No downturn expected for fertilizer prices
Impact of high natural gas costs lingers
By ANDREW OVERBECK

Fertilizer prices, after their sharp recent rise, are expected to remain high, and industry experts say the record cost of natural gas is the primary culprit.

It has been a tough several months for fertilizer manufacturers, formulators and distributors as natural gas prices rose 500 percent to more than $10 per million British thermal units (MMBtu), squeezing already-thin margins.

Natural gas is a major cost component in the manufacturing of nitrogen fertilizer. As a general rule, every 50-cent increase brings a $10 increase per ton of urea.

GAS PRICES TO SPIKE IN FALL
At press time, urea was averaging just over $100 per ton in ports along the Gulf of Mexico, a primary point of production and importation. Natural gas prices, meanwhile, had receded to below $4/MMBtu. Fertilizer producers see no drop in prices in the coming months, however, because natural gas remains at double its historical levels and will likely spike again in the fall.

Moreover, manufacturers are still generating product using higher-cost urea purchased before prices softened.

Continued on page 26

Biotech turfgrass destined for market
By JOEL JOYNER

WEST KINGSTON, R.I. — Like it or not, genetically engineered turfgrass is on the way. Not only that, but researchers say the possible varieties are endless. “I believe there will be a continuous stream of engineered turfgrass products by various companies,” said Albert Kausch, visiting associate professor here at the University of Rhode Island. “It’s possible now to clone any gene from any organism and introduce that into turfgrasses for various traits. The technology itself is so beneficial and useful that it will go forward.”

Continued on page 13

COURSE MAINTENANCE
Florida’s water ‘disappearing’ ... 8
Professor seeks to commercialize Poa ... 8
Tools of the Trade at Charbonneau’s Gleneagles ... 10

COURSE DEVELOPMENT
Mungeam breaks ground at Westchester ... 14
New 54-hole complex near Palm Desert ... 14
McBroom going international ... 17

COURSE MANAGEMENT
Landmark Golf East lands Barefoot ... 21
Troon adds Black Creek ... 21
Donahue, Hamill promoted at Palmer Golf ... 21

SUPPLIER BUSINESS
New products abound ... 20
Simplot T&H forms international division ... 25
Pennington selects Golf Ventures in Fla. ... 27

Stone Tree brings public golf to Marin County
By DOUG SAUNDERS

NOVATO, Calif. — The new daily-fee Stone Tree Golf Club here in Marin County stands as a testimony to tenacity. It took the developers eight years to run a permitting gauntlet involving 11 federal, state and local agencies. To meet some objections concerning wetlands, the owners donated 64 acres to the Nature Conservancy. The initial routing plan was rejected. More than 13,000 trees had to be planted.

But when the 7,000-yard layout opened last November, it marked the completion of the first championship golf course...
When an unknown vandal destroyed some of our PennLinks greens in 1999, we realized we'd have to re-grass all 18. PennLinks had provided a fine putting surface, but the newer Penn bents were available at the time of reseeding, and the Penn 'A' series looked good in our trials. But which one would work best in Tulsa, Oklahoma, capital of the Transition Zone? At the urging of Dr. Joe Duich we had Penn A-1 and Penn A-4 blended for us by Tee-2-Green Corp. and are pleased with the results, but more pleased that our members recognize the difference in density, grain-free smoothness, plus putting speed and consistency. Winter mowing height is 0.135", which we lower to 0.110" — the same height of cut we'll use at the U.S. Open — for summer play. I'm very impressed with the Penn blend's ability to establish a strong, dense root system so quickly. We can cut a cup in our soil push-up greens and pull the plug with total confidence of no breakage.

Poa annua is a fact of life in Tulsa, but we've had no invasion or encroachment in the two years since we've seeded our relatively small greens. With the extreme density of our Penn A-1/A-4 blend, the use of alternative spikes only, and pre-emergent applications, Poa annua doesn't get a chance to start.

The team of Southern Hills heroes here stand on the belief that our greens will be a fast but fair test for the world's best golfers during the U.S. Open in June, and remain excellent for member play long after the television cameras are gone.

John Szklinski, Superintendent
Southern Hills CC, Tulsa, OK

Penn A-1 and Penn A-4 are two of the Penn Pals™, which include Penncross, Penneagle, PennLinks, Penn A-2, Penn G-1, Penn G-2, Penn G-6, Seaside II, Pennway blend, NuPenn blend, and PennTrio blend.

Tee-2-Green®
PO Box 250
Hubbard, OR 97032 USA
800-547-0255 in U.S.
503-651-2130
FAX 503-651-2351
www.tee-2-green.com
e-mail: bentinfo@tee-2-green.com

Perfect Putting at the U.S Open
Domino’s Pizza founder planning Rees Jones course

BY JAY FINEGAN

ANN ARBOR, Mich. — Tom Monaghan, impresario of the Domino’s Pizza empire, is in the permitting stage for an 18-hole golf course near this University of Michigan community. If approved, as appears likely, the course will come with all the toppings, particularly an acute environmental ethic.

Monaghan is not scrimping on this facility, to be called Ave Maria International Golf Club. The course is expected to cost about $20 million and will feature a 34,000-square-foot clubhouse that originally was going to be Monaghan’s personal residence.

“The clubhouse is going to be built in a Frank Lloyd Wright style – low-profile, natural materials, really pretty jazzy,” said Bill Koschny of the Ave Maria Foundation. “It will be a very exclusive, upscale operation.”

“This is not your typical country club,” added course manager Don Schrotenboer, who said the club will be the equivalent of those that charge $50,000 or more a year for individual memberships.

Monaghan is hoping that the natural character of the course will appeal to golfers willing to part with hefty fees for a pristine environment. He believes the course will fit well with the character of the area. “Ann Arbor is synonymous with higher education,” the founder said, “and environmental quality is always a priority with intellectuals.”

REES JONES DESIGN

The layout, designed by architect Rees Jones, will occupy a 390-acre tract, including some 70 acres of wetlands. The plan seeks to preserve vegetation and topographical features in a near-natural state, with minimal alterations. His design specifies the filling of only one-third of an acre of wetlands, with raised boardwalks crossing less than a quarter of an acre.

But that small wetlands loss will be more than compensated for by the creation of new wetlands. “We’re filling in less than half an acre, but we will be adding about an acre,” said landscape architect Henry Byma, of SmithGroup JJR, an Ann Arbor landscaping and engineering firm.

Byma added that Jones was chosen as the designer “to help us arrive at a reduced impact on the environment.” Jones’ work, he said, “emphasizes preservation of as many natural features as possible.”

MICHIGAN STATE INVOLVED

The landscape design exceeds mandated watershed and flood-control requirements. Sophisticated turf management strategies, developed with guidance from Michigan State’s department of crop and soil science, are aimed at protecting soil quality and groundwater resources.

The club, situated northeast of here, will help fund Ave Maria University, the “umbrella” organization Monaghan established that includes Ave Maria College, in Ypsilanto, Mich., and St. Mary’s College, in Port Orchard, Mich. Monaghan also set up a branch of the university in Nicaragua.

NGF report forecasts development slowdown for 2001

BY ANDREW OVERBECK

While the number of new golf course openings in the United States once again topped the 500 mark in 2000, the number of openings forecast for 2001 could be significantly lower, according to the National Golf Foundation’s recently released “Golf Facilities in the U.S.” report.

The record development pace continued in 2000, with 524 golf courses totaling 398.5 18-hole-equivalents opening across the country. That number is up approximately 34 percent from 1994 figures (see accompanying chart).

However, at the close of 2000, a total of 707 courses were under construction, a 25-percent decrease from year-end 1999 figures. The total courses in planning increased only slightly to 1,049. Of those under construction, 535 courses are scheduled to open in 2001.

According to the NGF, approximately 60 percent of these courses actually open in a given year. If that trend holds true, new openings and expansions may only reach 321 in 2001, meaning that the number of 18-hole equivalents could be the lowest figure since the early 1990s.

DeVries debuts first solo course design

BY ANDREW OVERBECK

KINGSLEY, Mich. — Mike DeVries has unveiled his first solo design here at The Kingsley Club, a private equity membership facility just south of Traverse City.

The layout, which opened May 19, was constructed in-house by DeVries and superintendent Dan Lucas.

“We moved about 30,000 cubic yards of dirt,” said DeVries. “That includes 10,000 yards for greens mix and tee mix.”

The reason for the minimal amount of earthmoving required during construction was because the “holes were just there,” according to DeVries. The designer had his pick of 400 acres of land and chose the best 200 for the 6,750-yard par-71 course.

“I especially like holes two through seven,” he said, “because of the unique landform that they are situated on and how they relate to one another. Due to the openness of the site there, one gets to experience the holes from many different vantage points.”

Construction at Kingsley began in fall 1998. The course features fescue fairways and bentgrass greens. The club is a golf-only facility and membership will be limited to 250.

GTA sells The Woodlands, Palm Desert CC

GULF SHORES, Ala. — Golf Trust of America, continuing to unload courses as its liquidation plan proceeds, has sold The Woodlands for $6.4 million to Brights Creek Development Co., The Woodlands, here in Gulf Shores, is an 18-hole daily-fee club opened in 1994. GTA also has sold Palm Desert Country Club (Calif.) for $4.075 million to Dahoon Investment Co.
Tennessee’s Hermitage layout sweeps environmental honors

By JAY FINEGAN

OLD HICKORY, Tenn. — The year-old President’s Reserve course here has won big-time recognition for outstanding environmental achievements.

The 18-hole expansion at Hermitage Golf Course, opened in May 2000, has won the Soil and Land Conservationist of the Year award from the Tennessee Conservation League (TCL). It was the first time a golf facility had been nominated for the distinction, and the course swept it unanimously.

In addition, President’s Reserve has won designation as a Certified Audubon Cooperative Sanctuary - the third course in Tennessee to receive the recognition and the 303rd in the world to qualify for the honor.

And finally, the course has received the 2001 Aquatic Resource Preservation “Certificate of Merit” from the Tennessee Department of Environment and Conservation.

An 11-judge panel selected the course for its stewardship of the extensive wetlands on the 280-acre President’s Reserve property.

WETLAND BUFFER ZONES

The Nashville district of the Army Corps of Engineers (COE), which in 1998 issued a permit for construction of President’s Reserve, nominated the course for the TCL award.

"In general, a minimum of 150 acres is needed for a standard 18-hole course," the COE wrote to TLC director Marty Marina. "The President’s Reserve course was planned and constructed on 280 acres. As a result of acquiring a much larger tract of land, the designer was able to minimize wetland impacts as well as maintain wetland buffers and upland forests as natural features on the course."

Indeed, owner Mike Eller and superintendent Bobby Schultz took to heart the COE’s process of avoiding, minimizing and mitigating wetland impacts as part of their design criteria. Consequently, the environmental quality of this former cattle farm and walnut plantation was actually improved.

The Reserve was designed by Denis Griffiths and Associates, and built by Wadsworth Construction’s Southeast division, under project superintendent Jon Vondomelin and vice president Edward Harbauer.

ENVIRONMENTAL SHOWCASE

Schultz and Eller set out to make the course an environmental showcase.

Of the 45 acres of wetlands on the course, the architect was able to reduce impact to only 3.1 acres. Eller and Schultz, however, drew up a mitigation plan that more than offset that intrusion. Their blueprint included a restrictive covenant that protects 43.6 acres of wetlands in perpetuity, restores and creates 5.23 acres of wetlands, and preserves 17 acres of upland forest and buffers as natural resource protection areas.

"Environmental responsibilities are taken very seriously at the Hermitage, to preserve and allow golfers to enjoy the game in one of nature’s purest settings," said Eller, president of Danner-Eller Golf Properties. "These beautiful wetland areas with the natural vegetation and wildlife are truly a setting that allows a golfer to have one of the most enjoyable golfing experiences anywhere."

"The President’s Reserve is a championship-quality course that had the luxury of being built in a beautiful 300-acre natural environment," he added, "and it’s rewarding to be recognized by these prestigious environmentalists for our Continued on next page"
O'Brien to manage operations at First Tee

BY JOEL JOYNER
ST. AUGUSTINE, Fla. — Joseph O'Brien, former chief operating officer of the GCSAA, has joined The First Tee as senior managing director of operations. While staying focused on development, O'Brien intends to offer services as part of the organization's game plan.

"The First Tee is really moving from a largely catalytic organization designed to help communities create affordable, accessible golf facilities for juniors, to one that also functions as a service organization," said O'Brien.

Having worked in chapter relations with the GCSAA, O'Brien is conversant with the challenges and opportunities of working with reasonably independent entities to achieve the same objectives.

"We're establishing a computer network between all our chapters by providing hardware, software and even cameras in order to formally register all the youngsters in the program," he said. "With 52 chapters, it's a monumental project."

THE FIRST TEE NETWORK
Computers and training manuals have already been delivered to the chapters, and a national database will be prepared. "Chapters will be able to track student participation and development in the program," said O'Brien. "Their life skills progress, clinic and lesson participation and the success of their play will be collected to create a database."

"The chapters also can use their own imagination to utilize the computers to the fullest," he said. "Educational games may be offered to further develop student learning. Down the road, we also could help individual chapters create their own Web sites."

PAR AND BIRDIE LEVELS
The organization has released its life skills curriculum for the par and birdie training levels. "We have trained personnel across the country ready to implement that program," O'Brien said. "The eagle level is still in development and will probably be available next year."

The life skills program covers everything from proper attitude and relationships on and off the golf course to terminology, rules and respect for the game.

OTHER COMMITMENTS
The First Tee is following through with its other promises.

Topdress with PROFILE™
Gearing up the long-term health of your greens is as easy as making PROFILE® Porous Ceramics part of your regular topdressing mix. University research and over 3,000 golf courses have proved that PROFILE helps reduce scheduled maintenance by:
- Improving drainage and oxygen in the root zone
- Preventing and minimizing compaction
- Solving localized dry spot
- Increasing moisture and nutrient retention

Build with PROFILE™
PROFILE® in your original greens mix will prevent many of the problems that drive up maintenance costs later. PROFILE outperforms other soil amendments by permanently altering soil structure with a complete agronomic package:
- Exceeds USGA® stability requirements
- Meets USGA® particle size distribution
- Provides a CEC of 33 meq/100g
- Maintains water-holding capacity, infiltration rates and oxygen levels that exceed industry standards

Race to your PROFILE distributor or call 1-800-207-6457 for all the details. www.profileproducts.com
Cliff Boyd’s excellent Internet adventure

Jay Finegan, editor

Cliff Boyd’s Virginia National course, on banks of the Shenandoah river

More support needed for new player development

Andrew Overbeck, managing editor

Cliff Boyd’s Virginia National course, on banks of the Shenandoah river

More support needed for new player development

Andrew Overbeck, managing editor

More support needed for new player development

Andrew Overbeck, managing editor

More support needed for new player development

Andrew Overbeck, managing editor
He's dropped the price of MarkeTee to $3,500. "In less than a week, we can have a course up and running," he says. "It builds them a gigantic e-mail list for their course. It is very focused marketing.

"Where I've seen it most effective," Smith adds, "is for weekday play. Send out special offers at around 10:30 in the morning. That's when most people are sitting in their office thinking, 'I'd rather be playing golf.' If you e-mail a special offer, it gives them a reason to go."
IGM PROMOTES THREE SUPERINTENDENTS

LAKELAND, Fla. — Citing its rapid growth in Central Florida and along the East Coast, International Golf Maintenance announced the promotion of three superintendents to regional managers. Gregory Mackintosh, former superintendent at the Widow's Walk Golf Course in Scituate, Mass., now heads up the company's Northeast operations. Also promoted is Steve Gano, selected as manager of the Southeast region, who joined IGM in 1999 as superintendent of the Valdosta Country Club in Valdosta, Ga. The third appointment went to Jason Moore, who now heads up operations in Central Florida. Moore was recruited straight out of Lake City Community College in Lake City, Fla., and was the first superintendent hired by IGM for the company's first contractual facility. Prior to his promotion, he served at the Twin Rivers Golf Club in Oviedo, Fla.

GCSAA, GOLF DIGEST JOIN ON ENVIRONMENTAL AWARDS

LAWRENCE, Kan. — The Golf Course Superintendents Association of America joined with Golf Digest magazine, forming the Environmental Leaders in Golf awards to recognize stewardship of golf course superintendents and their facilities. The program blends GCSAA's Environmental Stewards awards with the magazine's Environmental Leaders in Golf awards. Superintendents who have previously been winners of either award are ineligible to apply for the 2001 award, unless they have changed facilities. The program is sponsored by: Syngenta Professional Products; Rain Bird Corporation; Golf Division; Textron Golf; Turf & Specialty Products; and Pursell Technologies.

GILLIS RETIRING FROM CGSA

MISSISSAUGA, Ontario — After more than 12 years as the executive director of the Canadian Golf Superintendents Association, Vince Gillis plans to retire. Gillis said it was time to give up full-time employment and pursue his personal interests. He has been in association management since 1965, and expressed his satisfaction with things that have been accomplished during his tenure with CGSA. Jay Leach, president of CGSA, said that he will strike a committee to give direction to the board on leadership succession. Gillis will assist in the transition.

Florida’s water ‘disappearing,’ governor warns parched state

By JOEL JOYNER

TAMPA, Fla. — Even as Florida rolls through its rainy season summer, water officials continue to press for conservation as drought concerns escalate. The South Florida Water Management District (SFWMD), for example, has introduced a new, hard-hitting campaign with their “Wasting water is a crime” slogan.

Concerns have reached the highest level. “One of Florida’s most vital resources — water — is disappearing,” warns Gov. Jeb Bush in TV announcements broadcast around the state.

According to weather experts, wet-season rainfalls are just a “drop in the bucket” in recovering Florida’s water supply. Barraging major hurricanes, normal rainfalls from June to October will be insufficient to erase the water deficit at Lake Okeechobee, a vital reservoir, before next winter’s dry season.

District-wide enforcement against water use violators has generated more than $250,000 in fines.

“DRY AS A BONE”

Golf course superintendents, relieved that the wet season has arrived, are still suffering from three years of drought. “It’s getting worse,” said Norman Carmouche, superintendent here at the Palm Ceia Country Club. “We’re still under the phase three category for restrictions.”

Allowed to irrigate fairways only once a week and greens and tees thrice weekly, Carmouche doesn’t anticipate any change. “It’s been dry as a bone here for a long time,” he said.

“We’re an older, more established course, built in 1914,” said Carmouche. “We’ve fared better than most courses in the area because of our shade trees and very little mounding. I played at the TPC at Tampa Bay the other day and, with their mounding, they were really burning up there.”

“DOWN TO THE BOTTOMS”

Pond levels at Carmouche’s course are down six to eight feet. “They’re down to the bottoms,” he said. “When you see a duck walking across the bottom of a pond, you know they’re low.”

Hand-watering has increased for many courses here. “We do quite a bit of it on the greens, trying to hit the hot spots,” said Carmouche.

Penn State professor seeks to commercialize Poa annua for golf market

By JOEL JOYNER

UNIVERSITY PARK, Pa. — Poa annua has few friends. And why should it? “It’s thought of as a weed, and some people are trying to get rid of it,” said David Huff, associate professor of turfgrass breeding and genetics here at Penn State University.

Oddly enough, Huff is trying to develop a strain of Poa that the market might like. “The truth of it is,” he said, “it plays a big part in the golfing world, but a superintendent can’t go out and buy it if he needs it.”

Huff is a staunch advocate of Poa annua putting greens. In his view, its density is greater than that of the newest bent grasses “by an order of magnitude.”

In one of his test plots, he has counted as many as 1,360 Poa plants in an area the size of a quarter.

His goal is to provide a product that meets golf course standards. “I hope to have a satisfactory Poa product on the market within five years,” he said.

“NUMBER ONE PRIORITY”

After examining about 1,600 strains of Poa annua, Huff and his team have narrowed the candidates down to about 60 strains.

“Two years ago, we decided to make the Poa project our top priority,” Huff said. “We now have varieties that have performed very well on some test plots, and this year we’re placing some on actual greens to determine global evaluations and observations. We’re looking to get it down to about 10 to 12 strains.”

Poa is susceptible to pests and diseases and sensitive to heat stresses and

Survey: 63 percent of courses promote wildlife

LAWRENCE, Kan. — Results of the first comprehensive national survey of U.S. golf course management practices show that golf facilities can be maintained in a manner that is compatible with the environment. Nearly 83 percent of the survey respondents indicated that their golf courses are managed specifically for wildlife.

Conducted under the auspices of the Golf and Environment Initiative, the surveys went to 11,000 superintendents who belong to the Golf Course Superintendents Association of America. The Golf and Environment Initiative is a consortium of more than 20 golf associations and environmental organizations that have been examining the game’s environmental practices since 1995.

“The debate about golf’s impact on the environment has been clouded by a lack of complete and nationally aggregated data,” said GCSAA president Tommy Witt. "That has led pro-golf and anti-golf factions to make assertions that can’t necessarily be supported by fact."

The survey addressed a number of agronomic and economic issues, including grass types, number of rounds played, length of season and maintenance budgets. “It would be fair to characterize our first effort as solid, but limited,” said Witt. “We collected a tremendous amount of information, but not enough to allow for extensive interpretation.”

To broaden the coverage to a two-year spread, half the superintendents provided information for 1999 and the rest for 2000. Among the survey findings were these:

• An average golf facility covers 150 acres, with 111.5 of that reflected as managed turf.
• 62.9 percent of the respondents manage their courses specifically for wildlife.

In addition, facilities owned or controlled an average of 100.3 acres of wildlife habitat.
• The most common form of habitat consists of freshwater bodies (found on 78.8 percent of golf courses), deciduous woodlands (67.9 percent), wetlands (51.9 percent), and streams or rivers (48.9 percent).
• Median golf course irrigation water covers 78 acres, or 70 percent of managed turf areas. The national irrigation median is the equivalent of 13.5 inches applied to irrigated areas per year.
• 85.4 percent of golf courses have at least one certified pesticide applicator, with an average of two certified applicators per course.

The GCSAA voluntarily surveyed its members as part of a collaborative effort to build a national database of environmental data for golf courses.

"This is an important step in collecting objective data that both the golf industry and the environmental community can use to evaluate environmental conditions on golf courses," said Paul Parker, executive vice president of the Center for Resource Management.

Continued on page 11

Continued on page 12
The Best Greens Aren’t Built. They’re Maintained.

No machine maintains greens better than the John Deere 2500 Tri-Plex Greens Mower. After years of extensive testing feedback from literally thousands of superintendents worldwide, the 2500 has been engineered to give an exceptional quality of cut, the utmost in operator comfort, and the highest level of serviceability. Cut is king on the 2500. The cutting unit suspension carries the weight of the lift arms and grass catchers on the traction unit instead of the cutting unit. The 2500 also has the lowest psi of any tri-plex greens mower. And all controls are conveniently located at the operator’s fingertips. For a better look at the 2500, call your local John Deere distributor or 1-800-537-8233.
MANCHESTER VILLAGE, Vt. — Superintendent Joseph Charbonneau oversees the management of 1,200 acres of property here at the historic Equinox Resort.

At the 230-year-old hotel here, Ethan Allen's Green Mountain Boys planned their attacks on British redcoats during the American Revolution.

The Equinox also is home to the Walter Travis-designed Gleneagles Golf Course that dates to 1927. Charbonneau has been at the course, situated at the base of the 3,816-foot Mt. Equinox, since 1978.

A championship layout with spectacular mountain views, the course underwent renovation work by Rees Jones in 1992. "I worked as the construction and grow-in superintendent from 1991 to 1992," said Charbonneau. "We have bentgrass from tee to green, 112 bunkers and a lot of rolling terrain."

Charbonneau manages a crew of 16, maintaining the track to high standards. "The bunkers are the predominant hazard on the course," he said. "About 90 hours per week are invested in the maintenance and grooming of our four acres of bunkers."

**THREE-FOOT HOSE**

One of the most crucial aspects of maintaining the superb greens involves proper water management. "The sprinklers supplement the plant by applying water at night to make up the deficits," Charbonneau said. "During the day, the greens must be cooled off by applying a light amount of water to close the plants' stomata to reduce water loss."

With a course full of golfers, cooling off greens can prove difficult with a traditional 100-foot hose. "One is always in the way with the hose," he said. "At Gleneagles, we use a snap valve key, a three-foot hose and a three-quarter inch nozzle."

"With this contraption, a putting green can be effectively cooled off in less than a minute with no inconvenience to our guests," he said. "This idea was given to me by retired superintendent David Clement, and we’ve been using this method successfully here for about four years now."

**Greens mowers:** 3 Toro Triplex, 8 Toro 500 hand mowers
**Tee mowers:** 3 Toro Triplex 3100s, 6 Toro GM1000s
**Fairway mowers:** 3 Toro 5200s
**Rough mowers:** Tractor w/gang
**Riding bunker rake:** 1 Toro, 1 Cushman
**Turf utility vehicles:** 2 Cushmans, 1 Toro workman, 4 Carryalls, 4 Yamas

**Verti-cut reels:** 3 Toro 3100, 5 Toro 5200
**Thatching units:** 1 Toro Greens, 2 Ryan
**Aerifiers:** 1 Toro Greens, 2 Ryan
**Tournament speed roller:** 1 Toro
**Triplex, mounted Reel grinder:** Foley
**Bedknife grinder:** Foley
**Irrigation pump station:** PS/Flowtronics, 1100 GPM
**Golf car fleet:** 75 Yamas, gas

**Flagsticks:** Par Aide/Prestige Flags
**Computer & accessories:** 2 computers, Toro built
**Primary herbicide:** Trimec
**Primary insecticide:** Battle G.C.
**Primary fungicide:** Daconil
**Primary slow-release fertilizers:** Earthworks
**Cannot live without:** My sense of humor
**Oldest piece of equipment on course:** A23-year-old greens mower

**Total square footage of maintenance building(s):** 9,000 sq. ft.
**Annual rounds of golf:** 21,000
**Normal green speed:** 9"
Florida’s water
Continued from page 8

Carmouche said. “But it takes a lot of manpower.”

Wells were installed at the course in the 1930s. “They’re pretty salty now,” he added. “There’s nothing like a good rainfall.”

The Orlando area is dealing not just with drought, but also wildfires. “It seems like half of Florida is on fire,” said Earl Leyton, golf course mechanic at the Dubsdread Golf Club in Orlando. “I’ve even had a 1,000-acre fire out by my house.”

Water bodies in the area are hurting badly, too. “I live over in Clermont,” Leyton said, “and there’s a chain of lakes out there that’s no longer a chain. The rivers are all dried up. Lake waterlines are 300 to 400 feet from the docks. It’s really a mess.”

POWDER-DRY ROUGHS
Courses in St. Petersburg also are coping with drought stresses. “The course outskirts are basically powder dry,” said Dave Kane, assistant superintendent at the Renaissance Vinoy Resort. “In early March, we got nearly an inch,” Kane said, “but then we hadn’t had any since January. We’re hurting. This is the worst drought period since they’ve kept records in this area.”

The challenges continue to stack up. “Florida has a lot of sandy soil, so what little rain we’ve gotten so far drains straight down through,” said Kane. “We do use effluent, and we can irrigate our greens, tees and fairways okay. But the problem is that the sodium content gets high. We need rain to flush it out.”

SUPERNS STRIVE FOR FLEXIBILITY
In South Florida, phase two restrictions continue to remain in effect even though rainfall conditions are fair. “Temporarily, we’re in great shape,” said Randy Randquist, superintendent at the Boca Rio Golf Course in Boca Raton. “Long term, we still have concerns about water restrictions. “Lake Okeechobee is still real low,” he said. “I believe the levels are around nine feet now, which is the lowest it’s ever been for this time of year. Our real concern is when we get back into the dry season again – especially if restrictions are still in place. And that really hinges on Lake Okeechobee getting some heavy amounts of rain.”

Parts of the 663-square-mile lake have actually caught on fire. Superintendents in South Florida are negotiating with the SFWMD for more flexibility. “They won’t make any changes to the rules,” said Randquist, “but there is some indication that they may rewrite some rules for a potential phase three situation to offer more flexibility.”

Superintendents may be able to better manage when and how often they irrigate their courses. “If we can show a genuine reduction by using flow-meters, they may be more willing to rewrite those rules,” Randquist said.

Drought conditions are expected to persist in the Southeast through August.

Danneberger launches Superintendents’ Korner
By JOEL JOYNER
COLUMBUS, Ohio — T. Karl Danneberger, Ph.D., professor of turfgrass science at Ohio State University, has launched Superintendents’ Korner, an Internet site for superintendents in the Midwest.

Located on the OSU Web site, SK is designed to cover issues and developments concerning turfgrass in the region. Current topics, called “turfnotes,” are listed on a regular basis and inform superintendents on both abiotic and biotic stresses that occur throughout the growing season.

“I launched it in April, and I think it has been well received,” said Danneberger. “Whenever I make a new posting, I send out an e-mail to those on the SK list.”

The site may be viewed at http://hcs.osu.edu/karl. Turfnotes published so far this year cover a range of topics, everything from red thread, mushrooms in aerification holes, necrotic ring spot and dandelions. Basal rot anthracnose, take-all-patch and dollar spot on bent/Poa fairways round out the list.

AQUA-AID PROPORTIONER SYSTEM
“A Simple, No Mixing method of applying Aqua-Aid products”

The AQUA-AID® PROPortioner System is designed specifically for use on all types of turf, perennials, annuals, vegetables and ornamental plantings.

- Golf Courses
- Athletic Fields
- Nurseries
- Landscape Plantings
- Greenhouses
- Cemeteries
- Hydrosedging
- Home Gardens
- Transplanting
- Home Lawns

A convenient system with no chemical mixing for utilizing the Aqua-Aid Products that’s as easy as hand watering. Four Pellet formulations that are designed to make hand watering more effective and longer lasting.

- AQUA-AID Pellet
  All purpose watering saving Pellet
- AQUA-ROOT Pellet
  Microbe feeding and Nutrient Chelation Pellet
- AQUIFER Pellet
  Soil penetrating Localized Dry Spot Pellet
- AQUA-MAXX Pellet
  Root producing enhanced Kelp Pellet

1-252-937-4107 or 1-800-394-1551

5484 S. Old Carriage Road
Rocky Mount, NC 27803
If the label's on it, the best is in it.

Now it's easy to know whether you have the best turfgrass mixtures and blends available. Just look for the Jacklin Quality label. The Jacklin Quality label on the bag says you're planting turfgrass varieties with:

- the industry's leading private research and breeding program behind them
- a wealth of innovation that has led the world in turfgrass development for nearly seven decades
- proven performance that combines unsurpassed color, turf quality and disease resistance

You never have to wonder if the best is in the bag when the Jacklin name is on it.

So the next time you order seed, ask for Jacklin Quality inside. You'll forever be labeled as somebody who knows how to grow great turfgrass.

Poa annua
Continued from page 8

winter damage, and its diversity complicates the uniformity in growth and color demanded for golf course greens.

"We're looking to eliminate those types of weaknesses," said Huff. "We do have a variety that's resistant to several strains of anthracnose. One Poa strain also has a very good field resistance to dollar spot. The tests this year will be a key factor. We're also focusing on color."

SEED PRODUCTION

For those who have Poa and rely on it, Huff hopes to offer a tool so they can continue to manage their courses the way they would like. "I've had one guy say, 'More superintendents have kept their jobs because of Poa rather than have lost their jobs because of Poa,'" he said.

Building a market with an abundant supply of Poa products could prove challenging. "It may be quite some time before we solve all the problems with the plant," said Huff. "Probably not in my lifetime. But the biggest single thing holding us back from the marketplace is seed production.

"You just can't go out and harvest the seed with a combine," he said. "That's what all the seed producers use. They're huge operations, and I don't imagine most would want to harvest Poa as a sort of specialty."

HANDLING NATIVE STRAINS

Kevin Morris, executive director of the National Turfgrass Evaluation Program, in Beltsville, Md., sees other complications. "Poa is unique because there are so many locally adaptive eco-types that it would be difficult for someone to market," he said.

"The problem is marketing a variety that can overcome and withstand the native varieties of Poa," Morris added. "It would be hard to obtain a uniform green that's not invaded by a local Poa with a different strain. Native types may move in and create a splotchy, non-uniform green, just like they do with bentgrass."

That hasn't stopped Colin Boyd. He has been growing Poa annua for the past five years, doing green extensions on as many as 60 golf courses.

"We're doing this because the older-style golf courses -- the Oak Hills and the Aroniminks of the world -- have Poa annua greens," said Boyd, president of Colin Boyd Turf Industries in New Wilmington, Pa. "We focus on the golf course industry, and strictly greens and tees.

"Our approach is to make it so that the golfer can't tell that we were there, as opposed to using straight bentgrass," he added.

"The sod we grow, we hope, helps make our extensions match up well and flow with the rest of the green." •

PENN STATE STUDENTS RECEIVE GCSAA SCHOLARSHIPS

UNIVERSITY PARK, Pa. — Eight students at Penn State's Golf Course Turfgrass Management Program were awarded scholarships by the GCSAA. The scholars are:

- Daniel J. Brickley, R. Geoffrey Brunner, Sean R. Jordan, Toby J. Kiggins, Joshua J. Laughridge and Joseph Maloney. Merit award winners were Aaron J. Baker and Steven T. Craig.
Biotech turfgrass

Continued from page 1

the market. "About 70 percent of the U.S. corn crop is now genetically engineered, and about 55 percent in the soybean market," said Kausch.

The strategies applied to corn and soybeans can also be applied to improve turfgrasses.

"We can change pigment to offer more variety, provide drought- and disease-resistant grasses, and provide pest-resistant as well as salt-tolerant turfgrasses," he said. "Not only does it introduce traits that don't exist in grass, but it does it faster than conventional breeding. It's really amazing. The wish list is extensive."

WORK AT RUTGERS

At Rutgers University, bio-tech work started in turfgrass by analyzing DNA to identify one strain from another and examine the variation.

"We discovered we could transform bentgrass by introducing clone genes or foreign DNA," said Peter Day, director at the university's Institute of Biomolecular Research. "We initially introduced some genes for Roundup resistance." But Roundup ready turfgrass has not been perfected.

"More recently, we have focused extensively on various constructs that confer resistance to turf diseases, particularly dollar spot," he said. Preliminary trials look promising, according to Day. "Once an engineered variety satisfies the eagle eye of the turf breeder, it will go through performance trials," he said. "It would be very foolish to release anything prematurely."

"One concern is outcrossing and how introduced varieties are likely to be spread through pollination," he said. "The question arises: are these altered species hazardous to the environment?"

EXPERIMENTING WITH STERILITY

Male sterility is one option being studied as a means of controlling a released, transgenic grass variety in nature. "It's still experimental," said Day. "The technology is difficult, with limited success in some grasses. It has been done in tobacco and there's also extensive work being done on rice."

Male sterility in genetically altered turfgrass is a primary focus at Kausch's lab in Rhode Island. "It's an expensive procedure," said Kausch. "It's not something you do in your garage over the weekend or in a Dixie cup."

"Moving one gene requires a great deal of technical experience and anywhere from eight months to a year before you have a plant with an introduced gene in it," said Kausch. "We've had some positive results. We'll probably have something on the market in three to four years."

POLLEN TRAVELS 3,000 FEET

Turfgrass pollen is known to travel up-
Munegem breaks ground on Westchester County’s first daily-fee course in 63 years

By PHILIP HALL

NEW CASTLE, N.Y. — It’s been 63 years since a new public golf course opened for play here in Westchester County. Exclusive private clubs abound (there were 39 at last count), but a dense population and real estate prices gone berserk make the development of public-access facilities a virtual impossibility.

This shortage of affordable golf courses is something local players have come to accept. Indeed, the nation gained insight into this regional problem last year when The New York Times published a front-page story on the subject.

But help is on the way.

Ground was broken in June at Hudson Hills Golf Course, an 18-hole daily-fee layout designed by architect Mark Munegem, a partner with Uxbridge, Mass.-based Cornish, Silva and Munegem, Inc. Developed by Westchester County itself, the course is scheduled to open for play in 2002.

“The main portion of the land we’re using for Hudson Hills used to be a golf course,” explained Munegem. “The club changed its name many times. It was called Pine Ridge when it opened in the 1920s, then Sunset Hills, then Pine Ridge again before it took the name Hudson Hills Golf Club in the mid-1960s.”

The club shut its doors in 1982 and today the site is totally overgrown. “We’ve appropriated the most recent name for this new project,” Munegem added, “but we’ve essentially designed a brand new golf course here, a completely new routing. This isn’t a restoration; it’s a reincarnation.”

CONTROLLING GREEN FEES

How do 110 acres sit unused for nearly two decades just 30 miles north of New York City, in the heart of one of America’s most outrageously priced real estate markets?

Well, the club closed down because IBM purchased the property with plans to build a corporate research laboratory there. Those plans never materialized.

Five years ago, the county successfully negotiated to buy the property back. At that time, the county had intended to develop the project privately, via a third-party lease arrangement.

“Eventually, the county decided to develop the course itself,” said Munegem, who recently completed tournament renovations at Chicago’s Olympia Fields Country Club, site of the 2003 U.S. Open. “That was the only way to control green fees. In Westchester County, a private operator could charge just about anything and get away with it. Better than anyone, county officials recognized the need for affordable golf here.”

Continued on page 19

Fream’s Nine Bridges GC puts Glenelg in Korea

By JAY FINEGAN

JEJU ISLAND, South Korea — Architect Ron Fream has opened his fifth course in Korea since 1984. Nine Bridges Golf Course here on this subtropical ocean resort destination, less than an hour’s flight from Seoul, Tokyo and Osaka, held a soft opening June 1. The layout will hit full swing in August.

Fream said early players have been “very impressed” by the par-72, 18-hole course, which runs to a championship length of 7,200 yards and down to 5,250 from the front tees. The scenery is “amazing” around the site, said Fream, who noted that volcanic outcroppings line the several creeks that cross the property. The entire island is volcanic.

BASED ON GLENELG

The California-based architect, who has designed courses all over the world,
During overseeding, it won’t burn the course. Or you.

Fertilizing during overseeding is a lot like playing with fire. Apply a little too much, and it won’t be long before those telltale signs emerge. That’s when the real beauty of Milorganite appears. By releasing its nutrients slowly, Milorganite stimulates cool-season grass seedlings without overstimulating warm-season varieties as they go dormant.

It’s foolproof – protecting both the course and your reputation. For details, visit milorganite.com or call 1-800-287-9645.
Forse renovating Ross layouts coast to coast

By ANDREW OVERBECK

HOPEDOOD, Pa. — So far this year, golf architect Ron Forse has been busy on both coasts renovating four Donald Ross-designed layouts.

The project lineup has taken him to the Peninsula Golf and Country Club in San Mateo, Calif. — the farthest west Ross ever designed a course — and to Penobscot Valley County Club in Orono, Maine — the farthest east. Forse is also renovating the Country Club of Mobile in Alabama and Lake Sunapee Country Club in New London, N.H.

RESTORING ROSS TOUCHES

On each project, Forse is updating the layout, while at the same time trying to restore some of the original Ross touches that have been lost over time. This includes reinstating bunkers that have been filled in, redesigning green complexes and thinning trees. To justify the changes, he relies on old photographs, member’s memories and, when he gets lucky, a routing plan.

All changes, however, are not easy, said Forse, whose firm has worked on 25 Ross courses since 1988.

“The challenge is that none of the members have seen the course that way before,” he said. “We’ll get to a course and find a green that has shrunk in and the members refuse to change it because they think all Ross greens were small,” Forse said. “Ross greens on average are 6,000 square feet.”

On each project, Forse is updating the layout, while at the same time trying to restore some of the original Ross touches that have been lost over time. This includes reinstating bunkers that have been filled in, redesigning green complexes and thinning trees. To justify the changes, he relies on old photographs, member’s memories and, when he gets lucky, a routing plan.

All changes, however, are not easy, said Forse, whose firm has worked on 25 Ross courses since 1988.

“The challenge is that none of the members have seen the course that way before,” he said. “We’ll get to a course and find a green that has shrunk in and the members refuse to change it because they think all Ross greens were small,” Forse said. “Ross greens on average are 6,000 square feet.”
McBroom moving beyond Canada, designing in Caribbean and Finland

BY JAY FINEGAN

TORONTO — Golf architect Tom McBroom, well-known for his award-winning designs across Canada, is making his debut as an international designer with commissions to build courses in Finland and in the Caribbean island state of St. Kitts & Nevis.

The Royal St. Kitts Golf Course will be built adjacent to a new beachfront resort to be operated by the Marriott Hotel group. The par-71, 6,944-yard course will include a driving academy and teaching facility. Two sides of the property offer stunning ocean views.

Construction of the 18-hole course started in June with a scheduled opening in November 2002, coinciding with the opening of the Royal St. Kitts Beach Resort, a 650-room development already under construction. "Royal St. Kitts will be a sensational resort course that will rank among the best courses in the Caribbean," McBroom said.

No Tarps. No Tanks.

Basamid, the only granular soil fumigant on the market, quickly eliminates virtually all weeds, nematodes, grasses and soil diseases so you can reseed in as little as 10 to 12 days. And the nonrestricted, granular formulation requires no complicated application equipment or tarps, thereby reducing your labor costs. Basamid is the quick, easy way to get your new turf off to a healthy, vigorous start. To make your renovation easier, call 1-800-545-9525 or visit www.turffacts.com. Always read and follow label directions.

No Hassles.

Granular Soil Fumigant

Renovation Made Easy.
American golf course, the Meadow Club, within the carefully controlled borders of Marin County in more than 20 years.

Marin, an enclave of golden hills and tranquil woodlands, lies just across the Golden Gate Bridge from San Francisco. Its bold headlands provide dramatic vistas of San Francisco, the bay and, to the west, the Pacific Ocean. A century ago, when these wild lands were accessible only by ferry and train, the wealthy built summer homes here. Alistair MacKenzie’s first American golf course, the Meadow Club, was sculpted here in 1927.

The Green
IS THE SHINING GEMSTONE BY WHICH ALL GOLFERS JUDGE THE QUALITY OF YOUR COURSE.

THANK GOODNESS,
WE’VE GOT A WAY YOU CAN BREEZE RIGHT OVER THAT BABY.

Push The Top Dressing Envelope
Sure your players expect your greens to be perfect, but you shouldn’t have to spend all day top dressing them.

Ask for Standard Golf’s Drag Brush Transport Unit, and you’ll breeze through the course, cut hours off your top dressing time, and your greens will look like a million bucks.

What To Do With Your Spare Time
With the time you save using Standard Golf’s Drag Brush Transport Unit, you could learn to speak Dutch. Build an Eiffel Tower from broken tees. Or, dare we say it, actually doak Henderson, Drag Brush Transport Unit Test Pilot. Successfully broke the 18 green top dressing barrier in record time.

LOCALS WARY OF DEVELOPMENT
Today, Marin is home to artists, environmentalists, rock musicians, and every movement imaginable to enhance the human experience. These ingredients blend in with some of the most affluent bedroom communities, creating a vibrant tapestry that captures all that is the fabled California lifestyle.

Residents of this region are protective of their open space. “Tough construction regulations make it difficult to build, especially golf courses, and land is really expensive here,” said superintendent Kevin Pryseski. “There’s only a handful of courses in the county, and I doubt you’ll see another one.”

When the 240-acre parcel of land known as Black Point became available in 1988, four local investors thought they could make something special for golfers. Little did they know about the endless stream of hearings, votes and paperwork that had to be navigated to turn the dream into reality.

The parcel is a stretch of agricultural land next to Route 37, Marin’s main east-west artery, whose only recent use was for an annual crafts fair. Stretches of the property had become an illegal dump — any change in its land use would be an improvement. Fifty acres spilled into a large flat area of grazing land while the other half worked up a large hillside covered in majestic oaks.

RESIDENTIAL COMPONENT
The developers first contact for course design was former USGA president Sandy Tatum, who has earned a strong reputation in Bay area golf circles, not only for his interest in promotion of the game but also for his work in course architecture. Tatum has been involved in such projects as the Links at Spanish Bay in Monterey, the attempted reconstruction of Harding Park in San Francisco, and Lake Shasta Resort near Redding.

“The investors were golfers themselves and knew how desperately this growing region needed a quality daily-fee facility,” said director of golf Paul Segzka. “To make the project financially feasible, it was determined that a certain number of home sites would be required.” The plan, however, was to keep the best parts of the property for the golf course and hide the home sites elsewhere.

JOHNNY MILLER COMES ABOARD
The owners, realizing the project’s regional significance, brought in local resident and pro golfer Johnny Miller and his design partner, Fred Bliss. As part of the original design team, Miller drew up the initial routing plans and also added strong name recognition.

When the first routing plan failed to satisfy various new requirements, Miller, Bliss, Sandy Tatum and his partner, Jim Summers, of Golfco Co., collaborated on an acceptable routing and mounding design. The consortium of four designers stuck together through the process, with Sum-mers handling the daily work of shaping, Miller and Tatum adding input on shot values and green sites.

“Summers worked on the site every day,” said Pryseski. “He made the changes in the field. There was quite a bit of conflicting opinion [between the four designers], which is probably why the layout works so well. Someone’s feelings may have been hurt a little, but in the long run we got the best design.”

13,000 TREES PLANTED
Once construction finally began, it took

Continued on next page

GOLF COURSE NEWS
Stone Tree
Continued from previous page

23 months to complete. Continental Golf Construction Co. of Auburn, Calif., handled the heavy lifting. The great challenge was shaping the 10 holes that play along the flattest part of the golf course. Care was taken to frame each hole with mounding, so only the hole you are playing is in view.

"This was a very difficult site to build on, as we could not impact any wetland areas, and these areas continued to be declared even during construction," Summers said. To tie this area to the tree-laden hillside portion, more than 13,000 trees were planted along these holes, satisfying a permit requirement to replace — on a three-to-one basis — trees that were taken down from other parts of the course.

"Every tree we removed was inventoried by an on-site arborist to determine how many trees we would have to add to other areas," Summers said. The new trees — live oaks, valley oaks, willows and alders — were mostly placed on the flat, treeless section of the property to give the course more definition.

PLAYING SURFACE

The mounding in the flat areas was another challenge, built as the mounds were on bay mud that behaved like Jell-O. "We moved over 300,000 cubic feet of dirt on the property and imported over 180,000 cubic feet of sand to add a full sand cap to the course," said Harvey Lundershausen of Capital Golf Construction. "All of this took a lot of time."

According to Pryseski, the effort paid off. "We have a firmer playing surface during the winter — our rainy season," he said. The course offers bentgrass greens and a rye/bluegrass mix on the fairways and tees. Water comes into play on several holes, with six acres of man-made wetlands, three ponds and two creeks. "There are only 40 bunkers, because the wetlands, hill-sides and water features add enough challenge," said director of golf Soczka.

The difficulty of the design and construction lead to the development of Stone Tree's motto — "A handcrafted classic."

Mungeam
Continued from page 14

Mungeam — a member of the board of governors at the American Society of Golf Course Architects — has become a familiar name in Met area golfing circles. His recent designs include High Bridge Hills GC, the North Course at Charleston Springs GC in Millstone Township, and Colt's Neck Golf and Country Club. All three courses are in New Jersey.

Course construction permits were secured for Hudson Hills back in 1997; Mungeam has spent the past two years honing his design plans here in New Castle. Several of the overgrown holes are still discernible, though none will be part of the new Hudson Hills 18.

"We have aerial photographs of the old course, and if you go out in the field you can see everything," Mungeam continued. "You come across these depressions, and if you scrape around you'll find the old bunker sand. We found a tee sign the other day — a post with fancy wrought-iron work and a board hanging from it. But the writing has been worn away by time.

"The former course was wedged onto just 110 acres, but today we have 150 acres to work with," he added. "It's great land, steep in some sections but lovely, rolling terrain with nice views to the west. When we're finished, I daresay Hudson Hills will be the best public facility in Westchester County."

A COURSE FOR CLINTON

Much has been written about where Bill Clinton, now a resident of neighboring Chappaqua, will play his golf. Mungeam, for one, has a suggestion. "Hudson Hills will definitely be affordable enough for anyone on a government pension," he quipped.

Having christened four original layouts last year (including partner Brian Silva's much praised Black Creek Club in Chattanooga, Tenn.), Cornish, Silva and Mungeam will open four more original designs in 2001, including Mungeam's LeBaron Hills CC, a private club in Lakeville, Mass.

Also, the Mungeam-designed South Course at Charleston Springs will open this fall.

GOLF COURSE NEWS

IT'S ONLY HUMAN NATURE TO WANT THE BEST OF BOTH WORLDS.

Apply MACH 2® Turf Insecticide once before egg-hatch to prevent grubs all season long. Or apply shortly after egg-hatch to cure grubs up through the second instar. Make the choice that suits your schedule and resource availability. MACH 2 also controls key lepidoptera, such as cutworms, armyworms and sod webworms, making it one of the most versatile turf insecticides on the market.

And don't worry about watering MACH 2 in immediately. Unlike other products, MACH 2 can wait 2 weeks or more for you—or mother nature—to water it in without degradation of the active ingredient.

Prevent or cure with season-long control. Unmatched irrigation flexibility. Effective grub and lep control with an award-winning environmental profile. Only MACH 2 truly gives you the best of all possible worlds.

For more information, call 1-888-764-6432 ext. R3107, or visit our website at www.mach-2.com.
**Standard Golf’s Flagstick Caddie eases transport**

Standard Golf’s new Flagstick Caddie is a utility vehicle-mounted unit that allows for easy transport of flagsticks for special events or cup rotation systems. The caddie holds up to 18 flagsticks and features cushioned foam slots that prevent damage during transport. The unit also comes in a smaller version that holds up to six flagsticks for red, white, and blue rotations.

The vertical arm of the caddie fits into the stake hole pocket of most golf utility vehicles. Alternative brackets are available to mount to the side of the vehicle’s box. For more information, contact 319-266-2638 or www.standardgolf.com.

---

**National’s 8400 tackles tough terrain**

National Mower has introduced the 8400 Hydrostatic Triplex Mower. Designed with a low center of gravity, the 8400 can tackle hills, slopes and banks. The hydrostatic drive provides independent reel and ground speeds for a quality cut at any speed. The unit features power steering and a 16-hp Briggs & Stratton engine. It has an 84-inch width of cut and can cover 3.5 acres per hour.

For more information, contact 888-907-3463 or www.nationalmower.com.

---

**Trion unveils mobile lift table**

Trion Lifts has unveiled its DL 1300 mobile lift table, an upgraded version of the DL 300. The DL 1300 still features the versatile dual lifting range mechanism, but also has a built-in battery charger, circuit breaker and remote roll gate control.

For more information, contact 800-426-3634.

---

**Par Aide ready with new tee markers**

Par Aide is ready with its new Banded Tee Markers and Branch Tee Markers. The Banded Tee Markers allow courses to use one color marker for a simple and professional design. Tee locations can be indicated by color bands, numbers or custom lettering.

The Branch Tee Markers have a natural pine or birch branch look. Made from a durable resin material, these markers feature slanted ends painted in red, white, blue, yellow or black and stainless steel spikes. For more information, contact 888-893-2433.
**BRIEFS**

**SUMMERS NAMED HEAD PRO AT JOHN DALY COURSE**

MYRTLE BEACH, S.C. — TSC Golf, based here, has named Rion Summers as the new head golf professional at John Daly’s Wicked Stick Golf Links. Summers, previously served as head pro at Diamond Back Golf Club in Loris, S.C. He has worked at TSC Golf-managed courses for four years. For a period of one year prior to working at Diamond Back, Rion was the first assistant at Wicked Stick.

**VONA MOVES UP WITH MARRIOTT**

ORLANDO, Fla. — Marriott Golf has appointed Dan Vona director of golf at The Frog at Georgiaian Resort in Atlanta. Vona, who was hired as the club’s club professional last September, will replace Tom Gray, who has accepted the director’s job at the company’s Camelback Golf Club in Scottsdale, Ariz. A graduate of Penn State, where he captained the golf team, Vona joined Marriott Golf in 1991. He previously served as head professional at The Golf Club at Marco, on Marco Island, Fla., where he set the course record in 1991.

**RED TAIL GC JOINS KEMPERSPORTS FOLD**

NORTHBROOK, Ill. — Red Tail Golf Club, a private 18-hole course in Avon, Ohio, near Cleveland, has become part of the KemperSports-managed portfolio. The company began operating the Robert von Hagge layout in the spring. "KemperSports has worked throughout the years to create a balanced portfolio of golf facilities," said KemperSports CEO Steve Lesnik. "Part of that equation includes private clubs." Melinda Maltezos has been named general manager at the Red Tail complex. Eventually, more than 600 homes will be built when the property is completed.

**MCKINNEY ADVANCES AT PALMER GOLF**

ORLANDO, Fla. — Arnold Palmer Golf Management has named Glen McKinney, regional director for the Mid-Atlantic region. In two years with Palmer Golf, McKinney has ascended from general manager of the Penderbrook Golf Club to area manager to his most recent promotion. McKinney will oversee Palmer Golf’s private Crofton Country Club and Walden Golf Club, as well as the region’s daily-fee Bay Hills Golf Club and Penderbrook Golf Club.

**GOING BAREFOOT: LANDMARK GOLF EAST OPENS BIG**

By JAY FINEGAN

MYRTLE BEACH, S.C. — Landmark Golf East has signed aboard as long-term manager of the star-studded quadruplex called Barefoot Resort and Golf here, which features courses by Davis Love III, Greg Norman, Tom Fazio and Pete Dye. “After visiting the project, we knew Barefoot was something that Landmark wanted to be a part of,” said Buzz Gill, president of Landmark Golf East (LGE), an affiliate of Landmark Golf Co. “The scope of this project and the quality of the golf courses present Barefoot Resort very special.”

According to Gill, LGE will run every aspect of golf operations, from pro shops and clubhouse functions to course maintenance. He also plans to introduce a membership program for the semi-private Dye Course. Beyond that, Gill intends to set up a homeowners’ membership system at the three resort courses—those designed by Norman, Fazio and Love.

All four courses are also open to the public. The primary market consists of players visiting the area on golf package tours. “People on packages make up 95 percent of the play in Myrtle Beach,” Gill said.

**GIGANTIC RESIDENTIAL PROJECT**

The four layouts, which opened last year, will serve as the nucleus of a gigantic residential project. The owner of the 2,500-acre property, Silver Carolina Development Co., plans to build 23 different communities with more than 1,000 homesites and 4,000 multi-family homes. The developer also plans to build a ‘city within a city,’ with exclusive resort hotels, open-air cafes and shopping venues with atmospheres inspired by Savannah’s Riverfront, Charleston’s Market and New Orleans’ French Quarter.

Shep Guyton, vice president of Silver Carolina, said Landmark’s track record made the choice easy. “Landmark’s experience in the management and operation of golf courses in order to positively impact the surrounding real estate development is unmatched,” he claimed. “When you consider the best real estate projects of the last 20 years, the commitment to quality and service demonstrated by Landmark sets the standard for everybody else.”

**EAST COAST PRESENCE**

Landmark Golf East is a newcomer to the area. Last February, Gill and two vice presidents—Tom Sullivan and Joe Huff—moved to Myrtle Beach from Landmark Golf’s main headquarters in Indian Wells, near Palm Springs, Calif. They set up shop in Myrtle Beach, landing Barefoot as their first client.

“We felt we really needed a presence on the East Coast, rather than being 3,000 miles away,” said Gill, who formerly ran... Continued on page 24

**TROON GOLF ADDS ‘RETRO’ BLACK CREEK TO MANAGEMENT PORTFOLIO**

By JAY FINEGAN

SCOTTSDALE, Ariz. — Troon Golf never seems to rest. The fast-growing golf course management firm has added yet another client to its portfolio.

The newest member of the Troon fold, Black Creek Club in Chattanooga, Tenn., features a number of intriguing holes packaged in a “traditional” golf course design. Designed by golf architect Brian Silva, and built by Stein Construction, Black Creek shows strong evidence of the influence of Charles Blair (C.B.) Macdonald and Seth Raynor, as the course repeats such classic golf holes as Redan, Cape, Short and Punch-Bowl, which were signatures of their design styles.

There is more to creating a traditional golf experience than mere appearance, Silva said. “It’s one thing for a course to look old school; it’s quite another for a course to play that way.” At Black Creek,” he said, “all the design elements and strategies are there. The bunkers, for example, are certainly retro in their appearance, but it’s their placement, their integration into the golf hole and landscape, that influences decision-making. That’s what Raynor did so well, and that’s what we’ve done at Black Creek.”

Layout features range from deep bunkers surrounding the greens to blind shots and large green complexes. The fairways pose a challenge unfamiliar to the modern day “grip-it-and-rip-it” golfer, in that choices need to be made to avoid the day bunkers. The Black Creek, for which the course is named, comes into play on holes nine and 18.

“While creating this masterpiece, it was evident that we had to offer our members the best golf experience each time they play,” said Doug Stein, Black Creek’s founder. “We are very excited to have engaged Troon Golf due to their proven ability to deliver... Continued on page 22

**DONAHUE, HAMILL HEADLINE PROMOTIONS AT PALMER GOLF**

PONTA VEDRA BEACH, Fla. — Brian Donahue and Chris Hamill have been named vice presidents of Palmer Golf, heading a slew of changes at the course management firm.

As vice president of sales and marketing, Donahue will continue his day-to-day work with the sales and marketing teams in the field. In addition, he will assume more long-term strategic planning responsibilities within the sales and marketing department. In his short tenure with Palmer Golf, Donahue has championed the decentralization of the sales and marketing efforts. In addition, he has been an important part of the effort to implement the “Palmer Values.” Hamill advances to vice president of development, where he will evaluate new business opportunities. As the most traveled Palmer Golf team member, Hamill has consistently demonstrated one of the most selfless attitudes of anyone I’ve ever worked with. His impact on the Palmer Golf portfolio is often in a behind-the-scenes manner,” said Tim Tierney, Continued on page 22

JULY 2001  21
Black Creek
Continued from page 21
the highest quality product in both agronomic practices and member services.
Dana Garmany, Troon Golf chairman and CEO, said he was "thrilled" by the chance to manage Black Creek. "Our superior maintenance practices and uncompromising levels of service guarantee the members of Black Creek Club an unmatched golf experience," he promised.

Black Creek is a private club, but it accommodates guests at the Bluff View Inn, an amalgam of Victorian B&Bs in Chattanooga's arts district.

Palmer Golf
Continued from page 21
 president and CEO of Palmer Golf.
According to Tierney, Hamill's work on the Links at Victoria Park Golf Club (Calif.) project and the renovation of The Orchards Golf Club's clubhouse, in South Hadley, Mass., "have been crucial to our success in driving revenues to our properties."

Tierney also named John D'Amico general manager at Oronoque Country Club, in Stratford, Conn.
Scott Brady, last year's co-sales manager of the year, has accepted the general manager position at Tour 18 Dallas, effective immediately. "His blend of hard work, leadership and his knack for success will be a good addition to a strong team," Tierney said.

In addition, Chris Canonica, formerly the assistant general manager at Harbor Links Golf Club, in Port Washington, N.Y., has been named general manager at Minebrook Golf Club, in Hackettstown, N.J. "Chris is a 12-year veteran of the golf industry and will certainly have a positive impact on the operations and the team at Minebrook," Tierney said.

At Penderbrook Golf Club, in Fairfax, Va., Tim Dittmar has been named full-time general manager. According to Tierney, Dittmar has shown an ability to innovate in his marketing and leadership of the property.

TEXAS CREW
Tierney also welcomed aboard some of the most recent additions to the Palmer team from Texas. Blake Ross, formerly of Meadowbrook Golf Group, has been selected as general manager of The Golf Club at Castle Hills, in Lewisville. He also cited Palmer Golf's newest facility, The Golf Club at Star Ranch, in Austin. "Led by general manager Lindsay Bowman and superintendent Ricky Heine, Tierney said, "Star Ranch is certain to become Austin's number-one daily-fee facility."

John D'Amico
GolfSwitch, TravelGolf.com join forces
SCOTTSDALE, Ariz. — TravelGolf.com, a national publisher of online golf publications, has selected GolfSwitch, a division of Spectrum Golf, as the exclusive tee time reservations network for its newest sites: GolfArizona.com and LasVegasGolf.com.
GolfSwitch supplies golf courses with tools to enhance customer service, increase revenue and reduce operating costs. GolfSwitch's Web Booking Engine has been integrated into TravelGolf.com's online publications to allow golfers to search for open tee times at area golf courses based on date, time, price range and number of golfers.
When golfers find a time they like and make the reservation, they receive an e-mail confirmation of their reservation.
OB Sports
Continued from page 1

in addition to the company’s traditional delivery of world-class golf, top-notch maintenance and premier customer service. It will have plenty of company in Scottsdale. Nine other golf management firms have made the city their headquarters, including Troon Golf, with 80 courses; GolfMatrix and Granite Golf, each with 21; Western Golf Properties, with 20; and Intrawest, with 16.

Smaller Scottsdale-based management outfits include Lyon Golf LLC, with five courses, Scottsdale Golf Group, with four, John Jacobs Group, with three, and Quality Golf Partners, with one client. SunCor, which manages six courses, and Del Webb Corp, with 13, both work out of next-door Phoenix.

 MANAGEMENT TEAM INTACT

Under the direction of Vincent, OB Sports achieved strong success as a management company. In 1995, it merged with capital partners to form OB Sports LLC, which would both own and manage high-end courses.

By 2000, OB Sports LLC had grown its portfolio to include six owned-course assets and nine third-party management contracts. Last February, Vincent re-acquired 100 percent of the management division from the LLC’s parent investors, and brought the OB Sports name with him.

Along with Vincent as CEO, the company’s other top executives have relocated to Scottsdale. They include Phil Green as president; Ed Francese as president of OB Southwest; and Jamie Cook as vice president of finance. C.A. Roberts heads up business development.

“Professional golf course management has always been the core of our business,” said Vincent. “OB Sports thrives on providing a personalized hands-on approach to our management contracts and seeking creative solutions for our clients’ needs.

“In addition to operations management,” he added, “we will continue to identify stand-alone maintenance contracts as well as comprehensive development opportunities where we can get involved in construction management, business planning and the implementation of a fantastic theme for a project.”

PORTFOLIO ON THE RISE

OB’s current management portfolio includes five California facilities - Winchester Country Club in Auburn; Stevinson Ranch in Modesto; the Golf Club at Roddy Ranch in Antioch; Cimarron Golf Resort in Palm Springs; and Ironwood Country Club in Palm Desert.

The firm also manages the Oasis Golf Club in Mesquite, Nev.

New projects under construction to be managed by OB Sports include Laguna Del Mar in Rocky Point, Mexico; Seville Golf and Country Club in Gilbert, Ariz.; and We-ko-pa Golf Club, just east of Scottsdale.

Ed Francese, as president of OB Southwest, will continue to direct operations at The Gallery Golf Club in Marana, Ariz.
Barefoot
Continued from page 21

all properties for Landmark Golf. Landmark Golf and its eastern cousin are not to be confused with Landmark National, of Upper Marlboro, Md. "We all used to work together in the old Landmark days," Huff explained. "But today Landmark National is indeed a separate company. As they kept the Landmark name, so did we."

FIVE-STAR PORTFOLIO

Courses in the Landmark Golf portfolio include Oak Tree Golf Club, La Quinta Hotel and Golf Resort, PGA West, Carmel Valley Ranch and Mission Hills Resort—all in California. Landmark also owns the famous "Skins Game," played at Landmark Golf in Indio, Calif. In addition, the firm recently opened Oak Quarry, in River-
Deere entering irrigation business

Company to acquire Richton Int’l, Century Rain Aid parent

By Andrew Overbeck

Moline, Ill. — In a move to increase its product offerings and break into the irrigation business, Deere & Company has entered into an agreement to acquire New York-based Richton International Corp. for approximately $125 million, plus the assumption of $45 million of debt. Upon completion of the transaction, Richton’s irrigation business, which includes Century Rain Aid, will be combined with the recently purchased McGinnis Farms to create John Deere Landscapes.

Century Rain Aid has 160 distribution outlets in 34 states and carries the Hunter Golf line of irrigation products. Irrigation equipment sales make up about 20 percent of Richton’s total revenues, which reached $260.6 million in 2000.

“For now, business will continue as it stands today,” said Dave Werning, president of John Deere Landscapes and 25-year veteran at Deere & Co. “What we will do is marry up the two companies and coordinate with our equipment division to be able to go to golf courses with a broader product line.”

Adding to the bottom line

According to Werning, Deere made a play for Richton as part of a long-term plan to penetrate new markets, expand revenues and more fully service its existing customer base. Once the deal is completed, Deere will be able to structure more complete golf course packages and potentially boost earnings, which have been down so far this year (see related story below).

“Golf course superintendents will have mowing units from the equipment side; irrigation products through Hunter, and we will be looking at providing additional products and services,” Werning said. “Those include financing options through Toro’s up, Deere’s down for second quarter

Toro up 11.7 percent

Despite lower than expected revenues due to unfavorable weather, the Toro Co. reported that net earnings were up 11.7 percent for the second quarter, ended May 4. Earnings increased to $30.1 million for the quarter versus $26.9 million during the same period last year.

According to the company, sales of non-golf equipment “were up nicely” but golf product revenues were weak, “reflecting the economy’s effect on this market.”

“Strong professional equipment sales, new product introductions, and our ‘Five by Five’ programs have more than offset the effects of weather and an uncertain economy on our business,” said Ken Melrose, chairman and CEO.

The company said it expects third-quarter results to be on par with last year’s but estimated 12- to 15-percent earnings growth for the full year.

Deere’s net income declines

Deere & Co. reported net income of $127.8 million for the second quarter, ended April 30, and $184.2 million for the first half of 2001. In comparison, in the same period last year, the company recorded net income of $204.3 million and $127.8 million for the second quarter, and $184.2 million for the first half of 2000.

“Second quarter results are a reflection of the general economic slowdown and continued weakness in our major markets,” said chairman and CEO Robert Lane. “We have responded to these difficult conditions by reducing production schedules.”

These actions, Lane explained, are expected to have a negative impact on earnings for the rest of the year. The company blames the decreases on lower sales of commercial and consumer products and construction equipment, and the impact of weaker foreign currencies.

The Dow wraps up Rohm and Haas acquisition

INDIANAPOLIS — The Dow Chemical Co. has completed its $1 billion buyout of Rohm and Haas’ agricultural business. Rohm and Haas will be integrated with Dow AgroSciences LLC, a wholly owned subsidiary of Dow.

In the deal, Dow AgroSciences acquired Rohm and Haas’ Agricultural Chemicals business including fungicides, herbicides, insecticides andlicense to agricultural uses of the Rohm and Haas biotechnology assets.

The acquisition will strengthen Dow AgroSciences’ market position and is slated to increase annual sales to approximately $3 billion, said A. Charles Fischer, president and CEO of the company.

“We are very pleased with this acquisition, which is consistent with our overall growth strategy of adding value through mergers, acquisitions, alliances and our own R&D efforts,” he said. “The new product lines we’ve acquired complement and enhance our portfolio and increase our global scale and reach, allowing us to better serve our customers.”

Simploot to attack international marketplace

By Andrew Overbeck

BOISE, Idaho — Simplot Turf & Horticultural has upped its international attack by forming an international division. Hiromi Yanagisawa, the former general manager of the firm’s Jacklin Seed division, will head the new division, based here.

Yanagisawa, who joined Jacklin Seed in 1982 as the vice president of the international marketing department, has handled Simplot T&H’s existing export operations.

“I have been managing the seed division and the Simplot T&H’s export business has been done by Jacklin because we had more international experience,” he said. “With the newly created international division we will become responsible for exporting both turfgrass and forage seed, fertilizer and specialty products.”

International market growing

According to Yanagisawa, the international market offers strong growth potential.

“We see tremendous opportunities,” Yanagisawa said. “We decided that we needed to separate that business and concentrate on the international marketplace.”
Fertilizer costs to remain high
Continued from page 1

Increased gasoline prices this summer could also hamper their ability to pass along cost savings. Furthermore, U.S. urea production is down 21 percent on the year and several plants have shut down. As a result, some in the industry believe that current market turmoil could drive another round of consolidation. "The natural gas run-up is the number-one factor in price increases," said Mark Barbera, vice president and general manager for NuGro's U.S. division. "It will only come down to historical levels once more energy reserves come on line."

DEMAND SEEN TIGHTENING

Companies have raised prices across the board, but have been unable to recover all the costs. Consequently, many companies report thinning margins. Both Lesco and The Andersons attributed their first quarter losses of $5.6 million and $815,000, respectively, to the higher raw material costs.

Lesco chairman and CEO William Foley does not expect softening prices to have much of an impact in the marketplace. "The lower raw material costs are not expected to last very long, so we don't know what the net effect will be on an annualized basis," he said. "Prices won't come down a great deal."

Supply also is constricting. "A number of U.S. producers have shut down plants," Foley said, "and that will tighten demand as it gets consumed through industrial and agricultural markets."

Now, lower-cost offshore urea is coming onto the market, which poses additional concerns, said Barbera. "Quality and delivery are the issues there," he observed. "A good deal of offshore material is large granular or prill. Granular is too large for professional grade fertilizers, and prill does not coat well."

INVENTORY ISSUES

Production companies, meanwhile, are still trying to dispose of high-cost inventory. "Even if the bottom falls out of the market," said Russ Foley, Briggs & Stratton's national technical director, "you will not see that in the field - the pipeline is full of products that were produced at a higher cost." According to Foley, it could take eight to 12 weeks for Lesco to run product through the system.

Instead, having taken a large hit in the first half of the year, companies will seek to increase their dollar-cost average to reach margin targets for the year. "You have to lower prices as softening happens, but to stay in business you have to get an average gross margin for the year that is reasonable enough to keep you in business," said Bill Whitacre, president of Simplot Turf & Horticulture.

SURVIVING THE TURMOIL

The increase in raw materials costs has companies struggling to protect margins and recoup costs while remaining competitive.

"You try and pass along as much of it as you can," said Foley. "But you still have to compete on price, especially when you have a competitor that has bought something in the spot market for a lower price and can price for that particular load. It is a volatile commodity in that regard."

There is a fine line between staying competitive and staying in business, according to Mitchell. "It is a competitive industry," he said. "But you have to be realistic. In other words, you must be able to be competitive, but you must be able to make a profit."

Bruce Jasurda, president and CEO of Tyler Industries, agreed. "You don't run a successful business by giving your product away," he said. "We are entitled to a fair profit because of the value of the service they get from the distributor."
Simplot

Continued from page 25

Simplot T&H is already strong in the Pacific Rim and Asia, with offices in China and Australia, where the company intends to focus its first efforts.

"We need to handle those markets better and build the Simplot brand," he said. "There's still room to grow."

The division is also developing a business plan to increase sales in Europe and Central and South America.

**OVERSEAS EXPANSION**

Yanagisawa said that the division will also be looking to open more representative offices overseas and adding to staff.

"We don't have set locations yet," he said. "But we will go where the opportunities are the greatest. There are more right now in Asia. Europe is at least three years down the road."

Establishing international production facilities also could be on the horizon. "We will continue to export seed because we have enough production," said Yanagisawa. "But as we build the business and volume, we will look at producing locally to establish our brand and expand the market."

* * *

In other Simplot T&H news, the Jacklin Seed division has completed the restructuring of its management team.

Bill Whitacre, group president, will take over Yanagisawa's duties. In addition, Chris Claypool will be the sales director and Doug Brede, Ph.D., will direct research and development. Rich Underwood will be the Oregon location manager, and Glenn Jacklin will run the Idaho and Washington locations.

---

Pennington Seed teams with Golf Ventures

MADISON, Ga. — Pennington Seed has selected Golf Ventures as its preferred turfgrass and ornamental grass seed distributor in Florida.

"Golf Ventures will provide Pennington Seed the desired avenue to reach turfgrass managers in Florida," said Pennington's national sales manager Russ Nicholson. "They have 14 representatives with a total of 280 years of experience. Twelve of them have turfgrass degrees."

The distributor previously represented Loft's Seed, whose assets were partially acquired by Pennington, including those in Florida.

Golf Ventures, which has been in business in Florida since 1986, provides turf products, chemicals, fertilizers, golf course accessories, equipment and contract services.

---

Chipco adds Grippi, Parker

MONTVALE, N.J. — The Chipco Professional Products group of Aventis Environmental Science has appointed Joseph Grippi to sales representative for western Michigan and northern Indiana. The group has also named Scott Parker sales representative for southern Indiana, northern Kentucky and central Illinois. Both will be responsible for maintaining customer accounts and developing new business opportunities in their respective territories.
patterned Nine Bridges after a Scottish Highlands style, specifically the Kings Course at Gleneagles. Twenty-five revetted (sod-faced) bunkers punctuate the track, which features creeping bentgrass greens, tees and fairways. Bluegrass and rye semi-roughs fade into fine fescue true roughs.

“We brought in 150,000 cubic yards of sand, by barge, from the Yangtze River in China for all seedbeds,” Fream said. “Even the fairways have eight to 10 inches of sand. We also moved more than 2,000 large trees, up to 30 feet tall, as a conservation and transplanting effort. Autumn leaf color is like New England. Japanese maple and Kryptomeria—a type of pine—are the primary trees.”

Summer typhoons can pose weather difficulties, Fream pointed out, but the area receives only a foot or two of snow in the winter.

“There’s nothing else like this in Korea,” he said. “The course is initially for invited guests, but it will accommodate limited holiday play for tourists. The LPGA is slated to play a major international tournament here on Oct. 15. All the leading female players, including some rising Korean stars, will compete for a $1.5-million purse.”

LOCAL CONSTRUCTION

The owner of Nine Bridges, a Korean corporation called Cheil Jedang, is a major pharmaceutical manufacturer, with other interests in movie theaters, restaurants and film production. It formerly held a stake in Steven Spielberg’s Dreamworks.

Orange Construction, a Korean group, handled the heavy work. “They did a fine job. It’s a quality outfit,” said Fream’s partner David Dale, who did much of the architectural drafting work for the course.

LIST RENTAL

GOLF COURSE NEWS

...offers you the opportunity to reach the decision makers at thousands of golf facilities with an exclusive mailing list.

Call for details...

207-925-1099

LOCAL CONSTRUCTION

The owner of Nine Bridges, a Korean corporation called Cheil Jedang, is a major pharmaceutical manufacturer, with other interests in movie theaters, restaurants and film production. It formerly held a stake in Steven Spielberg’s Dreamworks.

Orange Construction, a Korean group, handled the heavy work. “They did a fine job. It’s a quality outfit,” said Fream’s partner David Dale, who did much of the architectural drafting work for the course.
Specializing in golf course/ park/ bike trail bridges in a variety of materials to suit your particular landscape needs. We fabricate easy-to-install, pre-engineered spans and deliver them to anywhere in North America.

800-548-0054
(exclude California)

§ Speeds up play
§ Reduces playing time up to 20% per round
§ Cost effective
§ Pays for itself in months
§ More enjoyment
§ No pacing and fairways, tees, driving range and cart path
§ Reduces playing time up to 20%
§ Rated #1 in national trials - Cavalier Zoysia

The Kirby Marker System
800-925-4729
760-931-2624
Fax 760-931-1753
www.Kirbymarkers.com

A Visible Marking System
You Can Mow Right Over

Test Trial Offer!
One Hole FREE for 45 Days

New #1 Rated Sportsturf!
Rated all in national trials - Cavaler Zoysia is excellent for golf courses, fairways, tee boxes, sports fields, and home lawns. Let us show you a book you haven't seen before. It's like playing on carpet!

Cavaler Zoysia features:
§ Can be established from sprigs or sod
§ Fine leaf texture
§ High shot density
§ Tolerant low mowing height
§ Cold hardy
§ Good disease tolerance
§ Good seed tolerance
§ Low water use
§ Resistance to insects

The Harrington Corporation
P.O. Box 10335
Lynchburg, VA 24506
804-844-7864 Fax 844-8562

Scores a HOLE IN ONE with a Classified Display Ad like this one in GOLF COURSE MARKETPLACE

Call Jean Andrews for details... 207-925-1099

The Fertilizer Institute Agri-Fund
P.O. Box 56440
PO Box 56440
San Diego, CA 92112

Phone: 619-696-7000 Fax: 619-696-7277

Cavaler Zoysia featuring:
§ Lawn Mowing Service
§ Lawn Mower Rental
§ Maintenance and Care
§ No more stress
§ No more worry

www.Kirbymarkers.com

Score a HOLE IN ONE with a Classified Display Ad like this one in GOLF COURSE MARKETPLACE

Call Jean Andrews for details... 207-925-1099

BRIDGING ANY SPACE

8301 State Highway 29 N, Alexandria, MN 56308 USA
Phone: 203-852-7500 Fax: 203-852-7067

E-Mail: conrib@continentalbridge.com wwwcontinentalbridge.com

FORE!
Join us in the FUTURE of golf course irrigation PLAYS THROUGH.

SOLTIS
Curtis Strange Design
Providing Golf Course Design Services
contact: Mike Riedly - IMG
2 Bryant Street, Suite 150
San Francisco, CA 94115
tel: 415-227-8000 fax: 415-227-8588 mriedly@imgworld.com

SOIL AND WATER SYSTEMS

Lower Water pH • Controls Soil pH
Improves Soil Drainage • Controls Algae
Reduces Sodium in Soil
Improves Effluent Water For irrigation use
Reduces Bicarbonates & Carbonate

SO2 GENERATORS

11638 Tamalpais Way, Grass Valley, CA 95949
(530) 271-0619 aquasol2.com

JULY
15-17 — The Fertilizer Institute Agri-dealer Legislative Conference Washington, DC. Contact: www.tfi.org
19-21 — Turfgrass Producers International (TPI) Conference and Expo Toronto, Ontario, Canada. Contact: 800/405-8873.

AUGUST
2 — New Jersey Turfgrass Association/Rutgers Golf & Fine Turf Field Day. Contact: (732) 821-7134
4-5 — Florida GCSA Annual Meeting. Contact: Tom Crawford (941) 922-2141.

SEPTEMBER
7-8 — Southwest Horticultural Trade Show. Contact: (480) 966-1610.
20-22 — Canadian West Horticultural Show. Contact: (904) 574-7772, 24-26 — PGA International Golf Show, Las Vegas. Contact: (203) 840-5468.

OCTOBER
4-5 — Turfgrass Landscape Equipment Expo. Contact: (800) 887-7285
7-9 — Golf Course International (Munich, Germany). Contact: +49 (0) 611-951-66-11
24-26 — CPI Exposition/ Chemical Show. Contact: (203) 221-9229

For subscriber address changes to Golf Course News, send notice of change of address to United Publications, Inc., 106 Lafayette St., P.O. Box 997, Yarmouth, ME 04096. Phone number is 207-846-0060. The publisher assumes no responsibility for unsolicited manuscripts or information quoted in the news paper. Contributors are responsible for proper release of proprietary classified information. Copyright 2001 by United Publications, Inc. All rights reserved. Reproduction, in whole and in part, without the written permission from the publisher is expressly prohibited.

Reprints may be obtained from Reprint Management Services at 717-560-2001. Back issues, when available, cost $7 each within the past 12 months, $12 each prior to the past 12 months. Back issue orders must be paid in advance either by check or charged to American Express, Visa or MasterCard.

Golf Course News is distributed in the U.S. without charge to qualified personnel of golf course facilities and to golf course builders, developers and architects. Non-qualified subscriptions to the U.S. and Canada cost $6. All foreign subscriptions cost $140 annually to cover air delivery. All payments must be made in U.S. funds drawn on a U.S. bank. For subscription services, please call 215-788-7112. Send address changes to Golf Course News, P.O. Box 3047, Langhorne, Pa. 19047-3047.
HELP WANTED

ACCEPTING APPLICATIONS
Bratt Inc. of Pleasant Grove, Utah is currently accepting applications for Shapers, Supervisors and Finish Operators. Please fax resume to 801-785-8012, attention Golf Division or e-mail: syoung@brattinc.com

CONSTRUCTION
Golf Course Construction Company has immediate openings for qualified project superintendents, shapers, and finish operators. Also seeking office based estimator (Hard Dollar exp.) for California office. Fax resume to: (650) 564-0086. Good long-term opportunities and excellent benefits package.

DESIGN ASSOCIATE
Golf Course Design Firm seeking candidates for Design Associate position. Please send resumes to Steve Wolfard at D.A. Weibring/Golf Resources Group, Dallas, TX via e-mail at swolfard@golfresourcesinc.com, or via fax at 972/831-1616.

DOMESTIC AND INTERNATIONAL
SEMA Golf is currently seeking qualified project superintendents, shapers, finish operators, and irrigation supervisors for both domestic and international assignments. Superintendents should possess some computer skills (Excel, Word, Projects). Irrigation supervisors should have a minimum of 3 projects as foreman or assistant. Mail or fax resume to: Bob Trueblood Vice-President SEMA Golf LLC 7580 East Gray Rd, Ste. 102 Scottsdale, AZ 85260 Fax: (480) 951-4081 E-mail: btsemagolf@aol.com

GOLF COURSE CONSTRUCTION
Expanding company has immediate openings for Foremen, Shapers, Box Blade Operators and Drainage Personnel. Please fax resume to 843-837-4966, ATTN: Golf Division.

INSIDE MANAGER
Golf Course Contractor needs inside manager. This individual will provide administration, finance and accounting support; including forecasting, budgeting, contract administration, estimating, record management, procurement, project cost tracking and general clerical services to ensure operational efficiency of the company. Position will also include managing and administrative and support services for the Company. Excellent Benefit Package. Fax resume showing recent experience, availability, salary expectations and references to 808-329-2882.
LINCOLN, Neb. — A trio of course construction companies has achieved member status in the Golf Course Builders Association of America. The three—Davenport, Iowa-based McCubbin Construction Corp., Scottsdale, Ariz.-based Sema Golf LLC., and Phoenix-based Weitz Golf International—have met the main requirement, having held the general contract on at least three courses in the last five years.

NEW ASSOCIATE MEMBERS

Meanwhile, Loveland, Colo.-based Bitterberry Golf and Caseyville, Ill.-based Munie Outdoor Services have been granted associate member status in the GCBA, based on having built at least one course in the last five years.

Weitz Golf International—have met the based Sema Golf LLC., and Phoenix-based membership in the Golf Course Build- construction companies has achieved one course in the last five years.

Munie Outdoor Services have been

I Advertiser _Page   *Appears in regional editions.

I Advertiser Page Phone Fax Email/Website

**Standard Golf**
**Excel Bridge Mfg**
**Enwood Structures**
**John Deere**
**Asphalt**
**From Tee to Green**
**Turf-Seed**

I Advertiser _Page Phone Fax Email/Website

**Aqua S02**
**AquaMaster**
**Boardtronics**
**E.P.Airson**
**Ewing Irrigation**
**Flowtronex**
**Harrington/Harco Corporation**
**Irrigation Association**
**Salis Golf**
**SyncroPo**

I Advertiser _Page Phone Fax Email/Website

**Aqua Master**
**Boardtronics**
**E.P.Airson**
**Ewing Irrigation**
**Flowtronex**
**Harrington/Harco Corporation**
**Irrigation Association**
**Salis Golf**
**SyncroPo**

I Advertiser _Page Phone Fax Email/Website

**John Deere**
**Precision Small Engine**
**TerraTire Products**
**Traction TCASP**
**Turbo Technologies**

I Advertiser _Page Phone Fax Email/Website

**Jacklin Seed Co**
**Profile Products**
**Quail Valley Farms**
**Southern Turf Nurseries**
**Swell**
**Tee-2-Green**
**TifGra**
**Turf-Seed**

I Advertiser _Page Phone Fax Email/Website

**Chesnut Identity Apparel**
**Covrmaster**
**Formast Construction Co.**
**Heritage Building System**
**IPG**

I Advertiser _Page Phone Fax Email/Website

**Chesterfield Identity Apparel**
**Covrmaster**
**Formast Construction Co.**
**Heritage Building System**
**IPG**

When requesting information, please reference GCN 7/01.
What’s better than a Jake cut? A Jake cut that combines state-of-the-art technology with ease of operation. They won’t settle for anything less at Arnold Palmer’s Bay Hill Club & Lodge — home of the Bay Hill Invitational. The new LF-3400/3800 fairway mowers feature the industry’s most advanced engineering, including a simplified hydraulic system, electrical components with self-diagnostic capabilities and improved overall ergonomics. With the input of experienced mechanics and operators, these models are the easiest ever to maintain, own and operate. Now, add in the Jake precision cut, and you’ve got a formula for productivity and performance no one can beat. After all, when you’ve got an image to maintain, there’s no room for errors. For a dealer near you, call 1-888-922-TURF or visit www.textron turf.com.

HOW A SIGNATURE HOLE MAINTAINS ITS SIGNATURE STATUS.

Precision Cut. Legendary Performance.