
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<td>6,10</td>
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<td>1721 Packard Ave.</td>
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<td>HF-15 Turf Tractor</td>
<td>1980</td>
<td>Hydraulic</td>
<td>Front</td>
<td>Liquid or air</td>
<td>N/A</td>
<td>52,000</td>
<td>7</td>
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<tr>
<td>Racine, Wis. 53403</td>
<td></td>
<td>Dave Buchanan</td>
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<td>Kubota Tractor Corp.</td>
<td>13</td>
<td>VR5701</td>
<td>1989</td>
<td>Hydraulic</td>
<td>Pull</td>
<td>Diesel/Liquid</td>
<td>N/A</td>
<td>42,500</td>
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<td>7,6,8</td>
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<td>550 W. Artesia Blvd.</td>
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<td>VR5709</td>
<td>1989</td>
<td>Hydraulic</td>
<td>Pull</td>
<td>N/A</td>
<td>N/A</td>
<td>40</td>
<td>5</td>
<td>N/A</td>
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<td>Compton, Calif. 90220</td>
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<td>Doug Fencel</td>
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<td>Lesco, Inc.</td>
<td>5</td>
<td>500D</td>
<td>1988</td>
<td>Hydraulic</td>
<td>Front</td>
<td>Diesel</td>
<td>N/A</td>
<td>N/A</td>
<td>65,750</td>
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<td></td>
<td>Lift 7-gang</td>
<td>1984</td>
<td>Hydraulic</td>
<td>Pull</td>
<td>N/A</td>
<td>N/A</td>
<td>5</td>
<td>5</td>
<td>6,9</td>
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<td>National Mower</td>
<td>N/A</td>
<td>Power Quint</td>
<td>1954</td>
<td>Belt</td>
<td>Pull</td>
<td>Tractor</td>
<td>$8,000</td>
<td>30</td>
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<td>700 Raymond Ave.</td>
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<td>84&quot; Triplex</td>
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<td>Gas</td>
<td>$7,000</td>
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<td>John Kincaid</td>
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<td>Ransomes Inc.</td>
<td>5</td>
<td>Fairway 5000</td>
<td>1989</td>
<td>Hydraulic</td>
<td>Front</td>
<td>Diesel/Liquid</td>
<td>$22,000</td>
<td>45</td>
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<td>One Bobcat Lane</td>
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<td>Motor 350D</td>
<td>1988</td>
<td>Hydraulic</td>
<td>Pull</td>
<td>Diesel/Liquid</td>
<td>$37,000</td>
<td>45</td>
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<td>Johnson Creek, Wis. 53038</td>
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<td>Maria E. Large</td>
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<td>Roseman Manufacturing</td>
<td>6</td>
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<td>1978</td>
<td>Hydraulic</td>
<td>Pull</td>
<td>N/A</td>
<td>N/A</td>
<td>$24,750</td>
<td>28</td>
<td>7</td>
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<td>Box 158, Rt. 29</td>
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<td>GMHR-7</td>
<td>1940</td>
<td>Ground</td>
<td>Pull</td>
<td>N/A</td>
<td>N/A</td>
<td>$8,750</td>
<td>28</td>
<td>7</td>
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<td>Collegeville, Pa. 19425</td>
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<td>Bill Babling</td>
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<td>The Toro Company</td>
<td>N/A</td>
<td>Reelmaster 223-D</td>
<td>1989</td>
<td>Hydraulic</td>
<td>Front</td>
<td>Diesel/Liquid</td>
<td>N/A</td>
<td>54</td>
<td>5</td>
<td>5,8</td>
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<tr>
<td>8111 Lyndale Ave. S.</td>
<td></td>
<td>Reelmaster 450-D</td>
<td>1986</td>
<td>Hydraulic</td>
<td>Front</td>
<td>Diesel/Liquid</td>
<td>N/A</td>
<td>54</td>
<td>5</td>
<td>5,7</td>
</tr>
<tr>
<td>Bloomington, Minn. 55420</td>
<td></td>
<td>Dennis Brown</td>
<td></td>
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</table>
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, trees 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.

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

<table>
<thead>
<tr>
<th>Width of cut</th>
<th>Weight</th>
<th>Ground pressure</th>
<th>Acres cut per hour</th>
<th>Height of cut</th>
<th>Traction drive</th>
<th>Reel drive</th>
<th>2.3 or 4 WD</th>
<th>Transport width</th>
<th>Transport speed</th>
<th>Mowing speed</th>
<th>Turning radius</th>
<th>Cab?</th>
<th>Grass catcher?</th>
<th>Turf conditioner?</th>
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<tbody>
<tr>
<td>195&quot;</td>
<td>1,920</td>
<td>9 psi</td>
<td>7</td>
<td>1/2-3/1/4</td>
<td>N/A Belt</td>
<td>N/A 93°</td>
<td>30</td>
<td>5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>145&quot;</td>
<td>1,400</td>
<td>9 psi</td>
<td>5</td>
<td>1/2-3/1/4</td>
<td>N/A Belt</td>
<td>N/A 93°</td>
<td>30</td>
<td>5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>138&quot;</td>
<td>3,570</td>
<td>9.7 psi</td>
<td>N.A</td>
<td>3/8-3</td>
<td>Hydrostatic N/A 2</td>
<td>89°</td>
<td>12</td>
<td>7.2</td>
<td>6°</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<td>142&quot;</td>
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<td>N/A</td>
<td>N/A</td>
<td>3/8-23/8</td>
<td>Hydraulic N/A</td>
<td>Hydraulic N/A</td>
<td>91°</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>No</td>
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<tr>
<td>100&quot;</td>
<td>2,100</td>
<td>&lt;10 psi</td>
<td>5</td>
<td>1/4-1/5/16</td>
<td>Hydraulic 2.4</td>
<td>85°</td>
<td>10</td>
<td>6</td>
<td>20°</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<td>180&quot;</td>
<td>4,448</td>
<td>15.5 psi</td>
<td>9.9</td>
<td>3/8-3</td>
<td>Mechanical 2</td>
<td>96°</td>
<td>20</td>
<td>5.5</td>
<td>108°</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>134-186&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>11.3</td>
<td>3/8-3</td>
<td>N/A Hydraulic N/A</td>
<td>93°</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
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<td>134&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>8.1</td>
<td>0-3</td>
<td>N/A Hydraulic N/A</td>
<td>93°</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
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<td>100&quot;</td>
<td>1,950</td>
<td>N/A</td>
<td>4.5</td>
<td>1/8-13/8</td>
<td>Hydraulic 3</td>
<td>72°</td>
<td>10</td>
<td>0.45</td>
<td>19°</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<td>171&quot;</td>
<td>3,500</td>
<td>N/A</td>
<td>8.6</td>
<td>3/8-3-8/16</td>
<td>N/A Hydraulic Ground 2</td>
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<td>20</td>
<td>0.5</td>
<td>96°</td>
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<td>138&quot;</td>
<td>1,200</td>
<td>N/A</td>
<td>6</td>
<td>3/4-21/2</td>
<td>PTO Belt</td>
<td>N/A 96°</td>
<td>10</td>
<td>5</td>
<td>N/A</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<td>900</td>
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<td>3/4-21/2</td>
<td>Gear Belt</td>
<td>2 60°</td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>N/A</td>
<td>6.4</td>
<td>5/10-13/16</td>
<td>Hydrostatic N/A Hydraulic 3</td>
<td>71°</td>
<td>9</td>
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<td>No</td>
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<td>3,571</td>
<td>N/A</td>
<td>7.9</td>
<td>1/2-2/9/16</td>
<td>Hydrostatic N/A Hydraulic 3</td>
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<td>15.5</td>
<td>7.5</td>
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<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>186&quot;</td>
<td>1,910</td>
<td>5.7 psi</td>
<td>7</td>
<td>1/2-3</td>
<td>N/A Direct Chain &amp; sprocket</td>
<td>N/A 98°</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>186&quot;</td>
<td>8,100</td>
<td>N/A</td>
<td>7</td>
<td>1/2-3</td>
<td>N/A Chain &amp; sprocket</td>
<td>N/A 186°</td>
<td>N/A</td>
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Golf Course News 29
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 shot? Maybe. The architect’s 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-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 than it used to be.

"Most greens have adequate cup placements on them," said the Toledo, Ohio designer. "Those areas have to be realized and cups not cut way out 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 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-handicap players 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 grass more playable, it also tends to be healthier.

"Moss is becoming a big problem 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 photo-synthetic surface area. Grass cut that low is subject to a lot more stress. Traffic, heat 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 horizontally 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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To meet golfers’ rising standards, the 223-D combines superior technologies: It begins with an exclusive positive down pressure system. The system, adjustable at 4 positions in 8 lb. increments, helps to maintain the reels in position over varying contours for a smooth, consistent cut.

Next is the exclusive design of the cutting units. An easy rear roller adjustment changes height of cut from 1/6 to 1/3" while maintaining the correct bedknife angle. This assures consistent cutting quality throughout the height of cut range. Quality golfers can’t help but notice.

Just a twist of two dials is all it takes to adjust reel speeds. This allows you to tailor your clip length to your specific turf conditions and height of cut at the mowing speed you find most productive.
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The design of the Reelmaster 223-D has produced a new standard that other lightweight mowers are sure to follow. It's built cleanly and efficiently for smooth operation and easy servicing. All controls are conveniently arranged in one easy-to-reach location. Maneuverability is unsurpassed due to a short wheelbase and precise full-power quadr link steering. A taller tire design gives you greater traction with less compaction and faster turning without scuffing. Golfers expect a well-groomed playing surface. And their standards are rising. Only the Reelmaster 223-D can handle the job. From bent grass to Bermuda, hills to contours, no other lightweight fairway mower gives you this kind of productivity, quality of cut or superior turf. Call your local Toro distributor for a demonstration. Or contact Toro at the address below.

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For free information circle #123

Fazios
Continued from page 25

state job at the Champions GC 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-1970's. 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-
Destroy the evidence or suffer the consequences.

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For all the facts and a convincing demonstration, contact your Cushman dealer or call toll-free 1-800-228-4444 today.
Jensen encouraged taking care of just places for people to grow old and high-end products said creature of '90s Jarvis of Land Design Research late value and sell space and pre-locked off all the stimulators that type) golf holes. By doing so we golf course developments and ing the 1950s and 1960s we laid out neighborhoods and villages and the rest of the develop-ment then takes care of itself, gen-erating 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; 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 rezon-ing approvals. Concord, N.H. land planner George Matarazzo warned about inconsistent interpretations be-tween 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, priv-ate open space. This is an ex-ample of the pitfalls you will en-counter. They are all solvable," he assured.

Toledo, Ohio golf course archi-itect Arthur Hills, with 175 new courses and renovations to his credit, noted that suc-cesful 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 de-velopments find they need more holes than anticipated. He recom-mended building 27 holes or at least planning for 27 and initially building 18. The extra holes allow for more flexibility in play and reve-nue and provide more golf front-age. There is no significant in-crease in maintenance or operat-ing 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 per-cent of golfers, that's all they can play. The champi-onship image can and should relate to the quality of the playing surfaces, the hazards, design and aesthetics of the golf course and its relation-ship 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 "bring-ing in experts from the start. We hired the best greenkeeper, architect and club management."

A lavish clubhouse increased real estate value without increas-ing golf frontage. A clubhouse ball-room 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 out-side activities," Whyte said.

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

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 confer-ence 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-est demand.

The growth of golf is pushing the market, noted Jensen, point-ing to the doubling of golf's participation rate from 3.4 percent of the U.S. population in 1980 to 10.4 percent in 1989. With 26 million golfers in the country, golf is ex-pected to grow from a $20 billion to $40 billion industry by the end of the decade.

Golf course communities pro-mote lifestyles in total environ-ments, said Jensen. "We are not just selling housesstriped 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 away the trees (links- type) golf holes. By doing so we locked out all the stimulators that can come from the corners of the property. The goal today is to stimu-late value and sell space and pre-miums farthest from the course," he said. The rest of the develop-ment then takes care of itself, gen-erating 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; 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 rezon-ing approvals.

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A lavish clubhouse increased real estate value without increas-ing golf frontage. A clubhouse ball-room attracted people for special
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."

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 those people we had just hired and trained, which is the toughest management assignment there is," Rickey said.

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 understating 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*

Tom quoted quality as 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.
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 you're feeling blue. 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 of 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 superintendent's 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 mean less downtime 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 an indirect 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
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, 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 toxologically 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 substances 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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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 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 advisors 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 responsibilities; 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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UST insurance

Continued from page 1

The Florida Association of Golf Course Superintendents has developed the only insurance program specifically for golf course USTs. The policy does not cover replacement or repairs to existing tanks. Deductibles can be as low as $1,000. 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 $550;
- 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 guarantee can supply a list of certified contractors.

"The success of this program is that we all pull 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 (Il.) Country Club, who has organized the breakfast for 11 years, asked for "a new young face" to volunteer to take his place.

Norwood Hills’ Null wins 2nd GCSAA title

After a first-round 77 on Orlando’s Hunter 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 Fan- ning won the Scottish Trophy for the gross division of the chapter team competition.

Ray Beaudry, Ted Maddocks, Mike Beeb and Mike Wallace of Connecticut GCSA #5 combined to take the Frank Lamphier Trophy awarded for the chapter team net division crown.
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 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 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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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 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 Perry Dye and on behalf of Commissioner Deane Beman, express optimism about the future of golf.

"If, yes, 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.

"If we're going to have any growth... We're all looking forward to the '90s, and with everything we've been going on internationally — in Europe, in Japan, the Far East — 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 obstacles."

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 plaque to Wadsworth, whose company was the overarching choice as the best builder of 1989 in a national survey of architects.

Builders Association
The Golf Course Builders Association will do anything within its power to improve the situation, from adding educational programs for builders to joining the industry-wide Allied Association of Golf and the Task Force on Environmental Concerns, promised Rossi. "We now have 21 people on our board. We're going to call all 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 of us, builders, suppliers, associate members. The 58 members at the annual meeting were eager to contribute their time and money to make sure builders can 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 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 have seen some sort of golfing policy." 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, and its new Subcommittees and golf courses are "entrenched," Dye said.

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

"We hope to have over 200 members at the annual meeting were eager to contribute their time and money to make sure builders can make our contribution to the game."
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 must 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.'"

Conference Report

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 staple—a John Deere 3325 Professional Turf Mower.

"We wanted a high-quality, high-volume mower that could collect clippings," says Rasor. "We bought our first 3325 after seeing it here on demo and have been so impressed with its performance that we've gotten a second one since.

"The full-sized center grass catcher has been a real advantage because we have to mow 36 holes, and not having to stop as often to empty that center basket saves us a lot of time.

The weight transfer feature has also been important. There are three or four holes on each course where we couldn't mow without it. It really makes a difference on hills."

For the name of your nearest distributor, or free literature on all John Deere's Golf and Turf Equipment, call 1-800-544-2122 toll free or write John Deere, Dept. 35, Moline, IL 61285. We know, like Gary Rasor, you're going to like what you see.
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 1-14 in Singapore, organized by Connex Private Ltd. Last November the first Golf Course Europe was held in Wiesbaden, West Germany, by 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 Frem, 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. Mayasia, 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 at Expoconsult Industrial Estate, Singapore 1440 (telephone 7499696).

Jones

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.
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 Transamerician 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 well be back in 10 years to do it 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 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," he said.

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.

McNeill listed three practices that cause major problems in greens construction:

- Placing sod grown on a silt clay material on top of a USGA specification mixture. The USGA specifications may be done correctly, but by putting the sod grown on that material the builder has created a barrier between sod and sand.

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 Director Ben Gengefield—conferred with McNeill later and both supported mixing in the entire fertilizer mix so long as the blend is not spread for several months. (If that were done, the nitrogen would activate organic breakdown.)

"Please, Mr. architect," McNeill pleaded, "specify a quality-controlled (soil) blender for USGA greens specifications."
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, said Pierman. 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 considered 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? Who's going to be responsible for that? 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 Association 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.

Md. super gets mower for year

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."

The unit will be delivered to Renault in early April. Fourteen other superintendents were semi-finalists in the drawing, winning Ransomes jackets and caps.
International supers

Continued from page 1

By John McCarron

organizes, 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.

Lyons 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 director 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.

- **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.

- **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.** 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 Superintendents 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.

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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." Hoffman added.

"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 recover 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 conditions that conventional aeration and top-dressing can cause."

"Now there is an answer. A superintendent can treat greens when necessary without con-

Toro's Hydroject 3000

Toro's Hydroject 3000 concerns of this conflict. Now aeration and heavy play can both occur on the same day."

Citing a trend toward more frequent aeration, 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 sprays 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 eightfold to 900 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 opportunities are 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 Scandanavian country with another 50 under construction. Together they sponsor a yearly trade show; courses are being built annually in a nation with another 50 under construction. Together they sponsor a yearly trade show; courses are being built annually in a nation

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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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 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 Fishbeek of Atlantic East Corp. in Saratoga Springs, N.Y.; Charles Winstead of Tideswater Power Equipment Co. in Virginia Beach, Va.; and Jack Hurst of Dyne-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."

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 3.5 percent, four-year contract at 7.5 percent, or five-year contract at 8.5 percent.
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 49-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-Teacher, an expanded and improved selection of practice green 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

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 new 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 superintendent is relatively new in France, where the job has traditionally been shared by a greenskeeper and course director.

But golf in France, as everywhere, is growing.

The country recently saw GCSSA certification bestowed upon one of its few titled superintendents.

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., 571 E. 10th St., Chicago Heights, Ill. 60411 or call 312-757-7500. Circle No. 257

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, Fl. 32082. Circle No. 253

NEW LITERATURE

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And then see how much power we've harnessed.

Wisconsin Robin

More power to you.
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 characteristics 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

Pythium control is easy when you build your program on Chipco® Aliette.

The key to a successful, season-long Pythium control program is the foundation you build it on. And you can’t buy a better foundation product than CHIPCO® ALIETTE® brand fungicide. CHIPCO® ALIETTE® brand is unlike any other disease control you have ever used. Its true systemic action spreads protection throughout every blade of turfgrass, including the roots. Protection that lasts for up to 21 days from a single application.

Then, the unique chemistry of CHIPCO® ALIETTE® actually stimulates the natural ability of turf to fight off infection. So you get two-way protection other fungicides just can’t match. Plus, CHIPCO® ALIETTE® prevents Pythophthora and 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 #342

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 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 180 horsepower Briggs & Stratton engine and a slicer assembly designed to plant rows on two-inch centers.

In back is a 44-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.
User-friendly trencher developed by Vermeer

A new, fully-hydraulic 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, lowa.

The Vermeer V-1550 comes with a solid-state ignition, heavy-duty solenoid starter, compact 31/2-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 1,490-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 Irrometer Co. Inc., Dept. WEM, P.O. Box 2424, Riverdale, Calif. 92516-2424 or call 714-689-1701. Circle No. 307

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 316-638-8000. Circle No. 347

Irommeter unveils moisture controller

Irommeter 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-main-moisture control device for automatic land-leveling, irrigation system. The WEM 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 Irrometer Co. Inc., Dept. WEM, P.O. Box 2424, Riverdale, Calif. 92516-2424 or call 714-689-1701. Circle No. 307

Golf Course Marketplace

To reserve space in this section, call Simone Lewis, 813-576-7077

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Golf Course News	 51
CALENDAR

April
16 — GCSSA seminar on Calculations and Practical Mathematics in Golf Course Management at Benton, 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.
29-30 — Golf Course Development Conference in Chicago, Ill. Contact Crittenden at P.O. Box 1150, Novato, Calif. 94948; 415-382-2486.

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

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

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 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.

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

Continued on page 53
Golf Course Marketplace

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For free information circle #119

Continued from page 52

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, 3000 AE Maarsen, Holland: 03465-75777.

December
12-14 — Second Annual Pacific Coast Turf and Landscape Conference and Trade Show at the Watson 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


* — 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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For free information circle #120

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 solve the traffic-related problem, the efficiency-minded turf manager is free to concentrate on more pressing matters.

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 removable 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 1/2 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 traffic bump spacing can be left to your individual preference. It normally only requires one encounter with the traffic bump for even the most aggressive car pilot to reform.

These low-profile measures will not solve all the problems a superintendent faces, but by turning a recurring problem, the efficiency-minded turf manager is free to concentrate on more pressing matters.
New Improved Hydraflo Ends Cold Water Mixing Problems.

Hydraflo® is the non-ionic wetting agent that is more effective, and far more economical to use.

More effective because Hydraflo is more resistant to leaching—it actually stays in the soil longer. So localized dry spots will absorb water more quickly. Leaf wetness and dew-related problems are reduced. And, less irrigation is required.

And, Hydraflo is more economical to use than the other leading brand. Because it not only costs you less, but lower application rates are needed.

The result—a soil environment producing stronger, healthier turf. With substantial savings in product and application labor costs.

Call your Grace-Sierra distributor today and order new improved Hydraflo. Or for more information, call us toll-free at 800-492-8255.

Get the wetting agent that beats the others cold. Get Hydraflo.

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

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

The improvements begin up front. The exclusive front roller has a larger diameter for reduced rolling resistance, higher side frame clearance and improved durability. It works even better to "pucker up" horizontal runners and plant leaves, readying them for clipping. And now Jacobsen offers two blade spacings: the standard .280" for most green applications, and an optional .500", which works well where nearby traps have coarse grain sand.

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

They rotate through the slots in the front roller, cutting horizontal runners and cultivating strong, erect grass plants.
A quick up/down blade adjuster has four positions in ¼" increments so you can condition each green exactly the way you want. Or, you can raise the blades to skip grooming. And a Micro Depth Adjustment dial lets you fine tune cutting heights by increments of .007" without tools.

Every Turf Groomer greens conditioner comes with a sealed aluminum drive housing to prevent grass, debris and moisture build-up in the heavy-duty 1” belt drive system.
For faster, truer putting and healthier, hardier greens, look to the new Jacobsen Turf Groomer. For a free demonstration, contact your Jacobsen distributor.
Or contact Jacobsen Division of Textron Inc., Racine, WI 53403.
Now it’s easier to make your greens come true.

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