Grads facing uncertain future

By Peter Blais

Turf school graduates are having more trouble finding entry-level jobs as assistant superintendents than they did a year ago, according to college officials.

“We usually graduate 45 to 50 students,” said Professor Richard Cooper, coordinator of the University of Massachusetts two-year turf management program.

“Last year was the first time they weren’t all able to get jobs. This year it’s been even worse. It’s taking a lot more work to find positions.”

Cooper blames a weak economy, particularly in the Northeast, for the bleak job

Continued on page 8

Cat strike leaves mark on industry

By Hal Phillips

PEORIA, Ill. — Wadsworth Construction Co. held a unique perspective on the year’s most visible labor dispute, in terms of industry and geography.

Located in Plainfield, Ill., Wadsworth observed the five-month strike at nearby Caterpillar Inc. from close range.

“We've got Cat plants on both sides of us, in Aurora and Joliet,” said Paul Eldredge, president of Wadsworth. Before the April 15 settlement, Eldredge indicated he felt Caterpillar was in a good position to wait out its discontented work

Continued on page 45

Japanese course basher sets sights on Hawaii

By Peter Blais

His goal is nothing short of stopping all golf course development, period. And Hawaii is his latest target.

“It’s not possible to build a good golf course,” said Mr. Morita of the The Global Network for Anti-Golf Course Action.

“You can’t put something like that on 150 acres and expect it not to hurt the environment, unless you stick it in the middle of the desert. But if you build it in the usual way, it’s just not possible.”

Before developers dismiss the 44-year-old Japanese activist as just another fly in the ointment, they ought to consider his record.

Morita claims to have had a hand in stopping construction of 280 Japanese courses through his work with the Japan National Network Against Resort and Golf Course Development. Since 1988, the group has helped obtain moratoriums against new development in 10 of Japan’s 46 prefectures.

With Japanese corporations financing many of Hawaii’s new courses, Morita turned his attention to the 50th state last

Continued on page 24

Maintenance costs continue upward spiral

From Staff Reports

Higher payroll expenses caused country club maintenance costs to jump almost 10 percent last year, despite efforts to cut back on repairs and other costs.

Average payroll climbed 10 percent (to $15,888 per hole) while payroll taxes and benefits rose 16.8 percent (to $3,610 per hole) at 250 private U.S. country clubs surveyed by the accounting firm of Pannell Kerr Forster in its 1992 Clubs in Town & Country report.

Continued on page 39
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Just in case...
Go slow on new courses, Hawaii planner warns

HONOLULU, Hawaii — "Men in doubt about approving new golf courses, be conservative until better information about water resources is available."

That was the message to state and county planning commissions from Harold Masumoto, director of the Office of State Planning. He pointed out that not enough is known about Hawaii's underground water resources and the impact golf courses might have on them.

A recent planning office study found 68 courses in Hawaii—29 on Oahu, 18 in Maui County, 13 on the Big Island, and eight on Kauai.

The report cites Hawaii Real Estate Research and Education Center data which indicates a demand for 44 more golf courses now, 14 more by the year 2000. Another 102 courses have been proposed.

Hilo golf courses targeted for new taxes by council

Hilo, Hawaii — Increased revenue and more control over existing and proposed courses are City Council targets in its effort to create a new tax class for golf courses.

The tax rate, at least double the current highest real property tax rate of $1 per $1,000 valuation, would be placed on golf course land and "all other facilities related to the game of golf," according to a bill introduced by Councilmen Brian De Lima and James Arakaki. Pro shops, hotels or lodges and any other accessory facilities would be included.

De Lima noted that many courses are membership only and that surrounding communities often benefit little from their development.

"The people who develop golf courses are going to welcome this because they don't want to deal with a situation where they don't know what's going to be asked of them," De Lima said.

Muni course plan put on hold in Pa.

ELIZABETHTOWN, Pa. — An 18-hole municipal golf course proposed in Elizabethtown Borough and West Donegal Township — a plan under study for a year — has been sidetracked.

Waste Management Inc., which owns most of the 140 acres called the Old Elizabethtown Landfill, is no longer considering a lease agreement. A spokesman for SCA Services of Pennsylvania, an affiliate of Waste Management, said it would not be in SCA's best interest to pursue the proposal at this time because of ongoing Superfund activities at the landfill.

The firm wants to complete work with the federal Environmental Protection Agency at the site before pursuing an agreement. Cleanup is not expected to begin for four or five years.

Golf Course News
EPA claims golf courses help and hurt surface water

By Peter Blain

Golf courses can help improve or further deteriorate water supplies, according to an Environmental Protection Agency official.

"No general consensus exists on the impact of golf courses as non-point pollution sources. They can have positive as well as negative effects," said Environmental Protection Specialist Robert Goo, commenting on the recently released National Water Quality Inventory: 1990 Report to Congress.

Issued in late March, the state report states that many U.S. water quality problems have improved because of water pollution control programs. Treatment facilities to cleanse wastewater from point sources such as sewage plants and industrial sites have been particularly effective.

Still, many difficulties remain. The EPA report characterized pollution from agricultural and urban areas as still "serious and widespread." The federal agency also expressed concern about toxic pollutants in surface and ground waters, as well as the loss of wetlands.

Runoff is now the leading cause of pollution, according to state reports. Non-point source pollutants like dirt, oil and hypodermic needles carried along by rain and melting snow off asphalt streets eventually end up in storm drains leading to surface waters.

Those pollutants can also include excess fertilizers and pesticides, added Ben Lesser, a special assistant with the EPA Office of Water. Farming, grazing, construction, forestry, stream channelization and mining contribute, according to the report. Improperly maintained golf courses can also be contributors to such non-point source pollution, Goo added.

On the plus side, golf courses act as green space, providing vegetative buffer strips that trap runoff, filter out pollutants and reduce erosion, Goo said.

On the minus side, courses that improperly apply nutrients and pesticides and fail to stabilize the ground during construction simply add to the pollution problem, he added.

"I haven't seen any solid, negative data about golf courses," Goo said. "Golf industry people say properly managed golf courses are no problem. But opponents say all golf courses don't have the same degree of maintenance you see at the best-run areas."

Lack of education is the problem, agreed Dave Fearis, superintendent at Blue Hills Country Club in Kansas City, Mo.

"It doesn't matter if you're talking about golf or any other business," Fearis said. "You have people who run their business like professionals and those who don't. If one person misapplies chemicals or fertilizers, the public generalizes it to all courses."

That is probably the most important reason of all to join a group like the Golf Course Superintendents Association of America. The education it offers stops things like pollution from happening. Of all the turf associations, the GCSAA probably does more to educate its members than anyone else.

"But the GCSAA has just 11,000 members. That means some courses aren't members and that those educational efforts aren't reaching everyone."

The EPA recognizes golf courses as "potential" problem areas and is developing best management practice guidelines for an upcoming report on non-point source pollution in coastal areas, Goo said. A report on the economic impact of those practices is due out in May or June and the guidelines themselves sometime in 1992, Goo said.

One of those recommendations could involve grass clippings, according to EPA Environmental Protection Specialist Rod Frederick. While clippings can be safely composted or mulched back into the earth away from waterways, they should be removed within 50 feet of flowing water, he recommended. Otherwise they will likely become part of any excess runoff.

The EPA is not singling out golf courses as a problem, Goo said. In fact, he sees more positives than negatives to the industry and its practices, he added.

"Golf courses are trying to address any problems. They know that it's in their best self-interests to do so," he said.

"Water treatment requires a lot of energy and billions of dollars. Pollutants are killing a lot of animals and costing tax dollars," Lesser said.

According to the EPA report, about two-thirds of all surface waters assessed by the states fully meet their water quality standards. The $8 billion spent by the federal government to upgrade and construct municipal sewage has helped reduce pollutants such as metals, bacteria and oxygen-demanding organic materials.

"Wet weather runoff is the big..."
EPA report

continued from page 4

great water pollution problem we face, and it is everybody’s problem," said LaJuana Wilcher, EPA assistant administrator for water, adding that the overuse of lawn fertilizer and pesticides is part of the problem.

Other points made in the report are:

• The most commonly reported pollutants affecting rivers, lakes and estuaries are nutrients, silt, oxygen-demanding materials, pathogens and metals. Agricultural runoff accounted for more than half the pollution in rivers and lakes, while municipal discharges were the leading source of estuarine pollution.

• The country has lost more than half its original wetlands and continues losing them at a "significant rate." Approximately 2.5 million acres disappeared from the mid-1970s through mid-1980s. Residential and commercial land development were the leading reasons for the loss. Agriculture and resource extraction were other causes.

• Underground storage tanks, septic tanks, municipal landfills, agricultural activities and abandoned hazardous waste sites were identified as the major threats to ground water. Nitrates, metals, pesticides, petroleum and volatilized organic compounds are of concern.

• Nearly 1,000 pollution-caused fish kills, totalling 26 million fish, were reported in 42 states. More than 300 beach closures occurred in 24 states.

Forty-seven states and territories noted 998 fishing advisories and 59 fishing bans. PCBs, pesticides, dioxin, mercury, organics and metals were the most common causes.

Valley Lodge Golf Club recovering from Christmas flood

By Vern Putney

SIMONTON, Texas — Flood waters up to 10 feet deep all but drowned Valley Lodge Golf Club here Christmas Eve, and another storm a week later made New Year’s Eve no time for celebration.

But the Fletcher family has surmounted these setbacks.

Owner-manager Melissa, husband-club professional Browne and father-course superintendent Jack — all buoyed by financial disaster relief from the Small Business Association — are on track in a massive reconstruction effort that may have the new nine-hole course in playing shape by mid-August. "Bulldozers are everywhere," noted Jack.

"Destroyed greens have been replaced by clovered greens as we seek higher ground. Hole and terrain layout have been altered as we take the high road in the 160 acres available. We're going to end up with a much better course. Up to 30 percent of the SBA loan will go toward greens and tee box elevation."

The senior Fletcher’s tone is far different from the dismal, spirit-dampening days following the devastation, when the Brazen River rose up in raging wrath to deluge eastern Texas courses after heavy rains.

The Fletchers felt particularly buffeted. They had purchased the course a month earlier. Melissa, who had been marketing director and operations manager of The Downs Race Course in Albuquerque, N. M., must have felt the horse connection a far less risky venture after such total destruction.

Now, as the Texas refrain goes, "There seldom is heard a discouraging word, and the skies are not cloudy all day."

All signs are positive, she assures. The former 2,400 yard layout will measure nearer 3,000 yards, and she hinted expansion to 18 holes in the near future.

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CIRCLE #104

May 1992 5
Cautious note emerges amid Asian golf development boom

By Brook Taliaferro

SINGAPORE — Several speakers at the Golf Asia '92 conference, held here recently, voiced concern over the pace of golf development in the Pacific Rim, as Southeast Asia emerges as a major resort destination for the Far East. Yet their caution was nearly lost in the enthusiasm over the growth of golf here as Southeast Asia emerges and are now even seeing it to some extent in Hawaii, Japan and Europe and are now even seeing it to some degree in Thailand," said Robin Nelson, director of Nelson & Wright Golf Design Group of Honolulu.

"Whether it be France, Bali or the South Pacific, we are bringing a wonderful game to many people, but it is also their land. Their willingness to accept a new land use may hinge upon the respect we show them."

Nelson's comments came during the second annual Golf Asia conference and exhibit, an event which has doubled in size to 250 exhibitors and 6,000 attendees. Exhibitors representing major golf architectural firms and many equipment manufacturers were on hand as officials of golf development projects who were selling memberships in clubs from Australia to Bali to Malaysia. While the effect of regulation has yet to be felt throughout Asia, and the mood in no way reflected the stifled frustration of European developers attending Golf Europe last fall, this area of the world is not immune.

"In areas such as Taiwan and Japan, relatively flat land is strictly reserved for the cultivation of farm crops, forcing golf to take to the slopes," said Nelson. "Some spectacular golf courses have been built around the Pacific Rim using extensive cut and fill techniques. But these courses are expensive and will not help to lower the already high green fees and maintenance costs."

Concern also centered on pesticide use as countries in this part of the world wrestle with the same environmental issues that trouble environmental group and golf developers in the United States and Europe.

"The ramifications of future pesticide use for countries in Southeast Asia revolve around unprecedented economic growth seen in countries like Thailand with rates of 14 percent in 1985," said Gary W. Beehan, senior turfgrass consultant with Australian Turfgrass Research Institute.

Beehan said: "The huge number of golf developments just completed, several speakers warned of the growing inattention to the business side of Asia's golf boom. "Asian developers often defy logic and commit to project development without formal feasibility studies," said James E. McLoughlin, of the New York-based McLoughlin Group. McLoughlin suggested that feasibility studies are foregone because "market deficiencies are more obvious outside the United States and because funding is often readily available with feasibility back-up."

Such lack of planning has led to spectacular mismatches in the commercial side of the development both in the United States and now in Southeast Asia, McLoughlin said. "Miscalculation in the mix of residential and hotel housing is the single greatest reason why golf course-based real estate developments fail," he said.

Perhaps the most ominous note of all was sounded by the conference's final speaker, Bryan G. Griffiths from GolfConsult International, Ltd.

"The highest profile developments in the Pacific Rim in recent years have been the corporate and exclusive private end of the market. It cannot expand indefinitely," said Griffiths. "The prudent investor should be examining the scope for lower profile investment."

As an example, Griffiths, who is based in London, spoke of five mega-courses in the United Kingdom that folded during 1991. "That was $120 million quid that went down the pipe last year," he said.

Griffiths repeatedly warned about the dangers of design-led golf projects: an emphasis upon the topographical and the physical rather than economic viability.

"It is a travesty to suggest the

Continued on page 7
SINGAPORE — Today's golf course architects must take a team approach toward course design, architect Mark Hollinger told an audience at Golf Asia '92 here.

According to Hollinger, senior designer with JMP Golf Design of Saratoga, Calif., "The days of a one-man firm designing the golf course are gone forever. It takes a group of highly specialized professionals working together to get the job done."

In order to design world-class courses in today's golf design environment, Hollinger said a course design firm must have a staff of in-house professionals whose expertise spans a wide range of fields — from land planning to landscape architecture, stormwater engineering to turfgrass. He said it's critical the firm be able to deal successfully with governmental agencies whose regulations can vary from state-to-state and country-to-country. And, he said, "we must be able to assemble and work with a team of experts."

"As in the past, a love of the game, a sense of aesthetics, and an understanding of strategic design principles are crucial. But now we must also be conversant with the latest innovations in a number of highly technical disciplines. And," he said, "we must be able to assemble and work with a team of experts."

"Designing courses today involves working with difficult terrain under problematic circumstances and with numerous constraints. Because the land allocated for golf course development is often very limited, nine times out of 10, we have to design courses on extremely severe sites," Hollinger said.

"The design team concept gives the owner, the golf designer and the golfer playing public the confidence that the course will meet the highest golfing standards."
Job market for this year's graduates remains depressed

Continued from page 1

picture. Golf clubs are feeling the financial pinch and can't afford the attractive salary and benefit packages they have in the past to lure superintendents and assistant superintendents from other clubs. Consequently, fewer assistant superintendent posts are opening up.

"You used to see the merry-go-round positions. Superintendents felt left for better jobs. Assistants took their place and graduates moved into the assistant jobs. That's not happening anymore. Clubs aren't offering the attractive packages to cause movement. When times are bad, people tend to stay where they are," the UMass professor said.

While not quite as depressed as the Northeast, the Southeast is also experiencing hard times.

"The superintendent market is a little soft," said John Persol, chairman of the Division of Golf Course Operations at Lake City (Fla.) Community College. "We've placed all of our graduates for the past 25 years. We'll do the same this year, although they won't be able to be so picky.

"Some of them will end up taking jobs as spray technicians, irrigation installers or assistant superintendents at golf courses that are far from their first choice. That's a lot different than the late 1980s when there were two to four jobs for every graduate."

The economy has also soured the job outlook in Canada. Openings are off 10 to 15 percent for University of Guelph (Ont.) graduates, according to Jack Eggens, a horticulture professor at the country's premier turf school. Salaries are also down.

"We've got 10 students going out as assistants in the $27,000 to $34,000 (Canadian) range. Three years ago some were starting at $40,000," he said.

Despite the downturn, the market for superintendents is "fairly good," compared to students entering other fields, Eggens said. Agricultural openings are down 40 to 45 percent and engineering 60 to 70 percent, he added.

And small pockets of prosperity do exist. Richard Moore, an instructor with the landscape turf program at Spokane (Wash.) Community College, said the eastern Washington job market is "still quite good. We graduate six to 15 percent from our assistant program each year. The head jobs will eventually return to a time when there were two to four jobs for every graduate."

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Experts suggest students should explore alternative turf careers

By Peter Biais

One of the best options for turf graduates having problems finding entry-level golf jobs is landscape architecture.

Landscape architecture is a steadily growing field that suffers from a good-old-boy-with-a-pickup-truck image problem, according to John Piersol, coordinator of Lake City (Fla.) College's golf course operations program.

"The Golf Course Superintendents Association of America has done a terrific job of upgrading the superintendent's image," Piersol said. "People picture Jack Nicklaus and BMWs when they think about golf careers and want to be a part of it. Landscape architects are professionally trained and also deal with management, pesticide, water and other environmental issues. But they still have that image problem they have to overcome."

Image aside, landscape architecture also pays well.

Graduates of Lake City's 2 1/2-year associates in landscape technology program start in the $20,000 to $23,000 per-year range (about the same as assistant superintendents) to care for trees, flowers and shrubs at resorts, Piersol said.

Directors of landscape make $30,000 to $55,000 yearly. Only the high-five-to-low-six-figure salaries earned by the handful of superintendents at the nation's top clubs aren't attainable by landscape architects, unless they go into business for themselves, he added.

"And a landscape architect can be a hero by just adding a little color to the surroundings. Expectations are much higher for a superintendent. If the course isn't perfect, like what they see on television, people complain. With landscape architects, they don't really know what to expect," Piersol said.

Sports turf management is another growing field, although it has suffered some due to municipal budget cutbacks in recent years. Willoughby Golf Club superintendent Kevin Downing noted.

Superintendent openings also exist overseas, particularly in Southeast Asia. Piersol said he could place a half-dozen assistant construction superintendents there almost immediately.

"The problem is you have to be very mobile," Downing said. "And after four or five years there, you don't really have any contacts if you want to get a job back home."

Frustrated Vt. developer may run for governor

By Peter Biais

After eight years of frustration over his inability to get a golf course construction permit, and what he perceives as the anti-business attitude of recent administrations, Sherman Hollow developer Paul Truax will soon decide whether to run for governor of Vermont.

Truax, 56, said he will determine whether to seek the GOP gubernatorial nomination by late April, after the current legislative session ends. Truax said it will be clearer then exactly who else may seek the party's nomination to run against incumbent Democrat Howard Dean.

The Huntington businessman charged the Dean administration with encouraging excessive central control, discouraging out-of-state investment, and ignoring the desires of Vermont's people.

"I have been approached by numerous citizens, business and community leaders who share my concerns," Truax said. "They've pledged their support, both personal and financial, if I will make a commitment to run. I'm ready to make that commitment if the clock allows."

A native Vermonter, Truax began his career in engineering and moved on to medical administration. He owned and operated many businesses before embarking on Sherman Hollow, a proposed 18-hole golf course, community, hotel and conference center in Huntington.

District and state environmental boards have rejected Truax's applications because of concerns over pesticides, water and erosion.

The most recent setback came at the hands of the state board last fall. Truax requested the board reconsider its position in December and received a hearing in February. He is awaiting a decision.
An apology for Jimmy, after all these years

Robert Trent Jones Jr. is president of Robert Trent Jones II, which designs golf courses around the world. The firm is headquartered in Palo Alto, Calif.

I am not convinced Silence of the Lambs is better than the best the golf industry could have offered for the Oscars competition. Nor can I imagine that Anthony Hopkins was the year's superior talent. So I've devised my own list of choices for the sky in gold of 1991.

Without further adieu, here goes:

Best Animated Short: Brian Silva, Small in stature but tall in humor, Silva wins this Birdie with a dozen jokes to spare. Best Special Effects: Bonnet Creek Golf Club, the new creation at the sky in gold of 1991.

A quick rightward glance to our Cockyhead reveals an addition to the staff here at Golf Course News. I've recently been named editor of this fair publication, thus ending my run through the nocturnal, sometimes caustic world of daily newspapers.

As a longtime golfer and lover of course design, I accepted the editorship of Golf Course News with enthusiasm and without hesitation. In this space each month I plan to baffle at some length on subjects tomy liking; subjects gathered willy-nilly from my experiences on the course, on the road and among industry professionals.

Oftentimes, new editors choose their column spaces with sentiments like these: "Hello, so glad to be here... This is your publication, so don't hesitate to write us letters... We will continue to deliver the outued readers, have come to expect..."

Oftentimes, new editors choose their column spaces with sentiments like these: "Hello, so glad to be here... This is your publication, so don't hesitate to write us letters... We will continue to deliver the outued readers, have come to expect..."

Yes, I'd like to begin my editorial tenure with something a little different: an apology.

I am not fond of being called "journalist." I've never liked being seen as a member of the tribe that goes "whoosh" haphazardly whilst travelling around the course like a group of madcap chases all over the course.

An empty house sits at the geo-center of the column, wedged between the first green and second tee. When I was a kid, the gentleman who oversaw Neihofd lived there with his six kids and two bellimg

And because it's owned by an institute of higher learning, students sometimes use the sixth fairway for gym class at which time both the sixth and seventh holes are off limits to members, or anyone else for that matter.

In any event, I grew up across the street from Neihofd and the course was my playground. We staged mock military battles in the bunkers; rode our bikes across fairways past unwriting foursomes; and played football in the rough on No. 7.

But, we do see a much more men-

However, our greatest source of joy was not the play itself... It was the thrill of leading angry crew members—like poor Jimmy—on madcap chases all over the course.

One hot summer night, while playing in the sprinklers on No. 6, our frolic was interrupted by several beauties of Light... Frozen with fear, we looked up to see Jimmy and his newfound entourage.
Sell the game
Continued from page 10

gri  x in Manhattan for all the traffic it will cause.

An estimate of facts and figures pretty much got out the window when the opposition blew up, as the story is always the same. The golf course drives the animals away. The birds disappear. The soil will be choked with chemicals, and on and on.

Even though 10 percent of the U.S. population plays golf, some 30 million of us out there, the city or county officials involved often don't, and they are easily persuaded by these silly and baseless arguments.

A FAMILIAR refrain

As you read this, does it ring a bell? How many golf course projects have you heard of or read about that have been challenged in this manner? Defeated?

How many do you suppose were never even presented because those with the idea, those willing to take a risk, knew they would not be playing on a level field?

As we embark on the voyage of 1992, the threat to golf is only related to economics in the sense that the permit process is very expensive and getting more so. It is this political rite of passage that is the really serious problem. If those of us in the industry are not able to provide the playing facilities for those who currently play golf or would very much like to, our sense that the permit process is very expensive and getting more so is wonderful argument.

The answer is obviously to form our own band of volunteers. Those who love the game need to step forward and shout loudly that golf is the absolute preservation of open space. The golf course is an animal habitat, a bird sanctuary, and a permanent greenbelt area.

It provides wetlands that were never there before. When disasters strike in places like the San Fernando Valley, San Jose, Sacramento and San Diego, some view the golf course as a portent of development to follow. But, the golf course is part of the solution, not the problem.

We desperately need more golf courses, especially good public ones. Instead of denying permits, every city council and board of supervisors in the country ought to be seeking ways to provide more golf. Sanitary landfills and the areas in the vicinity of airports come immediately to mind.

Our golf associations around the country should have regular support groups for new golf course ideas and proposals. On the Monterey Peninsula, we designed and built Poppy Hills for the more than 140,000 members of the Northern California Golf Association. It now does more than 60,000 rounds a year, played mostly by those dues-paying members who own it and their guests. What an outstanding model for other broadly-based golf organizations to follow.

As often as possible, our people attend seminars and business conferences relating to the golf industry. We also appear at countless planning commission, city council and board of supervisors meetings. In many cases we feel like the sole in a hockey game, wading off one slip shot after another about the game of golf.

If there is a single message in all this, it is to live the game, as well as play it. Step forward and be a spokesperson for golf whenever a challenge is issued. Support good sound ideas in your community which will provide new courses and the opportunities for others to play and enjoy the game.

If you are reading this, you are one of those close to 30 million in the United States who play the game for the fun and friendships it provides. Let's not let it return to the elitist game it was before folks like Ike and Arnie convinced us golf was a game for everyone.

Instead, let's join together and actually sell the game to those who make land-use decisions.

This is loud and clear, let's get them to our vote for open space, greenbelts, wetlands, animals and wholesome fun and exercise.

Oh, don't forget the birds, either... or should I say birdies?

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For the "International" we spray everything inside and outside the gallery ropes with Surf-Side #37 and Iron. Our fairway program during the summer is 3-oz Surf-Side/M and 1½-oz Iron/M applied every other week. We don't water-in the application. The Iron mixed with Surf-Side does wonders for the grass! Greens receive 1 qt./M Surf-Side to start season.

Back in 1986 we had lots of fairway areas that didn't take water well. Localized dry spots were a real problem due to thatchy turf and a clay-gravel soil. With 40 days over 90°F and winds coupled with 15 to 25% humidity the exposed sites dried out rapidly. A program of aeration plus Surf-Side has reduced this problem significantly. At Castle Pines hand watering isn't just hand watering any more . . . any remaining dry areas on fairways are hit with Surf-Side using a quick coupler and a 5-gal tank proportioner containing a premix of 1½ gals Surf-Side #37 to 3½ gals water. This gives us one quart Surf-Side to sixty gallons water applied as a drench. A repeat application usually isn't needed for up to 4 weeks. Our fairways are irrigated twice a week. When conditions warrant we also premix Surf-Side and Iron (with water) in a 50-gal tank and inject this into the irrigation system.

Fairways were originally seeded to Seaside and Astoria bent. Tees and greens to Penncross. We now overseed fairways with Penncross and SR 1020.
**Briefs**

**HI-LO LINES UP MAJOR SPEAKERS**

Drs. Terry Riordan and Joe Duich will be featured speakers at a special spring seminar Hi-Lo Desert Golf Course Superintendents Association is sponsoring May 19 at Doubletree Resort in Desert Springs, Calif.

Riordan, of the University of Nebraska, will talk on "Water Conservation and Buffalograss" and on "Selection of Cool-season Turfgrass for Tees and Fairways." Duich, recently retired from Pennsylvania State University, will lead an open discussion on "An Adventure in Japan."


**Zidik resigns; Hahn takes post on GCSAA board**

Joseph Hahn says he is excited and anxious to begin his duties as the newest member of the Golf Course Superintendents Association of America's board of directors.

Hahn, superintendent at Oak Hill Country Club in Fairport, N.Y., was named by GCSAA President William Roberts to fill the one-year term of Paul McGinnis, McGinnis, of Union Hills Country Club in Sun City, Ariz., filling the vacancy for the two-year term of Randall Zidik, who stepped down shortly after being re-elected to the board at the GCSAA annual meeting Feb. 17 in New Orleans. Hahn was one of five men who ran for three open seats on the board.

"I'm real green. I'm a rookie. And I'm anxious to get started," said Hahn, 51, a 28-year member of GCSAA.

He said he wanted to serve on the board because he had worked on several GCSAA committees, including the Superintendents of America's board of directors.

Zidik, superintendent at Rolling Hills Country Club in McMurray, Pa., served three years on the board.

In his letter of resignation Zidik said that "over the past several months I have been struggling to deal with the balance between my GCSAA activities and my numerous other responsibilities. Upon returning from conference and following a thorough self-examination, I have come to the conclusion that it would be best for me, my employer, and for GCSAA to resign from the GCSAA board immediately."

Zidik said he will "treasure the friendships made with the association's senior staff and with my fellow board members... Experiences and maturity have shown me that there is no greater gift than that of true friendship and for that I thank all of you from the bottom of my heart."
Westwood benefits from Montross’ turf talents

By Vern Putney

When “Mostly Montross” switched careers a quarter-century ago, teenager son Walter Me suspected that golf would shape his life.

After the senior Montross became the general manager at Annapolis (Md.) Roads Country Club, Walter began at the bottom of the links ladder as caddie, cart maintenance worker and all-around gofer. His big break came when directed by the golf course superintendent to help out on the golf course.

Although the work was much more physical than it is today, there was nothing he enjoyed more except perhaps playing golf.

Pointed to the right profession, Montross has occupied several prestigious industry positions since graduating in 1975 from the University of Maryland, Institute of Applied Agriculture.

A certified superintendent since 1984, he’s been president of the Greater Washington Golf Course Superintendents Association (1981), IAA, Maryland Alumni Association (1984), and Mid-Atlantic Association of Golf Course Superintendents (1989). Montross also served on the Virginia Turigrass Council’s board of directors from 1986-1989. He and wife Linda have a 9-year-old daughter Tracy, and a son Geoffrey, 7.

Montross believes job appeal stems from the variety of tasks involved: the look of the course from day to day, month to month; and the longer-term observations, such as maturing trees and finished construction projects. He notes that as projects mount, playing time diminishes.


When approached about coming to Westwood, Montross learned the club was interested in changing fairway turf from 90 percent poa annua to something more hardy to the Mid-Atlantic region. The goal: tighter, drier lies in the summer months.

Club officials years before had decided that upgrading the course was both necessary and desirable. The club had completely rebuilt all greens and begun to rebuild many of the old postage-stamp tees before Montross came aboard.

Fairway turf remained the only serious problem. Montross did not know which type of turf would be chosen. In the Washington area, almost every type of grass can be found in the fairways. Within a 20-mile radius,

Continued on page 15

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"Hypalon is a Registered Trademark of E.I. DuPont"
Montross' challenges at Westwood far more than 'just growing grass'

Continued on page 14

Zoysia, Bermuda, rye, blue, bentgrasses and combinations of each can be found.

As Montross learned more about the unique traits special to Westwood, he formed an idea about the grass best suited. He chose bentgrass. He felt this type turf would provide year-round quality, with the potential to play summer rules most of the year. Until this time, bentgrass had not been extensively tried as a fairway turf in this area. Many years ago, there was an attempt to grow poa annua all over again. This variety was chosen because of its particular growth characteristics. The golf course was closed only 30 days, as lateral rooting occurred. Little more than a year later, the playing surface is excellent. The bentgrass survived one of the worst summers in the Mid-Atlantic region. The only problem was the expected reinvatination in the fall of 1990. Westwood ended up with a little more than hoped for, about 40 percent. Last fall, Montross again reseeded, using Pennlincs and the new Dominant bentgrass.

"This blend has looked excellent in our nursery," he said. "We are experimenting with the use of various growth retardants, pre-emerge products and Progress in attempting to find a program that will reduce poa annua levels to around 20 percent."

Westwood CC has begun the complete renovation of all sand bunkers. This will entail removing all old sand, re-establishing drainage and adding new sand. These 65 bunkers embrace 130,000 square feet. In addition, seven new bunkers will be built. Apace with Westwood's vision of the future, Montross sees an equally positive outlook for the technological end of the golf course business. The superintendent's position has evolved tremendously, and Montross is excited to be a part of it. However, as golfer demands have increased, many superintendents face increasingly difficult situations. Next big step may be to convince golfers that not every family has the resource or capability to be like the course last viewed on TV.

Montross would encourage those about to enter this field to take a Dale Carnegie course. It might be more topical than ever. "Growing grass," he noted, "now is just a small part of the business. Pesticides, public and press relations, communication and planning have emerged as more prominent issues."

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The offspring continue to hunt down pest larvae. Once successfully eliminated, the nematodes simply wither and die off. So what you're left with is healthier turf. Not to mention peace of mind. To learn more about our natural larvicide, just call your distributor, or call Ciba-Geigy Turf & Ornamental Department at 1-800-934-CIBA.

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Agronomists hope Far East proves a bonanza in superior turfgrasses

Continued from page 13

Others expressing interest in the trip, according to Taliaferro, include fellow OSU professor Ron Tryl and U.S. Golf Association Green Section Research Director Mike Kenna.

"We'll try to find one or two others," Taliaferro said.

Taliaferro believes superior varieties of Bermudagrass, centipedegrass and zoysiagrass may be discovered in the Far Eastern country. Little germplasm (plant material) has found its way out of China over the past 45 years because of Communist rule and strained relations over the Tiananmen Square episode.

The Chinese also feel they have been mistreated by "foreigners," who have traditionally raped the country of its natural resources, Taliaferro said. The Chinese, for example, had a monopoly on soybean production prior to World War II. But foreigners took plant material out of the country and that domain was lost forever.

"The Chinese never forgot that," said Doug Brede, research director with Jacklin Seed Co.

To help lessen mistrust of foreigners, Taliaferro said his group plans to share any plant material it discovers with Chinese researchers.

The OSU professor spent four weeks in China during 1987, building a strong rapport with scientists there. Those contacts have been very supportive of the U.S. group's plans and should be helpful in gaining Chinese government approval for the trip, he added.

Glen Burton, a research geneticist with the USDA's Agricultural Research Service in Tifton, Ga., was one of the few turfgrass researchers allowed into the country during the past half-century. He returned from Shanghai in 1974 with a strain of Bermudagrass that was released in 1988 as Tifton 10. It has since become one of the most popular Bermudagrasses on the market, greening up early in spring and showing good winter survival as far north as New Jersey. It is particularly well suited to roughs.

Burton's success fuels Taliaferro's optimism for finding new and better grasses in China.

"We're not certain superior grasses are there," Taliaferro admitted. "But we know various grasses have existed in China for thousands of years. Where that many species exist for so long, there has to be great diversity. "China is also a large country with variable climatic conditions. That also implies much genetic variation."

Researchers eye Envirotron as a prototype

Continued from page 13

climate-controlled chambers and greenhouses which will allow scientists to study various aspects of the movement of water, fertilizers, chemicals and nutrients through plants and soils.

The Envirotron was funded by private support from FTGA, a nonprofit organization, and by matching funds from the state.

University of Florida Interim Vice President for Agricultural and Natural Resources Jim Davidson stressed the importance of taking an holistic approach to turfgrass maintenance in the future.

"We must not only find ways to control and eliminate pests and diseases affecting the industry, but we must also come to a solution that is acceptable to our society and that protects and preserves our environment," Davidson said.

Rehberg said: "If I could leap forward 20 years from now and look back, I believe the greatest legacy this Envirotron will give us will be in the area of education."

To furnish the Envirotron with the resources it will need, the research facility's planners are seeking donations-in-kind of equipment and machinery from private businesses and corporations.

Jack Posilvar, production manager for Lewis Brown Jr., the Gainesville architectural firm which designed the facility, said a pre-bid conference with potential contractors is set for the end of August. A contract will be awarded Oct. 1, he said, with construction starting Oct. 15.

He expects the facility will be substantially complete by mid-July 1993, when the International Turfgrass Society meets at Palm Beach.

The Envirotron consists of a research laboratory, greenhouse, study-living area and one of only a few rhizotrons in the world.

Rhizotrons essentially are glass-walled underground laboratories that enable researchers to study roots and soil to a depth of about six feet, except the crucial top two inches of root structure.
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Fifteen thousand people viewed the festival, with the Heart's name appearing on a sign in front of the tree and wreath and also on an information board at the entrance to the festival. A television station also showed the tree and wreath to its viewers.

Meanwhile, the Heart also donated a check for $500 to the Redemptorist Center, which feeds more than 175 families weekly, assists the aging and provides emergency assistance and self-help programs, social activities, an outreach program, and free health facility.

"Obviously, the Heart of America GCSA received a lot of publicity for its involvement with the Festival of Trees and the Redemptorist Center," Fearis said. "However, it was also gratifying to be able to help the needy during the Christmas season."

The Heart will continue pursuing those public relations ventures that expose our name to the public—golfing and non-golfing."

Coopman, Mita earn Nicklaus' recognition as top supers

NORTH PALM BEACH, Fla. — Jack Nicklaus has honored Michael S. Coopman of Dove Canyon Golf Club in Mission Viejo, Calif., as the National Superintendent of the Year.

The International Nicklaus Superintendents of the Year honor was awarded to Minehiro Mita of Japan Memorial Golf Club in Kobe City, Japan.

"Golf course management has become a state-of-the-art science over the years, and both Michael and Minehiro have mastered their skills in maintaining superior golf facilities," said Nicklaus, chairman and chief executive officer of Golden Bear International. "Both have overseen golf courses from construction to completion and established a level of maintenance to compare with any course I have seen."

Coopman was named course superintendent of Dove Canyon in July 1988, and was responsible for overseeing the course's transition from construction to grow-in, maintenance to its opening in 1991. Prior to Dove Canyon, Coopman was employed at Bear Creek Golf Club in Temecula, Calif. Coopman graduated from Michigan State University.

Mita becomes the second Japanese superintendent to receive the award and has overseen the responsibilities at Japan Memorial since 1988. Prior to his work at Japan Memorial, Mita served as superintendent at Sunnyfield Golf Club near Mito City, Japan. He recently accepted a new position as golf course superintendent at the new course being designed by Nicklaus at Ibioka outside of Tokyo.
The data will be used to assess the potential risk posed by the pesticides and fertilizers and to help develop and refine guidelines and management practices for pesticide applications on golf courses.

The program will seek to evaluate the use, accumulation and runoff of pesticides and fertilizers from golf courses. Application records will be examined to determine peak application periods. Samples will be obtained during these peak periods, especially immediately after significant rainfall. The data will be used to assess the uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost. It also gives you the texture and uniformity of sod at a fraction of the cost.

The New Jersey Department of Environmental Protection and Energy's Pesticide Control Program is interested in conducting a monitoring program for pesticides and fertilizers on golf courses.

Superintendents interested in participating in the program should contact Roy Meyer of NJDEPE Pesticide Control Program at 609-530-1274. Costs associated with sampling will be borne by the PCT, which says sampling will be accomplished with a minimum disruption to course operations.

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Southeast

DISEASE TRAINING
A short course, Diseases of Ornamental Plants, will be held May 19, hosted by the University of Florida at Gainesville Institute of Food and Agricultural Sciences.

The course will focus on the mode of action of ornamental fungicides, bacterial and fungal diseases, sanitation and root-rot complex.

More information is available from Uday K. Yadav at 407-323-2500, ext. 5559.

FLORIDA FIELD DAY
The Central Florida Golf Course Superintendents Association is conducting a field day and its annual golf championship June 10 at Timacuan Golf and Country Club in Lake Mary.

Whit Derrick will defend his title in the tournament, which will get off with a shotgun start at 9 a.m. The equipment demonstration will begin at 2 p.m., with dinner following at 5 p.m.

NEW POSITIONS
Mike Kenovich, formerly at DeBary Plantation in DeBary, has accepted the position of superintendent at Green Valley Golf Course in Clermont.

Dale Reash has moved from La Cita Country Club in Titusville to Countryside Country Club in Clearwater. Both courses are operated by ClubCorp of America.

STEICHEN GETS ORLANDO POST
ORLANDO, Fla.—Alan Steichen has been named golf course superintendent for Falcon’s Fire Golf Club, under development here by Floribra U.S.A., Inc.

Steichen had been at Laurel Oak Country Club, Sarasota, since July, 1989, and previously was assistant superintendent at Longboat Key Club.

West

SHELDON NAMED AT SANDPINES
Jim Sheldon, lifetime PGA professional, has been named director of golf operations at Sandpines Golf on the Oregon Dunes, a resort course being built in the central coastal community of Florence, Ore.

The course is scheduled for play early next year.

"I'm working with the development team to establish a strong, program-oriented approach to what will be a very special public course," said Sheldon.

"I'll help with the programs, selection of a course pro and play the role of 'ambassador' as our project gets rolling."

Sheldon was named PGA Professional of the Year for Oregon in 1987.

The Rees Jones-designed championship course forms the centerpiece in a 270-acre privately owned parcel featuring the Oregon Dunes.

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Covering all of the angles

From golf course to graphics design, Richardsons do it all

By Mark Leslie

While golfers are trying to hit holes-in-one on the Tom Fazio and Pete Dye-designed golf courses at Disney World, the Disney folks feel they have hit a home run with their graphics package designed by a less-well-known architect.

Richardson or Richardson — translated architect-cum-artiste Forrest and graphics expert Valerie — have received high praise from Disney Development Co., whose accolades are given sparingly.

Tom Sunnarborg, development manager for Disney Development Co., said: "The graphics are a home run. Our criteria was that the signs be durable, readable, functional, but also unique. And they are. There is nothing else like them. From the signs along the entry road to the signs in the clubhouse, tee signs and cart path directional signs, yardage markers, flags, logo, everything is really well done. They have clearly exceeded expectations."

Saying that "part of our challenge is to do projects that are so special they're worthy of our company," Sunnarborg placed the Richardsons in the company of Fazio and Fazio in painting a picture of high-caliber success that has enveloped Disney's Bonnet Creek.

Continued on page 27

Zoeller designs 1st in Carolinas

HILTON HEAD, S.C. — Island West Golf Club at Hilton Head, a daily-fee course designed by golf professional Fuzzy Zoeller and Clyde Johnston, opened Dec. 21.

An 18-hole championship course, Island West is Zoeller's first design in the Carolinas. According to Zoeller, "Island West Golf Club will provide a challenge to the high- and low-handicapper alike. While the course will present several opportunities to 'go for it,' there is also a 'safe' route to the green. There will be no forced carries. Who wants to come to a resort to get beaten up by a golf course?"

Island West is being developed by the Fairways Fund, an investment fund recently introduced to the market by Marion Bass Investment Group, parent company of Bass Golf, Inc. and headquarted in Charlotte, N.C.

Arthur Jeffords, who heads up Bass Golf, said of the course: "Fuzzy and Clyde have given us exactly what we asked for — a golf course that's fun to play. It will challenge you but not break you."

The course plays from 4,938 yards to 6,803 on three sets of fees. It is located on 150 acres of low country terrain with more than 24 acres of lakes and strategically placed bunkers.

Island West is open to the public, but the whole operation has been designed to elicit the feeling of a private country club.

Island West's 6th and 17th par-3s feature side-by-side greens 125 yards wide, as viewed from the air. Though a body of water fronts the greens, architects Fuzzy Zoeller and Clyde Johnston have designed "safe" routes.

Photo by Skip Meachen

From play to profession

By Mark Leslie

Little did Arthur Jack Snyder know what seeds he was planting 20 years ago when he gave a teenager a topographical map and told him to "go design a golf course."

The 13-year-old kid was Forrest Richardson. And Richardson now owns Golf Group Ltd. and works alongside Snyder on many projects, although their companies are not officially related.

"I bothered Jack a lot as a kid," Richardson said. "I'd bike over to his house. He'd give me topo maps and say, 'Here, kid, go design a golf course.' I learned a lot from him."

Snyder helped fan the growing flame of interest to the point that Richardson published a newsletter, "The Golf Course Designer," for four years. Richardson was 15 years old when —

His 80 readers spanned the globe. When he once wrote that lack of finances might force him to discontinue publication, sub-

Continued on page 29
President Pierman spells out builders' priorities

By Mark Leslie

A certification program to ensure standards of construction is Jerry Pierman's number-one priority as he enters his two-year term as president of the Golf Course Builders Association of America.

"We hope in five or 10 years people who build golf courses will ask a contractor if they are a member of GCBAA and if they are certified. That will tell us our standards are being addressed and recognized," said Pierman, who succeeds Perry Dye as head of the 125-member organization.

Pierman said the golf boom of the 1980s opened the door for contractors to get in the business thinking it was easy—and big—money. "So we had some problems because of that. Now we've got to settle down, start the certification program, start policing ourselves, and bring the overall quality of work up to a better standard.

"But even more so, we can eliminate some of the problems we've had in the past—like projects over-running budget, getting started and not finished, starting with one builder but needing to call in another in the middle of construction." Certification, he said, does not only deal with workmanship.

"That is number one in everybody's mind. But there are a lot of other problems that enter into building a course. We're trying to say, You've got to have built so many golf courses. You've got to have qualified, experienced people. We want to see recommendations from former clients."

Saying that when a project runs into trouble, the builder is considered part of the problem, Pierman said: "In most instances that's not the case. The project is probably financed incorrectly to start with, budgeted incorrectly, planned poorly, or the game plan was not stuck to during construction."

To attack the problem, Pierman and the GCBAA believe certifying builders is crucial, as in educating developers.

"The certification program is being put in place. It allows the members of the GCBAA to become certified through testing procedures once a year. It tells the golf industry we are setting standards for ourselves. It does not mean if someone is not a member they are not a good contractor. But it says our members have met that standard," Pierman said.

The GCBAA hopes to conduct the first certification testing in mid-August at its summer meeting during the PGA Championship in St. Louis, Mo. Then, once a year a representative of each company will take the test for renewal.

During this process, GCBAA members intend to police themselves. The hope is that future certified contractors will check the work of companies that want to become certified.

Pierman foresees future GCBAA-sponsored educational programs as a key for golf course developers, saying, "We're the builders. Who better to ask than us?"

Want proof of the effectiveness of Scotts TGR Turf Enhancer 50 WP?

Scotts TGR Turf Enhancer 50 WP not only improves the color, density and playability of turf. It also reduces clippings (by up to 50%).

TGR Turf Enhancer controls turf growth control for tees, fairways and greens, encouraging tightly knit turf stand. As turf growth slows, clippings are reduced and water conserved—offering important economic and environmental advantages with regards to clipping disposal and water management.

When used with nitrogen fertilizers, TGR Turf Enhancer stimulates turf greening for...
The golf course architecture firm of Robinson & Carrick Associates Ltd. of Willowdale, Ontario, has completed construction of Calerin Golf Course in Erin, Ontario. This is the 8th hole on the nine-hole private course. Calerin is one of two courses Robinson and Carrick will open in July, according to Doug Carrick. Osprey Valley Heathlands Course, an 18-hole daily-fee facility, is also set to open that month in Alton, Ontario. The Heathlands course was built between May 15 and Sept. 15 last year.

Photo courtesy of Robinson & Carrick

Treated with TGR Turf Enhancer

Read our clippings.

up to 12 weeks. And it is especially effective on perennial ryegrass turf.

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Your Scott Tech Rep is ready to show you how TGR Turf Enhancer can improve the playability of your golf course as part of a total turfgrass program.

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NGF report concentrates on munis

JUPITER, Fla. — A new National Golf Foundation (NGF) report offers communities, private developers and others interested in building and/or operating a public golf facility a close look at the common denominators of some of today’s newer and more successful municipal projects.

Entitled Lessons Learned from New Municipal Golf Course Development, the 75-page report includes profiles of 20 municipal courses that have opened for business since 1985. The courses selected are representative of municipal facilities across the nation in terms of location, size and type of facility.

Each profile includes information on:

• Conditions that led to the decision to develop the course and who was involved.
• How the land was acquired.
• How the project was financed.
• How design and construction was accomplished.
• The variety of operating systems and fee structures being employed.
• What developers say they might have done differently if they had to do it all over again.

Among the case histories are examples of projects for which the land was donated by a variety of sources, such as developers, private citizens and corporations. There are also examples of developments that municipalities have undertaken in conjunction with both management companies and park districts.

For further information, call NGF’s Membership Service Department at 800-733-6006.

S.C. course to mix business, pleasure

ROCK HILL, S.C. — Rock Hill Economic Development Corp. officials have revealed a master plan for the Waterford Business Park that features a privately developed 18-hole golf course.

Palmetto Club Properties of Greenville will finance, develop and manage the golf course, to be designed by three-time U.S. Open champion Hale Irwin. N. Barton Tuck, Jr., general partner for Palmetto Club Properties, said the course will be challenging while offering executives and employees an opportunity to mix business with pleasure. Construction is expected to begin in the fall and open by the fall of 1993 or spring of 1994.

Walking trails, lakes and extensive landscaping are also planned around industrial warehouse and office buildings along the Catawba River. At least 51 percent of golf course tee times will be available to the public. The business park tenants will receive special corporate privileges and Rock Hill residents will receive a 10 percent discount on weekdays.
Japanese course basher takes arguments to Hawaii

Continued from page 1

fall, Morita said more than 100 projects are under construction or planned in Hawaii. Better than half involve Japanese corporations. Japanese companies own 35 percent of the state’s agricultural land, prime areas for future golf course development, he added.

“I understand he’s pretty persuasive with the people in Japan and with some of the environmental groups in Hawaii. I imagine they’ve welcomed him with open arms. A lot of development is being financed with Japanese money and there are people only too happy here to listen to his message,” said Dennis Vogt, Dye Designs International’s director of turf maintenance and head superintendent of Royal Hawaiian Country Club, a 36-hole course scheduled to open its first 18 in June.

Morita first spoke at a community-based anti-golf conference sponsored by the Hawaii Golf Course Action Alliance in November. He returned for two weeks in January, touring some of the state’s most controversial developments, speaking at anti-golf development meetings and testifying before local governing bodies.

Was he effective?

“Testified before the Honolulu City Council on one project in the morning and he testified on another in the afternoon,” said environmental consultant Stuart Cohen of Environmental & Turf Services Inc. of Wheaton, Md.

“I didn’t hear him. All I know is the council approved the project I was working on and rejected the one he talked about.”

Doug Jones, a reporter with the Hilo Hawaii Tribune Herald on the Big Island of Hawaii, where a course development moratorium has been considered, covered Morita’s visits.

“He has a very understated approach, speaks English well and is very persuasive,” Jones said.

In his younger days, Morita operated a Tokyo-based trading company and played golf occasionally. Seeking a simpler lifestyle, he sold his business and moved 100 miles from Tokyo to smaller Kamogawa in Chiba Prefecture. He became a subsistence farmer, joining a Buddhist temple that promoted a natural gardening method that even forbid the tilling of soil.

“That was the first time I became aware of the environmental problems with golf,” Morita said.

He has since become Japan’s leading anti-environmental activist.

Continued on page 25

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The advantages of Turf Club membership are numerous. To find out more, write Kubota Tractor Corp., P.O. Box 7020-T, Compton, CA 90224-7020.
Basher wants to stop any and all golf developments

Continued from page 24

golf development voice on the international scene, basically because "no one else in our group speaks English that well." "I fear some of the same things are happening to Hawaii's environment that happened in Japan," he said. "There is huge destruction of the landscape. Large amounts of soil are moved and hills cut down."

Golf course fertilizers and pesticides leach into groundwater, despite claims by industry officials that, when properly applied, they are trapped within the turf, Morita said.

"Golf courses are trying to limit the amount of chemicals they use because they know how dangerous they are," he said. "We feel it's our duty to inform people they are being attacked by golf course developers."

Vogt countered that Royal Hawaiian has had all chemicals and fertilizers cleared with the appropriate state and federal agencies and will employ an integrated pest management plan to minimize chemical use.

"We don't use chemicals if we don't need them," Vogt assured. Socially, golf courses, particularly at resort facilities like those dominating Hawaiian development, cater exclusively to rich people who can afford $300 or $400 hotel rooms and $100 to play golf," Morita said.

Japanese resort developers are land speculators, the former businessman said. They drive up land prices, making it too expensive for local people to buy. The jobs they create are low-paying and the resorts generate little in new taxes, he added.

"They promise high-paying jobs and more tax dollars, but they never deliver. No one benefits except the corporations and a few politicians. That's what happened on Okinawa. And the situation from the courses also destroyed the coral beds," he said.

Morita's message has struck a chord with the residents of Hawaii's Big Island, where some have accused Mayor Lorraine House of using her influence with the local planning board to bend the zoning rules for a Kona developer, Jones said.

The developer, who reportedly contributed $21,000 to the mayor's election campaign, received an accessory-use permit for a 54-room inn adjacent to the golf course, instead of having to go through a separate permit process, he added. Some members of the City Council want the power to approve golf courses taken away from the mayor-appointed planning board and given to the voter-elected council, Jones said. The Hawaii Golf Course Action Alliance's Protheser thinks it's a good idea.

"Culturally, golf resorts rob an area of its local flavor, Morita said. "Developers don't care about the local culture. They don't make their resorts blend in," he said.

Anti-golf forces have stopped development in Japan by using education and convincing government boards to deny permits. Showing a connection between a project and the yakuzu, Japan's organized crime syndicate, has also brought many projects to a halt.

"Japanese regulations have gotten very tough for the yakuzu the past two or three years. It's pushed them out of the country to areas with less stringent regulations, less opposition and cheaper land. Hawaii is one of those places they are looking at," Morita said.

"We've pushed the yakuzu out of Japan and into other countries. We feel partly responsible for their efforts to develop overseas. That's why we've established the Global Network, to oppose all golf course development throughout the world. Human beings can't afford golf courses anymore." Added Protheser: "There's tremendous sensitivity here to yakuzu money. People want to learn more about them. We hear of some of the same intimidation tactics they use in Japan are going on here."

Vogt said he hasn't seen any connections between Hawaiian development and yakuzu. Anti-golf groups have tried to connect Royal Hawaiian's Japanese developer Y.Y. Corp. with organized crime, he added.

"It's not valid," Vogt said. "They've made statements that the course will never be finished. It's hurting membership sales some, but we'll get through it."

Morita is working with Japanese journalist Tsutomu Kaji on a book concerning the Japanese investment in Hawaiian resorts and plans future visits to the island state.

"We want to stop all golf course development in Hawaii," he said. "There are 75 courses there already on a very small group of islands. That's enough."

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Golf Course News is publishing these lists monthly. Above are courses that have been approved around the country in the past month. Below are sites and contacts for new courses and renovations in the planning stages. When those courses are ready to begin construction they will be listed again as "newly approved.

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

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Richardsons tackle all facets of design

Continued from page 21

Golf Club since it opened in January. Fazio is a famous golf course designer. He plied his trade admirably in designing Disney's Osprey Ridge, Sunnarborg said.

Dye is a famous golf course designer. He also plied his trade admirably in designing Eagle FInes, Sunnarborg said.

What's special about the Richardsons?

The marriage of course design and graphics in one company, according to the folks at Disney.

Their graphics company, Richardson or Richardson, is a division of Golf Group Ltd., a golf course design firm in Phoenix. Forrest was once the art director for a television station and holds a degree in visual communications. Valerie was the head of the graphics department for a school system. "Tome this (graphics) is an extension of the whole process of golf course design, and one that architects, I think, are starting to take a little more note of," said Forrest Richardson, who has worked as a designer with architect Arthur Jack Snyder of Phoenix, Ariz., for nine years. "I don't think any of these great architects want to do a project and then have the signage, graphics, trademark and name not be indicative of their work.

"It would be like Frank Lloyd Wright designing a wonderful building and going to a real-estate sign company to get the sign for the front of it. He took a great interest in making sure the entry signs, monument signs, type faces and everything that was going into his buildings was sensitive and compatible to the architecture. He didn't go to While-You-Wait Signs."

Although the Richardsons have only once been hired for both jobs — a project under way in Hawaii — Forrest said: "If you're designing something as a whole as a course, it's like designing a theater. Golf course design and graphics are the same way. It's like a theater. Golf course architects want to do a project and have the signage and graphics and name not be indicative of their work.

"For Disney's Sunnarborg, finding a graphics company with golf course design knowledge was a plus.

"When hiring our consultants, I talked to nationally known, big-time architects and found there's no room for us to be involved in the signage, graphics, advertising and marketing. It's like hiring the architect and finding out he doesn't get to design the putting greens."

For Disney's Sunnarborg, finding a graphics company with golf course design knowledge was a plus.

"I said, 'This is the kind of company I want,'" he said.

Sunnarborg said Disney wanted "recognizable, unique and special so that people would remember it and buy the golf shirt and hat, the balls, and all those things. I looked at what everybody else was doing. It fell into two categories: very nice sandblasted or carved granite, which is all very nice but looks the same; and sandblasted wood."

I gave Forrest the criteria: You're not going to get sandblasted or carved granite. But it's got to hold up to chemicals, years, weather, and guys hitting it with a driver intentionally or intentionally with their golf clubs. Come back with something that really creative that hasn't been done before.""

The eight-person Richardson company, which does a lot of corporate design, marketing, advertising and packaging, "rose to the challenge," Sunnarborg said.

Fresh off their success at Stone Creek — an upscale daily-fee facility that had been taught by Westcord and redesigned by Arthur Hills — the Richardsons tackled the Disney job with fervor.

"With Disney we went steps further," said Forrest Richardson. "We began to talk about the theme, not the name. Disney is very on-stage off-stage oriented. Anything that is outrage when a guest visits, Disney considers to be a theatrical experience that has to be produced from

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Continued on page 29

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CIRCLE #123

May 1982 27
Has age ever determined which golf course architect got which piece of land in a two-course project?

It did at Disney World where the 60-ish Pete Dye got to choose over the 40-ish Tom Fazio.

The result has Walt Disney's development company flapping its ears in joy over its new Bonnet Creek Golf Club, encompassing Dye's Eagle Pines and Fazio's Osprey Ridge.

"Pete and I met about it. We knew we had two pieces of land, one low-profile and one with more contour and elevation," said Fazio. "So I said, 'Pete, you're older. You choose.' Pete said, 'I'll do the low-profile course.'"

Fazio added: "I think it turned out to be exactly what Disney wanted — two separate, distinct golf courses, that are almost total opposites, coming out of the same clubhouse."

Tom Sunnarborg, development manager for Disney Development Co. in Orlando, said, "We've found that people will stay an extra day here to play the other course, which is the most we could hope for."

Fazio said the courses are almost total opposites. "We had a north course (now Osprey Ridge) and a south course (Eagle Pines)," Fazio said. "The south course had to meander through the environmental issues — wetlands and some future development. The north course had some wetlands and other areas, and had potential for more water bodies and dirt. They almost set up a different style."

Sunnarborg said: "Tom filled and Pete cut. So Tom's course is very high and wild, a lot of up and down, a lot of topography, holes playing north, south, east and west, holes playing into the ridge, off the ridge, on the side of the ridge. It's a very spectacular golf course. Pete's is very subtle, maybe a little bit more difficult, but very low-profile, with a lot of water, a lot of sand."

A long-time environmental innovator, Dye wanted to do something environmentally positive at the Disney site.

"He did that in a lot of ways the public doesn't notice," Sunnarborg said.

"He is also very interested in speed of play. He did a lot of little things. St. Augustine grass is on the in-play side of water and bunkers, so balls don't get lost. They went way back into out-of-play areas and cleared them out so it's easy to find the ball. A lot of things make this very fast and fun to play. Both golf courses have exceeded our expectations."

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For further information on how South American Green can reduce soil erosion and solve revegetation problems on your course, contact South American Green today.
Richardsons
Continued from page 27

beginning to end. The golf courses at Bonnet Creek are no exception.

“We started working with all the people at Disney in defining the place. Is it a traditional Augusta-like setting or something else? A lot of questions had been answered by the architects. We decided upon a real quiet, simple, elegant, modern approach.”

That character was reflected in the final design for the logo and signage—a subdued look centered on the diamond shape.

“The diamond expresses the architecture and geometry of the clubhouse. It’s a simple, elegant icon that goes with everything,” Richardson said. “The name Bonnet Creek and the names of the courses were derived from suggestions from Disney. We went from one extreme to another and always came back to the natural theme of the osprey and the eagle.”

The result is a high photo opportunity. “If you look at all the Disney properties and attractions, they center around the concept of photo opportunity,” Richardson said.

Sunnarborg said: “A well-done golf course graphics program could involve thousands of signs. You could group them into maybe 10 categories. Each of our categories is probably a different material. The signs in the clubhouse are brush stainless steel, which are very elegant and nice. The signs on the golf course are one-inch thick, solid-aluminum plate. It’s thick enough to be durable, but thin enough so that it almost looks two-dimensional. It’s a full-grain color, but it’s green so that it’s meant to fade into the background of green grass. The top of the sign is a diamond-shaped mes-

sage carrier that seems to float in mid-air so you don’t see the base of it.”

Richardson said: “The main thing was not to call attention to the signs. The diamond helps a great deal. They are recognizable, shiny and bright, and you look for them the rest of the round.”

Mission accomplished.

The mission was also accomplished at Stone Creek.

Henry DeLozier, president of Resort Management of America which operates Stone Creek, said of the Richardsons: “We see a lot of folks who end up with the same solution to design questions. Perhaps it is a great solution. But when we talk with Forrest or Valerie we come up with new solutions that are ingenious, innovative and give the golfer or potential customer a different message than what we see as a standard in the golf industry.”

DeLozier added: “They have a capacity to touch a different plane than many of the rest of us are operating on. I can only attribute that to imagination and ingenuity. You look forward to what they’re going to give you (in a project), with full knowledge that you’re going to get some things that are absolutely whacky and off the wall and some things that touch a new sense of understanding for your own project.”

Richardson said that to enhance Stone Creek’s image “we developed the overall visual theme, the trade-mark and the color palette. Then we moved into the huge task of developing the sub-palettes of color for merchandise. Although we weren’t as involved in the design of merchandise, we gave them concepts and ideas and guidelines to follow about how to implement the logo on merchandise. We coordinated the signage (tee markers, tee signs, and signs on the course) and a great deal of work consulting in print graphics—yardage books and things like that.”

Richardson hopes projects like Stone Creek and Bonnet Creek, where graphics is stressed, are harbingers.

DeLozier is excited about the Hawaiian project because of its character and because his wife Valerie’s company, Richardson or Richardson, is doing the design work for the facilities.

Kealakekeke Golf Center near Kona is unique in that it will contain a 18-hole, par-72 course and a 9-hole (kids’) course. The kids’ course will be 1,056-yard, par-29. It is scaled down to about 0 percent of the hitting range of adults so that adults can use it as an iron course or play it at a different par. The 310-yard hole, for instance, could play as a par-4. In hisigagnwark, Richardson has an eye toward imagination and change. “There’s a lot of sameness in golf course design today,” he said. He intends to do his part in changing that.

GOLFPAGE NEWS

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Higher demand fuels unprecedented growth

Ranges offering practice areas by weeks open

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By Bob Spiwak

While industries nationwide are plagued by recession, the golf or practice range industry has grown in all respects — geographic, number, ancillary services and revenues.

A golf range association has been born. A publication for the industry has been launched.

A new concept in ranges including fitness centers, miniature golf, and electronic stuff that might put Back Rogers on the Tour is appearing. An industry trade show is set for Chicago next January.

Steve di Costanzo, executive director of the infant Golf Range and Recreation Association of America (GRRAA), reports that the number of ranges built in 1991 increased 33 percent over 1990.

Mark Grothe, golf-ball marketing manager of Spalding, said, "1991 was a big jump in range sales) over 1990." He estimated 50 percent.

Working to make practice more perfect

High-end, "ultimate" range facilities carve their niche

By Lisa Maki

Practice makes perfect, but what makes perfect practice? An optimum practice facility must meet the golfer's spiritual needs — physical and psychological.

Such perfect facilities are scarce, no matter what a golfer's skill level or where he plays: cow pasture or country club.

Throughout the country, golf courses have a common problem — inadequate practice facilities. Municipal courses often show more concern for picking up balls than hitting them.

Private courses have generally compromised their practice areas, squeezing in extrahomesites, leaving small ranges with no specialty shots.

Well-meaning entrepreneurs tried to respond to this dilemma by creating "golf entertainment centers" complete with batting cages, video arcades, putt-putt courses, and rubber matts.

These centers sprang up at major intersections across the country. They did little to satisfy the demand for picking up balls than hitting them.

An alternative to cow pastures, country clubs — is entertainment centers appears to be gaining popularity — the high-end daily-fee golf club.

Continued on page 35

American Golf executive

Market runs the risk of over-expansion

By Peter Blais

The market for practice range facilities may not be as bright as many believe, according to an executive with one of the nation's largest course management companies.

The past few years, many ill-conceived projects have been built in areas with insufficient demand, said Joe Guerra, senior vice president of corporate development with American Golf Corp.

Consequently, some municipalities are overstocked with practice centers, a situation that isn't likely to change until a few go belly up, Guerra said.

For example, two practice centers were recently built within five miles of AGC's Irvine, Calif. facility. While it isn't meeting expectations, the AGC center is still earning a fair return, Guerra said. But Irvine can't support the additional 150 new hitting stations and he expects the new facilities to have a tough time surviving.

"Many new practice ranges were built on headlines rather than sound economics," the AGC executive said. "The developers wanted in on what they saw as a glamorous business.

"One of the main problems is that the barriers to entry are so low. You can build a range for $600,000 to $1 million and 12 acres of land. A lot of people wanted to get into the business and were willing to mortgage the house to do so. But the market just didn't justify the investment."

Many developers bought land where they would have been better off signing a long-term lease, the AGC executive said. Those projects performing best are generally on land the developers have owned and operated as practice ranges for many years, adding... Continued on page 32

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Aqua range delivers novelty, profitability

By Lisa Maki

One trend that may further aid the rebirth of practice facilities — even the cow pastures and country clubs — is the aqua range, which combines beauty, drama, challenge and shot value, not to mention the novelty of floating golf balls.

The notion of hitting balls into a lake may sound counterproductive.

But the aqua range generates income and offers the developer a number of advantages: increased value of neighboring homes, decreased maintenance costs, and the fill necessary for forward tees to reflect modern game. Jim Cocchi, director of golf at Glenn Lakes Golf Club in Weeki Wachee, Fla., supports the aqua range concept.

Cocchi said his clients enjoy the aqua range, and it's been very profitable.

Its success can be partially linked to Cocchi's belief in supplying good quality balls. Although floating balls are about 60 cents more expensive than ordinary balls, the initial investment will be returned in kind, he said.
By Peter Blais

One of the country's largest management companies are at most its courses and may soon be building more stand-alone ranges.

"It used to be that the practice range was the last thing that entered your mind," said Jerry Diamond, Club Corporation of America's director of golf course operations.

"Now we're upgrading everything..." Ranges have become a vital tool to the ultra-violet rays of the sun. The desire of golfers to become more proficient is evident at Pinehurst Country Club, the flagship of Club Corp.'s resort division.

"I used to be the practice range was busy in the morning and dead at night," said Ken Crow, director of the company's Golf Advantage Schools. But you walk by at 5 p.m. now and it's packed. To play at that higher level, people realize they have to be out there before and after they play their round.

They want to improve, and the only way to do that is through practice," Diamond said. The desire of golfers to become more proficient is evident at Pinehurst recently renovated its practice area, expanding the tee area by 30 percent and building more target greens. Hitting areas are rotated frequently, divots patched daily and tees and fairways maintained at the same level they are on the courses. That has meant a moderate increase in maintenance costs, Crow added.

The practice facility at Barton Creek in Austin, Texas, expanded last year. Shanty Creek/Schuss Mountain in Bellaire, Mich., will expand this summer. Remaining Club Corp. resorts—Quail Hollow in Cleveland, Shangri-La Country Club in Allentown, Okla., and Palmas Del Mar in Puerto Rico—will be evaluated in 1992 with anyeye toward future expansion, Crow said.

A 10-to-12-acre facility that can accommodate at least 40 golfers is the ideal size, Crow said. "You want to get it as big as you can," he explained. "How fast the turf recovers also affects its size. It depends on the part of the country. In the North Carolina host, recovery rates are slow so you need more area. "You want the turf to be the highest quality possible. After all, people are paying $80 or more for a round of golf. They desire the best we can deliver."

The same philosophy holds at Club Corp.'s private facilities, according to Jim Hackbarthy, golf adviser for the Central region, extending from Texas through Kansas.

Club Corp. has renovated four of Hackbarthy's 25 courses. The rest are in line for facelifts.

Club Corp. sets certain standards for its practice facilities. They include target greens comparable to regular greens found on the course; designated tee spaces with 10-foot spaces that can be moved daily; high-quality ranges that are cut daily; practice greens mowed daily and ups; changed three times weekly; drinking water close by; artificial mats installed during transition periods; and fully maintained practice bunkers. All this can be expensive. Renovations at a small Houston club called Quail Creek will cost $100,000, Hackbarthy said.

"With the only area with an uncertain future is Club Corp.'s stand-alone practice ranges, the PGA Tour Family Golf Centers, Club Corp. and the Tour jointly operate two facilities, one in Arlington, Texas, opened three years ago and the other in Clearwater, Fla., opened five years back, said Andrew Crosson, Club Corp.'s vice president of new business development.

None have been built since and the PGA Tour has asked Club Corp. not to comment about them until the Tour decides on its future involvement at a May 25 meeting, Crosson added.

"It's a market with relatively few barriers to entry," commented Jim Crow of Crosson when asked if all the Mom-and-Pop operations opening recently have affected expansion plans. "You need a very, very good site to make a go-go.

"We're not staying on the sidelines forever. An inevitable shakeout should leave some prime properties and opportunities available, he predicted.

"The ideal situation for a new facility is a 45,000 population within a five-mile radius. There are not many places like that. And land is so expensive. We'll see what happens."
Forecast conference June 28-30

CHICAGO — Market research, site selection and schematic design will be among the topics addressed at the first Golf Range Development Seminar, co-sponsored by Forecast Golf Marketing & Financial Systems Inc. and the Golf Range & Recreation Association.

The seminar will be held June 28-30 at the Omni Ambassador East Hotel here.

For three days, range owners/operators and industry experts will discuss sales forecasting, feasibility, pro forma financial statements, warranted investments, concept and development programs, zoning and environmental issues, physical plants and financing.

Scott Marlowe, market analyst for Forecast, will be the keynote speaker. Marlowe is also a faculty member for the Professional Golfers' Association Golf Range Seminar Program.

Space is limited to 60 attendees and spots must be reserved 30 days in advance. For details, contact James Murphy at 804-276-5280.

NGF plans range seminar

JUPITER, Fla. — Creating a viable driving range involves more than laying down astroturf at one end of a large, open expanse. Equipment, design characteristics and effective marketing techniques are all part of the formula.

The National Golf Foundation will address these and other factors during its first seminar on the development and operation of golf ranges June 8-9, at the Fairview Park Marriott in Falls Church, Va.

The two-day program will present case studies focusing on issues of interest to operators, developers, investors, architects, suppliers and municipal officials.

Among the topics on tap:

- Components key to the financial success of a range operation, i.e., design characteristics, adequate lighting systems and proper equipment.
- Ways to increase profitability, i.e., effective marketing, golf schools and other amenities.

The speakers will include William Love of Ault, Clark & Associates; Bob Wittek of Wittek Golf Supply Co.; Kevin Hammock of Marriot Golf; Dr. Bob Ross of Environmental Structures; Jim McCumber of McCumber Golf; and golf course architect William Amick.

For more information call Roger Yaffe at 407-744-6006.

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CIRCLE # 132
yond teeing it up and blasting it out. Golf experience—something beyond the sign. The fields are both prosaic and aesthetic. Ball picker sales are up, along with other range equipment, said Sopko.

From headquarters in Lake Grove, N.Y., Nannette Poillon, owner of American Indoor Golf and distributor for Golttek simulators, described a piece of equipment that offers computerized course mapping ("Every pebble and contour of a given course is known and reproduced by the computer") which allows a player, indoors, to use regulation clubs and balls, have balls bounce accurately off berms, be subjected to wind effects and have the swing analyzed as birds chirp in the background. "Golf learning centers," they are called.

Poillon reports the simulator was installed indoors at a Michigan range, Kedlin, that had 25 outdoor tees and a 2,400-square-foot pro shop. Prompted to "play the popular Myrtle Beach courses," people signed up before the simulator was delivered.

Scott Schirmer, editor and publisher of Golf Range Times in St. Louis, began the 20-page bimonthly trade paper last July. Schirmer said the first issue had two ads. Four editions later, ads started coming to him unsolicited. Offered free to 2,200 public-access ranges in the United States, GRT "provides suppliers of golf practice ranges with a cost-effective advertising medium in the form of an informative and interesting publication for range owners," Schirmer said.

Reflecting the wider, more diversified nature of ranges, the Golf Range and Recreation Association of America was born in January and already has 285 members. Members own and operate traditional ranges, indoor golf and miniature facilities.

Di Costanzo portrayed GRRA as "the only association dedicated to golf range facilities and management."

He said, "GRRA was formed because the growth in the industry the last two years has been tremendous. Critical mass has been reached in this industry."

Di Costanzo expects a membership of 1,000 by year's end, with more to come.

"The (range) 'universe' contains 4,000 to 5,000 facility operators," he explained. The organization will offer a newsletter, insurance benefits, legal services and equipment discounts to members, he said.

DATA TELLS THE STORY

Scott Marlowe is market analyst at Forecast Golf Marketing & Financial Systems, Inc. in Richmond, Va. Ask him a question about the industry and he'll pull an answer out of his data base.

"Is the number of ranges increasing?" "Lord, yes! There was a 53.6 percent increase in 1991 over 1990," he said, then asked, "Do you want the numbers pertaining to on-course or free-standing, or indoor, or aqua ranges, too?"

Forecast's data answers the question about the solvency of ranges. Morlowe said about one-tenth of one percent of all public-access ranges failed in the last year, which is about one-fifth the rate of the number for all amusements and recreational services, and about one-seventh of the national failure rate for all U.S. businesses.

"There has been an explosion in ranges," Morlowe continued. "They have increased eight times the rate of golf courses. Landowners are looking for a land bank, course operators for an additional source of revenue."

Firing another salvo of statistics, Morlowe offered this: In 1989 83 percent of PGA-affiliated courses had a range, and 45.4 percent of the remaining courses offered the facility.

Municipalities are finding ranges a source of revenue. A case in point is Crystal Lake, Ill. A suburb of Chicago, its park district serves about 40,000 people.

Jim Miller, superintendent of recreation, said the city has a park project of about 200 acres. "We are looking at a way to generate revenue, and with what the range will produce, we can partially fund other projects," Miller said. "There are a lot of advantages, like no taxes. The public has used surrounding ranges, and this one appears to be a 'can't-miss' situation."

"The 15- to 20-acre range, still in the planning stages, is being designed by Lohmann Golf Designs of Marcungo, Ill. Lohmann architect Phil Sage said ranges usually occupy around 10 acres. The Crystal Lake facility will be larger as, "We are getting into more upscale facilities with sand bunkers and chipping greens. There will be a long-grass area for practice from the rough, mounds and depressions at either end to practice from."

"Golf," Sage said, "is getting more competitive. You have to cater to the person who just got a new sand wedge and wants to practice with it."

THE 'USED' MARKET

Grothe, of Spalding, said the life of a new range—ball is about one year. As

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Continued from page 31

Continued from page 34

The used market

balls get worn, more prosperous ranges will sell or trade them to other ranges, and purchase new ones.

"It's like the used-car market," he said. "There is a second-hand market in range balls.

Grothe would not divulge any numbers as to volume or dollars of the company's two-piece range ball.

As Spalding claims to be the largest ball maker in the world, Wittek, of Chicago, assumes that position in golf range equipment. Both manufacturer and distributor, Wittek serves courses and ranges around the world.

According to Sopko, Wittek invented the first ball picker for ranges. The company deals in new and recycled balls, all range equipment and parts, mats, washers, tees, dispensers and lighting systems to name a few. "Indoor golf facilities have skyrocketed," Sopko said. "Of course pro shop display items are up... Miniature golf is up."

Sopko noted the phenomenon has reached Poland, where a facility is being planned.

Wittek also is involved in the preliminary planning stages for ranges. "The range and miniature field is just growing," he said. "Business is up. The need and potential are there."

It's not only swinging clubs at these places. Pollion offered results of a 1990 study of golf learning centers, which also offer associated health clubs, diagnostic equipment, classrooms and actual ball striking.

The study showed an existing market of $80 million in 1990 and forecast 19-percent growth by 1995.

"Purpose of any golf course should be participation. The Standard of Excellence. Satisfaction is a key factor in satisfying these needs, and ultimately in the success of a practice facility. Repetition is boring. Variety induces concentration.

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With miles of fairways, greens and tees to maintain, the last thing you need to worry about is your practice range. That's why you'll appreciate our colorful new, worry-free, Standard Golf Range Banners. ♦ Naturally, they're highly visible. That, after all, is the whole idea. The bold black numbers literally pop off the 4' x 2' bright yellow nylon banners. And unlike pennants, they can be easily read on the calmest or windiest of days.

♦ They're durable, too. Mounted on do-it-yourself PVC frames (our enclosed instructions show you how), they're designed to stand up to all kinds of weather. ♦ Best of all, they're very economical!

So you can afford to order all you need. ♦ Ask your nearby Standard Golf distributor about the best Range Banners in the business. Available in 25-yard increments from 75 to 300 yards, they'll help you and your members feel more at home — that's right! — on the range.

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GOLF COURSE NEWS

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When it comes to even nutrient distribution, consistent results and predictable growth with each and every application, blends just can't equal the performance of homogeneous greens grades fertilizers. In fact, using a blended product on your greens is kind of like using a rotary mower wall-to-wall. It's just not the most efficient tool for the job.

That being said, we'd like to build a case for our line of greens grades, because despite what you might have heard, there is a difference.

For starters we've got five premium formulations. Country Club® 18-4-10, 18-3-12, 18-0-18, 8-4-24 and 10-18-18. All are ideal for greens, but also a sound value for fairway applications.

And our distribution network is larger. So you can buy just what you need, when you need it. All for about the same price as what you'd pay for blends.

So why not call your local Lebanon distributor or 1-800-233-0628 for more information. Because when it comes to greens grades, there's no match for Country Club.
Ball retrieval made easy, automatic

Continued from page 36

The patented 22K Commercial Ball Washer cleans 28,000 balls an hour and delivers two clean balls at a time to Hollrock's new ball shooter. Capable of shooting balls as high as 30 feet in the air — through pneumatic tubes — the Ball Shooter feeds two balls at a time to Hollrock's newly engineered Ball Bin, which features a hopper with 9,500-ball capacity.

To receive balls from the ball shooter, the Ball bin may be located close by; on another building level or in an adjacent building. Hollrock's Ball Bin is token actuated and is easily adjusted to deliver from 15 to 70 balls per bucket. There is only one moving part. From the time the balls are picked up on the range and dumped into the 22K washer, they are never touched again until a golfer tees them up on the range.

For more information, call 203-688-5269.

PRACTICING THOSE UNEVEN LIES

All the buckets in the world won't prepare a player for uphill, downhill and side-hill lies. How-However, two new products just might.

The Tufshot Golf Mat, manufactured by the Del Rey Co., allows golfers to practice difficult shots resulting from uneven lies. The Tufshot consists of two pieces: a slanted, round base made from a foam material; and a synthetic turf mat.

The base is sloped at a four-degree angle and weighs just seven pounds, making it easy to move around and create uphill, downhill and side-hill situations. The Tufshot was designed specifically for practice and teaching sessions, and the base will conform to uneven surfaces often found at golf ranges. For more information call John Horn at 800-TUFSHOT.

A Swedish product, Realitée Golf Tee Mat, also provides the player with multiple stances, though from a square base. The Realitée is perched on four legs, each of which can be adjusted to simulate those awkward lies.

The Realitée also comes equipped with three different turf lengths — foregreen, fairway and rough. The unit also features a convex mirror, allowing a unique view of one's stance and swing.

For more information on Realitée, write EW Golf HB, Box 10261, S-100 55, Stockholm, Sweden or call 46-8-667-09-05.

SPICING UP RANGE TARGETS

A self-clearing, slightly elevated green, the HI Target Range, can be situated anywhere in the hitting area. When a golfer puts a shot on the green — 16 x 24 feet, 20 x 24 or 24 x 28 — a blue light signals success. A hole in one is rewarded with flashing red lights. The sharpshooter also receives a Hole In One Award Certificate and a prize from participating ranges.

Each hole-in-one winner is automatically entered in the National Hole In One Pro Shot Program, which includes monthly drawings and regional/national "shoot-offs" featuring prize money.

Hole In One Pro Shot also offers a revenue-sharing plan whereby the firm provides target units at no cost. Hole In One will install and service the HI at its own expense, and participate in a revenue-sharing plan with the range. For more information call 818-993-SHOT.

RANGE BOSS BALL WASHER

SGD Co. of Akron recently unveiled its new, improved Range Boss golf ball washer. This all aluminum, non-corrosive ball washer will clean 15,000 balls per hour and features an EZ lift-out brush for removing stones, broken balls, etc.

For further information and a free catalogue, contact SGD East at 1-800-325-3411.
WARSAW, Poland — Two Fremont, Calif. companies, BryStar Industries and GolfTech Inc., plan to build a championship golf and country club here.

The course will be built on a 1,000-hectare site in the vicinity of a 400-year-old palace, which will be converted into a clubhouse, according to Timothy Starkweather, chief executive officer of GolfTech, a golf development company.

"We anticipate groundbreaking as far as grading by late this year," said Starkweather. "Because of the tough winters in central Europe, we probably won't start real construction of the country club until April 1993. It will be a championship, 7,000-yard, par-72 course, the centerpiece of a proposed technology park.

Bradford Benz and Associates of Los Gatos, Calif., will provide the design. San Francisco-based Meridian Engineering Group, which recently opened offices in Warsaw, is the project engineer, Starkweather said. Golf Tech will manage the country club. William Horne, a golf course manager who has been associated with more than 50 country clubs, has been hired as a consultant.

A master planner with interest in developing several projects in the Warsaw area, Starkweather said the country club will be an integral part of a greenbelt. "I am using green belt criteria as if this were built in California using California building codes," he said.

Starkweather anticipates the club membership will evolve from executives with American Fortune 500 companies that have set up business in Warsaw, as well as European and Asian corporations coming into the area.

"There are more than 300 American corporations, including IBM, Xerox, Gerber Baby Food, Stanley Tool and just a great cross-section of American manufacturing capability that have set up headquarters in the last 18 months," Starkweather said.

"There are literally hundreds of Asian corporations setting up headquarters here, too," he added. "There were 3,300 joint ventures with west European companies. So, we passionately believe that western Europeans, North Americans and Asians will come to Central Europe and bring our kind of lifestyle."

A golf college is planned to teach Polish executives who want to learn the game. The country club will sponsor youngsters who want to learn how to play golf, as well as sponsor collegiate- and Olympic-caliber golf teams. The training area will be a larger-scale version of one that Benz designed for another of his foreign projects, the Beijing Golf Club in China.

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

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May 1992
CIRCLE #136

CIRCLE #137

GOLF COURSE NEWS
The National Golf Course Owner's Association has elected Vince Alfonso Jr. as president. Jim Scott of Michigan was elected vice president; Garry N. Black of Texas treasurer; and Charles H. Berrell of Ohio secretary. Alfonso is partner with Leonard and Lovene Sapp in The Rail Golf Club, Inc., in Springfield, Ill. In addition to serving as the chief operating officer of The Rail Golf Club, Alfonso is the head professional and general manager. He has been a Class A member of the PGA of America for 12 years.

After serving his apprenticeship working under his father, PGA life member Vince Alfonso Sr., Vince Jr. spent five years as head professional and general manager of Holiday Golf Club in Olive Branch, Miss., prior to arriving at The Rail in 1983.

He has been a member of the NGCOA since 1983 and has served the organization as a member of its board of directors for the past eight years.

Scott has been a golf professional for 20 years. A PGA member for 14 years, a charter member of the NGCOA, and involved in the golf business for 30 years. He is a co-owner and director of golf of Gulf Lake

Continued on page 41
Marriott names French adviser

Toipol will help American company market its management services

WASHINGTON, D.C. — In a move to attract contracts for its golf management services in France, Marriott Golf has appointed Marc Topiol as its representative in the country.

Topiol will serve as an adviser to Marriott Golf. He will also provide international market research assistance and help develop management contract agreements for Marriott Golf, especially for public golf facilities in France.

In addition to his business enterprises, which include operating his own company, Trajectoire, Topiol played the European professional golf circuit for a number of years and has served as a development consultant to various leisure-based companies.

"France offers an unparalleled opportunity for the golf management services we offer," said company President Roger Maxwell. "With 500 facilities, France by year-end will rank second only to England in terms of the number of facilities available to golfers in Europe."

Marriott Golf manages 16 golf facilities offering more than 600 holes of championship golf in the United States and Bermuda. Thirteen of the facilities are company-operated and managed. The remainder are managed for others.

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Houstonian takeover bid fails

HOUSTON — The Houston City Council has ruled out a bid to privatize the Memorial Park recreational facilities which include an 18-hole golf course that, from all accounts, has fallen into disrepair.

Sources at the Houston Chronicle indicate the city is currently exploring the idea of funding a course renovation.

The Houstonian Group, a circle of private investors, had bid to manage the park's golf course, jogging trails and tennis courts. The Group's original plan had called for renovation/improvement of the golf course, and an expanded clubhouse with separate banquet and meeting facilities.

However, Parks and Recreation Director Don Olson responded against the move after the Houstonian Group ran into financial problems.

The Houstonian Group claims a suit filed in January by attorney Tom Alexander frightened away potential investors and financiers. Alexander, who represents Friends of Memorial Park, contends the "granting" of the park for profit-generating commercialism violates the deed restriction. The land was given to the city by the Hogg family on the condition it be used for public park purposes.

Las Vegas council delays action on management firm

LAS VEGAS — In a concession to Las Vegas area golfers who've complained about fee hikes, the proposed new lease agreement with the firm running the city's only municipal golf course has been tabled by the Las Vegas City Council.

Councilman Frank Hawkins, noting constituent concerns over the fee increases, moved to table the matter until a council panel — including himself and Councilman Arnie Adamsen — can review the contract with Santa Monica, Calif.-based Golf Enterprises.

Councilman Bob Nolen, who previously balked at the lease because of questions over access to the company's financial records, said he has always been dissatisfied with the contract.

The only dissenter in the 4-1 vote to table was Councilman Scott Higginson, who said delaying a proposed course and clubhouse improvement program included in the lease would do a disservice to players and the community.

Prestwick names Thompson pro

SURFSIDE BEACH, S.C. — Prestwick Country Club, a private 450-acre golf course community, has named PGA pro Leonard Thompson its touring professional/director of golf.

Thompson, a member and resident of Prestwick, will serve as an adviser for the community on course and club operations and provide members-only golf clinics. Matt McCauley will continue as the club professional in charge of daily operations.

"We're thrilled to have Leonard working with Prestwick in this capacity," said Chief Executive Officer John Gandy. "We see Leonard as an ambassador for large for our club and community. He lives here and he plays here, so he knows Prestwick well."
Casper takes over Loch Ledge GC

The firm began leasing the course from the Addiction Recovery Corp. of Rockville, Md., on April 1.

"We plan to totally upgrade everything from the course to the physical plant," Marty said, "there is a need for more quality courses in this area, and we're confident Loch Ledge can offer the golfing community an enjoyable as well as affordable place to play golf."

Part of the golf course improvement program, which will begin immediately, will be installation of cart paths throughout. Soil tests as well as a complete maintenance program are already being studied by BCGM.

"The 18-hole course was part of a 185-acre parcel, which included a rehabilitation center and was purchased by ARC in 1985."

"At the time, of course, our primary interest was the hospital. The golf course was a nice asset, but it wasn't the purpose of our acquisition," said Daniel J. Morawitz, senior vice president, finance and administration. "We are excited about the plans BCGM has outlined for improving not only the operation but the aesthetics and playability of the course as well."

Myrtle Beach firm to manage Olde Beau GC

ROARING GAP, N.C. — Developer Billy Satterfield recently selected Hall Development of Myrtle Beach, S.C., to manage development, marketing and sales for the next phase of Olde Beau Golf Club, situated an hour from Winston-Salem in the mountains of northwestern North Carolina. Hall Development will work with Satterfield to develop, introduce and market new products — homes and homesites — within the 850-acre Olde Beau community.

Satterfield, who built Bermuda Run G.C. in Winston-Salem and The Country Club of South Carolina in Florence, worked for nearly three years to sculpt Olde Beau G.C. into the mountains near Roaring Gap and built its 20,000-square-foot clubhouse. The community opened in 1986.

Hall's current projects include Prestwick Country Club, a 446-acre Dye golf course community in Myrtle Beach, S.C.; Southbridge, a 2300-acre community whose first phase surrounds a Rees Jones course near Savannah; and Myrtle Trace, an adult retirement community in Myrtle Beach.

Western Golf will manage Seralago

KISSIMMEE, Fla. — Floribra, U.S.A., Inc. has announced the appointment of Western Golf Properties, Inc. as consulting and management firm for The Golf Club at Seralago, an 18-hole Rees Jones design under construction here.

Seralago, a 584-acre master-planned resort development, is situated two miles east of Walt Disney World, in the heart of Orlando's tourist corridor. Among Scottsdale, Ariz.-based Western Golf Properties operations are The Golf Club at Desert Mountain in Scottsdale, Wild Wing Plantation in Myrtle Beach, and Pelican Hill Golf Club in Newport Beach, Calif.

Golf course owners elect new officers

VIENNA, Va. — Billy Casper Golf Management has agreed to lease and manage Loch Ledge Golf Course in Westchester County, N.Y. Course in April 1.

"We are excited about the plans BCGM has outlined for improving not only the operation but the aesthetics and playability of the course as well."
The best of the year from Leslie's seat on the aisle

Continued from page 10

Ontario, outside Toronto, it derived its name from the bountiful flowers by that name on the site. It came on line last year after Devil's Pulpit took the Canadian golfers by storm two years ago. You can breathe now up there, folks!

Best Adaptation: The Donald Ross Memorial Course in Boyne Highlands, Mich. You no longer have to travel the country over to squirm in excitement about playing holes designed by the master. A selection of his best are recreated here.

Pennington is a national company with locations throughout the United States, so we understand that the grass that does well in Georgia won’t survive a Minnesota winter. And the turf that’s ideal for a fairway won’t do at all for a green. Different circumstances call for different grasses. That’s why we offer so many kinds and varieties. Each one is developed to meet specific conditions.

Perennial ryegrasses such as Pebble Beach, Sunrise 246, and Stadion are just a few of our top varieties that give outstanding performance for overseeding. For roughs we have proven performers such as Finelawn 5GL, Triad and Enviro turf type tall fescues, as well as our new cold tolerant turf type bermuda—Cheyenne.

With basic production in every major grass seed region in the country, Pennington can provide you with the correct grass seed for any application and the dependable service that you need.

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- Cheyenne

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AGC to offer daily care service at Calif. course

American Golf Corp. is offering what it claims is the first children’s day care center at a golf course.

Trained and licensed day care providers are available at Lake Forest Golf & Practice Center in connection with any of the operation’s services — nine-hole course, practice range or lessons.

“We want to make a meaningful and unprecedented commitment to parents who desire to play golf,” American Golf Vice President Joe Guerra said.
Ciba-Geigy, biosys enhance marketing relationship

PALO ALTO, Calif. — Ciba-Geigy and biosys, a manufacturer of biological insecticides, have signed a research and development funding and international marketing pact.

Under terms of the agreement, Ciba-Geigy will provide biosys with $5 million over two years for research and development of beneficial nematode strains and formulations. Ciba-Geigy will also be responsible for the promotion and marketing of biosys' nematode-based products.

In 1991, Ciba-Geigy became the exclusive distributor of biosys products in the United States for the turf and ornamental market. Ciba-Geigy's first biological insecticide product, Exhibit, was developed and manufactured by biosys.

The active components in biosys' range of biological insecticides are beneficial nematodes, microscopic organisms that kill a host of soil-dwelling insect pests. Nematodes are designed to be harmless to humans, plants and animals, leaving no harmful residues in the soil or ground water. In fact, the United States and several European countries exempt nematodes from all registration requirements.

The newly signed, 15-year agreement grants Ciba-Geigy exclusive rights to market and distribute biosys' present and future beneficial nematode-based products for insect control in the agricultural and horticultural crop markets worldwide, except the United States.

Feds display recycled goods June 29-30

By Peter Blais

Buyers representing the U.S. Department of Defense's 250 golf courses will be among those attending the federal government's first trade fair to showcase recycled products in Washington, D.C. on June 29-30.

President Bush ordered federal agencies last October to accelerate their purchases of recycled products. Federal purchases represent the single biggest market for recycled products.

Additionally, representatives from state and local governments are being encouraged to attend, as well as manufacturers, entrepreneurs, investors and corporate procurement specialists.

"The president has required us to promote cost-effective ways of using recycled materials. We are favoring the purchase of such items," said David Moffett, the U.S. Navy's golf specialist.

Chemicals and fertilizers in recycled containers, benches, signs and other products made from recycled materials are used on golf courses, Moffett noted.

Many golf courses and other government facilities are looking at composting programs, added Nancy Stehle, deputy director of the environment in the Office of the Assistant to the Secretary of the Navy. The fair is expected to draw 2,000 attendees and 180 exhibitors to the Washington Hilton. Admission and booth space are free.

State officials who have made significant strides in purchasing recycled products will offer training sessions to vendors on how to enter the government marketplace.

Pulling more than their weight

Ongoing experiments prove polymers useful in droughty soils

By Hal Phillips

Cross-linked polyacrylamide is a mouthful, but this granular polymer has impressed industry observers with its ability to soak up free water in soil and store it for the plant's use.

Under a microscope, polymers look something like a honeycomb. So it's not surprising the rock-salt-like substance can hold up to 400 times its weight in water.

While polymers have already been used in producing disposable diapers and cat box filter, several modern cross-linked polyacrylamides have hit the golf course market: Hydrosource, Terra-Sorb, Water Grabber, Soil Moist, Water Lock and Broadleaf P4, to name just a few.

Imagine a plate full of spaghetti," suggests Dr. Jeff Nus, an independent consultant and former member of the Horticulture Department at Kansas State University. "The gaps and holes between the strands contract and expand, giving the cross-linked polyacrylamide its water-absorbing capabilities.

"When the individual crystals... are injected into a turf/green situation, the crystals begin to hydrate and absorb the free water and fertilizer picked up by the water molecules. As leaf transpiration creates a demand, both the water and fertilizer held in the soil profile and hydraulic properties of the root zone will offer training sessions to vendors on how to enter the government marketplace.

Continued on page 44

Frits delivery 3,000th pump

Dallas-based Pumping Systems Inc. recently delivered its 3,000th pump station to Coosaw Creek, a new golf project currently under construction in Charleston, S.C.

"When the individual crystals... are injected into a turf/green situation, the crystals begin to hydrate and absorb the free water and fertilizer picked up by the water molecules. As leaf transpiration creates a demand, both the water and fertilizer held in the soil profile and hydraulic properties of the root zone..."
An all new outlook from LANDCADD

FRANKTOWN, Colo. — LANDCADD International is making LANDCADD software available in the Microsoft Windows environment.

LANDCADD International is a leading developer of land planning and design software. It's used to prepare contour maps, complete site analysis, perform earthwork calculations, plan the site, design the landscape, specify plants, lay out irrigation systems and add construction details.

The 10-component package is sold by individual module, or in integrated solutions sets.

"We plan to deliver LANDCADD for Windows as quickly as is reasonably possible," said LANDCADD President Greg Jameson. "Because we're based in AutoCAD, we will make our port after AutoCAD for Windows is available from Autodesk."

Jameson indicated the Windows port is important to many users because it allows them to have multiple applications open simultaneously, without losing any of the familiar features of LANDCADD. "We still believe our power users will probably want to remain in the MS-DOS environment because of speed considerations," Jameson added.

LANDCADD recently made available a yearly maintenance agreement for current customers in the United States. The annual cost of the maintenance contract is $795 per registered serial number. The cost of the agreement is 15 percent of the software list price for users with multiple copies of LANDCADD.

The maintenance agreement provides unlimited phone-in support; a toll-free number to call for support; reduced costs on major upgrades and new modules; direct support from LANDCADD's technical experts; and free copies of any maintenance releases, including bug fixes and minor enhancements, throughout the term of the agreement. For more information, call 303-688-8160.

Chafee named product manager at Kubota Tractor

COMPTON, Calif. — Chris Chafee has been named product engineer of Commercial Turf Products for the Kubota Tractor Corp.

Before joining Kubota, Chafee was a service representative for Case International, covering the northern California, Nevada and Hawaii regions.

Reycyclables on the market

Continued from page 43

The defense department will sponsor the fair along with the Environmental Protection Agency, General Services Administration, Office of Management and Budget and Council on Environmental Quality.

For registration and vendor information call 800-967-3066. May 15 is the deadline to register for booth space.

A TURF'S-EYE VIEW OF

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

That's where CHIPCO® brand 26019 fungicide comes in. With its unsurpassed control of Helminthosporium Leaf Spot and Melting Out, Dollar Spot, Brown Patch, Fusarium Blight and Red Thread, CHIPCO® 26019 is simply the best investment you can make to ensure the quality and play-ability of all your turfgrasses. It even protects against...
Chipco strike leaves mark on the industry

Continued from page 1

force. He proved a prophet. "They've got a pretty good inven-
tory out there," he said at the time.

Some golf course builders and contractors went about their busi-
ness untouched by the walkout of 12,000 employees. Yet Bill Kubly,
head of Landscapes Unlimited, said months of inactivity from the
nation's largest manufacturer of heavy equipment did change the
market.

"I was talking to one of our sub-
contractors the other day, and he
said he was having trouble coming
up with second-hand, rubber-tired
scrapers," said Kubly, who noted that
most course builders don't own real
heavy equipment, like scrapers.

"It's strange," Kubly continued.
"Late last fall, the market was real soft
because the whole economy has been
soft. We were able to pick up some
scrapers at a 30 percent savings. But
now, the short supply has driven up
the price."

That situation is unlikely to change
anytime soon. Caterpillar production
has been crippled for nearly six
months. Work didn't return in force
until April 20.

However, "There's some equip-
ment in the country now, if that's
time before we'll begin to feel it," noted Eldredge. "The price of
equipment may have gone up. But if
the economy were better — and it
looks to be improving — it wouldn't
have made a difference."

According to Eldredge, while the
strike took place right next door, it
never hit home at Wadsworth. "I
don't know that it has affected us," he
said.

"It was a real sad situation," said
Bob Steele, vice president at Paul
Chute and Associates. "We haven't
felt any effects. We're pretty well
equipped with scrapers — we own
most of our equipment.

"But if this thing had gone on for
two or three months, into the sum-
mer, it could have become difficult to
get scraper parts, among other
things."

Kubly said he's pleased the struggle
ended when it did. "As the whole
economy turns up, this strike could
evitably have really slowed us down."

The Average Golfer.

Pink and Gray Snow Mold and
Fusarium Patch.

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

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

Polymers

Continued from page 43

drated crystals are absorbed
through the plant-feeder root sys-

tem."

Once deposited, studies show the
polymer makes roughly 50 percent
of the absorbed water available to
the plant. It's estimated that 15
pounds of polymer per 1,000 square
feet will store 1/2 inch of typical
irrigation water; 30 pounds will store
1 inch.

Nus has found polymers most
effective on tees and greens.

"Polymers work best in drought-

riden soils, and we build greens
tees out of sand-based root
zones, which are traditionally
drought-ridden soils," Nus ex-
plained. "If we can hold 20 times
its weight in water."

Don Courtney, director of golf
operations at the 54-hole Wigwam
golf complex in Litchfield Park,
Ariz., has experimented with poly-
mers in several trouble spots. He
also applied polycrylamides to half
his driving range, leaving the other
half untreated.

"Where we've put it down, it has
kept the grass greener and held
water well," he explained. "In be-
tween fertilizer applications, the
plots do stay greener."

Courtney is impressed. But with
further experiments underway on
fairways and roughs, he's not quite
ready to issue an unqualified en-
dorsement. "I'm holding back until
I see more," he said.

Nus agrees the jury is still out,
and he issues these words of cau-
tion: "These materials are so ab-
sorbing, there is a point of no return.
If used improperly, they can be
counterproductive.

"Before you can promote any of
these materials, you have to have a
firm base in scientific research, and
that research is just starting to hit
the review stage."

The cross-linked polycrylamide
must be applied underneath exist-
ting turf, a problem for superin-
tendents. The Olathe Model 831 Pol-

erm Planter, for example, is pulled
by a 40-horsepower tractor and de-
posits the crystals after individual
blades slice the turf at depths of 2
2 to 4 1/2 inches.

"Irregularly grooving, rotating
blades on 6-inch centers. It's a heavy-duty machine," said Nus, who noted the
Olathe 831 is "a surface disruptive
and better suited to athletic fields."

According to Nus, there are al-
ternatives for the golf course in-
dustry, namely high-pressure, liquid
injectors and smaller-blade prod-
ucts "vibrating, slicing, gloop type
things." However, these two prod-
ucts are currently going through
the patent process, he said.

Despite the shortage of appro-
Priate applicators and grounded
scientific research, Nus said poly-
mers should not be considered
"down-the-road" technology. "It's
dependent on us," he said. "There's
a lot of interest, but we have to be
sure we know what we're talking
about before we start publicizing it."

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Oiling system added to Power Pruner

A new, patented automatic oiling system has been added to the Power Pruner, the portable telescoping pruner from Technic Tool Corp.

The automatic oiling mechanism has been under development for almost two years and will be presented as standard equipment on all Power Pruners. The new oiling system can also be retrofitted to all existing Power Pruners.

The Power Pruner is lightweight and equipped with a unique drive shaft that extends from 7 to 11 feet. This design helps reduce the time and effort spent with most conventional pruning methods while improving operator safety.

For example, because the tool reaches up to 17 feet, including the operator’s reach, the cutting chain remains a safe distance from both the operator’s face and body. In addition, sheared limbs will fall farther from where the operator is standing.

The cutting head consists of a 10-inch sprocket-nose chain bar; chrome-plated, 3/8-inch pitch cutting chain; and a patented cutting shoe.

For more information contact Nancy Keller at 800-243-9592.

Feldmann unveils manual core plug aerator

Feldmann Engineering & Manufacturing Co., Inc. has added the Devil Stick, a hand-held, manually operated core plug aeration tool.

This unique device, which resembles Lucifer’s trident, is used to core aerate tight areas close to trees, buildings and paved paths. It’s ideal for regenerating spring sod growth in specific areas of winter kill or high traffic.

The single row of five coring tines are evenly spaced over the full 12 3/4-inch width, cleanly penetrating to a depth of 2 1/2 inches. The Devil Stick weighs only six pounds.

For more information call 414-467-6167.
Greensia rolls out the seed

New Seeded Fabric from Greensia offers an alternative to current turf-seeding methods.

Simply roll out the seed.

The seeds are attached to a biodegradable fabric at even intervals, resulting in quicker turf establishment and healthier growth.

Top-dressing or mulching is not necessary because the fabric acts as a blanket which keeps seed moist, improves oxygenation and protects it from harmful environmental elements.

Other advantages include substantial reduction of seed runoff and easy installation.

Studies have also shown Seeded Fabric aids in erosion control.

For more information, contact Greensia America at 213-382-7070.

Toro's Groundsmaster 325-D with Guardian Recycler 72.

Toro mower pioneers cut, recut process

The Guardian 72 Recycler Deck, new from Toro, is designed to eliminate clippings by employing a patented, three-chamber cutting process that slices clippings repeatedly.

Introduced at the Golf Course Superintendents Association of America conference in New Orleans earlier this year, the Guardian 72 Recycler is uniquely designed to provide a safer, turf-user environment by restricting hazardous discharge — at the same time putting an end to the burden and expense of collecting clippings.

The design of the deck is intended to force discharge downward and confine it to the mower's width, thereby decreasing the risk of hazardous discharge, especially in areas frequented by pedestrians.

Researchers in cooperation with Scott Abrahamson, assistant professor in the Department of Aerospace Engineering and Mechanics at the University of Minnesota, the mower cuts and recuts grass 10 to 15 times more than regular mowers.

Following the cut, the fine slivers are forced deep into the turf directly beneath the deck, where they retain moisture, decompose and act as a natural fertilizer. Because the Recycler mower eliminates windrowing, grounds personnel are free to perform other maintenance duties more pressing than raking and bagging.

Users will also find the Guardian 72 Recycler conveniently retrofittable to the Groundmaster 345 and 325-D (previously the 322-D).

The Guardian 72 Recycler is backed by the firm's Direct Today 48-Hour Delivery Program, by which any part not immediately available from Toro distributors can be delivered within 48 hours, anywhere in the contiguous United States.

For more information call 612-888-8801.

Terrene provides natural alternative

Terrene, the new line of natural organic fertilizers from Enviro-Gro Technologies, features slow-release granules that deliver a high percentage of nitrogen as water insoluble. Terrene also features a low burning potential, micronutrients and large amounts of organic matter.

Other benefits include minimal nitrate leaching into ground water; high organic content promoting solid microbe activity; a low burning potential because it contains no salts; and a variety of granular sizes.

Terrene is enlisting distributors to carry the new line. For more information, call 717-392-6982.
Radio waves keep carts off greens, tees

BERWYN, Pa. — Erratic, irresponsible golf cart use accounts for millions of dollars in course damage every year. Many superintendents lie awake at night, dreaming of a futuristic world where carts turn themselves off before making an appearance.

Well, the future is now.

Cartrol, a division of the Invisible Fence Company, recently unveiled a system that uses radio frequencies to direct golf cart traffic away from protected greens and fairways, without altering course appearance with barriers or painted lines.

The Cartrol system consists of a thin boundary wire buried six inches underground and carrying a low-frequency radio signal. When a golf cart equipped with a Cartrol system crosses the radio-controlled boundary line, a receiver, installed in the electrical system of the cart, picks up the signal and causes a temporary electrical failure in the cart’s forward gear.

A warning light on the dashboard tells the driver the cart will move only in reverse. Once away from the boundary line, the forward gear is restored to normal function.

Unlike some electronic add-on devices for individual carts, Cartrol is a complete system that can be used to create boundaries anywhere on the course. Without altering the configuration of buried wires, the radio field can be increased or decreased to change cart traffic patterns.


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2 Plus 2 (MCPP + 2, 4-D Amine) delivers superior control of hard-to-control broadleaf weeds on a wide variety of turfgrasses.

And 2 Plus 2 contains no dicamba. So it can be used in turf areas which include trees and shrubs without risk of root pruning on the ornamentals. A major worry with some other products.

For real value in grassy and broadleaf weed control, make your postemergence herbicides Daconate 6 and 2 Plus 2. That’s the word.

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Always follow label directions carefully when using turf chemicals. Daconate 6 is a registered trademark of ISK Biotech Corporation.

Flow control for micro sprinklers

A barbed coupler flow, new from Hendrickson Bros., is designed to optimize performance of micro sprinklers.

Model FC77 is now available in eight flow levels: 6, 8, 10, 15, 17, 20, and 25 GPH. Each complements the type and pattern of the individual micro sprinklers.

The new coupler uses the same patented flow-control system proven on other Hendrickson products. For quick installation, a barbed fitting connects either in-line or at the base connection of 1/4-inch tubing.

To assure long-term service, with minimal maintenance, the FC77 features high-strength plastic housing for chemical and impact resistance.

For more information, call 714-737-6822.

Ciba-Geigy, biosys pact

Continued from page 43

The U.S. market for professional turf and ornamental is covered by the separate 1991 agreement between Biosys and the U.S. subsidiary of Ciba-Geigy Ltd. The new agreement excludes sale of biosys products in the professional turf insect-control segment in Japan.

Biosys products are marketed in the U.S. and Europe under the brand names BioVector and BioSafe-N (insecticides for a broad range of agricultural applications) and Exhibit Biological Larvicide, for control of turf and ornamental insect pests.

BioSafe products became available in the United States this year through retail distribution by the Ortho Consumer Products Division, Chevron Chemical Company, as part of the Orthogranics product line.

"This agreement with biosys attests to our strong commitment to commercializing effective biological pesticides that are harmless to the environment," said Dr. Heimo Brunetti, corporate director and head of the Plant Protection Division at Ciba-Geigy Ltd. "The efficiency of biosys products against a wide spectrum of insect pests has been confirmed over the last three years through our joint field development trials."
ASGCA directory released

The American Society of Golf Course Architects has published its inaugural membership directory with information on each of its associates and regular members. The 120-page book highlights each architect's design philosophy and strategy. It also provides addresses where each member of the society can be reached — including fax numbers.

In addition, the directory also contains a listing of representative courses designed by each member.

Other tidbits of information include the hiring practices associated with golf course architect, and key points to consider when hiring one.

To obtain a copy, send a check for $5 to the American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, Ill., 60601.

Brillion brochure now available

The new line of precision grass and landscape seeders is the subject of a six-page, four-color brochure from Brillion Iron Works.

Specially designed for professional landscapers, turf and sod producers, the brochure highlights all standard and optional features, including new glass-filled, precision-fluted nylon seed meters, wider metal deflectors, and simpler, heavier, more positive drive systems.

For a free copy, call Brillion at 414-736-2121.

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Keep an eye on The Leader Board

If they haven't already, club officials across the country will soon receive the first issue of The Leader Board, a new bi-monthly newsletter published by The Center for Golf Course Management.

The Leader Board is designed to provide golf's volunteer and professional leaders with timely, authoritative, interesting and useful information to convey a better understanding of the golf course and club management business.

Annual subscriptions will be priced at $24 per individual subscription — or $118 for a "full board" subscription. The Leader Board will provide up to 12 copies of each issue. A club may choose to receive copies directly to each club director's or green chairman's home or place of business.

For more information or to order a subscription, contact The Leader Board at 913-841-2240. The Center for Golf Course Management is a subsidiary of the GCSAA.
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continues on page 51

Contact 404-7694076.

10-13—New York State Turfgrass Association annual meeting on St. Simons Island. Contact 404-769-4076.


* For more information or to register, contact Betsy Evans, education coordinator, Golf Course Superintendents Association of America, at 800-472-7678 or 913-841-2240.

The seminars are dependent upon the availability of the instructors, and are therefore subject to change. One-day seminars cost $100 for GCSAA members and $120 for non-members; two-day seminars cost $180 for members and $210 for non-members.

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A little paint keeps wayward carts in line

Course clutter substantially reduced; drivers stay on the straight and narrow

By Peter Blais

"Uglyyyyyyyyyyyyyy."

That's all co-owner John Shields could mutter to himself as he gazed out at the ratty ropes and tilted posts stretching along the golf car paths traversing Glenn Dale (Md.) Country Club.

"How do we get rid of that stuff? We need something to keep the cars on the paths. But what can we come up with that's aesthetically more pleasing," Shields asked himself.

Like most golf courses, Glenn Dale occasionally spray painted the grass around greens, tees, wet spots, ground under construction and other areas where golf cars were forbidden to tread.

"About two years ago it occurred to us to extend that practice to the car paths. It's worked great," Shields said.

Two crew members took stiff-bristled brooms and vigorously swept the path edges. Next, they used a four-wheeled paint sprayer ($375 from a local paint contractor's store) and 20 gallons of white latex traffic paint (about $150) to edge the paths with a two-inch line.

Completing the 18-hole paint job on the George Cobb-designed layout took the two workers about eight hours.

"Getting the paths thoroughly clean is key," Shields said. "Otherwise the paint adheres to the dirt and just gets brushed off."

The lines are supposed to act like the center and side lines on a highway, keeping golf cars within those boundaries. A line on one side means golfers must not cross that side of the path. Lines on each side mean they stay on the path, period.

Where the lines end, golf cars can drive onto the course. A one-inch-diameter, three-foot-tall PVC pipe is placed where the cars should return to the path.

Explaning that the lines act like the lines on the highway works best.

The only changes Shields has made the last two years were doubling line widths to four inches and the return PVC pipes to two inches. If a line needs to be removed, a single coat of black paint does the job. From a liability standpoint, the lines are much safer. There are no ropes to trip over, broken posts to catch on pants, nails or hooks that cut into clothes or skin.

"Those ropes always seemed to be a lawsuit just waiting to happen. I've heard of several courses that were sued because golfers tripped over ropes," Shields said.

The lines also eliminate ruling problems concerning what do to when a ball comes to rest near a post or under a rope. Maintenance with weed whackers around posts is eliminated. So, too, is the three hours a week cowboys averaged straightening posts and replacing ropes.

Occasionally edging paths to keep grass from infringing on the lines keeps a neat appearance, Shields said.

Shields said the lines are aesthetically much more pleasing. You look out at the course and you don't see ropes or stakes anywhere.

"You don't even see the white lines when you look from fairway to fairway. The only time you see them is when you're in a car driving down the path.

"The members (about 500) know the rules and most accept them. The hardest part is getting guests to understand what you're trying to do. That's why we give them the card at the start of a round. And rangers remind them from time to time.

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