GOLF COURSE JELONS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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tennis court. See Spring Prep section, pages 28-30.

OFF-SEASON? YOU BETCHA!

A UNITED PUBLICATION VOLUME 12, NUMBER 1 JANUARY 2000 • \$7.00

INSIDE

Bug Off!

Tools of the Trade

Take a look inside former GCSAA President Joe Baidy's new maintenance center24



LOPEZ NOW AN ARCHITECT

Nancy Lopez, who has consulted on golf course designs in Japan and the Philippines, is embarking on a career in design. See an interview with Lopez, the Old Tom Morris Award winner, on page 31.

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SUPPLIER BUSINESS		
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PERIODICAL

Roundup-tolerant bent looms on the horizon

By PETER BLAIS

COLUMBUS, Ohio — The Scotts Co. is developing genetically modified turfgrasses that are resistant to the herbicide Roundup, a potentially major breakthrough that could make it easier for superintendents to control weeds, according to Scotts researcher Dr. Virgil Meier.

Speaking at the recent Ohio Turfgrass Conference and Show here, Meier said a Roundup-resistant bentgrass crop could be ready for harvesting as early as 2003. The Marysville, Ohio-based firm is also researching Roundupresistant strains of Kentucky bluegrass and St. Augustinegrass. The bluegrass could be available in 2004.

Among other tasks, the crew at The Valley Club in Sun Valley, Idaho, must maintain the club's platform

"This whole area of genetically modified organisms (GMOs) will change how we maintain turfgrass 15 to 20 years from now, starting with the Roundup-resistant bentgrasses and bluegrasses that will be available in 2003 and

2004," Meier predicted.

Scotts has been testing genetically modified

Continued on page 23

Valderrama Declaration affirms stewardship

By TREVOR LEDGER

VALDERRAMA, Spain — "What started as a simple exploration of ecology has turned into a major, complex and dynamic program," said Jo Schatten, chairman of the European Golf Association Ecology Unit in his opening ad-

dress to the U.S.-Europe Golf Environment Summit at Valderrama Golf Club here in November.

Two days later, leaders in golf from around the world were signing the Valderrama Declaration, a statement of intent affirming the golf industry's commitment to environmental stewardship in partnership with such

Continued on page 17

Novartis, AstraZeneca to merge, spin-off ag units

By ANDREW OVERBECK

BASEL, Switzerland — Consolidation continues in the agrochemicals industry as the boards of Novartis AG and AstraZeneca PLC have agreed to merge and spin-off their troubled agribusiness units to form Syngenta. The \$15-billion deal combines Novartis' Crop Protection and Seeds businesses and Zeneca Agrochemicals.

According to industry analysts, this move may be the first in another round of mergers. The Syngenta deal may affect St. Louis-based Monsanto Co., which earlier had been rumored to be in talks

Continued on page 57

Supers giddy about tourney

By A. OVERBECK

MOBILE, Ala. — The four superintendents hosting their peers at this year's GCSAA Golf Championship are feeling emotions of apprehension and excitement as they start to prepare for the event.

"I'd be lying to you if I told that I wasn't feeling the pressure to look good," said Michael Rienzi, superintendent at Kiva Dunes Golf Club. "To me this is big. I'm more nervous about this than I was about Continued on page 25

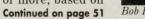
The 18th hole at the Falls Course at Magnolia Grove. The course will host the final round of championship play at the 2000 GCSAA Tournament.

GTCR commits \$100M to new Husband firm

By PETER BLAIS

CHICAGO — GTCR Golder Rauner, LLC has committed \$100 million in equity financing to back former Cobblestone Golf Group Chief Executive Officer James A. (Bob) Husband and his executive team to start Heritage Golf Group, LLC, a new course acquisition/management firm based in San Diego.

The commitment includes an initial investment of \$50 million, with potential to provide up to \$100 million or more, based on





Bob Husband

What they're saying about Penn Pals

"Penn A-4 enhances the game of golf. It is my personal feeling that Penn A-4 is one of a number of significant contributions to the game of golf by Dr. Joe Duich." "Awesome."

Cutler Robinson, CGCS, Supt. Bayville GC, Virginia Beach, VA

"Simply stated, everyone who has played Bayville comments the greens are 'the best they have ever putted.' This grass allows our members to experience 'tour' quality putting and green speed without jeopardizing fairness and enjoyment. Properly managed, Penn A-4 is, in my opinion, the best grass to date and has set a new standard for excellence."

Dean Hurst, PGA Professional Bayville GC, Virginia Beach, VA

"Even though summer temperatures can reach 115-120°, we've cut our Penn A-4 at 7/64" for more than a year with no problems."

> **Doug Anderson**, CGCS, Supt. The Vintage Club, Palm Desert, CA

"For me, the lower the cutting height, the better the management (Penn G-6)."

Pete Gerdon, Supt.

Grandfather Golf and CC, Linville, NC

"Because of the short season at our 7,500 ft. elevation, we sodded our rebuilt greens with 42" wide rolls of Penn A-4 from West Coast Turf in California.

There, we found a source for rootzone sand that closely matched our own, and the long, wide rolls minimized seams. We re-opened 5 weeks after sodding, and dense, fibrous roots reached 10-12" in a matter of months."

Kevin Ross, CGCS, Supt. CC of the Rockies, Edwards, CO

"Quality of the Penn A-4 putting surfaces at The Estancia Club is beyond comparison. Ball roll and the pace of the greens are excellent. I would not hesitate using Penn A-4 again."

Carl Rygg, CGCS, Supt. The Estancia Club, Scottsdale, AZ "Penn A-4 Greens do not cost more. While they do need more topdressing and aerification, they require significantly less water, fertilizer, and pesticides."

Ted Hunker, Supt. Tartan Fields GC, Dublin, OH

"We've overseeded Penn G-6 into our Poa/bentgrass greens after aerifying a total of five times. We fill the holes within 1/4 to 1/8" with sand, seed with one lb. per 1,000 sq. ft., then topdress. When the Poa stresses under heat pressure, Penn G-6 will re-populate that area."

John Lof, Supt. Michelbook CC, McMinnville, OR

"Penn A-4 greens do not mean more work, more trouble, and do not cost more money to maintain. In fact, just the opposite may be true. We have found that they require fewer cultural practices such as vertical mowing and brushing.

In two years of managing Penn A-4, we have not observed any brown patch or dollar spot, and greens require limited amounts of fertilizer."

Kurt Thuemmel, CGCS, Supt. Walnut Hills CC, East Lansing, MI

"I overseed our 18 old greens with 1/4 lb. per 1,000 sq. ft. of Penn A-4 each time we aerify. Now, with single cut and roll, our green speeds are consistently fast at 12 to 12-1/2'. Where ball marks tend to tear older bents, they just make dents in Penn A-4."

Pat Franklin, Supt. Plum Creek CC, Fishers, IN

"We resodded high stress areas in our PennLinks fairways with Seaside II, and are very pleased with its performance. I selected Seaside II with improved dollar spot disease resistance and salt tolerance to address two major turf challenges; the coastal influence and potential sodium buildup from irrigation.

We find Seaside II a strong ally to our PennLinks fairways, and in the future, will slit seed with Seaside II where needed to enhance turf quality."

David Major, CGCS, Supt. Del Mar CC, Rancho Santa Fe, CA

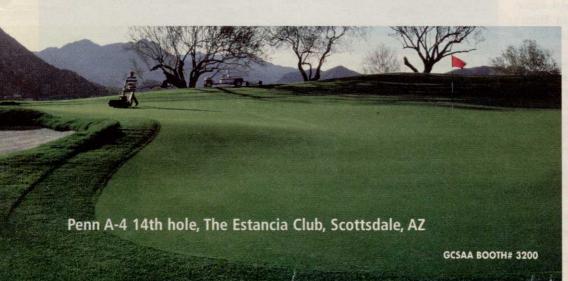
"We have 36 putting greens and 4 practice greens that have been converted from Toronto C-15 to Penn A-4 Creeping bentgrass.

When the greens were placed in play the spring after conversion, comments from our golfing membership were very positive even though turf maturity had not been reached. Putting trueness and turf appearance were among the positive remarks most often mentioned. Now that the putting surfaces have additional development, comments are the greens are superior to anything they've played."

Bill Byers, CGCS, Supt. Des Moines G & CC, West Des Moines, IA

"Comments from golfers have been extremely positive (Penn G-2)."

Jeff Hill, CGCS, Supt. Pinehurst Resort and CC, No. 8, Pinehurst, NC



Penn A-1
Penn A-2
Penn A-4
Penn G-1
Penn G-2
Penn G-6
Seaside II
NuPenn Blend

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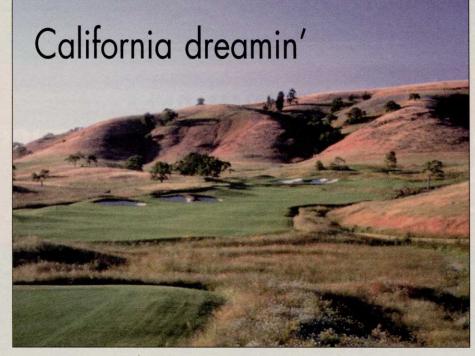


BRIEFS

BOSTON — A judge will be asked to appoint a monitor at Haverhill Golf & Country Club in Boston to ensure that the club complies with Massachusetts anti-discrimination laws. Nine women recently won a \$1.97 million verdict against the club after a jury unanimously decided they were unfairly denied "primary memberships" that come with choice starting times and greater access to the club. The club will appeal, and officials say they won't change club policies until the appeal is decided.

DETROIT — Workers installing a sprinkler system on the 18th hole at Detroit Country Club discovered a human skull three feet underground. Police then found a second skull and other remains. Investigators are determining whether the bones are linked to an unsolved crime or if they've come upon an old Indian burial ground.

JACKSONVILLE, Fla. — Weed Design has been selected to create an 18-hole course within a limited real-estate development on Fleming Island, south of the city. It is called The Golf Club at Fleming Island Plantation. The owner-operator is Landscapes Unlimited of Lincoln, Neb., with the assistance of Centex Homes.



S AN JOSE, Calif. — CordeValle Golf Club opened recently to members and their guests. CordeValle is located just south of San Jose, Calif.

The course was developed through a collaboration by the Haas & Haynie Corp., which created The Estancia Club in Scottsdale, Ariz., and Hix Rubenstein Companies, a Los Altos-based development company specializing in golf-related resort and residential development.

CordeValle is built on 1,700 acres of picturesque California countryside and caters to a membership comprised primarily of high-profile business leaders from the Silicon Valley region. CordeValle includes an 18-hole course designed by architect Robert Trent Jones Jr., as well as a club, spa, and resort-style accommodations managed by Auberge Resorts.



Schrickel develops plans for design scholarship tour

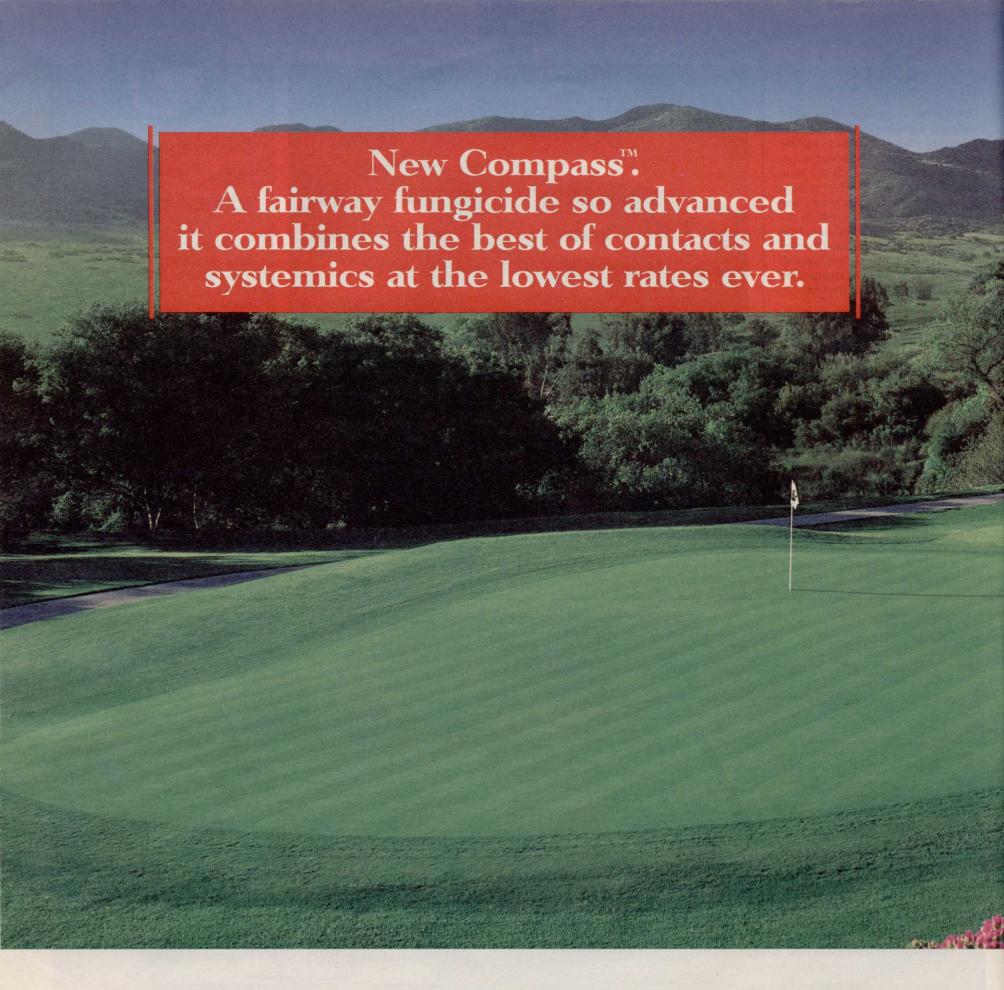
By ANDREW OVERBECK

WILDENBRUCH, Germany -Bettina Schrickel, graduate student at the British Institute of Golf Course Architects (BIGCA) and design associate with the Ronald Fream Design Group Ltd., has founded the Grand Tour Scholarship. The travel scholarship will be awarded to four golf course architecture and turfgrass students each year. Participants will visit 40 of the top-100 U.S. golf courses including Pebble Beach Golf Links in Pebble Beach, Calif., Bel-Air Country Club in Los Angeles, Prairie Dunes Country Club in Hutchinson, Kan., East Lake Golf Club in Atlanta, Merion Golf Club in Ardmore, Pa., and The Country Club in Brookline, Mass.

The Grand Tour Scholarship was inspired by Schrickel's own two-month journey to more than 40 U.S.

Continued on page 9





Unsurpassed control of Brown Patch and 10 other diseases.

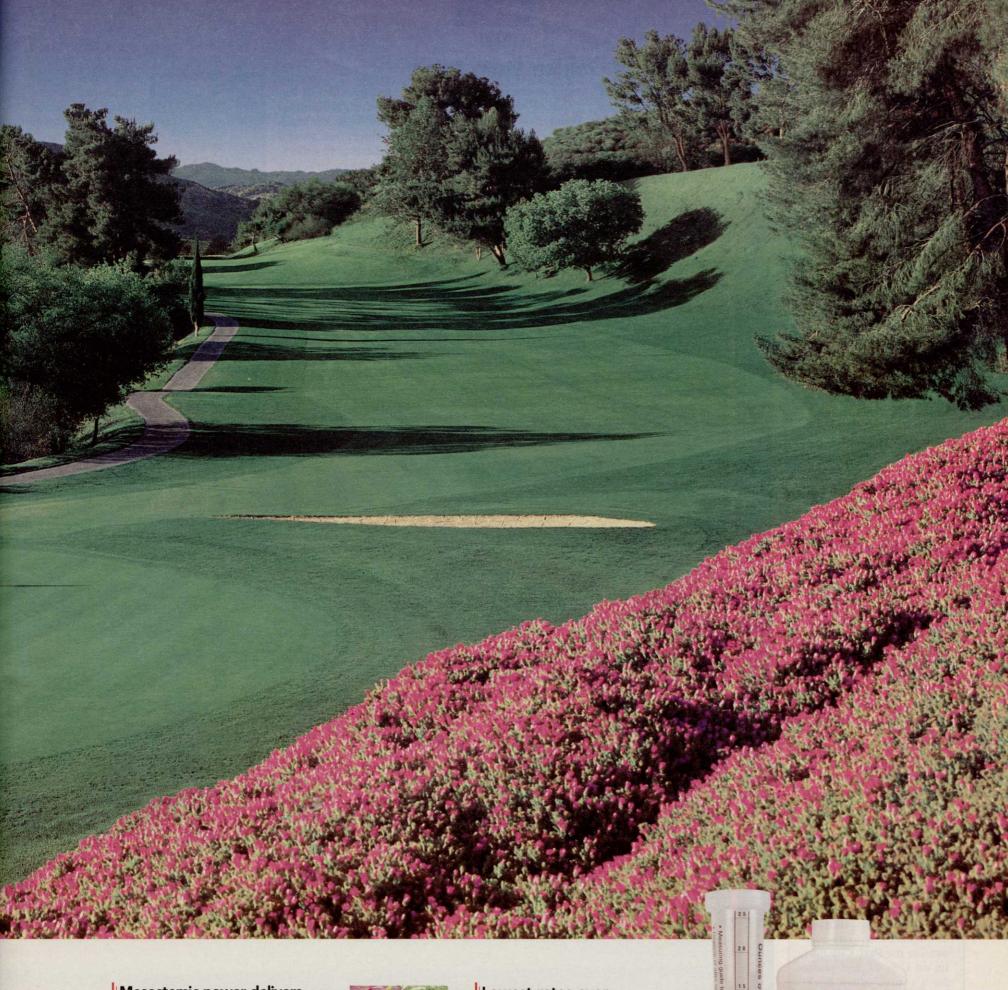
Compass is the best Brown Patch value on the market. Period. It provides the highest efficacy against Brown Patch at the lowest rates ever, as well as excellent control of diseases such as Gray Leaf Spot, Anthracnose, Leaf Spot, and many others.

Tank mix with Banner® MAXX™ for Dollar Spot control and Subdue® MAXX™ for Pythium control.

Compass is an excellent tank-mix partner for Banner MAXX in controlling Dollar Spot and providing additional protection against Anthracnose, Leaf Spot, and Summer Patch. Tank mixing with Subdue MAXX provides exceptional control of Pythium.

Affordable on fairways, yet effective on greens.

Use of Compass is not limited to fairways. With its revolutionary technology, it can be used on greens and tees, as well. Affordably priced, it is the ideal solution for all areas of the course.



Mesostemic power delivers locked-in, rainfast control up to 21 days.

Mesostemic activity, a revolutionary feature unique to Compass, allows it to securely lock into the plant surface. The result: a protective reservoir of fungicide for long-lasting, rainfast disease control.



Lowest rates ever reduce chemical load up to 95%.

Compass delivers the value of a contact with the power of a systemic.

Reduced-risk classification means environmentally sound disease control.

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Rainville, Bye put final strokes to Golden State track

HAYWARD, Calif.—Rainville & Bye Golf Course Architects has completed Mission Hills of Hayward, a nine-hole executive golf course.

The new \$3.1-million public course, which recently opened for public play, features three par-4 holes, six par-3 holes and putting green. A new clubhouse with food service and commu-

nity room is scheduled to open next year. The 1,940-yard, par-30 course also has multiple trees, 27 sand bunkers, bent grass greens, bluegrass/ryegrass fairways, and two lakes that come into play on three holes. According to Gary Bye, principal of Rainville & Bye, the Mission Hills course was also designed to accommodate a unique wetlands restoration project, contributing to its overall scenic beauty.

He added that work on Phase II of the project, which will encompass a new \$2-million practice facility located on 13 acres, has also begun. Nearly 75 percent of the site will be used for a practice range, which will be 300 yards long and include target

greens. The practice facility will also feature night-lighting, double-decker artificial turf tees accommodating 40 golfers, 10 grass practice tees, chipping and putting areas com-

plete with a variety of bunker styles, a 12,000-square-foot putting green, a small pro shop and



restrooms. Design plans call for the range and target greens to be topped with artificial turf.

Situated on 37 acres, Mission Hills at Hayward is located on a 110-acre parcel be-

ing developed into a newhome community by Standard Pacific of Northern California.

Avalanche of courses coming to Park City

PARK CITY, Utah — Developers here are proposing as many as 13 new golf courses within a 10-mile radius, according to *The Salt Lake Tribune*.

The Snyderville Basin, which includes Park City and its immediate surroundings, has three courses.

Ground has been broken on one course and another is approaching final county approval.

The Grayhawk development is building Glen Wild. The 18-hole private course designed by Tom Fazio sits within an 888-acre, 195-unit residential project.

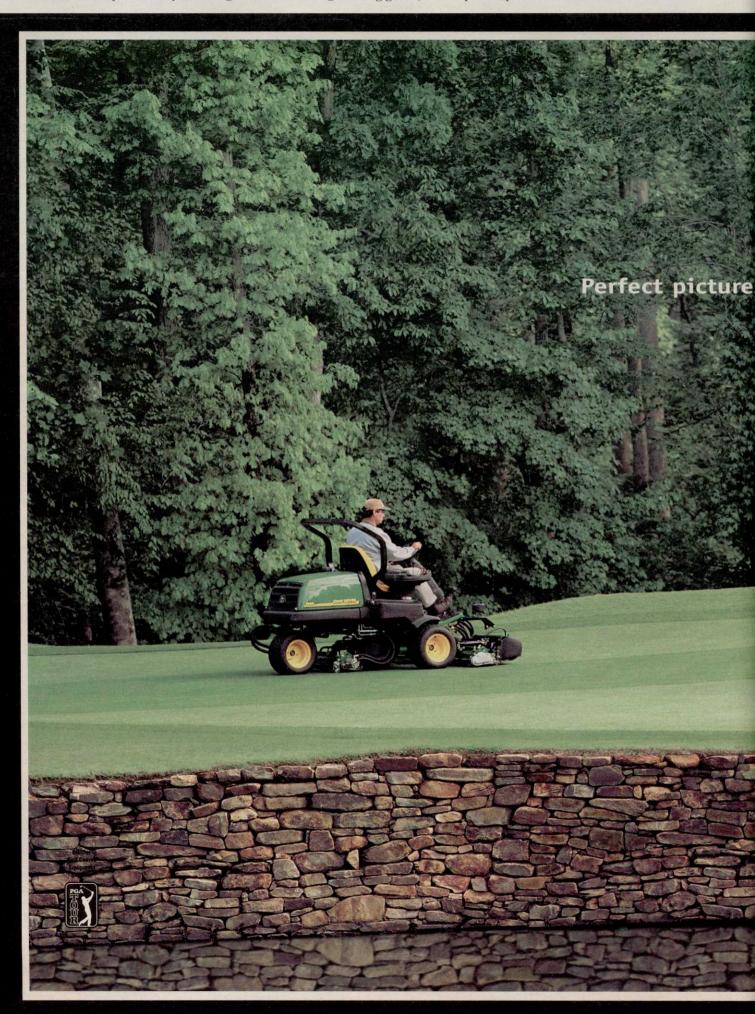
At The Canyons, American Skiing Co. is expecting approval this year for an 18-hole public course at the entrance to its ski resort.

Other proposals include a yet-to-be-named course across State Road 224 from The Canyons. Just beyond the basin's eastern flank near U.S. 40, the Pivotal Group, another Phoenix-based company, is proposing Promontory, a huge resort on 6,500 acres with as many as five private courses.

Other proposals include one or two public courses at Richardson Flats just outside the Park City limits on U.S. 40, and plans for a course called Rock Cliff on the southeastern tip of Jordanelle Reservoir. Another course has been designed near the reservoir's northeastern shore.

CORRECTION

The photograph that appeared in the December issue of a maintenance complex built to resemble a castle was taken at Old Stonewall Golf Club outside Pittsburgh. It was not at Fieldstone Golf Club in Greenville, Del., as stated in the caption. It was an editor's mistake and we apologize.





New OSHA ergonomic regulations unlikely to affect golf workplace

By ANDREW OVERBECK

WASHINGTON — In an effort to combat musculoskeltal disorders in the American workplace, the Occupational Safety and Health Administration (OSHA) has issued an ergonomics proposal that would require more than 1.6 million employers to implement a basic ergonomics program.

Under the proposed regulation, once an ergonomics-related injury occurs in the workplace, the company must assign someone to be responsible for ergonomics and rectify current ergonomics problems. The company must also educate its workers on the signs and symptoms of musculoskeltal disorders and set up a system for employees to report signs and symptoms. Under the "quick fix" program, if a company corrects a hazard successfully in 90 days then OSHA requires no further action.

According to OSHA Public

Affairs Specialist Susan Fleming, the regulations will apply mostly to manufacturing and production jobs. "Over 50 percent of musculoskeltal disorders occur in manual

The best greens aren't built.

They're maintained. And no

machine maintains them

handling jobs, and stem from overexertion and repetitive motion," she said. OSHA estimates



that implementing these measures would save companies \$9 billion annually in workers-compensation costs.

The new ergonomics regulations, however, will likely have

no impact on the golf course.

"Golf for the most part, is considered a hybrid between the agriculture and construction-worker standards. This standard does not apply to those catagories," said Ron Smith, president of Sports Club Management in Braintree, Mass., who consults businesses on compliance with OSHA and risk-management issues.

However, Smith cautions that golf courses would be wise to keep an eye on the ergonomics proposal as it goes forward. "While this may not directly apply to golf, there are the vague parts that talk about musculoskeltal disorders and those occur in almost every line of work," he said.

Following the public comment period which ends Feb. 1, OSHA will hold a series of public hearings beginning Feb. 22 in Chicago, Washington D.C. and Portland, Ore. OSHA expects to have a final standard developed by the end of 2000 and the regulations could be phased in beginning in 2001.

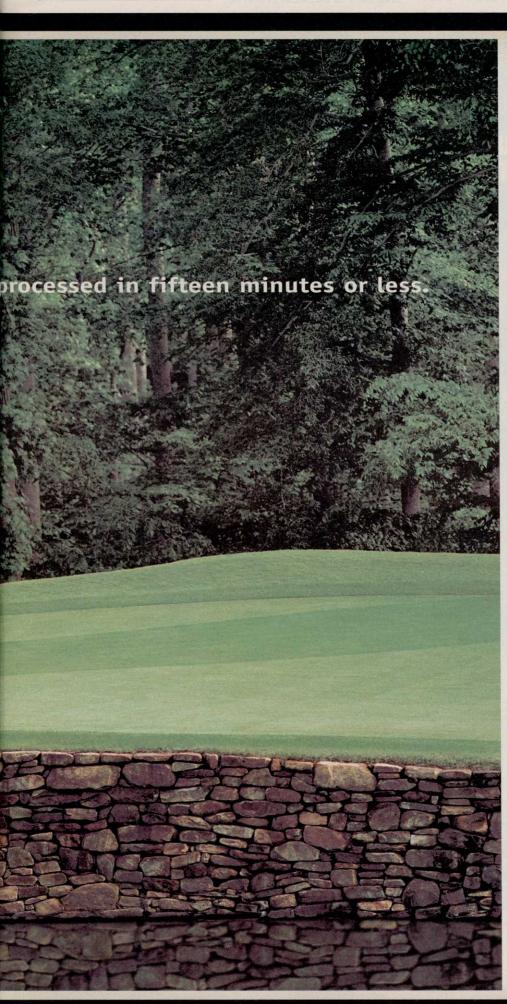
Kitchell picked for Mexican golf course project

PHOENIX — Kitchell Mexico, the Mexican subsidiary of Phoenix-based Kitchell Contractors, has been chosen as the construction manager for Querencia Properties' Golf Community project in Los Cabos, Mexico.

Querencia Properties is developing more than 840 acres of land on the Baja Peninsula; the first phase of the project will include an 18-hole course designed by Tom Fazio, as well as 46 single-family residential lots and 20 villas. Joined by Kitchell's Custom Home division, the Mexico team will be managing all elements of the project, including procurement of local permits, equipment purchasing and importation and subcontract management.

Kitchell, one of the 75 largest construction managers and general contractors in the United States, operates throughout the western United States and Mexico.

Its wholly owned Mexican corporation provides design/build, general contracting, and construction management services from its offices in Phoenix, Guadalajara, Saltillo, and San Jose del Cabo.



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. www.deere.com

GCSAA BOOTH #3821





S.C. Granddaddy gets a facelift

MYRTLE BEACH, S.C. — Pine Lakes International Country Club has gotten a new look. "The Granddaddy" began a renovation of the back nine holes of the course in the summer of 1998. The second stage of the renovations for 1999 began on May 26 and is now complete.

This year's renovations in-

cluded the 12th and 17th greens and the 13th fairway to create better drainage and visuals and to change the lay of the land. The par-5 12th green has been rebuilt and is closely guarded by a water hazard on the 12th green.

"In 1998, the renovations to the tee boxes began a series of changes to take place at various stages. This second stage brings our course more up to date in terms of the latest architecture and a more competitive level," said Scott Miles, president of Pines Lakes. "Rich Robbins, our architect, is taking an old golf course that's been here since 1927 and making subtle changes, but at the same time really highlighting the course."

Designed by Robert White,

Pine Lakes International Country Club, Myrtle Beach's first golf resort, is still the epitome of traditional golf. The staff still dresses in traditional Scottish attire, mimosas are served on the 3rd hole on sultry summer days, and Lowcountry chowder is served on the 7th tee during the winter months. Pine Lakes, nicknamed "The Grand-daddy," is located on Business 17 North

PALMER TO DESIGN

SARASOTA, Fla. — Palmer Course Design Company has been selected to design the private golf course in The Country Club at Lakewood Ranch. The new course will begin construction early this year.

Hills to spruce up Phoenix resort layout

PHOENIX — Camelback Golf Club at Marriott's Camelback Inn will be enhanced with a complete redesign of the Padre Course and practice range, along with an expanded clubhouse, pro shop and restaurant. The project is designed by Arthur Hills and Associates.

Separating itself from the traditional desert golf courses, the Padre Course will be a parkland setting. The course will be lengthened by 300 yards and three new lakes will be added to create an extra challenge. While some holes will maintain their current routing, others will be re-routed to increase the overall playability, competitiveness and appeal.

The new clubhouse will be expanded to nearly 36,000 square feet and will feature an executive board room and permanent outdoor pavilion.

Weitz moving dirt in Kansas

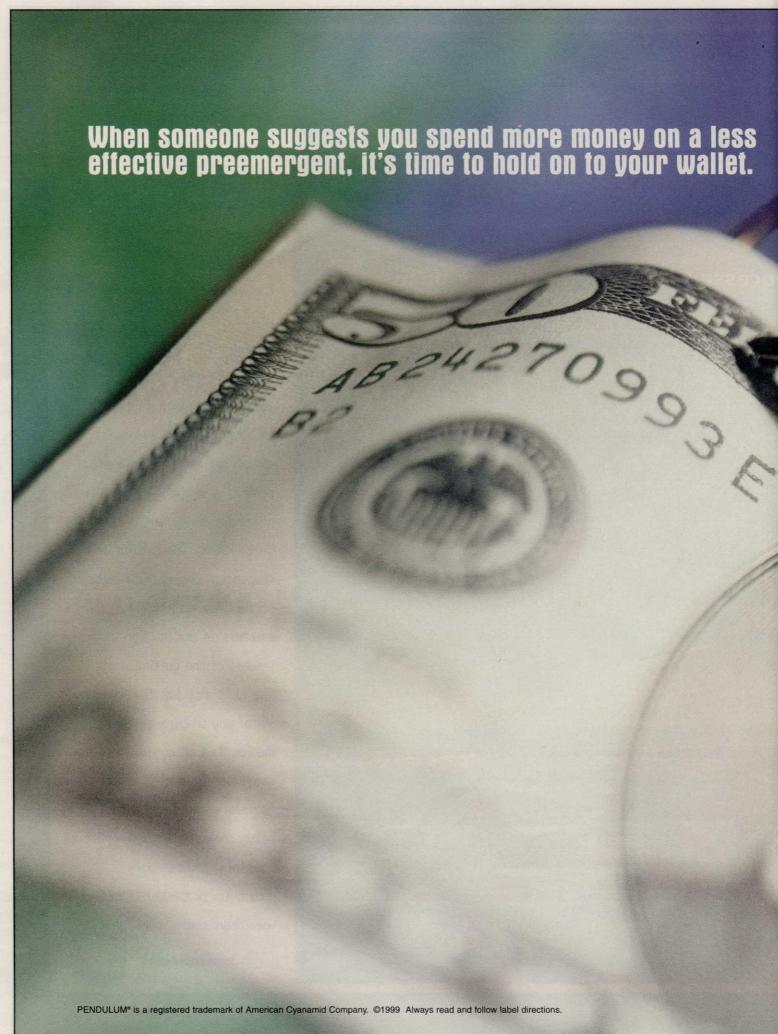
OVERLAND PARK, Kan. — Weitz Golf International has begun construction on LionsGate here. The project includes an 18-hole course, 13,700-square-foot clubhouse, cart barn and other support facilities, and is scheduled for completion by April 2001.

Commented Jim Koepnick, president of Weitz Golf International: "It is especially gratifying that we were brought in during the early feasibility/development stage, and that we have been assigned the total project."

Weitz Golf International is a division of The Weitz Company, Inc., a construction company established in 1855. Weitz Golf International's offices are located in North Palm Beach, Fla., and Temecula, Calif.

JONES TANDEM AT WORK IN VEGAS

LAS VEGAS — Golf course designer Robert Trent Jones Jr., in collaboration with his father Robert Trent Jones Sr., is fine-tuning his latest project, Southern Highlands Golf Club, that opened here in December.





ING CITY, Ontario, Canada—ClubLink Corporation has entered an agreement to purchase all the assets of Greenhills Golf & Country Club in London, Ontario, from the Simpson family and related corporations. The transaction is dependent on certain third-party conditions.

Greenhills features an 18-hole course that winds through mature forest and valley lands on

ClubLink enters London, Ontario golf market

London's southwestern perimeter. The club also includes a clubhouse with banquet seating for 200, a nine-hole academy course, the Greenhills Golf Dome for indoor practice, a pool, eight indoor tennis courts and five outdoor clay courts. The tennis facilities will be leased back to the Simpson family.

"We are pleased to make our

initial acquisition in London, a strong financial and manufacturing center for economically vibrant Southwestern Ontario," said Bruce Simmonds, president and chief executive officer of ClubLink.

"By way of its proximity to the western edge of the Greater Toronto Area, London represents a natural extension of ClubLink's clustering concept."

London is less than one hour from ClubLink's Heron Point Golf Links, on the western periphery of the Greater Toronto Area where the majority of ClubLink's other golf course are located.

As part of the agreement, Sonar Corporation will provide marketing and consulting services to ClubLink. The principals of Sonar are Don Simpson and his sons David and Craig. David was president of Greenhills and Craig was a standout with the NHL's Edmonton Oilers.

Sonar will continue to own and operate 18-hole daily-fee Bear Creek Golf & Country Club in nearby Strathroy.

Scholarship tour

Continued from page 3

golf courses in spring 1999. Rain Bird International will sponsor the scholarship during its first year.

"I consider this journey to be one of the most educational and beneficial experiences of my life. Having seen all these extraordinary and beautiful places, and being guided by wonderful and knowledgeable people, I soon decided that I would like to share this experience and enable future students to follow in my footsteps," said Schrickel.

"Traveling and studying the world's finest golf courses is a valuable experience and compliments a thorough education."

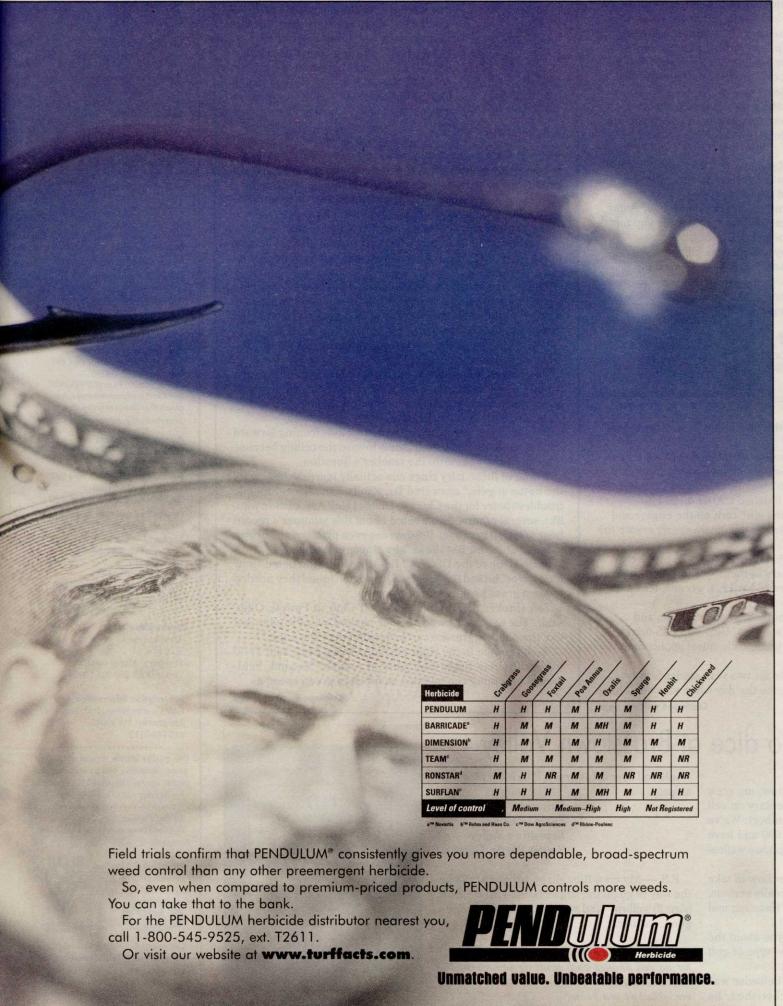
However, the program will not be an extended vacation, according to Schrickel. "Successful candidates will be those who can prove significant efforts and success in their field of study. The aim is to enable students to walk and study the golf courses; playing them is rather out of the question," she said. "It is a great privilege that scholarship candidates can get access to the mostly private golf clubs where visitors are not normally welcomed."

Both study tours will take place annually in April. The Western route leads to 18 golf courses in three weeks; the Eastern route includes 22 golf courses in four weeks.

Golf course architecture and turfgrass students from all over the world are invited to apply for the scholarship. Applicants shall be at least 21 years old and prove significant efforts and results in their educational career path in either golf design or turfgrass management.

For further information and application forms, contact Bettina Schrickel in Germany, fax: 49-33205-64035.

Deadline for applications is Jan. 30. Successful candidates will receive the Scholarship Route Book four weeks prior to departure, which includes detailed route plans, golf course descriptions, hotel recommendations and safety advice. Airplane tickets, rental cars, travel expenses and cellular telephones for the duration of the journey will be provided. Applicants must be in possession of a valid passport and an international drivers license. It is the responsibility of students to obtain a tourist visa for the United States and full health and travel insurance individually prior to departure.



Eyeballing the future

'My interest is in the future because I am going to spend the rest of my life there.'

- Charles F. Kettering

n the midst of millennium madness my mind meanders to the fact that the millennium doesn't start until Jan. 1, 2001—a year from now. But never mind reality in this day of giddiness. For a moment, let's go along with the crowd—some of whom are actually attributing the economic rocket ship



Mark Leslie editor

America is riding to Bill Clinton, of all people. Let's take a look with those rose-colored glasses at the next 100 years. It can be an exciting "trip," something like my wife's grandmother who, in her 96 years, lived to see the first car, the first airplane and the first computer.

• This century we've come from horsedrawn mowers to a mower in which you log in the coordinates of your fairway and let 'er rip.

The future? Doctors are about to implant manmade eyes into Stevie Wonder. I foresee manmade eyes in that machine that will help it mow the golf course from tee to green.

And that troublesome job of cutting the cups each day? A day will come when you can program the mower to cut the cup for position 1 or 2 or 7 on each of the greens.

• The Internet is barely a baby and its possibilities seem limitless. Everyone, it seems, has a home page — even my

nephew. And e-commerce is everywhere. Indeed, who does not sell their goods and services over the World Wide Web?

The future? Virtual reality will come to golf. Turfgrass professors will take cybertrips to golf courses to investigate diseases and prescribe a cure without even leaving their offices.



Many courses have wed pages.

Better still, can't you wait for the time when Prof. Growmore can say, "Beam me up, Scotty!"?

• Designing courses on computers with CADD software has speeded up a number of processes and helped many architects with dig-and-fill figures, but aren't we just skimming the surface?

The future? Simply plug your finished CADD disks into earthmoving equipment out on the site, turn on the engine and watch that equipment (remember the manmade eyes?) create the course envisioned on the disk.

 GPS and GIS technology is being used today to precisely map courses and all the particulars in them — and under them – from irrigation and drainage lines to bunkers, greens, tees and trees.

The future? Working with a course's weather station and tuning into weather-forecasting services, GPS- and GIS-driven equipment will micromanage irrigation, chemical applications and various other tasks.

• Spanish is now a prerequisite for two-year students at Michigan State University. I foresee the day when you won't have

Continued on next page

Supers keep late hours for knowledge

o it's 7 o'clock on an early-December Tuesday evening in Columbus, Ohio. The superintendents and assorted turfgrass managers assembled at the Ohio Turfgrass Conference and Show have had a full day of meetings, educational sessions and trade show tromping.

Now the bars and restaurants are open. ESPN SportsCenter is winding down and a full slate of college basketball, NBA and NHL games are about to hit the airwaves. Then there are home courses to check up on and loved ones to call before they head off to bed.



Peter Blais managing editor

So, considering the alternatives, how many people would you expect to show up for a late-night session called "Greens Management — What's Working and What's Not" featuring Ohio State Professor Dr. Karl Danneberger moderating a panel of seven local superintendents, a pair of United States Golf Association agronomists and a Chicago city agronomist?

No disrespect to the distinguished moderator and panel, but I thought a dozen, maybe two dozen at best would venture back to the conference rooms they had already inhabited since 6:30 that morning.

"Missed it by that much," as perplexed secret agent Maxwell Smart used to say holding thumb and forefinger an inch apart. Try 200 people wedged into a packed room.

The number of turf experts trying to quench their collective thirst for a little more knowledge was the first thing that impressed me.

The second eye opener was one of Danneberger's opening questions to the seven supers who, between them, must have had somewhere in the vicinity of 200 years of combined turfgrass-growing experience.

"What's the one thing you learned this year that's new?" the Ohio State professor said.

Now these guys had been around for awhile, through droughts and floods, good economies and bad, strong green committees and weak ones. I expected at least one or two "Gee, I don't know. It was just another golf season."

But these guys were more like school kids leaning forward in their seats thrusting their hands toward the ceiling because they knew the answer to the teacher's question.

"Some of these fairy rings can actually increase in activity the hotter it gets," answered Dr. Randy Kane, an agronomic troubleshooter for the Chicago District Golf Association who, like several others, commented about this summer's record heat. "Once it gets over 100 degrees even pythium and brown patch shut down. But these fairy rings really take off."

Keith Happ of the USGA's Mid-Atlantic region noted "how little water" he and the supers in his region found they needed to keep grass healthy and presentable.

Ted Hunker of Tartan Fields Golf Club in Powell, Ohio, said, "The new bentgrasses can be pushed over the edge just like the old bentgrasses can be pushed over the edge."

"Good people in the right positions is the key," said Todd Voss of Double Eagle Golf Club in Galena. "Second, lightweight brooming can add just as much to green speed as

Continued on next page

Cell phones? No dice at Brasstown Valley

To the editor:

Just a quick note to let you know, my crew and I really enjoyed your commentary on cell phones (*Golf Course News*, November). We've had our sign up since April of 1999 and have really enjoyed needling the cell phone walk-abouts!

These people really don't know how to take our singe. They ask us if we are really serious. All we can do is laugh and say, "Have fun and play golf only."

Personally, I feel the same as you about the issue, and would like to see some type of golf code of ethics.

Hey, if Ben Hogan knew this behavior was going on, in the game he so cherished, he

would roll over in his grave, if he hasn't done so already.

Sincerely, Steve G. Gonea, Brasstown Valley Young Harris, Georgia

P.S. — My crew thought paint balls would be the way to go on the sniper issue: 1) red = slow play; 2) yellow = 2nd warning; 3) black = you're gone, partner!

Editor's note: I have this great idea for signage for no cell phones and, what do you know, the folks at Brasstown Valley are six months ahead of me. What do you know!



The sign at Brasstown Valley.

GOLF COURSE NEWS

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WES POWERS, 44, DIES

LANARK, Wis. - Men who had worked with Wes Powers at Sentry World in Stevens Point and Foxfire Golf Course in Waupaca will help his widow, Janet, get the Powers' golf course ready to open

Mr. Powers, 44, passed away peacefully at his home on Nov. 23 after a courageous battle with cancer. His death came one year after building and opening his dream, the 18-hole Lanark Links, in Al-

"I don't know the first thing about running this golf course," Janet Powers said in December, "but I am determined to do so. It was Wes' dream. It was the one constant in the last months of his life."

He had worked at Sentry World and Foxfire Golf Course. In 1998 he opened Lanark Links, making golf very affordable for youths and adults alike as "our way of giving back to the community," he

Survivors include his wife, two daughters, Jennipher Pagel of Waupaca and Kari Scott of Almond; two sons, Wesley of Waupaca and Caleb of Madison; three granddaughters, JennaMarie Pagel and Paige and Haley Scott; and his mother and stepfather, Lula and LeRoy Decker of Onarga, Ill.

A memorial fund has been established. People may send donations to Janet Powers at 7519 Wolf Lake Rd., Almond, Wis.

Eyeing the future

Continued from previous page

to learn a language to communicate with someone of another tongue. You will simply speak into a contraption that will translate what you say into the language you have asked for.

· Speaking of communication, is reaching your staff a problem?

In the future I see tiny earphones being worn by all the grounds crew for instant communication.

· And how about the bag-drop operation?

I can visualize this: The golfer drives his car into a machine at the bag drop and pops his trunk; a robot reaches into the trunk, removes the golf bag and puts it on a conveyor belt; the belt transports the bags to the waiting golf car, where another robot places the bag on the car. No, I'm not finished yet... The golf car then drives to the spot for the golfer to hop on and begin

· Today some of the foremost superintendents are using Eco Soil's BioJect system to apply biological controls on their courses.

In the future, this system will be commonplace, brewing up "design-blended" biocontrols that will handle a plethora of diseases through the irrigation system, thus greatly reducing the manpower and costs of chemical applications.

· Turfgrass breeders are taking bentgrasses farther south than ever imagined and breeding Bermudagrasses with playability resembling bents. The Scotts Co. is even developing a Roundup-resistant bentgrass

The future? Bents will exist that can thrive at the Equator, so further work on Bermudas will be unnecessary; paspallums will be puttable for courses on salt water... and far in the future grass will actually grow and cut itself... at exactly the height you want it.

I know we can't see the first car, first airplane and first computer in our lifetimes, but there are so many more advances to look forward to. Subsurface injection will hit the pests where they live. Antidessicants will be perfected to ward off weather's effects on

It's grand to prognosticate. But remember what Euripides wrote: "What we look for does not come to pass. God finds a way for what none foresaw."

Whatever it is that God will do, we hope you're there to observe it. But before then, have a Happy Year 2000 and prepare for the real new millennium!

Supers seek know-how in late-night sessions

Continued from previous page rolling,"

Matt Shaeffer of Columbus Country Club noted: "We roll all the time. But members aren't as concerned with turf quality as you [superintendents] are. If the playing surfaces are exceptional, they don't know that you have dollar spot, yellow tuft, brown patch or that your turf density isn't 80 percent of what it used to be. They are preoccupied with playability... You are your own worst critic. When you think it's bad, it's nowhere near as bad as you think it is."

Bob Figurella of Brookside Country Club in Canton, home to some wildly undulating Donald Ross greens, agreed. 'Members don't care about the Stimpmeter," he said. "They don't care about anything but how much movement there is in that putt.'

The next hour and a half was non-stop questions and answers from an audience whose numbers never dwindled until Danneberger said, "Time to go home kids." Or words to that effect.

If the organizers of the Ohio Turfgrass Conference and similar events ever begin to wonder if what they are doing is worthwhile, just ask some of those people attending the 7 p.m. sessions. I think you'll like the answer.



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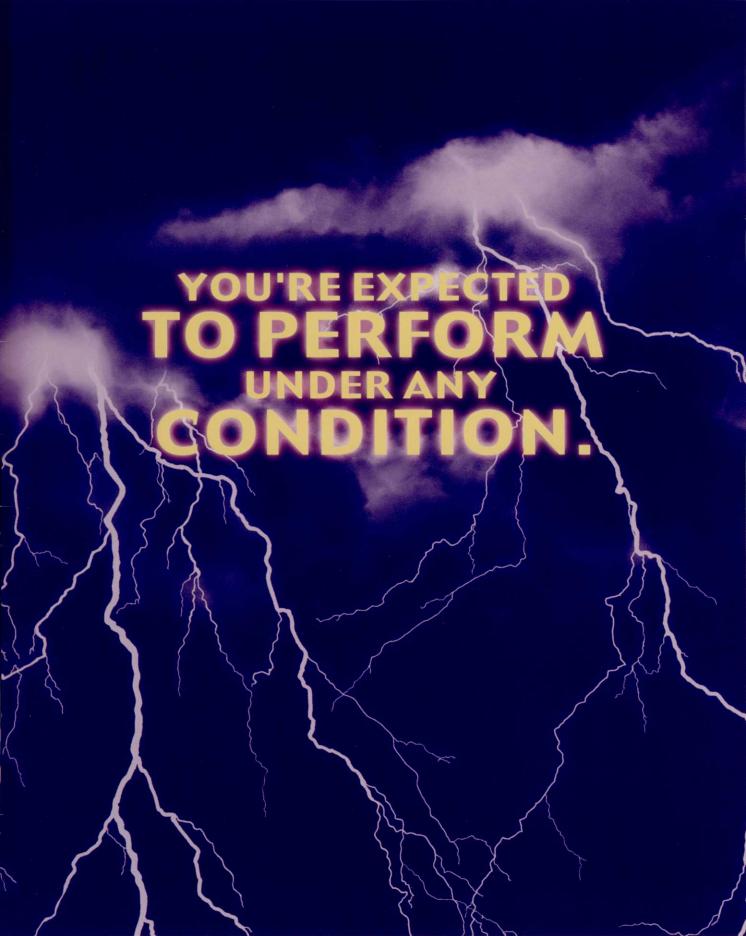
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Victoria National Golf Club, Indiana



Golf course superintendents are under enough stress as it is. You deserve a turfgrass as tough as

L-93. Based on recent NTEP results and related field data, L-93 was found to have no major susceptibility to turf diseases. Which means lower maintenance, and a lot less worry. And L-93 has been proven to save up to 30% on fungicide costs compared to other bentgrasses.

L-93 offers flexibility too with versatile mowing heights of anywhere from 1/8" to 3/16" on greens. And L-93 exhibits a strong vertical growth pattern, which provides a uniform, smooth-putting surface. It's also highly adaptable for use on tees and fairways at varying heights. And with L-93's quick recovery capabilities, ball marks and divots don't stay damaged long.

Strong disease resistance, low maintenance, flexibility and quick recovery are not the only advantages of L-93. It also provides applause.

"We chose to plant L-93
bentgrass from ABT. It
ranked first in the National
Turfgrass Evaluation
Program for our area.
Conversations with superintendents on the pros and
cons of L-93 confirmed our
choice. To date we have
been very satisfied with its
performance on greens at
.140" height of cut, tees at
.300" and fairways at .500".
The disease pressure is
minimal."

Dale Minick, Golf Course Superintendent Victoria National Golf Club Newburgh, Indiana

The benefits of L³ from the people who plant it.

"Although our course will not open until June 2000, I am already very impressed with the establishment, color and growth habit of L-93. We're cutting it at .185" during the grow-in stage and it doesn't show signs of stress or any tendencies to thatch. It's easy to see why L-93 has been rated the number one bentgrass for the last several years."

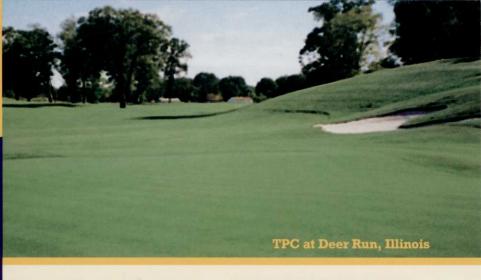
John Netwal,
Golf Course Superintendent
TPC at Deer Run
East Moline, Illinois

"It has performed exceptionally well for us. The density of the turf has been incredibly tight and the smoothness of the ball roll is the best I have seen. The greens have handled the heat very well and we have had almost no disease problems whatsoever."

Rusty Mercer, Golf Course Superintendent The Golf Club at Cuscowilla Eatonton, Georgia

"Both L-93 and Southshore varieties are very dense and show good color especially in the fall season. Throughout the year they show good traffic and heat stress tolerance. L-93 greens have kept good root strength well into the gravel all year long since grow-in. In Northeast Ohio there are two very prevalent diseases, leaf spot and dollar spot. We have not had any occurrences of these diseases."

Tim Roney, Golf Course Superintendent Sandridge Golf Course, Chardon, Ohio



"When it comes to choosing bentgrass everybody can claim they chose the best, but at Hamilton Farm, L-93 goes a long way in proving it's the best, the most versatile, disease resistant and fastest germinating bent on the market."

Tim Christ, Golf Course Superintendent Hamilton Farm Golf Course Bedminster, New Jersey

"At Olympia Field Country Club, in 2003 we will host the US Open. I selected L-93 for the new grass on our re-grassed greens for three basic reasons:

1) Intermediate density as compared to A's & G's; 2) Dollar spot resistance;
3) Genetic diversity of the variety.

We made our decision after numerous conversations with superintendents and researchers and visiting many turf plots."

Dave Ward, Golf Course Superintendent Olympia Fields Golf Course Olympia Fields, Illinois

"I selected L-93 for seeding tees, greens and fairways because it was the #1 rated variety. After three years L-93 has exceeded all of my expectations. My turf is perfect."

Ray Viera,
Golf Course Superintendent
Four Streams Golf Club
Beallsville, Maryland

"When we decided to plant bentgrass on our tees, I looked at all of the new bent-grasses. I chose L-93 and it has exceeded all of our expectations. We have had no incidence of disease and have used very little fungicide. We couldn't be happier with its performance."

Jim Dusch, Golf Course Superintendent Hawks Ridge Golf Course Ball Ground, Georgia

"L-93 has been a consistent grass for me. I looked at the alternatives and thought about the A's & G's, but I selected L-93."

Dave Giordano, Golf Course Superintendent Sand Barrens Golf Course Clermont, New Jersey



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- · Four Streams Golf Club, Maryland
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• Jericho National Country Club,

Pennsylvania

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- Little Mountain Country Club, Ohio Longaberger Golf Club, Ohio
- · Long Island National, New York

The Links at Dardenne, Missouri

- Majestic Springs Golf Course, Ohio Manhattan Woods Country Club, New York
- Metedeconk Golf Course, New Jersey
 Mill Run Golf Club/Wild Ridge Course,
 Wisconsin

Mountain Valley Golf Course, Pennsylvania

New Jersey National Golf Course, New Jersey

North River Yacht Club, Alabama Oak Grove Golf Club, Illinois Oakhurst Golf and Country Club, Michigan

The Oasis Golf Club, Ohio Old Scottish Links Golf Course, Massachusetts

- · Old Silo, Kentucky
- · Olympia Fields, Illinois
- · Pine Barrens Golf Course, New Jersey
- · Pine Hill, New Jersey
- The Pines at Clermont, New Jersey Players Club at St. James Plantation, North Carolina

Pleasant Valley Golf Course, Virginia Radnor Valley Country Club,

Pennsylvania

Red Tail Golf Club, Ohio

 Regents Glen Country Club, Pennsylvania Renaissance Club, New Jersey Riverbend Golf Course, Massachusetts River Creek Country Club, Virginia River Hills Golf and Country Club, South Carolina

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N.J. TURF ASSN. HONORS HURLEY

ATLANTIC CITY, N.J. - The New Jersey Turfgrass Association presented Dr. Richard Hurley the 1999 NJTA Hall of Fame Award during the New Jersey Turf Expo general session



here in December. The award is given to a person in recognition of a continuing lifetime commitment of dedication, service and achievements contributing to the advancement of

the turf industry in the state. The business director for AgriBioTech, Inc.'s Professional Turf Unit, is a past president of the NJTA and has been involved in breeding projects with Rutgers University, the University of Rhode Island and Texas A&M.

N.Y. TURF ASSN. CITES VILLANI

SYRACUSE, N.Y. - The New York State Turfgrass Association presented its Citation of Merit Award to Dr. Michael Villani of Cornell University during the organization's Turf and Grounds Expo here. Dr. Villani has served the turf industry in New York since 1984, providing leadership in scarab grub research, insect management and environmentally sound practices for pest management. He has collaborated on two important entomology references, The ESA Handbook on Turfgrass Insect Pests and Turfgrass Insects of the United States and Canada.

WILSHIRE NAMED TO FLA. BOARD

LAKELAND, Fla. - Roy Wilshire, superintendent of Grasslands Golf & Country Club Course at Oakbridge here, has been named to the board of directors of the Florida Turfgrass Association (FTA). Wilshire, who took over responsibility for golf course planning, stewardship and maintenance in 1993 at Grasslands G&CC, has more than 18 years experience in golf course stewardship and maintenance.

NYSTA ELECTS OFFICERS

SYRACUSE, N.Y. — The New York State Turfgrass Association (NYSTA) has elected Joseph M. Hahn as president of a new board for the Year 2000. The superintendent at Country Club of Rochester, Hahn succeeded Anthony Peca Jr. of Batavia Turf at the annual meeting. He is joined by Vice President John Rizza of Turf Partners, Inc., and Secretary/Treasurer Steve Griffen, owner of Saratoga Sod Farm.

Bug off! Beyond pesticides: Mosquito control goes high-tech

hen it comes to controlling mosquitoes and other biting insects, common tools such as pesticides and electric zappers may soon become a thing of the past. Thanks to cooperative research between the U.S. Department of Agriculture and two New England-based biotech companies, the latest mosquito abatement technology is now available.

American Biophysics, based in East Greenwich, R.I., launched the Mosquito Magnet in September 1998 and BioSensory of Willimantic, Conn., will release its Dragonfly model this month.

While the science behind the two products is complicated, the concept is simple. Both use carbon dioxide and an octenol lure to mimic the respiration of mammals and attract mosquitoes to the trap where they are killed and collected. However, the two machines use different luring and killing techniques and have different sources of CO2.

American Biophysics manufactures mosquito abatement equipment for scientists and entomologists who collect live insects for study. The company's professional line of equipment uses dry ice or pure CO2, two items that present some difficulties in mass production.

In order to expand the technology and the market, we had to develop a device that used a readily available source of inexpensive fuel," said Karen Salvatore, sales director for American Biophysics. "We invented a catalytic converter that

Continued on page 18



The Mosquito Magnet, which is about the size of a barbecue grill, converts propane to CO2 to attract and trap biting insects.

Some myths debunked concerning blue-rye mixes

By DR. ERIC K. NELSON

Combining Kentucky bluegrass and perennial ryegrass can provide a versatile, high-performance turfgrass for golf course tees, fairways and roughs in coolseason grass areas, proving to be a quickestablishing, persistent, resilient and versatile playing surface.



Relative size of Kentucky bluegrass and perennial ryegrass after six weeks.

This statement is more true now than ever with recent releases of several new low-mow tolerant Kentucky bluegrasses. Kentucky bluegrass and perennial ryegrass have complementary characteristics, where the features and benefits of one can overcome the potential disadvantages of the other.

The key to taking advantage of both species in turf is to get them established in a balanced stand. There are many conflicting theories concerning the proper way to uniformly establish these species together. Some of the techniques are based upon research, experience and good agronomics. Others are based on hypotheses and conjecture.

However, there is more than one proper way to get the job done. Factors including species ratio in the seed mixture, seeding rate, seedling management, establishment timing and the immediate influence of Mother Nature on plant survival can all affect the results.

My general recommendation for taking advantage of features and benefits of both species in a balanced stand is to sow a mixture consisting of 80 percent (by

Continued on page 14



New low-mow Kentucky bluegrass plus perennial ryegrass excel on tees, fairways and roughs.

GOLF AND THE ENVIRONMENT

Al develops Environmental Audit

Talk to golf course superintendents and you discover that most consider themselves stewards of the environment. After all, they work outdoors amidst the natural beauty of water, grass, trees and wildlife. But how can superintendents and course managers be sure they're not just touting environmental stewardship, while in actual practice, hitting a double bogey? How do they know whether management practices are really on par with widely accepted standards for environmental performance?

Now, an effective new tool is available

to help superintendents and club managers do just that. Audubon International has developed an Environmental Performance Audit to help superintendents, club managers and others rate their environmental performance.

The Environmental Performance Audit is a self-assessment or evaluation that uses environmental performance indicators, or best management practices, to measure their work. The audit is a simple, inexpensive means to help superintendents and club managers evaluate current management practices that safeguard

Continued on page 16

Barber forms Blue Ridge

By MARK LESLIE

GREENVILLE, S.C. — He was a golf course superintendent, then a

college professor and researcher, then an executive with two course management companies, at one time overseeing 44 courses



Dr. Joel Barber

in 17 states. Now Dr. Joel F. Barber has formed Blue Ridge Golf "to pro

Continued on page 61



Mastering the mix

Continued from page 13

weight) Kentucky bluegrass (two to four varieties) and 20 percent perennial ryegrass (one to two varieties) at 125 pounds per acre (3 pounds per 1,000 square feet, 15g/square meter). The justification for the recommendation is supported by research results and field experiences.

JUSTIFICATION

At 125 pounds of seed mixture per acre, the bluegrass component is sown at 100 pounds per acre which approximates optimum seeding rates for Kentucky bluegrass identified by J.H. Madison (1966). Meanwhile, the perennial ryegrass rate of 25 pounds per acre will provide for early erosion control and stability of the young stand.

The species ratio by bulk weight in the mixture, where Kentucky bluegrass may appear to dominate, is necessary to permit the more desirable Kentucky bluegrass to establish successfully among the perennial ryegrass seedlings. The reason that so little ryegrass is necessary is because of the difference between inherent characteristics of perennial ryegrass and Kentucky bluegrass including: number of seeds per pound, germination energy, field survival and seedling competitive ability.

THE SEED COUNT PARADOX

The number of seeds per pound of perennial ryegrass and Kentucky bluegrass are quite different. Most perennial ryegrass varieties have approximately 250,000 seeds per pound. Most elite Kentucky bluegrass varieties on the market may average about 1.5 million seeds per pound.

Some seed companies are quick to point out the seed count disparity when they make their recommendations for an 85-percent (bulk weight) perennial ryegrass and 15-percent Kentucky bluegrass seed mixture that will provide 50 percent of each species by seed count.

The false assumption when formulating 50/50 seed count mixtures is: A seed is a seed and they will all develop into a plant to give you a 50/50 species stand.

Unfortunately, the assumption is not true because of the great difference in other more important species characteristics. As a result, these 50/50 seed-count mixes usually end up as all perennial ryegrass with none of the ben-

This article first appeared in Jacklin Golf's On the Green newsletter. A graduate of the University of Rhode Island and former director of turfgrass research at Northrup King, Dr. Eric K. Nelson is senior scientist/turfgrass breeder at The Scotts Co. in Gervais, Ore. He wrote this article while senior technical agronomist for JacklinGolf.

efits of Kentucky bluegrass.

GERMINATION ENERGY

Kentucky bluegrass seed is not created equal to perennial rye seed, even though their germination percentage on the label is usually similar. First, perennial ryegrass germinates within four to 10 days from first irrigation. Kentucky bluegrass seed typically germinates in 10 to 21 days.

These germination energy differences are reflected in the standard test used to determine germination percentage for labeling purposes. The test for perennial ryegrass runs for 14 days, while the test for Kentucky bluegrass allows for a full 28 days. Since perennial rye gets the jump on Kentucky bluegrass in seedbed germination energy, the ryegrass may already start to dominate.

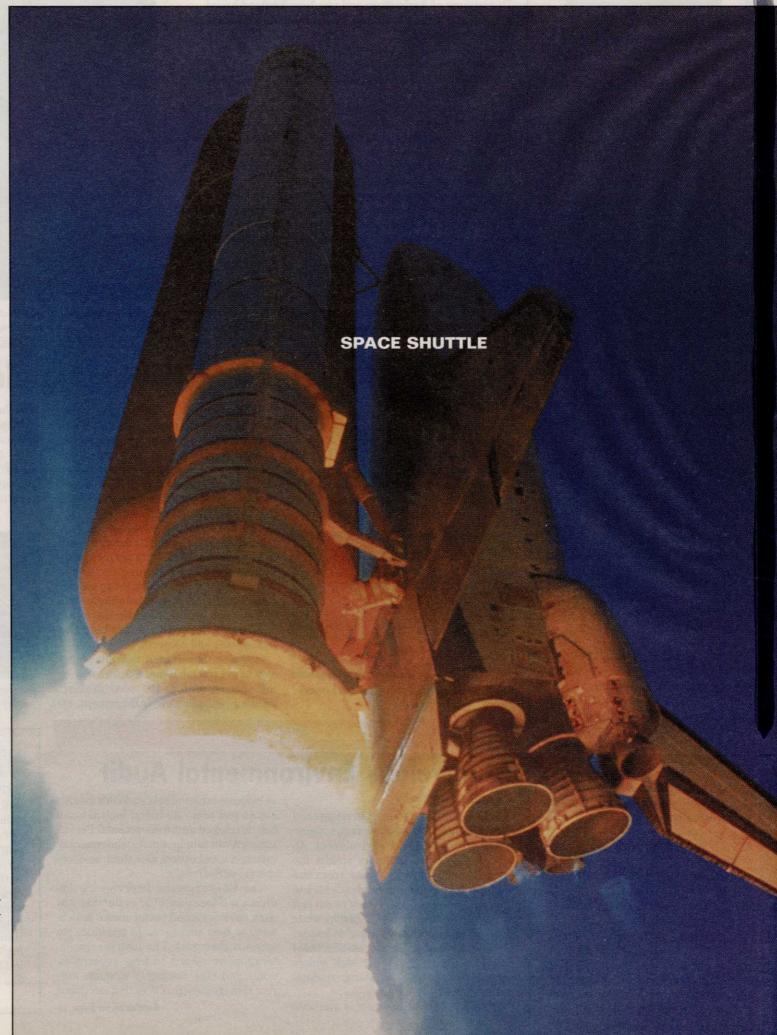
SEEDLING VIGOR

Next, after germination of both species, there is a differential rate of seedling development that favors perennial ryegrass. Perennial ryegrass will produce new tillers (shoots) and leaves rapidly and at an increasing rate, while Kentucky bluegrass does not tiller or grow as fast. Jacklin Seeds' research director, Dr. Doug Brede, documented in his 1982 Ph.D. dissertation that individual perennial rye seedlings may develop seven to eight new tillers, while Kentucky bluegrass seedlings produce an average of only one to two new tillers after six weeks of establishment. Therefore, the difference in tillering capacity alone may quickly make up for the difference in seeds per pound between perennial ryegrass and Kentucky bluegrass.

SEEDLING SURVIVAL

As Kentucky bluegrass does not germinate nor develop rapidly, there is an increased risk of

Continued on next page





Mastering the mix

Continued from previous page

loss in the field from environmental stress, attack by pests or competition from other plants. Field survival of Kentucky bluegrass seedlings was evaluated 40 years ago in unpublished research by Dr. H.B. Musser at Penn State (1957). He found that only about 30 to 35 percent of all Kentucky bluegrass seeds sown

survive to produce plants. In 1982, Brede found similar results with 45 percent of Kentucky bluegrass seeds producing plants, while he found seedling survival of perennial ryegrass was approximately 75 to 80 percent.

There are a number of reasons for the low field survival of Kentucky bluegrass compared to perennial rye. The greatest impact is related to the seedling vigor of the species. Regardless, more

bluegrass is required to make up for lower seedling survival.

EARLY FOR ADDED SUCCESS

As with all new turf establishment, proper seedbed preparation and fertilization are critical for a healthy start. However, timely irrigation of the seed bed is important for getting a balanced stand of the two species. Often, the tendency is to cut back on seedling irrigation once the perennial ryegrass has sprouted.

However, keep in mind that Kentucky bluegrass still requires consistent moisture to germinate and establish as well.

Close mowing within the first three weeks of ryegrass emergence is another trick identified in Brede's research that can help ensure Kentucky bluegrass establishment among perennial ryegrass seedlings.

This timely mowing at 1/2- to 5/8-inch will effectively shock only the ryegrass and open the leaf canopy a little longer for the smaller Kentucky bluegrass plants to establish. Higher rates of perennial rye are possible using this judicious mowing technique.

CASE STUDIES

The Latah Short Course in Spokane, Wash., seeded tees and fairways on Sept. 15, 1997, with a 90-percent Kentucky bluegrass, 10-percent perennial ryegrass mixture at 125 pounds per acre. The course opened to rave reviews on June 6, 1998. The half bluegrass is still going strong.

Don Tolson, superintendent at Stock Farm Golf Course in Hamilton, Mont., used a 90/10, blue/rye mixture at 125 pounds per acre.

After two weeks of establishment on tees, it looked like the ryegrass was too thin. But, after two more weeks, the perennial ryegrass was beginning to dominate. Tolson used the close mowing program to effectively set the ryegrass back. The turfgrass stand is now well balanced, with a strong Kentucky bluegrass component.

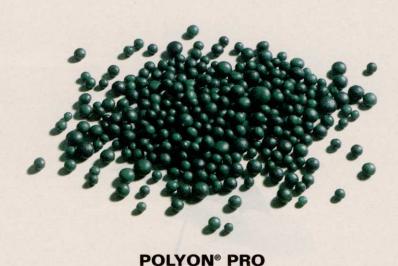
VISUALIZING THE RESULTS

Taking the concepts of seed count, germination energy, seedling vigor and seedling survival into consideration, sowing an 80percent Kentucky bluegrass and 20-percent perennial rye mixture at a seeding rate of 125 pounds per acre will provide 25 pounds per acre of perennial ryegrass (6.25 million seeds/acre assuming 250,000 seeds per pound) resulting in about one established rye seedling every square inch.

But, remember that each ryegrass plant is going to rapidly tiller and produce new leaves that radiate out and begin to cover the spaces between plants. Within eight to 10 weeks, leaves of one ryegrass plant will be touching the surrounding ryegrass plants in the turf and shading the soil surface. However, about this time, the Kentucky bluegrass should begin producing rhizomes when it reaches the three-tiller stage. Once the rhizomes begin to form, the entire turf stand should be well on its way to maturity and improved stress tolerance.

Following the recent advent of Kentucky varieties tolerant to closer mowing, Kentucky bluegrass and perennial ryegrass mixtures are a preferred choice for golf course fairways, roughs and tees in all traditional coolseason grass areas.

Using the proper species ratio, seeding rate and maintenance during establishment, Kentucky bluegrass and perennial ryegrass mixtures will rapidly produce a dense and traffic-tolerant turf with the diverse benefits of both species. The mixture can provide long-term advantages for superintendents.



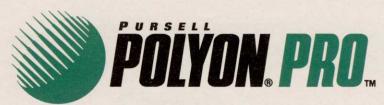
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Audubon: Audits

Continued from page 13

and enhance the quality of the environment. It can further be used as a set of guidelines to help plan and establish appropriate environmental strategies in areas that management is not currently addressing.

"We wanted superintendents and club managers to be able to evaluate themselves, instead of having a regulatory agency look over their shoulders," said Dr. Miles "Bud" Smart, director of environmental planning for Audubon International. "The audit will give people a useful snapshot of their performance and help them identify their strengths as well as any areas that need improvement."

Audubon International collaborated with environmental and turf researchers; experts in environmental planning, water quality, and wildlife; superintendents and club managers; as well as organizations such as the U.S. Golf Associatioin, Club Managers Association of America and Golf Course Superintendents Association of America. In addition, Audubon International's nearly 10 years of experience working directly with superintendents, has resulted in an audit that is user-friendly and easyto-complete.

The Environmental Performance Audit is available in a variety of forums. Club managers may obtain it for full facilities through CMAA.

Audubon International staff also will offer seminars for club managers during the CMAA World Conference in Atlanta in February. The Environmental Performance Audit for golf courses is available to members of the Audubon Cooperative Sanctuary Program.

In addition, GCSAA members will have the opportunity to take the audit during a new seminar, "Integrated Environmental Management," offered by GCSAA's Continuing Education Program.

"We hope people will follow up on taking the audit by participating in one of the available educational forums, or joining the Audubon Cooperative Sanctuary Program to learn more about taking action based on the results of the audit," said Smart.

"In the future, we hope to also secure funding to make the audit available via CD-ROM, so that participants can enter information into the audit on their computer. The program would then calculate your score and provide interpretation for the meaning of the score."

Jean T. Mackay is manager of educational services for Audubon International, headquartered in Selkirk, N.Y.

Crystal Springs, Riverside certified as sanctuaries

BURLINGAME, Calif. — Crystal Springs Golf Course here and Riverside Golf Club in Grand Prairie, Texas, have achieved designation as Certified Audubon Cooperative Sanctuaries by the Audubon Cooperative Sanctuary System (ACSS). Crystal Springs is the sixth course in California.

"This is another significant environmental achievement for the turf management staff at Crystal Springs, " said Tom Isaak,

CourseCo president. "They work very hard to reach elevated standards, which we believe are in the community's and industry's best interest."

Riverside Golf Club is the sixth course in Texas and the 205th in the world to receive the honor. The other five courses in Texas are Lakeside CC in Houston, Barton Creek Resort's Fazio, Crenshaw and Palmer courses in Austin, Padre Isles CC in Corpus Christi, and Hyatt Regency Hill Country Resort and La Cantera GC in San Antonio.

"The certification process was extremely humbling for my staff," said Michael Bartlett, superintendent at Riverside Golf Club. "We felt very comfortable with our environmental programs going into the certification process, but the ACSP opened our eyes to more and better ways of environmental and wildlife enhancement.



What
each
particle
looks like
to your
turf.





Valderrama Declaration

Continued from page 1

bodies as the International Olympic Committee, World Wide Fund for Nature, the United Nations and the European Commission.

The summit was organized by Audubon International and the European Golf Association Ecology Unit, now called Committed to Green, represented by Ron Dodson and David Stubbs, respectively.

"This is an historic occasion," said Stubbs. "For the first time we have brought together the top officials from the game of golf alongside world authorities in environmental protection, to agree on a common agenda.

"Not only does the Valderrama Declaration set out the principles for a joint approach on environmental issues, but it also specifies direct long-term support for practical programs."

This latter point — the practical application of environmental programs — was a major theme throughout the summit. Most of the speakers emphasized astonishing advances being made in all areas of ecological steward-

ship within the golf industry.

"Cooperative is the key word, not confrontation," Dodson declared. "We must forge partnerships with governments, private industry, golf clubs, individuals, everyone."

Such partnerships were discussed in greater depth and, without exception, the same conclusion was reached: to enter into an agreement with anyone, an education program must be de-

livered in some form or other. This education should be extremely wide-ranging, from direct training of golf industry employees to the demonstration to the public at large of good environmental practice.

Peter Dawson, secretary of the Royal and Ancient Golf Club of St. Andrews and a signatory to the Declaration, synopsized the challenge: "To grow and flourish, golf must be a good neighbor and be seen to be a good neighbor."

The public awareness of sound, ethical and environmental practices was widely agreed to be at least as important for the golf industry as the actuality.

The current education programs were shown to be primarily aimed at people in the golf industry. Though they were unanimously accepted as being highly laudable and effective, there was concern that the time had come for a wider, more expansive campaign to increase public awareness of the benefits of golf courses to the environment.

Dr. Patricia Cobb of Auburn University in Alabama pointed out the danger of "preaching to the choir."

That's not to say that the "choir" is fully in tune with the Committed to Green and Audubon standpoint, she said, but rather that a wider audience needs to be included.

Jim Moore of the U.S. Golf Association noted a number of worrying attitudes that still exist within the golf industry and that still need to be addressed with continuing educational programs.

"Architects and developers are often skeptical about environmental programs," Moore said, "because they feel that they are judged guilty until proven innocent, that being 'environmentally sound' costs them money and complicates their lives and some just pay lip service in order to get through the permitting process."

Jo Schatten outlined the progress made by Committed to Green, pointing out: "This is a new movement. Five years ago, who would have thought that so much could be achieved? Then, European golf was seen to be 'public enemy number one,' which was destroying nature and polluting water."

The proof of golf's value to the environment and the recent progress made was brought to life by Paul Rooney, environmental and biological studies lecturer at Liverpool Hope University who recently headed up a three-year research project on the Sefton Dunes in northwest England, an area which includes Royal Birkdale and several other notable golf clubs.

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Bug off!

Continued from page 13

can change propane gas into CO2 at just the right temperature and humidity.' The unit, which runs constantly, uses the same propane tanks as a barbecue grill and needs to be changed every three weeks.

Once attracted to the CO2 and octenol, insects are captured by a counter flow.

There is a tube that releases the CO2 and then above it is another wider tube that is a vacuum that sucks them in to a

collection net," said Salvatore. "When mosquitoes approach the host and don't find what they are looking for, they will fly up." The counter flow captures the mosquitoes and deposits them into a net where they die of dehydration. Power for the vacuum and CO2 fan is provided by the catalytic converter. The collection net needs to be emptied every three weeks.

According to Salvatore, the machine covers an acre effectively and begins to collapse the mosquito population within six to eight weeks.

ANOTHER METHOD

Using computer modeling and various

combinations of attractants, BioSensory has taken a different approach with the technology

"We designed the Dragonfly to look like the blood host preferred by the mosquito of the Southeast," said company President Jim Nolen. The machine uses three attractants, puffs of pure CO2 to replicate respiration, an octenol lure so it smells like a mammal and a thermal lure that, under infrared, looks like veins un-

"We have found that mosquitoes are actually programmed to fly from puff to puff," said Nolen. "The Dragonfly has

proven to have 98-percent accuracy.

When mosquitoes try to land on the Dragonfly, they pass through an electrostatic panel and then fall into a collection tray at the bottom of the unit. However, this necessitates an external power source. The 24-volt unit can be plugged into inground low-power

Golf courses that are using the new technology have been impressed and, as a result, are now using less pesticides.

Lee Van Valkenburg, director of golf course tion of a small maintenance at Ocean mammal to attract Reef Club in Key Largo, and kill biting in-Fla., has eight Mos- sects. quito Magnets on his

property and an additional 40 to 50 on homeowners' lots. "In a certain area, they will trap out all the biting females," said Van Valkenburg.

The Dragonfly uses

licate the respira-

"We are getting overall property benefit, which translates into a tremendous benefit for the environment. We are using about 40 percent less pesticides than last year," he added.

Jack Nunges, superintendent at Oyster Harbors Club in Osterville, Mass., has seen a similar benefit and has saved more than \$2,000 on pesticide applications. "It has been picking up the mosquitoes and no-see-ums by the ton,"

However, neither machine will work unless it is positioned properly. "You have to position it between you and where the pest is coming from, or they'll bite the heck out you," said Van Valkenburg, who rues the task of changing the propane tanks and the collection nets.

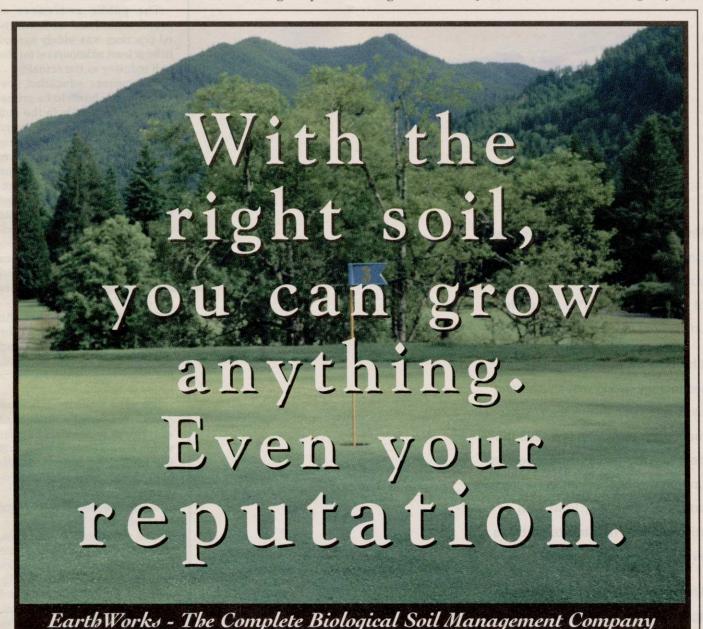
Nolen recommends that the Dragonfly be positioned a minimum of 30 feet away from the area that needs protection. "They can sense it 100 yards away," he said. "But they can't see you until they are 30 feet away; that is their visual range."

BioSensory also manufactures the Mosquito 'Cognito that offers a twopronged approach to mosquito control. The Mosquito 'Cognito puts out an inhibitor that blocks the mosquito's ability to smell," said Nolen. "When put in the area that is being protected, it can cut landings by up to 80 percent."

The Mosquito Magnet costs \$954. The propane tanks and octenol lures, which have to be changed every three weeks, cost \$10-\$12 and \$5, respectively. American Biophysics currently sells direct through telephone and internet sales, but is working on new distribution agreements with propane dealers.

The Dragonfly will be available starting this month, mostly through professional pest controllers, and will likely be leased for around \$20 a month. The company has signed on with Praxair to change, service and deliver the CO2

The Mosquito 'Cognito will cost \$20 and will be available this spring at retail outlets.



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30 years and counting for Ohio's Bob Figurella

By PETER BLAIS

ANTON, Ohio — After 30 years on the job, you wouldn't expect job security to be an issue. Not so, according to Bob Figurella, 59, head superintendent at Donald Ross-designed Brookside Country Club here.

"It's probably worse now," Figurella said. "What you did 10 years ago won't fly today. Our



Bob Figurella

course has become very upscale. We have people living in Canton who are commuting an hour away

into Cleveland. There is more [maintenance] money than I ever thought would be there. Our budget has grown unbelievably over the past two or three years."

In this era of musical chair superintendencies, what has kept Figurella at Brookside for 30 years? He has interviewed for several jobs during the past three decades and accepted a few. But when he's notified his employers, they have always said: "Bob, we don't want you to go," and the two sides adjusted his contract.

"You build something and it's not complete and you want to see it through," he explained of his 30-year tenure. "There's a part of me that loves this place. It would be tough to leave.

"I'm working with second-generation members on the board now. People I used to chase off the golf course are likely to become club presidents. Most of the people who hired me 30 years ago are dead or in Florida. We're in contract negotiations right now. But I'm starting to think about going someplace else and finishing strong."

A native Buckeye, Figurella grew up in Masury. His brother worked on the grounds crew and Figurella caddied at Yankee Run Golf Course in nearby Brookfield.

"In September of 1954," he recalled, "the guy who owned the course asked me if I wanted to work on the grounds crew. Some of the people he had hired were football players and went back to school. I was 14."

Figurella's older brother went on to the University of Massachusetts turf school and the younger Figurella soon followed.

"[Dr.] Joe Troll was there.," he said. "Dick Wadington was brand new. But Lawrence Dickerson was the reason I went there. He and Burt Musser were the two leading turf experts in the United States at that time."

Figurella received his certifi-

cate in turfgrass management and returned to Yankee Run as assistant superintendent. From there he went to Acacia Country Club in Cleveland and two years later, Spring Valley Country Club in Elyria hired 21-year-old Figurella as head superintendent.

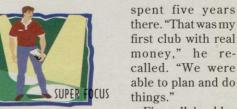
"They had fired the superin-

tendent and he took his crew with him," Figurella remembered. "I didn't know what I was getting myself into, but I was excited. The course had been a month without a crew and had been neglected. They were mowing greens and fairways with mowers that hadn't been set in a month. The rough was uncut. It

took awhile to get the course back. Within two months, I got a \$4,000 pay increase. But the

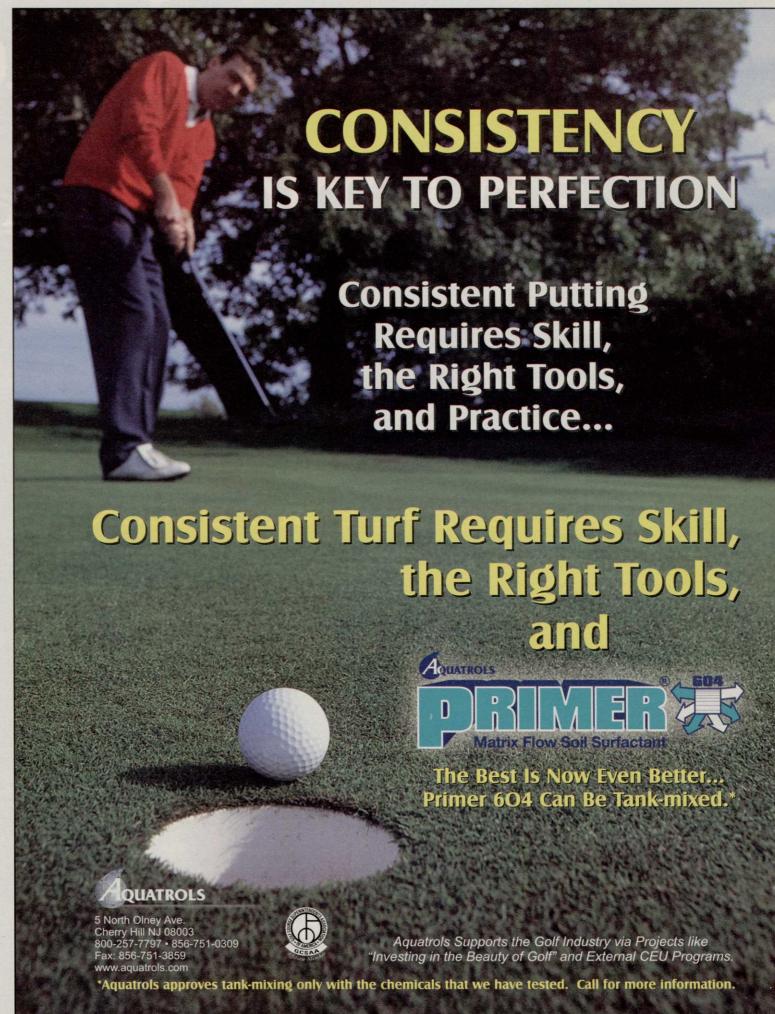
club was in financial trouble. I had to go buy aluminum sulfate with my own money."

Fairlawn Golf Club in Akron was Figurella's next stop. He



Figurella's older brother was the superintendent at Brookside, but left in 1969 to spend more time building a profitable sod business. Again,

Continued on page 22



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Figurella: 30 and counting

Continued from page 19

Figurella followed his older brother's footsteps, interviewing and eventually accepting the

"It was a pretty ordinary course at the time," Figurella said. "They had taken out 35 fairway bunkers, although the greens were still original. We've been putting bunkers back ever

since. We put six back this fall along with three tees.

"The course is very severe with slopes of as much as 8 percent on some greens. There are false fronts and hogbacks. It's definitely Ross, but with maturity it's become like a man's hairline. It's receded. Many of the bunker banks have receded up toward the greens. We're taking those down and restoring the bunkers

"Robert Trent Jones did a remodeling plan and has restored many of the bunkers. Someone made the analogy that we had a 1920s car with 1960s amenities. You'd look out from the tee and see a Robert Trent Jones look. But as you got toward the greens, is started to look like the other [Ross] era. We're doing most of the restoration work in house.

"But what we're known for is the severity of our greens. Whoever was around in 1922 when they built these greens knew what they were doing because they have stood the test of time. We play 120 events from mid-April to mid-September on those old greens. And they have never been rebuilt."

The greens have long been Washington bentgrass, overseeded occasionally with

Penncross. Lately, Figurella has begun introducing G2. And there is a lot of poa annua. Figurella has fought the urge to mow his greens with triplex mowers, and continued to mow by hand. Riding triplexes are used on the fairways.

Brookside does roughly 20,000 rounds annually, with play beginning no earlier than 8 a.m. "If you start any earlier, you're changing cups in the dark," he said. "It's an impossible situation. We don't start preparing the course before first light. And I pride myself on not having anyone on the course mowing when people are playing. That's helped me survive.'

Figurella credits Baby Boomers with the rise in the status of Donald Ross and golf course architects in general.

"This Donald Ross phenomenon didn't happen until the 1970s," he said, "When I came to Brookside no one knew or really cared who the architect was. We have some old drawings and aerial photos of the course. The landscape architects got top billing on the old drawings. Those guys are in 1 1/2-inch letters up top and Ross is below in little half-inch letters.

"Baby Boomers have done for golf in the 1990s what they did for the baby food business in the 1950s, the Ford Mustang in the 1960s, real estate in the 1970s, and minivans in the 1980s. Now we're building drug stores and nursing homes on almost every corner. Just follow the Boomers and you see the history of our country for the past 55 years."

Figurella has so enjoyed the renovation process at Brookside that he has considered getting into the renovation business specializing in old Donald Ross courses. "I think I have a feel for it," he said. "If there is one thing I've done over the past 30 years it has been to give the course a sense of continuity from one end to the other that it was lacking when I got here."

Figurella is beginning to look forward to retirement. Last year he hired an experienced assistant superintendent, who afforded him the opportunity to take his first August weekend off in more than 30 years. Otherwise he's still there seven days a week, returning at 7 every night to walk the course and make any necessary adjustments to Brookside's computerized irrigation system.

Figurella's extended family includes five children. His oldest son is also a superintendent. Another son has a master's in business administration degree and works for a plastics company near Pittsburgh. A daughter works in public relations. A stepson is at Ohio State and a

Continued on next page





Roundup-resistant bent due in '03

Continued from page 1

grasses for the past several years, Meier said, using rights obtained to the Roundup-resistant gene from Monsanto and the gene gun insertion technology from its inventor, former Cornell University professor John Sanford.

Scotts is concentrating on these varieties because of the large market for these grasses. Bentgrass and Kentucky bluegrass are cool-season grasses used extensively on golf courses throughout the country. St. Augustinegrass is a warmseason turf used on some Southern courses.

Research expenses for genetically modified grasses are very high, Meier explained. Scotts hired 15 people in the past three years to work solely on this project. Even more costly are licensing expenses.

The problem with developing Roundupresistant grasses, opponents argue, is that such species could become a super weed that farmers and homeowners could not control by conventional means. Meier countered that bentgrass and Kentucky bluegrass are generally not considered major weed problems in agricultural circles and can be controlled using other herbicides.

Bentgrass will not cross-germinate with other grasses that are considered agricultural weeds, he added.

What has Scotts' research shown? Scotts has applied Roundup to its test bentgrasses at rates of 256 ounces per acre, four to eight times the recommended rate of 32 to 64 ounces per acre for weed control.

"We looked for injury [to the bentgrass]," Meier said. "There wasn't any. We still have a lot of testing to do to make sure it performs the way we'd like to see a bentgrass variety perform."

Scotts' Kentucky bluegrass has withstood Roundup applications of 128 ounces per acre, two to four times the recommended rate, Meier said.

Scotts is also seeking genes that would provide genetically modified grasses with disease resistance. Those grasses may not be available for another 10 to 15 years, Meier said.

Are there drawbacks to genetically modified Roundup-resistant turfgrasses or GMOs in general? Could they somehow be toxic to people or animals? Could they present environmental or food production problems?

"At this point I'd just say there are issues about whether GMOs should be used at all," Meier said. "The Food and Drug Administration has approved Roundup-resistant and Bt-resistant [for insects] crops in foods and feeds.

The Roundup-resistant gene, Meier explained, is made up of proteins. The proteins are made up of amino acids. The gene is one of several hundred in a healthy-growing cell.

"I'm assuming that if you can eat the stuff, you should be able to walk or play golf on it ... That's the assumption we're making and that's all the evidence at this point. We haven't found any detrimental aspect of the Roundup-resistant

Welding table moves with ease

RCADIA, Mich. - Because their welder, tank and welding table were difficult to move, the maintenance staff at Arcadia Bluffs Golf Club here devised a portable welding table on wheels.

Property maintenance person John Fisk and equipment manager Patrick Sullivan built a designated table on wheels that holds the welder tank off the bottom shelf in a horizontal position, which has plenty of storage room for

"We plan to install a permanent vise," said superintendent Paul Emling. "The welding table may be somewhat costly because we outfitted our shop in two areas and our cold-storage area with 220-volt welder outlets. We also purchased a long extension cord for the welder, as it is sometimes easier to take the welder to the equipment than it is the equipment to the welder."



The portable welding table is on wheels for easy movement.

Material costs for the portable welding table were:

2-by-2 by 1/4 angle - 55 feet \$47.25 72- by 36- by 1/2-inch plate \$171.00 72- by 36- by 1/8-inch plate \$36.00 Four castor wheels \$52.00

Figurella: 30 and counting

Continued from previous page

stepdaughter at cosmetology school. Figurella concedes that the head superintendent's job is demanding, costing him time with his children and perhaps a marriage.

There's something inside you that compels you to go there [the course] every morning, to be there at six o'clock," he said. "With my new assistant, I've started going home after eight or nine hours, but I always come back to baby-sit the course later in the day."

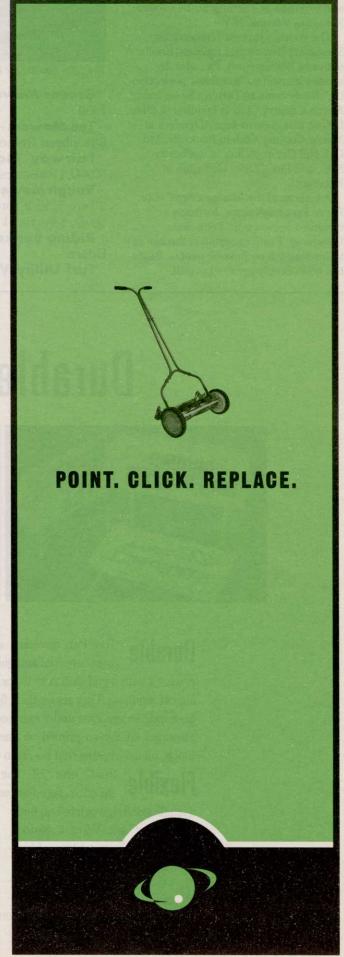
What is the major change he's seen in the past 40 years? Fungicides

"We have things now that work," he said. "We used to use fungicides that came from the agricultural industry. They didn't work very well. Now we have specific fungicides that do work well. I'm concerned we may lose some of them. I don't see a new contact fungicide coming out. We have one right now, daconil. If they take daconil from us, I don't know what we're going to do.

We also have more user-friendly products that are safer for the person applying them. We used to use things like lead arsenic that built up in your system. There's been a big improvement in quality.'

As for the future of golf course design and maintenance, he said: "What I don't want to see is Donald Ross greens altered for the new grass cultivars. They have to soften up greens and soften slopes [at older courses] when they plant the new As and Gs. They have to change the contours so there are pin positions. If speed does that to golf, that's wrong. Ross built these greens. If he's the man they say he is, why would you want to alter them?"







oseph G. Baidy, a certified golf course superintendent and president of the Golf Course Superintendents Association of America in 1994, is now director of golf courses and grounds at Turning Stone Casino Resort in Verona, N.Y.

The courses include Shanendoah, Sandstone Hollow and Pleasant Knolls. A native of Williamsport, Pa., who describes himself as "a realistic perfectionist," Baidy came to Turning Stone from Acacia Country Club in Lyndhurst, Ohio. Before that, he was superintendent at Manor Country Club in Rockville, Md., Oak Hill Country Club in Rochester, N.Y., and Fox Chapel Golf Club in Pittsburgh.

A veteran of the Marine Corps' elite Force Reconnaissance, he holds a turfgrass degree from Penn State University. From caddying at the age of 9 to winning interscholastic events, Baidy has been deeply involved in golf.

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Mobile courses offer up coastal challenge

By ANDREW OVERBECK

OBILE, Ala. — When the Golf Course Superintendents Association of America (GCSAA) last visited New Orleans in 1992 for the International Golf Conference and Show, the GCSAA Golf Championship was held in Ponte Vedra Beach, Fla., three states away from the convention center.

Traveling to the 2000 tournament will be a tad bit easier for participating superintendents. This year, the tournament will be staged at six courses in the Mobile, Ala., area Feb. 11-15.

The Toro Co. has renewed its sponsorship of the event through the year 2003 and the tournament is expected to attract more than 720 superintendents from across the country and around the world. Practice rounds run Feb. 11-12, the Four-ball championship will be held on Feb. 13, followed by Championship play Feb. 14-15.

Wayne "Chandler" Masters, superintendent at Rio Secco Golf Club in Henderson, Nev., is the defending individual champion and the Chicagoarea section of the Midwest Association of Golf Course Superintendents is the defending chapter team champion.

The 2000 Tournament will be held at the following courses:

Peninsula Golf and Racquet Club, Scott Clark superintendent

- Yardage Championship: 7,026 yards, Regular: 6,494, Forward: 5,799
 - Terrain Flat
- Rating/Slope 73.4/126
- Course Comments "These greens are huge, they average 6,000 square feet. There is also a fair amount of blind hazards since it is a flat piece of property."

Kiva Dunes Golf Club, Michael Rienzi, superintendent

- Yardage Championship: 7,092 yards, Regular: 6,464, Forward: 5,849
 - Terrain Coastal Dunes
 - Rating/Slope 73.8/129
- Course Comments "This is a bump-and-run style course, players will have to use a wide variety of shots."

The Crossings Course at Magnolia Grove,

Layton Overstreet, superintendent

- Yardage Championship: 7,151 yards, Regular: 6,560, Forward: 5,184
- Terrain Slightly hilly
- Rating/Slope 75.6/134
- Course Comments "These greens are real slopey and you have to watch the breaking speed."

The Falls Course at Magnolia Grove, Layton Overstreet, superintendent

- Yardage Championship: 7,239 yards, Regular: 6,558, Forward: 5,253
- Terrain Marshy, undulating
- Rating/Slope 75.1/137
- Course Comments "The Falls course is a true tournament golf course. Out of all the courses that they will be playing in the area there is no doubt that this is the big boy."

Cotton Creek at Craft Farms, Kevin Kaehr, superintendent

- Yardage Championship: 7,028, Regular: 6,581, Middle: 6,032, Forward: 5,175
 - Terrain Flat
 - Rating/Slope 73.9/132
- Course Comments "The Cotton course is longer and narrower, with a lot of trees on the back nine"

Cypress Bend at Craft Farms, Kevin Kaehr, superintendent

- Yardage Championship: 6,848, Regular: 6,424, Middle: 5,954, Forward: 5,045
 - Terrain Flat
- Rating/Slope 73.5/131
- Course Comments "Cypress is wide open and forgiving, but the greens are a bit bigger and wider. You will have some outlandish putts left if you are not near the pin."

WEATHER

Weather conditions in the Mobile-area in the middle of February can be a hit-or-miss proposition and many courses are situated close to the Gulf of Mexico or Mobile Bay so windy conditions are likely.

"In February there is usually a pretty stiff wind from the north, and that is when things get hard and fast," said superintendent Michael Rienzi at Kiva Dunes Golf Club. "It is usually around 70 degrees during the day, but we could get high winds and a cold snap."

Gulf Shores supers excited about tourney

Continued from page 1

working at the Masters. I'd rather be doing a tournament being watched worldwide on TV than to have all my peers come down and play my golf

The tournament, however, will give the superintendents a chance to showcase not only their talents, but also their courses.

"I am more excited than pressured," said Scott Clark, superintendent at Peninsula Golf and Racquet Club. "I am looking forward to showing everyone what we can do."

When the golf championship rolls into town in the middle of February, golfers can expect the six participating layouts here to be in tip-top shape. The courses in the booming Gulf Shores region usually do around one-third of the year's business between late February and late May, when the weather is warm and the humidity is relatively low.

"February is when we try to peak," said Rienzi.
"We get the bulk of our play in the spring, so we ought to be in good condition."

Each course will be going through its normal pre-tournament routine prior to the GCSAA event.

Layton Overstreet, superintendent at Magnolia Grove, planned to get busy right after the holidays. "I want to put our best foot forward," said Overstreet. "We will groom it as well as we did for the LPGA event that we had last October. We'll edge out the bunkers real good and speed up the greens a touch."

Clark will be re-tooling his spring schedule a bit to accommodate the tournament. "We'll mow more often and fertilize a couple of weeks ahead," said Clark. "We've done wall-to-wall overseeding, so it will be greened up nicely."

Fall activities, especially overseeding, have been key to ensuring that the courses look good and are in good shape for the tournament.

"Right now we have caught all the good breaks," said Rienzi. "We had the best overseeding I've ever had this year."

Meanwhile, Kevin Kaehr at Craft Farms is working diligently on winter projects. "We are thinning out some of the trees to get more air movement around greens and we are working on bunker drainage," he said. "We are right on target for February."

Kaehr can't wait until the tournament comes to town. "I am excited because this is a fast-growing area and a lot of people are not aware of what a golfing center Gulf Shores has become," he said.

In February, Kaehr and the rest of his compatriots will have the unique chance to show more than 700 superintendents what golf on the Gulf Shores is all about.

Maples to get USGA Green Section Award

By MARK LESLIE

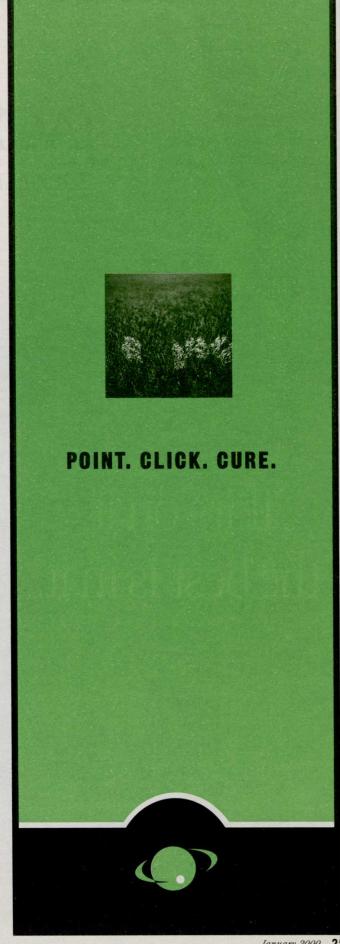
NEW ORLEANS, La. — Palmer Maples Jr., former president of the Golf Course Superintendents Association of America (GCSAA) and Carolinas Golf Course Superintendents Association, will receive the



Dalmar Mahla

USGA Green Section Award during the GCSAA's 71st International Golf Course Conference and Show here in February.
Following such past recipients as Drs. James Watson

Continued on page 26





Dr. Watschke to get President's Award

NEW ORLEANS — Dr. Thomas L. Watschke, professor of turfgrass science at Penn State University, will receive the Golf Course Superintendents Association of America's (GCSAA) 2000 President's Award for Environmental Leadership. The award will be presented by GCSAA President Dave Fearis

at the 8:45 a.m. Golf General Session, Feb. 18, at GCSAA's 71st International Golf Course Conference and Show here.

The President's Award was established in 1991 to recognize "an exceptional environmental contribution to the game of golf: a contribution that further exemplifies the golf course

superintendent's image as a steward of the land." The GCSAA board of directors selected Watschke on the basis of his research and education in the area of golf and the environment.

In 1985 Watschke established runoff facilities that provided some of the first scientific research showing the positive effects of healthy turfgrass on the environment. He developed numerous Integrated Pest Management programs for golf courses and developed the world's first undergraduate turfgrass degree program.

He has been a vocal advocate for the environmental benefits of golf courses through promotion of IPM and Best Management Practices and through his comparisons of golf courses with other land uses. He has been interviewed twice for CBS Morning News regarding healthy turf.

Watschke worked as a superintendent before completing his doctorate.

"Dr. Watschke is a most deserving recipient of this major award," Fearis said. "His research, education and continuing public support have contributed to an enduring legacy of environmental excellence."

Maples honored

Continued from page 25

and B.J. Johnson and famed superintendent Chet Mendenhall, Maples will be given the award during the U.S. Golf Association's annual general session, Feb. 19.

"To get that award is as meaningful as any you could get," Maples said from his home in Lawrenceville, Ga., where he is semi-retired and working as an agronomic consultant. "It is a crowning accomplishment. I will receive it for the Maples family. I feel my extended family has contributed to golf a little bit. We've been blessed by being in the golf industry."

Asked what he thought was his personal major accomplishment, Maples said: "I would hope that [the selection committee] looked at my feeling of sharing ideas that you've developed and that have worked for you; and my continuing reminder to never think you know it all. There is always education out there that you need. When you're looking down a long narrow path, the more steps you take the wider that path gets. Every time we learn one thing we find out there are maybe 100 other things we don't know.'

Maples served as president of the GCSAA in 1975, when he was presented its Distinguished Service Award, then was director of education from 1976-80. He retired on June 22, 1998, after 16 years at Summit Chase Country Club here.

The University of Georgia graduate worked as assistant and head superintendent at Charlotte (N.C.) Country Club for 11 years, then took the superintendent job at The Standard Club in Duluth, Ga., in 1970.

He is a member of the GCSAA Historical Committee and the Donald Ross Society.

The Maples family has included Frank (construction superintendent and greenkeeper at Pinehurst Resort for 48 years who died in 1949); Angus (superintendent at Pine Needles Golf Club who died in 1958); Palmer Maples Sr., (a golf professional who died in 1979); golf course architects Ellis (who died in 1984) and Dan Maples; superintendents Gene, Wayne and Joe; and golf professional Willie.



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GCSAA will honor environmental stewards

NEW ORLEANS — Fifty-two golf course superintendents have been named national, chapter or merit winners of the 2000 Environmental Steward Awards, underscoring their commitment to stewardship efforts on the golf course through contributions that enhance local environments. They will be formally recognized at 8:45 a.m. Feb. 18, during the Golf General Session at the Golf Course Superintendents Association of America's (GCSAA) 71st International Golf Course Conference and Show at the Morial Convention Center here.

In recognition of the winners, program sponsors Novartis Turf & Ornamental Products, Rain Bird, Textron Turf Care and Specialty Products with Cushman, Jacobsen, Ransomes and Ryan brands and Pursell Technologies Inc., will donate nearly \$23,000 to The GCSAA Foundation. The foundation is committed to advancing educational opportunities and environmental and scientific research for golf course management.

The 2000 Environmental Steward Award winners were named in three national categories (public, private and resort golf courses) and an international category. Winners include:

- National Public: Buck Workman, Cateechee Golf Club, Hartwell, Ga.
- National Private (tie): Michael Sandburg, Lakeside Country Club, Houston, Texas; and Donald Ewoldt Jr., Sand Creek Country Club, Chesterton, Ind
- National Resort: Jimmy Thomas, Hyatt Regency Hill Country Resort, San Antonio, Texas
- International: Darren Moore, The Manila Southwoods Golf & Country Club, Metro Manila, Philippines.

The Environmental Steward Awards recognize superintendents for overall course management excellence in the areas of technology use, resource conservation, water quality management, integrated pest management, wildlife/habitat management and education/outreach.

"The dedication of the golf course superintendent to enrich the quality of golf and its environment has truly been exemplified by all Environmental Steward Award applicants," said Dave Fearis, GCSAA president and certified golf course superintendent at Blue Hills Country Club in Kansas City, Mo.

"These awards continue to recognize GCSAA members for their commitment to maintaining a healthy environment, and they provide others with the opportunity to acknowledge their environmental stewardship efforts," he added.

In addition to the national and international winners, 24 chapter winners and 23 merit winners were selected from GCSAA's 101 affiliated chapters.

CHAPTER WINNERS

Public

Robert Best, Tierra Verde Golf Club at the Reserve, Arlington, Texas, Lone Star GCSA

Craig McDonald, Wildhorse Golf Course, David, Calif., Sierra Nevada GCSA

Joe Perry, Eagle's Landing Golf Course, Ocean City, Md., Eastern Short Association of GCS

Mark Petitgoue, ThunderHawk Golf Club, Beach Park, Ill., Midwest Association of GCS

Kerry Satterwhite, The Den/City of Bloomington, Normal, Ill., Central Illinois GCSA

Jim Scott, Kampen Course—Birck Boilermaker Golf Complex, West Lafayette, Ind., Indiana GCSA David Solga, Giant's Ridge Golf Course & Ski Resort, Gilbert, Minn., Minnesota GCSA

Clark Weld, Blue Heron Pines Golf Club, Cologne, N.J., GCSA of New Jersey

Bruce J. Wolfrom, White Pine National Golf Club, Spruce, Mich., Northern Michigan TMA

Private

David Bermudez, MountainGate Country Club, Los Angeles, Calif., GCSA of Southern California Geri Buchheit, Killearn Country Club, Tallahassee, Fla., Florida GCSA

F. Dan Dinelli, North Shore Country Club, Northbrook, Ill., Midwest Association of GCS

Jerred Golden, Hershey's Mill Golf Club, West Chester, Pa., Philadelphia Association of GCS

Doug Hausman, Dakota Dunes Country Club, Sioux City, Iowa, GCSA of South Dakota

David L. Johnson, Timarron Country Club, Southlake, Texas, North Texas GCSA

Allan Pulaski, The Landings Club, Savannah, Ga., Georgia GCSA

Rick Tegtmeier, Elmcrest Country Club, Cedar Rapids, Iowa, Iowa GCSA

Stephen B. Tibbles, Segregansett Country Club, Rehoboth, Mass., Rhode Island GCSA

Russell Vandehey, Oregon Golf Club, West Linn, Ore., Oregon GCSA

Resort

Chuck Colton, The Bridges Golf Resort at Casino Magic, Bay St. Louis, Miss., Louisiana/Mississippi GCSA

Timothy Glorioso, Hawthorne Valley at Snow-shoe, Snowshoe, W. Va., West Virginia GCSA

Terry Frost, Top of the Rock, Ridgedale, Mo., Ozark Turf Association

Dan Steiger, The Legacy Courses at Cragun's, Brainerd, Minn., Minnesota GCSA

James B. Sua, SAFRA Resort & Country Club, Singapore, Republic of Singapore (Country, as there is no affiliated chapter in Singapore)

MERIT WINNERS

Public

Patrick Aaron Blum, Colonial Acres Golf Course, Glemont, N.Y.. Northeastern GCSA

Jerry Coldiron Jr., Lassing Pointe Golf Club, Florence, Ky., Greater Cincinnati GCSA

Barry Greenwalt, Ironwood Municipal Golf Course, Gainesville, Fla., Florida GCSA

James M. Krutilla, Towne Country Club, Edgerton, Wis., Wisconsin GCSA

Frank Rendulic, Kittyhawk Golf Course, Dayton, Ohio, Miami Valley GCSA

Norm Schubert, Brae Lock Golf Course, Gravslake, Ill.

Steven Tiervey, Golfpark Nuolen, Wangen, Switzerland (Country, as there is no affiliated chapter in Switzerland)

Robert Warner, Whispering Pines Golf Course, Myrtle Beach, S.C., Carolinas GCSA

Private

Richard Coyne, Tatum Ranch Golf Club, Cave Creek, Ariz.

Michael Crawford, TPC at Sugarloaf, Duluth, Ga., Georgia GCSA

Jeffrey Cuny, Sewickley Heights Golf Club, Sewickley, Pa., Greater Pittsburgh GCSA

Frank Hull, Oak Meadow Country Club, Rolla, Mo., Ozark Turf Association

Scott Jorgensen, Spanish Hills Golf and Country Club, Camarillo, Calif., GCSA of Southern California

Charles "Buddy" Keene II, Gainesville Country Club, Gainesville, Fla., Florida GCSA

Joseph A. Kennedy Jr., Legends Club of Tennessee, Franklin, Tenn., Tennessee GCSA

Dennis P. Petruzzelli, Lakeover National Golf Club, Bedford Hills, N.Y., Metropolitan GCSA

Roger A. Stewart Jr., TPC at Jana Polana, Princeton, N.J., GCSA of New Jersey

Resort

Charles "Jeff" Hill, Pinehurst No. 8, Village of Pinehurst, N.C., Carolinas GCSA

Thomas Huesgen, The Links at Spanish Bay, Pebble Beach, Calif., GCSA of Northern California Donald Johnson, Garra De Leon Golf Course, Santa Cruz, Costa Rica, Florida GCSA

Patrick McCabe, The Greenbrier Resort, White Sulphur Springs, W. Va., West Virginia GCSA

Watch for next month

The February edition of *Golf Course News* will encompass full preview coverage of the Golf Course Superintendents Association of America's (GCSAA) 71st International Golf Course Conference and Show, scheduled for Feb. 14-20 in New Orleans, La.

Included will be profiles of all the superintendents running for office in the GCSAA; the schedule of educational sessions; a rundown on places to go in the Gulf Shores area; a look back on the year of rein for President Dave Fearris; and the announcement of GCN's Best Builder and Best Small Builder of the Year.





Gearing up for spring: A task that bridges the seasons

By ANDREW OVERBECK

or superintendents in the Snow Belt, what is done in the fall is a direct result of how quickly courses will green up in the spring. Fall applications of snow mold fungicides, dormant seeding and fertilizers, top dressing and general course aerification occur in a narrow window of time and weather.

For Mike Kosak at Lahontan Golf Club in Truckee, Calif., preparations for the next spring start in mid-August just as Mother Nature begins to slow the turf down. In the Midwest and Northeast, however, a string of warm falls has pushed back preparations into mid-November and December.

A WARM, DRY FALL

"This is the third late arrival of winter," said Patty Knaggs, superintendent at Bass Rocks Golf Club in Gloucester, Mass. "We didn't close the greens until mid-December."

Dry conditions in the Midwest have hampered preparations. "We had to keep pushing back the snow mold applications and we set a record for no snow flurries in November," said Michael Bavier, superintendent at Inverness Golf Club in Palatine, Ill. "I had to turn the water back on this year because we stayed so warm and dry so long."

However, not everyone is complaining about the Indian Summer conditions. Tom Leh, superintendent at Shepherd's Hollow in Clarkston, Mich., took advantage of the warm weather to grass-in 18 holes of the 27-hole Art Hills-designed layout.

"We had the seventh warmest November on record," said Leh. "We seeded a green on Nov. 1 and we've got grass on it. The course has greened up nicely."

The warm weather also means that it is tougher to keep the golfers off the course. "We used to aerify the greens right after Labor Day," said Wayne Otto, superintendent at Ozaukee Country Club in Mequon, Wis. "Now we do it the first week of November and the golfers want us to push it back to Christmas. But we obviously can't wait that long."

TO COVER, OR NOT TO COVER

Timing fall applications, however, is not the only tough call when it comes to bringing the golf course through the winter weather in good shape. Those who have a good amount of freezing and thawing throughout the winter and don't want to have the hassle of taking turf covers on and off, use differing strategies to keep their courses in good form through winter.

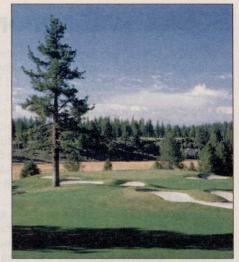
Knaggs puts down an 80/20 sand/soil top-dressing mix on the greens that protects them from desiccation and temperature extremes. "The top dress smoothes out the greens, they green up faster and they are less susceptible to disease," said Knaggs.

Even along Lake Michigan, where high winds and desiccation are a danger, superintendent Paul Emling at Arcadia Bluffs Golf Club in Arcadia, Mich. has left his greens uncovered this winter.

"We covered the four greens by the water last winter," said Emling. "But the wind blew beach sand down through the cover and as it flapped around, the sand wore spots into the green because there was no snow on it."

This year Emling is leaving them uncovered and dealing with the consequences come spring. "I will probably have some desiccation," he said.

However, there are certain circumstances that call for covers. Leh has opted to cover his four newest greens to protect



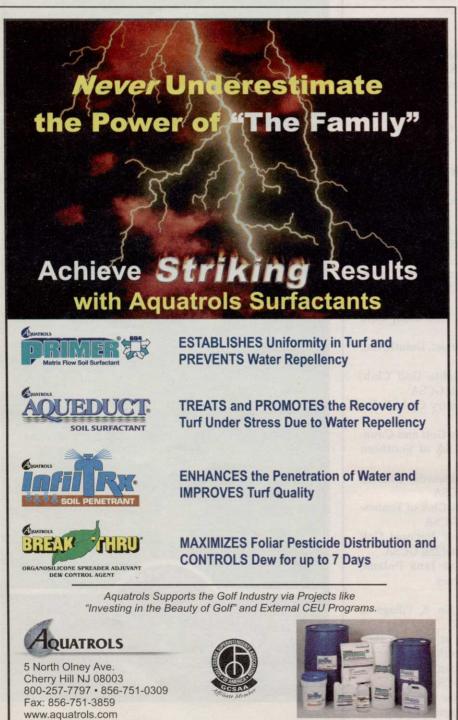
To get Lahontan Golf Club to look like this each spring, superintendent Mike Kosak must keep an eye on the winter weather that dumps an average of 380 inches of snow on his course each year.

the young turf from the inevitable desiccation and to allow them more time to germinate. Otto uses covers on his practice tee to promote regrowth and on two of his greens. "One is a new green and the other one is in the shade. It's a no-brainer," said Otto.

ICE, WIND AND SNOW

Despite rumors to the contrary, Snow

Continued on page 30



Transition key to success in the S'West



The dramatic effect of winter overseeding gives way to conversion back to Bermudagrass in the spring here at Desert Highlands Country Club in Scottsdale, Ariz.

By DAVE WILBER

COTTSDALE, Ariz. — Fairways in the Southwest depend on a successful springtime transition. On the outside, it may seem like a predictable event as warm temperatures of spring bring the weather in which Bermudagrass flourishes. Inside, however, the difficulties of transition are much more than they appear.

Phil Shoemaker, a certified golf course superintendent at Desert Highlands Golf Club here, knows transition all too well. The original grow-in superintendent at Desert Highlands, Shoemaker has recently returned to the club to take the helm.

"It begins with overseeding prep," Shoemaker said. "I fully believe that the days of verticutting down to the dirt are over. I dry down, scalp down and sweep with a large rotary broom."

By doing this, Shoemaker hopes to insure the return of the Bermudagrass in the spring.

Over the last five years, many courses that once were more concerned with their wintertime product now must deliver quality playing conditions year-round. The warm-season Bermuda must be given the chance to emerge from sleepy dormancy while the cool-season overseeding crop, which is just getting used to its life on earth, must be encouraged to die a predictable death. All of this must happen in such a way that golf continues as it should with happy private club members and resort/daily-fee customers who will return to the facility with their money clips at the ready. Sometimes the weather has different ideas.

The summer of 1999, while memorable for drought in the East and Mid-

Continued on next page



Hibernation is out of the question for **Snow Belt supers**

By ANDREW OVERBECK

hile the days are shorter and the temperatures colder, there is no shortage of golf course and non-golf course tasks to keep Snow Belt superintendents busy throughout the winter.

One look at the organizational chart that superintendent Stephen Maas uses to keep his winter jobs prioritized at the Valley Club in Sun Valley, Idaho, illustrates just how much work is left to do as the snow falls. "I use a timeline to outline the projects that need to get done before spring," he said.

From the usual indoor work such as repainting tee markers and servicing equipment to outdoor tasks such as monitoring snow depth and ice layers, Maas has

We collect all the trees that we have cut down over the year and deliver the firewood to the members.'

- Michael Bavier

his hands full.

Maas also performs additional duties for club members during the winter time. At Christmas-time, Maas and his crew assist in the hanging of lights and decorations and one year even built an ice rink.

In addition to spending countless hours plowing snow and fixing equipment, Michael Bavier at Inverness Golf Club in Palatine, Ill., finds the time to spread the holiday cheer. "We collect all the trees that we have cut down over the year and deliver the firewood to the members," he said. "It keeps them happy and my crew busy.

Each year, Maas is also in charge of maintaining an outdoor platform tennis court. The sport is played in the winter in sub-freezing temperatures and is popular with hardy club members. "It is kind of a cross between ping-pong and tennis," said Maas. "It is a wooden court that is lit up and surrounded by a cage. The floor is heated and we are in charge of keeping the place clean and turning on the heaters."

Maas has also been involved in interesting agronomic projects during the winter. The Valley Club, which is located at 5,500 feet elevation, planted more than 9,000 pine trees on the property. During their first winter, Maas had to keep the reflecting sun from damaging and burning the young trees. "We had to go out and put down Milorganite on the south and southwest side of the trees in order to minimize the reflection," he said.

This winter, however, Maas plans to take it a little easier. Unless of course he actually goes forward with his idea of using a snow groomer to erect a physical barrier around the perimeter of the course to keep out the voles that burrow down into the turf during the winter.

"One year we tried it with skis, last year we used a snowmobile and this year we may just try the SnowCat. We'll see,"

said Maas.

Rye/Bermudagrass transition

Continued from previous page west, is remembered by Southwestern superintendents in a much different light. A mild summer left warm-season grasses lagging behind. By September, as time arrived for the beginning of overseeding preparations, Bermuda fairways had gained precious little ground during the summer's mild temperatures.

As soon as perennial ryegrass began to be delivered, temperatures soared. Clubs and courses forced into early overseeding by hopes of pre-season golf in the stripes of ryegrass suddenly found themselves dropping cool-season seed and turning on water in perfect warm-season weather. The struggle to establish quality playing conditions will continue into much of the winter.

How does this affect conversion back to Bermuda?

"We'll probably have a really good transition," said Jim Janosik, a certified superintendent at LaQuinta (Calif.) Resort and Club. Janosik oversees the 36 holes inclusive of the Mountain and Dunes courses. While having a good transition is a good goal, Janosik, like all Southwestern superintendents, knows that he also needs a good crop of ryegrass for a good winter.

Shoemaker, a veteran of two Phoenix Opens while at the TPC of Scottsdale, explained: "Dense, lush ryegrass means for little Bermuda underneath at transition, but the better the ryegrass coverage the better it looks to everyone, so you have to walk a balance."

DESERT SUPERINTENDENTS

The Southwestern desert superintendent must actively manage transition by steering into the skid as soil temperatures rise in the spring. This means not shutting off the water to rid the course of ryegrass. The perennial rye actually hardens off a good deal and gets stubborn when dry. At the same time, Bermudagrass that is just beginning to wake up needs soil moisture, so shutting off the water can sometimes lead to undesired effects.

Shoemaker likes to aerify and gives a tip: "Early aerification makes a big, big difference." He also believes that seeding rates kept around 500 pounds per acre, rather than the 700-pound rate, can provide a good winter ryegrass crop while helping in the spring with decreased competition during transition.

"I also like to get down on height of cut early and be less than .400 inch in early May on fairways," said Shoemaker. By taking as much shade off the Bermuda as possible, this technique helps a smoother conversion.

"We'll be as low as we can possibly go, in the .300-inch

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— Gary Femrite, Golf Superintendent, Pebble Creek G.C., Becker, MN

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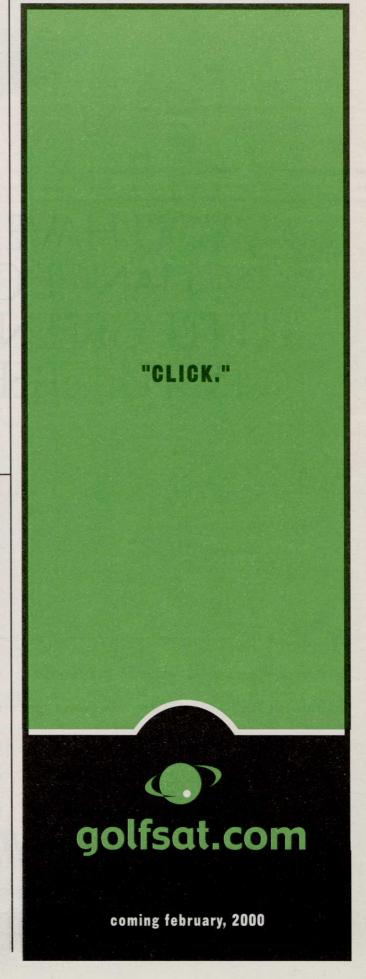
GCSAA BOOTH #1457

range," agreed Janosik.

Southwestern superintendents who actively manage their spring transition by careful overseeding preparation, active weather watching, solid irrigation management and cultural practices timed to encourage warm-season grass development can become masters of conversion.

Many have found that each year brings a new and different set of circumstances that need to be counted as determining factors. Having great fairways for almost 12 months is not the result of just sitting back and watching the weather change.

Dave Wilber is owner of Wilber Turf and Soil Services, an independent soil and agronomy consulting company. He services clubs and courses in the United States, the Caribbean and Scotland.





Spring

Continued from page 28

Belt superintendents have to stay on top of conditions throughout the winter. From breaking up ice layers to policing snow mold conditions there is plenty of oncourse work to be done.

Kosak has to keep a close eye on the snow conditions.

"Our average annual snowfall is 380 inches," he said. "But it can disappear at any point. One year we had six feet of snow just before Christmas and by New Years it was all gone."

My biggest concern is that the grass starts growing in the middle of winter and then the snow mold will absolutely kill you."

With that in mind, Kosak spends much of his fall ensuring that he has the grass as dormant as possible. "I shut off the water and get the plant hardened off," he said.

Stephen Maas, superintendent at The Valley Club in Sun Valley, Idaho, uses old flags and pins to stay up to speed on snow depth. "The pins show us where the greens are and

how many feet of snow we have," he said. "We take core samples of the snow regularly to log the amount of snow that we have

each day and keep an eye on ice layers and moisture and potential disease conditions."

Wind off Lake Michigan creates a constant source of work for Emling.

"It deposits more snow in the low-lying areas and takes it off the high areas," said Emling.
"We have tees and greens along
the water that rarely have snow
cover on them all winter long."

Last year Emling tried to use snow fences to keep the snow on the greens and had some success. "But it was a lot of maintenance," he said. "The wind kept snapping them right off."

WARM SOIL, WARM AIR

Come spring, course clean-up and getting the course dried out is the order of the day.

"There is nothing we can do because it is so wet," said Kosak. "In April we will blow off the remaining snow and let the course come out on its own." Then Kosak and his crew will verticut to get air moving through the crown of the plant.

Back in Massachusetts, aerification happens a bit earlier.

"Even though it's not always the agronomically correct time of the year, I usually do it when the high school is on spring break because that's when I have the labor staff," said Knaggs.

Clean-up is another arduous

Emling, again, must deal with whatever sand the wind has deposited on his course. "The wind pulls sand right off the beach and deposits it onto greens and tees," he said. "We have to go out there and skim the sand out of the bunkers and refill them and use a rotary broom to clean the sand off the greens and tees."

Maas also deals with a nasty spring-time surprise, voles that chew through the turf. Although Maas tries to control them, the damage is inevitable. "It takes a great deal of time to clean up in spring," said Maas. "We use spring harrows, a brush attachment and a hand rake to clean up the wet compacted runs."

With a new course coming into spring, Leh will be watching his course carefully. "We will get the irrigation system on as early as possible and aerify as soon as it dries out," he said. "I will only put preemergent herbicide on the mature turf, but none on the young stuff. We may have a grub problem and take-all patch, and we have to protect the young turf."

After a long cold winter, golfers are not the only ones who revel in the rebirth of the golf course.

"Once the frost goes, we make our first cut around the greens which is a lot of fun," said Bavier. "We get a chance to reshape the greens a bit."

Knaggs echoed those sentiments. "Come April 1 we are ready to come out of the blocks and concentrate on agronomics," she said.

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BRIEFS



ELDREDGE JOINING RAINMAKER

COLUMBIA, Md. - Paul Eldredge, who retired in December as president of Wadsworth Golf Construction Co., will join The Rainmaker Group, a golf course and residential development concern, as a principal. Eldredge will serve part-time as executive vice presi-



dent, assuming business development and project management responsibilities on both golf and residential projects. He worked 37 years for Wadsworth and was in-

volved in building more than 500 golf courses around the country. "After nearly 40 years in construction, I wanted to take a broader role in development,' Eldredge said.

SASSER JOINS WEITZ

NORTH PALM BEACH, Fla. -Weitz Golf International has hired Warren T. "Tommy" Sasser as vice president of marketing. Sasser's primary responsibility will be to direct the company's golf course construction marketing efforts. Prior to joining Weitz Golf, Sasser was president of Golf Development Consultants. Sasser is on the board of directors of the Golf Course Builders Association of America, and is a member of the National Golf Foundation, Golf Course Superintendents Association of America, Urban Land Institute and Society of American Foresters.

PHELPS LANDS VAIL JOB

VAIL, Colo. - The Eagle Vail Metro District has received \$3.5 million of bond financing for improvements to the Eagle-Vail golf course. The golf course design firm of Richard M. Phelps, Ltd. has been asked to plan



plete the job, not including the work currently under construction at the practice range. The remodeled practice range includes a new 10,000-square-foot putting green, 5,000-square-foot chipping green, 30-station tee line; two new grass tees and target greens.



The par-3 15th hole at Whispering Pines Golf Club plays with a prevailing crosswind and will stretch from a gentle 96 yards to 178 yards from the back tee.

Texans making dream come true for kids, amateurs — themselves

Corby Robertson and Chris Gilbert are two friends and veterans of the University of Texas football wars who, as college juniors, dreamed of opening a summer sports camp for kids. Camp Olympia, where children gain new athletic skills in a natural environment, opened in 1968 with 86 campers. The camp, which has always featured an introduction to golf, now serves over 8,000 youngsters each summer. The camp's success does not mean that Robertson and Gilbert gave up dreaming.

Recently the two announced their latest vision:

• Whispering Pines Golf Club, 18holes built on "a very special" 400-acre tract of land about 90 miles north of Houston, in Trinity County, Texas, next door to Camp Olympia.

· World Health & Golf Association, a not-for-profit corporation whose beneficiaries are the world-renowned Texas Medical Center Institutions and a First Tee Program for 5,000 fifth-

Continued on page 38

Fledgling Tillinghast Association growing

By MARK LESLIE

BASKING RIDGE, N.J. - Their two books on A.W. Tillinghast were hits, now Bob Trebus and Richard and Stuart Wolffe have formed the Tillinghast Association, creating a web site and newsletter as well

as a repository for information on the famed golf course ar-

When we published the first two ["Course Beautiful" and "Reminiscences of the Links"], we found A.W. Tillinghast



that there is a great interest in Tillinghast," said Trebus, who is the association's first president. "There is a Donald Ross Society. And, especially at Pinehurst during the U.S. Open, Ross was getting a lot of recognition, so we thought Tillinghast should get just as

The designer of such highly regarded tracks as Winged Foot's East and West Courses, San Francisco Golf Club and Quaker Ridge Golf Course, Tillinghast was a prolific writer. While researching a book for the 100th anniversary of their club — Baltusrol Golf Club — Trebus and the Wolffes discovered enough fodder on its designer, Tillinghast, to publish their two books - with a third waiting in the wings.

Tillinghast's interesting treatises will also Continued on page 39

Nancy Lopez aims for name in 2nd career: design

In her rookie season on the LPGA, in 1977-78, Nancy Lopez won nine tournaments, including five in a row and setting



a standard for winning that has not been equaled since. Elected into the LPGA Hall of Fame in 1987 at the age of 30, she is still active on the Tour, but has set her sights on a new chal-

lenge: golf course design. Working with her agent, IMG, she has launched Nancy Lopez

Course Design and is already awaiting contracts for two projects. In the meantime, she has been selected to receive the prestigious Old Tom Morris Award in February from the Golf Course Superintendents Association of America. Editor Mark Leslie found her



Nancy Lopez on a golf course site with IMG lead architect Brit Stenson.

during one of her few quiet moments at home in Albany, Ga., where she lives with her husband, former Major League player Ray Knight, three daughters, stepson Brooks, three dogs and three cats.

GCN: Part of the Old Tom Morris Award is to acknowledge your helping to "mold the welfare of the game." How do you feel you have done that?

Lopez: It's difficult for me to talk about myself, but character and sportsmanship have always been important to me. You can always be a good player, but if you're

a jerk it's not worth it; you've not accomplished what you should have because golf is a gentleman's sport. It is a game that tests you, that builds your character. I've always totally respected

Continued on page 32

Architects society plans remodeling seminars

The American Society of Golf Course Architects (ASGCA) has created a series of golf course remodeling seminars under the title of "Remodeling University: A Short Course to a Better Course." The one-day symposiums have been created to educate golf course decision-makers about the basics of remodeling.

The inaugural event will take place in Chicago at North Shore Country Club on Jan. 28. Similar programs will be held in Atlanta (Atlanta Athletic Club, March 2); New York (Westchester Country Club,

Continued on page 39



PURGATORY GOLF CLUB... IT'S OUT OF THIS WORLD

Purgatory Golf Club in Noblesville, Ind., designed by Ron Kern, is nearing completion in this Indianapolis suburb, and opening day is targeted for late spring. See story, page 36.



Q&A with Lopez

Continued from page 31

golf. It's a great game. Everyone can play golf - and you can play it for a long time and play it with your family. I've enjoyed playing it all my life, with my Dad and Mom growing up.

What I've always tried to do on the golf course is enjoy what I did. When I'm playing, well or

not, I'm still enjoying it. Sportsmanship has always been important to me because I know how I want to be treated if I won, or if I did not win. My Dad taught me good sportsmanship. He made me realize as long as I played my hardest, that is what people see. And they see that even if I finished second or third I never gave up. I never walked away from a golf event feeling bad.

A lot of people can't handle

SEE RELATED STORY, PAGE 34

losing. They walk away feeling defeated and don't learn and rejoice from their play. Playing golf was something I enjoyed so much, and I was so grateful to God that He allows me to play this sport and to walk golf courses and enjoy it the way I do.

GCN: There are only two fe-

male members of the American Society of Golf Course Architects Alice Dye and Jan Beljan. Why haven't there been more female golf course designers?

Lopez: Perhaps it's the credibility of a woman designing a golf course. I don't know if people have felt we could do that. I think IMG asked me to because of the competitor I have been all my career. Maybe they feel that I can develop a course that people can play and enjoy and be competitive.

My courses won't just cater to women. They will cater to men, also - because with the different tees you can put trouble in different areas. But women want to be made to feel special, also. To do that, I will give women a back tee and a forward tee. Men usually have three tees. Let the women have a choice.

GCN: But a decade ago, Alice Dye started a campaign for forward tees and all courses now are being built with several sets of tees. You play old and new courses. Have you not seen a significant trend in course designs to shorten courses for women, youths and beginners?

Lopez: Yes, there are more tees. But I want to make sure that women feel these are "their" tees. Tell them: "These are for women only.

And put some trouble out there for the ladies, yet give them a bailing-out point. Some courses don't have any bailing-out point at all for women. They have to carry the ball 150 yards to get over water. You can build a course that has trouble and gives women a chance to go for it, but doesn't force them to. Golfers want to have to hit that great shot. They will test themselves. But there are some courses that are so tough. People play them but they walk off them frustrated and beaten; they've lost a bunch of balls, played horribly and not had fun. My objective is to build a course that is tough and yet is fun to play; it's not boring and when they walk off they can remember the golf holes.

I would like to make a couple of tough holes in a row, and then one that's easier - to give you that emotional up-and-down feeling, which is part of golf. You should be able to feel a little relief. I want to make the type of course that plays with people's emotions as much as the mental part of their game.

GCN: How involved will you be in the actual design work?

Lopez: Heavily. I will really walk the site and give them my ideas and work with Brit [Stenson, IMG's lead architect] and get his thoughts.

It will not be like Northwestern golf clubs. They built the clubs and put my name on them. I didn't really have anything to do with it. Now I have my own line of golf clubs and I did have a lot to do with it. That's what I'm doing now [in design]. I'm going to give them my ideas and learn more and more about architecture. I think it will be a great experience. But I do have a lot of pressure to design my first golf course the best that I can. I want people to walk away and say, "Boy, I can't wait until Nancy builds another one.'

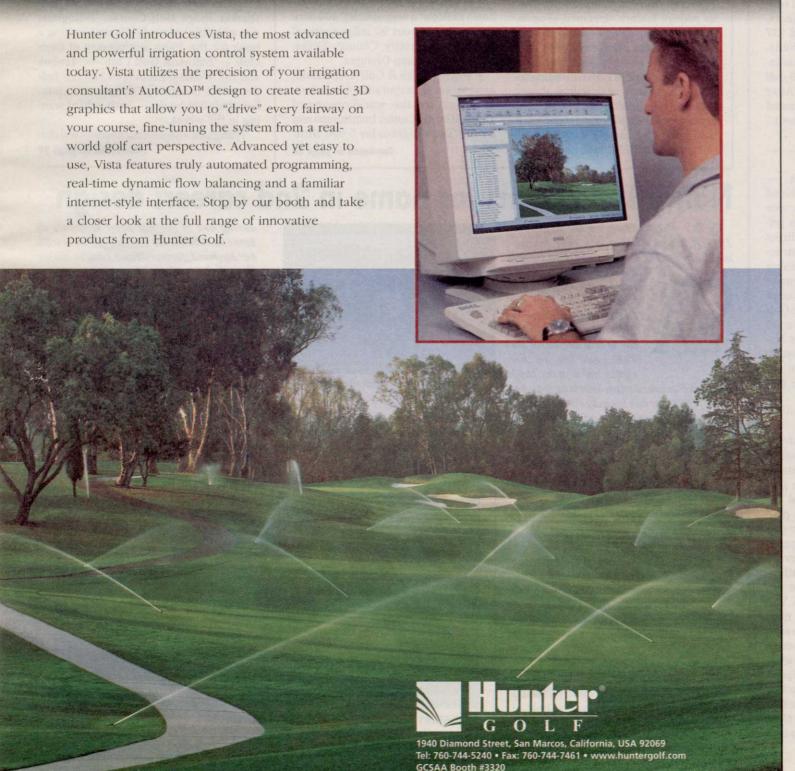
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> Continued on next page GOLF COURSE NEWS

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Q&A with Lopez

Continued from previous page

joyment to people. Even when I'm gone, they will know I loved golf that much and I cared about my fellow golfers, amateurs. I wanted to build something that they would love and enjoy playing as much as I did.

A lot of times courses are built for the professionals, and when did they ever pay a green fee? You have to build it for the people who support golf, and that's my goal: to build a course that will give them competitive feelings, they will be tested but will love and enjoy.

Another aspect is the visual. When I play courses I hate, I never play well — not because they are tough, but bewcause they are boring or not pretty. Visually, golf can intimidate you. I want a course that intimidates people; it may not be tough, but when they look at it, it looks tough. I've played courses like that. You are intimidated by what you see. Maybe there are trees on the right or out-of-bounds on the left, and yet it is only a 100-yard carry.

GCN: What would be a good length for your two sets of women's tees?

Lopez: On the Tour we play about 6,200 yards. I'm not sure what total distance I'm looking for. I want it long, but not so long that women don't enjoy it. I want them to be able to reach par-4s in two shots. Even good amateurs struggle to reach some par-4s in two. I want the better women to have the chance to hit a driver and 5- or 6-iron into the green. That's how the pros do it. They're not hitting 3 and 4 irons into par-4s.

This is all a learning process for me. I haven't done a full-blown course yet. I've

Lopez: Youths, family, golf help one another

Pointing to the golf industry's push to open programs to get youths involved in the game, Nancy Lopez feels children and families are issues to be considered.

Youth programs, she said "are something we really need to think about. It's so important. I look at women's golf, or even collegiate golf, and you barely see any American players coming up. You see a lot offoreigners scooping up scholarships and playing for college teams. We need to develop junior golf as much as we can in the United States. You look at the women's Tour and a lot offoreigners win each week."

Meanwhile, she said, golf can be an important cog in keeping the family unit together.

"Every day everyone in my family is going 100 miles per hour. They don't have that two to three hours to go out and play on the golf course. But if I can get them all on a golf course it would be a lot of fun," Lopez said.

While her two oldest daughters — Ashley, 16, and Erinn, 13 — are softball and basketball players and not interested in golf, her youngest, 8-year-old Torri, is an avid golfer, Lopez said.

"It's not just the training of the young," she added. "We have to get the parents to support their kids. My Mom and Dad supported me 100 percent. That's why I know I got to where I am today. They spent that time, money and effort to encourage me playing golf. Nowadays, because moms do work, it's difficult."

always been the consultant. I've walked the course and suggested ladies' tees and changes. You know, "Move that tee or bunker over because it's not fair." I'll talk with Brit about that.

It's deceptive to tell you yardage because, unless you go out on the site, you don't know from where the person is hitting the 5- or 6-iron.

Golf course design is a feeling, also. It's not just looking at the course. It's what you feel when you step on the tee, what you see and what intimidates you and doesn't intimidate you. Golf is an emotional up and down all the time. I know how I felt over the years when I stepped on those tees and my emotions were up and down. I don't want it to be, simply, "Let's tee it up and go." I want them to look at everything and say, "Boy, this is a beautiful hole. I can go for this or go to the right, or reach the green in two." Give them the opportunities that the pros have.

GCN: Do you think you can relate to the amateur-caliber player?

Lopez: I think so. Growing up, playing with my Dad, I remember courses I played and what I felt and how tough a hole was. I remember those feelings of hitting over water. I want bailing-out areas to the right or left and give golfers that choice. Let them get the thrill of golf by hitting that great shot, if they choose.

GCN: There are a number of male Tour players involved in design. Why haven't you been involved before this?

Lopez: I was not interested and did not have the time. IMG knew that and did not pursue it. What got it started was a visit to Florida — to The Villages — where they build two courses a year. The developer asked if I ever thought about designing a golf course and would I design one for him. It is a beautiful area and I expect we will sign a contract. When he asked, I had not really had the time.

But I love golf and being able to build a golf course and being proud of it is something I look forward to doing. When it is

Women & golf a mutual attraction

Judy Bell became the first woman president of the U.S. Golf Association two years ago, the same time that Alice Dye was elected the first female president of the American Society of Golf Course Architects. Now that Nancy Lopez is receiving the Old Tom Morris Award from the Golf Course Superintendents Association of America, what does she feel this says about the involvement of women in golf?

"I think women's involvement has grown tremendously over the last five or six years," Lopez said. "We've come a long way. A lot of people say, 'Why aren't you getting paid as much as the men?' or why, why why. You can only do what you can do.

"I think there are many more women playing it and enjoying it. I think even in the corporate world, they realize a lot of things get done on a golf course. It's a quiet place. It's away from phones. It's peaceful. Yet, you do realize who you want to do business with, because you learn more about their character on a golf course than anywhere. And I think women, especially corporate top executives, are finally catching on to that."

Lopez said that women are also getting involved "so they won't be golf widows. They enjoy being with their husbands more, and want to play golf with them and hopefully be the kind of golfer their husbands enjoy playing with.

"It's fun for me," she added. "I like to go to pro-ams and see groups of women playing, and the men really accepting that. Many years ago, when I was coming up I was not allowed to play on some golf courses because I was a woman."

As for Alice Dye and Judy Bell, "they are quality women in golf," Lopez said. "They respect the game. They respect the male game and yet they respect the women's game, also. When you have women who can do that, they have a lot of sense about golf. It's not an attitude [declaring] 'Women should be doing this or that.' It's more a statement: 'We can all do it together — for both men and women.'

"I've always respected Judy Bell very much, and I used to play with Alice Dye when I was an amateur. I'm flabbergasted that I can even put my name beside theirs. It's an honor. When I started playing golf I just wanted to be the best I could be."

finally finished and I get a chance to play it and be a part of it, that will be neat.

GCN: Now that you have created Nancy Lopez Course Design, where do you want to work?

Lopez: Right now I'm looking at the United States. I'm hoping we develop one in New Mexico because that's where I grew up. They're in the talking stages now. That would be a lot of fun for me. I love New Mexico and to have my name on a golf course there would be really neat to me.

GCN: Have you had any involvement with the LPGA's new golf courses?

Lopez: I was a little disappointed they didn't get us involved — perhaps let each player design a hole there, since it was our golf course. I think it would have brought a little more — something — to it. It would have been fun to have 18 holes with 18 different players' names on them — to see the character of each player on each hole.

It is flattering for me that IMG would ask me. Playing all the golf I have, I feel I have insight on what a hole should look like. I don't want to put my name on something and not be involved in it.





Lopez, Strange co-design Canadian course

KING CITY, Ontario, Canada - LPGA and PGA Tour players Nancy Lopez and Curtis Strange will co-design the second 18-hole course at ClubLink's Grandview Inn property in the Muskoka region just north of Toronto.

Lopez and Strange will bring 45 years of combined experience and prominence in the golf world to their design collaboration at the 850-acre Grandview property in the town of Huntsville. Ontario. Earlier this year, ClubLink announced that 1998 Masters and British Open champion Mark O'Meara will make his debut as a course designer with the first course at the Grandview site.

Construction is planned to begin on the Lopez-Strange course in fall 2001 with planned commencement of play in early summer 2003. Construction of the O'Meara course began this fall and play will start in early summer 2001.

"I decided to pursue my first design in North America with ClubLink because it is a North American leader in professional golf course ownership and management, and because of its record in developing quality golf properties," said Lopez, a member of the LPGA Hall of Fame and a winner of 48 Tour events in her 23-year professional career. "I am thrilled to be working with Curtis Strange who has been a good friend since we won the JCPenney Classic together in

"I co-designed ClubLink's flagship private course - King Valley Golf Club in King City, Ontario - with Doug Carrick, and I'm proud to say it is the 9th ranked course in Canada," said Strange, whose 21 worldwide tournament victories include back-to-back U.S. Opens (1988 and 1989) and two Bell Canadian Opens (1985 and 1987). "I am excited to work with Nancy Lopez and ClubLink, which is one of the fastest-growing and most respected golf course owners, operators and developers in North America."

Bruce Simmonds, president and chief executive officer of ClubLink, said: "It is a pleasure to work with two of golf's greatest competitors, whose friendship and international playing experience will create a worldclass course that challenges and accommodates all players. ClubLink has taken a pioneering role in recognizing that golf is becoming a more inclusive game for male and female golf-

"A winner of three major championships, Nancy Lopez has been the most popular woman professional golfer since 1978 when she

won nine events, including a record five in a row, and helped the LPGA Tour become one of the world's most successful women's sports organizations.

"The selection of Curtis Strange as 2001 U.S. Ryder Cup Captain late last month recognizes his place in golf history, which includes becoming the

first player since Ben Hogan in 1951 to successfully defend his U.S. Open crown. He is highly respected as the TV golf analyst for ABC Sports, and King Valley Golf Club, his 1990 collaboration with Canadian architect Doug Carrick, is renowned for its beauty and challenge."

The Lopez-Strange course will

be ClubLink's fourth golf development project in Muskoka, which underscores the region's emergence as an international golf destination.

ClubLink's first golf development initiative was The Lake Joseph Club, designed by Thomas McBroom, which was named Best New Canadian Course by Golf Digest and SCORE Golf magazines in 1997 and 1998 respectively. Another

ClubLink Muskoka course-Rocky Crest Golf Club, also designed by Thomas McBroomwill open in Spring 2000.

The Grandview courses will constitute a 36-hole Premium ClubLink Private Club, which will provide access to guests at ClubLink Resorts in Muskoka, only a two-hour drive from Toronto. ClubLink owns Grandview and three other resorts in Muskoka.

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Jacobson, Cochran complete Borland signature course

prominent golf course architects have agreed to donate their services to finish a golf course designed by their late friend and colleague Bruce Borland, who died tragically Oct. 25 in a plane crash with golfer Payne Stewart and four others.

Chris Cochran, a senior de-

sign associate with Jack Nicklaus Golf Services in North Palm Beach, Fla., and Rick Jacobson, president of Jacobson Golf Course Design here, have volunteered to finish the design work and oversee construction of Covote Creek Golf Club.

The course is located in unincorporated Limestone Township

five miles outside Borland's hometown of Peoria.

Cochran and Borland shared an office at Nicklaus Golf Services for seven years until the time of Borland's death. Jacobson had worked with Borland and Cochran at Nicklaus in 1990 prior to starting his own firm. The men and their families

had been friends for 10 years.

"Nicklaus Design wanted to make sure that Bruce's design was completed and that the course got built," said Cochran, who will be the lead architect on the project. "I have some work in Kansas City and other places in the Midwest, so with the course being in Peoria, it made

'At the memorial service for Bruce, several of us decided to pool our resources to fulfill his contract with the golf course developer so that the funds would still be donated to the church.

- Rick Jacobson

sense for me to do it."

Cochran and Jacobson offered to finish Covote Creek because Borland had agreed to donate his entire design fee for the project to the Palm Beach Community Church in Palm Beach Gardens, Fla., where he was an active member. By agreeing to finish Borland's work without compensation, Cochran and Jacobson ensured the church will receive the full amount of the donation.

'At the memorial service for Bruce (on Oct. 28), several of us decided to pool our resources to fulfill his contract with the golf course developer so that the funds would still be donated to the church," Jacobson said. Jacobson's firm is based in suburban Chicago. He plans to travel to the site frequently.

The involvement of Cochran and Jacobson also ensures that Coyote Creek will be the world's only Bruce Borland Signature Course and will fulfill the realization of his dream of building a course near his hometown.

Bruce attended high school in Bartonville just outside Peoria, and it was a lifelong dream of his to come back to his hometown and build a golf course," said Stephen Chitwood, president of Coyote Creek Development Corp. "It's really great that they can do this in honor of Bruce."

Borland had largely completed the design of the rolling, 6,700yard, par-71 upscale daily-fee course and had been to the site four times. He had been scheduled to travel to Peoria on Oct. 26, the day after the fatal crash.

Because of extensive wooded areas and the rolling terrain, some massaging will be necessary during the construction phase, which began in September, according to Jacobson. Shaping of greens and bunkers to blend with the existing topography of the site also will be necessarv, he said.

The club will have a full practice facility and elevation changes of up to 80 feet from tee to green in some areas. The course is scheduled to open in 2001.

Cochran and Jacobson visited the site together for the first time on Dec. 8.

"It'll be a nice golf course," Cochran said. "It has a lot of character. Everybody involved from the developers to the construction company is highly motivated to finish the project."

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Arnold resigns GCBAA post

CHAPEL HILL, N.C. — Phil Arnold, executive vice president of the Golf Course Builders Association of America (GCBAA) since 1991, will leave the post March 1 to devote full time to his golf course photography business.

"The association has been very good to me," said Arnold, the association's first full-time, paid staff member, "but I got an opportunity as a photographer that might never come my way again and I felt I had to take it. And the association might benefit from a fresh perspective on the new challenges it will be facing."

"Phil has done an absolutely great job taking the GCBAA from infancy to one that all of us are very proud of," said President Bill Kubly of Landscapes Unlimited. "Phil deserves a lot of the credit for that. We will miss him, but he has the organization in such good condition that this is as good a time as any to make a change. We wish him well as a photographer." Arnold resigned as associate general counsel to the National Golf Foundation to succeed Don Rossi, the GCBAA's semi-retired, part-time executive

director who had died a year earlier. When Arnold took over, the association had 66 members and annual expenses of \$53,000, slightly more than its revenues.

The GCBAA enters the Year 2000 with more than 250 members and revenues approaching \$500,000, some of which is directed to the association's own public-service effort, Sticks For Kids, and the industry-wide initiative, The First Tee program.

The organization now has two full-time staff members in addition to Arnold.

Arnold is generally credited with developing an aura of professionalism for the course construction industry by forging links with the other major associations, especially the American Society of Golf Course Architects, National Golf Course Owners Association, National Golf Foundation, Club Managers Association of America, PGA of America, Golf Course Superintendents Association of America and U.S. Golf Association.

The Certified Golf Course Builder program, established in 1992, was a linchpin of that effort.

Another major achievement under Arnold's watch was the introduction of an annual summer meeting and trade show in conjunction with the PGA Championship.

He instituted educational programs at that meeting to give the builders a broad perspective on the game and culture of golf as well as updates on construction techniques and regulatory issues.

"Our executive committee has met and will determine how to go about replacing Phil," Kubly said. "We have had several inquiries already from from competent people."

Kern completing Purgatory GC

NOBLESVILLE, Ind. — Purgatory Golf Club, designed by Ron Kern of Carmel, is nearing completion in this Indianapolis suburb, and opening day is targeted for late spring.

Sitting on on 218 acres, the 18-hole course has six sets of tees playing from 7,600 to 4,200 yards.

Five large lakes and approximately 150 bunkers will provide definition and strategy .

The practice areas will include a large range with target greens, a practice putting green and short-game practice area consisting of a large green with three bunkers, chipping areas and two short fairways.

Since the existing topography was "rather featureless," he said, he had to manufacture the land-scape. "During a trip to study the links of Scotland, I was fascinated with the beauty and character of the landscape and how the courses are located within that landscape."

"I would never be so presumptuous to claim to have built a links course in the middle of Indiana farm country on heavy clay soils with the ocean nowhere in sight. However, links courses such as Cruden Bay, Nairn, Royal Aberdeen and Royal Dornoch provided the inspiration for constructing the land forms that shape each golf hole at Purgatory."



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SunCor works with Audubon in Arizona

SCOTTSDALE, Ariz. — Sanctuary Golf Course at Westworld, SunCor Resort and Golf Management's new 18-hole daily-fee facility here, opened to the public in November as the first Audubon International (AI) Signature course in the Valley of the Sun.

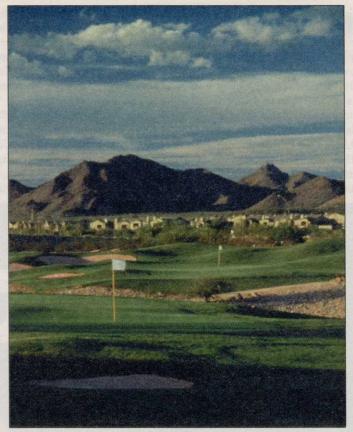
Tom Patrick, vice president of SunCor Resort and Golf Management, said: "We are extremely proud to be able to offer a golf course that provides so many opportunities. I don't think anyone who plays Sanctuary will leave disappointed because there's something here for everyone."

Sanctuary was built under the supervision and regulations of Audubon International, primarily within the city of Scottsdale and Bureau of Reclamation stormwater retention area.

To attain the certification as an Audubon Signature Property, the Audubon's requirements were incorporated into the earliest design phases of the development.

"Sanctuary has done an excellent job of integrating the golf course with the environment," said Dr. Bud Smart, director of AI's Department of Environmental Planning. "One feature the golf course has incorporated that is beneficial to the entire area is on-site re-charge wells that re-purify run-off water from the golf course and return it to the ground, replenishing the area's natural water source."

Randy Heckenkemper designed the 6,650-yard, par-71 course to take advantage of the land's natural topography and vegetation.



Sanctuary Golf Course at Westworld is close to au natural in the Valley of the Sun.

Miller, Pascuzzo aim for Scottish recreation in Calif.

SAN RAMON, Calif. — Inspired by the links course at Royal Dornoch in Northern Scotland, the 18-hole Bridges Golf Club opened to the public here on Nov. 19.

Set amidst rolling terrain, sand and water, the course is a collaborative effort between Johnny Miller Design Ltd. and architectural firm Graves and Pascuzzo Ltd.

The openness and austerity of The Bridges Golf Club reflects the look of golf courses in Northern Scotland, with natural landforms and hillsides. More than 115 acres of native shrubs and bushes were planted to represent the abundant gorse surrounding the links at Royal Dornoch.

"While designing this course, I was directly influenced by things I saw in Scotland," said Damiam Pascuzzo. "I feel



The 17th hole at The Bridges at Gale Ranch in San Ramon, Calif.

golf should be more about adventure and challenges and I wanted to create a course different than anything else in the marketplace."

The Bridges features 150,000 square feet of sand and stacked face bunkers, and natural riparian channel that runs

through 16 of the 18 holes. The threetiered 18th green is 16,000 square feet and can be played from multiple approaches.

The course plays to a par-73 from five sets of tee boxes and measures 7,100 yards from the tips.

Rainville, Bye sign with San Clemente, begin Yucaipa

SAN CLEMENTE, Calif. — The city of San Clemente has selected Rainville & Bye Golf Course Architects to prepare a master plan for improvements to the 71-year-old San Clemente Municipal Golf Course.

According to Gary Bye, the first phase of renovation of the 6,447-yard, par-72 course is set to begin in mid-2000, with completion slated for December.

Situated on more than 125 acres, the renovation may include the repositioning of some tees and greens. In addition, the firm will redesign all of the greenside bunkers and several fairway bunkers. Rainville & Bye will also revamp the golf cart paths, add new plantings, upgrade

protective fencing and suggest drainage improvements that may be necessary.

"This project will be quite challenging due to the fact that the course — one of the busiest municipal tracks in the nation — will remain open during the entire design and construction phase," Bye said. "We will incorporate some unique design and construction features which will significantly add more interest without slowing down play. We look forward to making suggestions which will enhance this exceptional course, yet can be enjoyed by all levels of golfers."

Hosting between 110,000 and 120,000 rounds of golf each year, San Clemente Municipal Golf Course is one of the old-

est courses in Southern California. Its front nine was designed and built in 1928, with the back nine, designed by William Bell, added in 1955.

Meanwhile, construction is underway on the 6,910-yard, 18-hole Yucaipa Valley Golf Club in Yucaipa, the first new course to be built in the East Valley area of San Bernardino County in more than 30 years.

The \$10 million public course is part of the Chapman Heights master-planned community being developed by Anaheimbased Communities Southwest. Situated on 160 acres, the 72-par layout will include four lakes, and a natural-turf driving range.

Schmidt & Curley finish Skins course

INDIO, Calif. — Schmidt-Curley Design of Scottsdale, Ariz., putting the finishing touches on Landmark Golf Club here in time for "The Skins Game," which it will host for the next five years. The picturesque 36-hole facility opened for public play Nov. 1, with "The Skins Game" being held Thanksgiving weekend.

"The two courses will offer dramatic panoramic views of the Caochella Valley," said Lee Schmidt, a principal of Schmidt-Curley Design. "There is also over 100 feet of elevation change, which is very uncharacteristic of desert courses. Mesquite-covered dunes, barren foothills and plenty of rich-reward golf strategies will add beauty and excitement to the two courses."

Construction on other Schmidt-Curley courses is also progressing on schedule at the 36-hole home of the Southern California Section of the PGA in Beaumont; Sunrise Colony courses at both Las Vegas (Siena) and Houston (Royal Oaks with Fred Couples); Talega in San Clemente and Santa Fe Valley in Rancho Santa Fe, both with Fred Couples; and, Marriott's latest highend facility in Palm Desert, with Nick Faldo.

Meanwhile, Schmidt-Curley Design is designing a course on the Las Vegas Strip. The Walters Group, developers and operators of five courses in Las Vegas, selected Schmidt-Curley Design for its latest high-end facility located between The Strip and Interstate 15 across the street from Mandalay Bay Resort.

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Texans eye amateurs

Continued from page 31

graders participating in Houston Independent School District's Outdoor Education Program;

• The Spirit, a made-for-TV amateur golf event, featuring a rainbow of national champions from sixty countries, to be played at Whispering Pines in October 2001.

Whispering Pines Golf Club is scheduled to open in March

Corby Robertson says that he and Gilbert always intended for the layout to be "memorable and revered," as is Marvin Leonard's Colonial Country Club in Fort Worth, Texas. They also hope it will become the stuff of legends, like James Tufts and Donald Ross' Pinehurst #2, William Fownes' Oakmont, or George A. Crump's Pine Valley.

In reality, many golf projects start with high hopes only to be sidetracked by land plans for housing developments or bottom lines. There are, however, similarities in this Texas project and the story of how Pinehurst #2 grew out of one man's vision and devotion to amateurism another's creativity.

For instance, the Robertson and Gilbert course is built among tall loblolly pines and stately oaks, over rolling hills, crossed by meandering creeks. The land is somewhat similar in look and feel to the sandhills of North Carolina. The designer hired to make the Texans' dream a reality — Chet Williams of Golden Bear Designs — says that Whispering Pines will have "interesting and challenging putting surfaces that "take full advantage of the natural shape and coutour of the land."

Like James Tufts, Corby Robertson had already laid out some holes on the property prior to hiring an architect. Chris Gilbert says that visitors were invited to play a game called "olf," as in golf without the "g" and without "real greens." When the Texans consulted an architect, their routing passed muster while Tufts' holes were totally re-vamped by Donald Ross.

Golden Bear's Chet Williams acknowledges only minor alterations. "I basically added variety and challenge with green design. The greens range in size from 4,300 square feet to 9,000 square feet and range in contour from gentle to significant." Williams, who first saw the acreage in 1994, admits he was lucky to be selected as architect. "Opportunities such as this don't come along often," he says. "This 7,300 yards layout was built just for golf and the plan took full advantage of the areas' sandy hills and natural features. Caney Creek, which runs along the perimeter of the property, and Lake Livingston are part of the

scenery on the last seven holes."

Now, with the scheduled opening only months away, Corby Robertson and Chris Gilbert have announced plans to give their "labor of love" to charity. In 1999, the Texans created the World Health & Golf Association—to "enhance human health and understanding" for that purpose.

The World Health & Golf Association will raise funds via individual, corporate, and charitable memberships and "donors" will automatically become members of Whispering Pines and will be able to access the course between Oct. 1 and May 20, except for tournament dates set aside for The Spirit or other competitive events. During the summer months, Whispering Pines' 18 championship holes, plus a three-hole teach-

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ing and practice facility, will provide a golf foundation for campers as well as the 5,000 fifth grade students participating in a First Tee program supervised by PGA and LPGA professionals.

The third week of October, 2001, Whispering Pines will become a world golf venue and Camp Olympia will become a village and home to golf's greatest amateurs, men and women invited to compete individually and

as teams. The resulting television production will be packaged for broadcast worldwide. Funds collected via donation or sale of the TV package will support not only the Texas Medical Center and First Tee program but also will be distributed to the sponsoring golf associations of each nation to help defray travel costs.

Corby Robertson and Chris Gilbert's dream of a world united

Continued on next page





Renovation seminars

Continued from page 31 March 17); and Los Angeles (Riviera Country Club, April 12).

ASGCA President John LaFoy will headline each event and will be joined at each venue by a panel of ASGCA architects. Among those slated to speak are past presidents Ed Seay (Chicago), Mike Hurdzan (New York), and Arthur Hills (Atlanta).

"Remodeling University is a must for any-

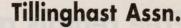
remodeling process," said LaFoy. "Whether it's keeping up with technology or the competition, most clubs will consider a remodeling project ... in the next few years. While there are no universal solutions with golf courses, Remodeling University will help public and private course representatives ask the right questions in this process."

The accredited panel at each venue will discuss many remodeling and restoration issues such as the basics of remodeling; budgeting and planning; and the roles and

tect, superintendent and green committee.

The ASGCA is working with the Chicago District Golf Association, Georgia State Golf Association, Metropolitan Golf Association and Southern California Golf Association to co-sponsor and stage the events.

People may get registration forms from the ASGCA, 221 North LaSalle St., Suite 3600, Chicago, Ill. 60601, or register online from the ASGCA web site at www.golfdesign.org. For additional information, contact Tony Hourston at 312-372-7090, or via e-mail at asgca@selz.com.



Continued from page 31

be featured on the association's web page: http://tillinghast.net. Along with those entries will be articles written by members.

"When we visit Tillinghast courses we will write about them and invite others to write as well," Trebus said. "A lot of people are restoring Tillinghast courses and writing about their projects."

By word of mouth, the association already has more than 70 members, Trebus said. Richard Wolffe is the vice president and Stuart, his son, vice president of research.

They are planning their first meeting for sometime this fall at either Shawnee Country Club in Pennsylvania or Bethpage State Park in New York. Shawnee was Tillinghast's first design and Bethpage's three courses were among his last.

Asked what he most admires about Tillinghast, Trebus said: "He was a real traditionalist. He was not gimmicky at all. He rewarded for a good shot and penalized for a bad shot, but not severely. Tillinghast courses have wide fairways with entranceways to the green. You stray and you're hitting over trouble to the green. He knew how to use trees — for the game, not as markers... And he used bunkers for strategic golf.

Membership is tied to the two books TreeWolf Productions has published on Tillinghast. A third book, "Gleanings by the Wayside," is due out by the end of 2000 or early 2001.

Growth of the association "just seems to be happening," Trebus said. "We developed this web site. People are telling other people and they are asking to join. If you own both books you get a free membership. If not, you buy them."

To join, people should contact e-mail: btrebus@bellatlantic.net.

Texans & youths

Continued from previous page

by golf may seem far-fetched at first blush. However, the two have proven track records with ventures where everyone seems to win. One is Camp Olympia. Another is Davenport Ranch in Austin, Texas, where Robertson and his sister Beth Robertson Morian built high-end housing, Austin Country Club's excellent Pete Dye course, and Wild Basin, a nature preserve created with donated land. For three generations, the Robertson family has supported the Texas Medical Center's programs for international health care, teaching programs, and research.

Additional information is available by calling Angela Atkins, Vice President for Development at (713) 751-7568.





Free rentals and clubs for kids at Myrtle Beach Nat'l

MYRTLE BEACH, S.C. — Myrtle Beach National courses are offering free club rentals and golf for kids. By calling Tee Time Central and scheduling tee times, golfers can get free club rentals, discounts on greens fees and carts as well as specials for kids playing free with a coupon.

Based on which of National's

eight courses they choose, golfers may select from such name brands as Taylor Made, Titleist DCI's, Ram FX's, Ping and Top Flite models. In the afternoons, kids can play for free accompanied by a paid adult. Discounts on greens fees and carts are also available by booking through the hotel or Tee Time Central.

"We're extremely proud to be able to offer these deluxe services to our golfers," said Jim Woodring, director of golf operations for the Myrtle Beach National Co. "We strive to provide the best golf experience possible to our golfers whether it be in the clubs we provide, the overall course conditioning or the specials we offer to ensure families and all levels of golfers a memorable experience."

Courses participating include West Course and South Creek at Myrtle Beach National, The Long Bay Club, Waterway Hills, King's North, River Club, Willbrook Plantation and Litchfield Country Club.

Reaching out

This package of stories is one of an ongoing series covering initiatives and projects developed to bring new golfers into the game, particularly youths and minorities. People wishing to submit projects for articles should contact the editorial department of *Golf Course News* at P.O. Box 997, Yarmouth, Maine 04096; e-mail:

mleslie@golfcoursenews.com

Clubhouses designed for First Tee

JACKSONVILLE BEACH, Fla. — Prato, Lane & Heumann/Architects, P.A., has completed a portfolio of golf course clubhouse designs for The First Tee program.

The First Tee's mission is to create facilities and programs that make golf more affordable and accessible for youths of all races and economic backgrounds.

The four regional PLHA designs range in size from 2,000 to 5,000 square feet and include an instructional component. All designs would be applicable to any First Tee facility throughout the country, according to the firm.

PLHA was part of a team formed to provide any First Tee franchisee the opportunity to obtain complete and seamless design-build services — from design through construction.

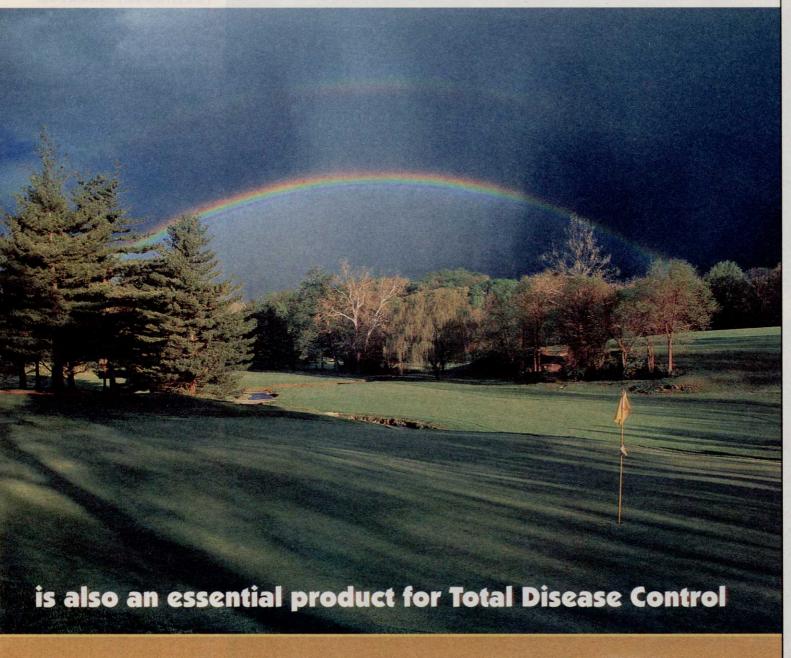
The other team members joining Prato, Lane & Heumann were DB International Golf Group LLC, a design/build company that will provide construction services, and Clubhouse Interiors, which will offer complete interior design and installation services.

"Prato, Lane & Heumann has provided some very exciting clubhouse designs for First Tee Chapters that can be adapted to meet every budget and scope," said Matt Strelo, The First Tee's director of facility services. "The concept enables each facility to have a unique, highly designed and functional learning center at the most efficient price possible."

TEES FOR KIDS URGED

Junior club maker U.S. KIDS GOLF announced its Personal Tee program in which it's urging courses to add two up-front tee boxes on every hole, thus creating par-3 options to build confidence in children and beginners. PGA Master Pro John Godwin was named the program's director of player development.

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LGD gives juniors a home on the range

INDIANAPOLIS — Lohmann Golf Designs (LGD) has devised an innovative solution to one of golf's long-standing dilemmas: How does a course or club foster junior play without turning young, inexperienced players loose on the course, where they will almost certainly irk adult golfers with slow play?

By routing and constructing a four-hole junior course within the practice range itself, LGD has settled the issue here at Highland Country Club. Now under construction, this breakthrough practice-facility concept will debut in May.

"This idea makes so much sense, it's hard to believe the Highland facility will be the first of its kind," said architect Bob Lohmann, founder and principal of Marengo, Ill.-based LGD. "The club can choose when to close the range and turn the kids loose. When they're ready to tackle the big course, so much the better. But this junior routing gives kids a place to themselves, a place to learn the game without inconveniencing adult players."

The junior course at Highland CC is part of a larger range renovation project. Highland's old practice tee was a measly 20,000 square feet. The new one will be moved back and expanded to 61,000 square feet. Working with its sister construction firm, Golf Creations, LGD has also sunken the landing area some 10 feet, instituted target greens/bunkers, and added another 15 feet of netting.

"Come next spring, you'll be able to hit driver on the range — but the junior routing is what makes this project exciting," said Lohmann. "We've designed the target greens to accept shots from the six small tee pads we built within the range itself. We figure the various combinations allow kids to play nine different holes.

"When I was a kid, I wasn't allowed to play the big course at Hartford [Wis.] Country Club—not until I learned how to handle myself properly," he added. "So I was sent to a practice field, which consisted of several rudimentary holes with small greens. It was a perfect learning environment because I could hit as many balls as I wanted, and I didn't have to worry about speed of play or bothering adult golfers."

Of course, land is too expensive nowadays to justify "practice fields." That, Lohmann said, is the beauty of the junior routing at Highland. LGD has given junior players a course of their own and doubled the usage of 7 acres that might otherwise have been traversed by no one but the range picker.

As outgoing president of the American Society of Golf Course Architects, Lohmann recently donated his \$5,000 President's Grant to The Golf Foundation of Wisconsin. The Foundation, Wadsworth Construction of Plainfield, Ill., and Lohmann have earmarked this funding for the Kids On Course program,

which provides free golf instruction, equipment and transportation for Milwaukee youths, as well as separate instructional programs for Special Olympians.

Kids On Course operates out of the Noyes Park practice facility in Milwaukee, where LGD is creating a chipping/putting area and a two-hole junior course.

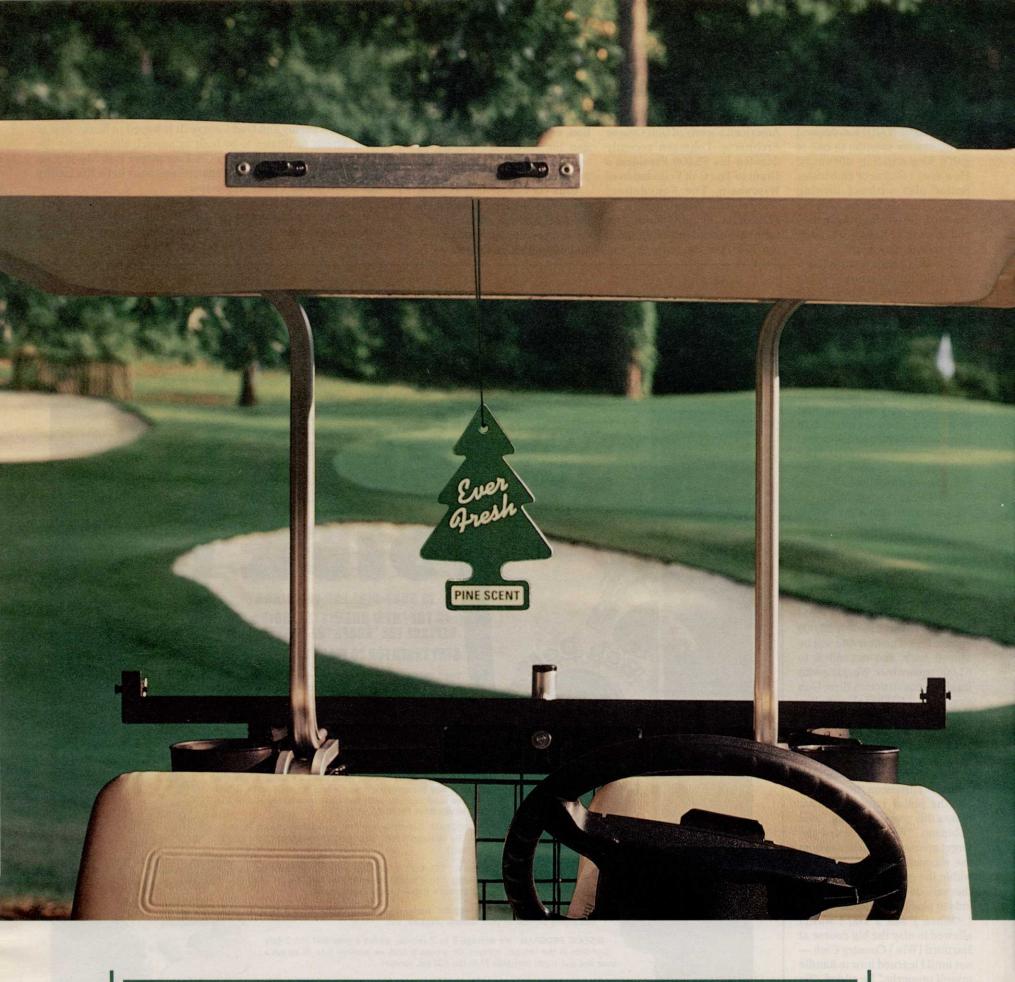
First Hook A Kid on Golf finished

VALPARAISO, Ind. — Construction is complete on the nation's first-ever Hook A Kid On Golf model facility here, the Creekside Training Academy and Golf Course. It is hoped to be the first of many similar facilitates to be built by municipalities across the nation. Introduced by Senior PGA Tour player Bob Murphy on July 14, 1998, at the ground-breaking ceremony here, the facility was built by Don Childs Associates.

Creekside has been selected and endorsed as a site by First Tee, which has supported the city of Valparaiso with limited funding, equipment, and resources that will be key to growing it's already active juniors golf programs.



GOLF COURSE NEWS January 2000 41



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METHOW VALLEY TAKES HIT

It's been a bad year for golf in Washington's remote Methow Valley. Earlier, Winthrop's Bear Creek Golf Couse shelved plans to add nine holes to its existing nine. In late spring, with the Methow River running at flood, the National Marine Fisheries Service shut off all irrigation ditches which rose in or ran through National Forest lands.

Relying on one of these ditches was the Sunny Meadows Golf Resort, which featured a small par-3 venue among its amenities. Barely surviving financially, a buyer was found for the familyowned property, but when Fisheries shut off the water, and made no promises of its return, the buyer left.

The bentgrass greens and half the fairways parched, and the owners are now facing bankruptcy.

After 3 decades, Arrowleaf throws in the towel

By BOB SPIWAK

MAZAMA, Wash. — After almost 30 years of attempts to gain a destination resort in Washington state, the last of three developers has given up. With planned development on 1,200 acres in the upper Methow Valley, which included an 18-hole Robert Cupp course, the R.D. Merrill Co. an-

nounced Dec. 7 that it was quashing its plans for a golf course, lodge and upscale housing.

Had this succeeded it would have been only the second 18hole course in Washington's largest county. Environmental blockage, appeals, court hearings, from the U.S. Supreme Court (which ruled favorably on two of four issues) down to the county level were the death knell for earlier developers. The current owners cited delays and lack of cooperation by the state Department of Ecology over water issues for the surrender.

On Oct. 15, the state Department of Ecology (DOE) released "Tentative findings" for water rights for the project. These rulings did not look favorable, but the developers hoped to have DOE's final reports in order to appeal the findings. However, DOE informed Merrill that a final decision could take as much as a year.

This prompted Merrill Chief Executive Officer Charlie Wright to observe, "We have tried to work with Ecology for seven years and have been frustrated by their inability to, among other things, meet committed deadlines."

The Methow Valley rises on the east slope of the Cascade Mountains, and its upper end resembles Yosemite. The pristine Methow River runs through it, snaking 70 miles to the Columbia River.

The entire valley is populated by barely 4,000 people. Surrounded by mountains and a 2,000-foot sheer cliff, the site of the course was described by architect Bob Graves as "...about the most beautiful location I have ever seen [for a course]."

Graves had designed an 18-hole course for the previous developer, Methow Recreation, Inc. a decade earlier before environmental opposition forced that owner into bankruptcy.

In the early 1970s, the Aspen Corporation had planned a resort in the same area, but with the emphasis on downhill skiing. Resistance was sufficient for Aspen to sell out in 1985 and take its money to develop around Whistler, British Columbia, Canada.

The new owners were confronted with fierce opposition from a local environmental group, which was frequently augmented by larger, national groups such as the Sierra Club.

The process continued, through millions of dollars in development and legal expenses, and it was during the tenure of Methow Recreation, Inc. that Bob Graves was called upon to design an 18-hole course, which was to include a golf academy and other amenities.

When Methow Recreation was in danger of defaulting on its loans, the land was bought by the Merrill Co. of Seattle, in 1992 in partnership with Lowe Development Corp. Wanting a fresh start, Graves' plans were aban-

Continued on next page





TATHAM, Ga. — The University of Georgia and Dr. Stan Coley have enjoyed a scholarly and, indeed, familial relationship over the last 40 years. Coley has earned three advanced degrees from the school, and in turn prided the school with his groundbreaking research in embryology. In November, however, the two celebrate a groundbreaking of a different sort with the formal announcement of The Georgia Club, a 1,000-acre mixed-use development here featuring two golf courses designed by Denis Griffiths.

The Georgia Club is the combined vision of Coley and the University of Georgia National Alumni Association. Coley and his partners, Donal Geaney and Derek Quinlan, are developing the property with the purpose of bringing forth a special enclave dedicated to providing association members with a world-class resort and private club amenities.

The groundbreaking celebrated the first amenity at The Georgia Club, an 18-hole championship golf course.

The highlight came when The Georgia Club gave a check to the UGA National Alumni Association for \$1 million. The funding represents The Georgia Club's long-term commitment to the association and its programs.

"This is truly a milestone day for our association and its members," said the alumni association's executive director, Dave Muia. "Certainly, we're grateful for The Georgia Club's generosity to the National Alumni Association, but we

Colligan designing two in Texas

ARLINGTON, Texas — John C. Colligan has started construction on two area golf courses — Squaw Valley North, in Glen Rose, and Mansfield National Golf Club, just off SH 360 in Mansfield.

Squaw Valley North will become the second 18-hole undertaking for Somervell County, complementing the existing golf course on which Colligan was project architect.

Both courses are scheduled to open in the fall of 2000.

Arrowleaf 'dead'

Continued from previous page

doned and Bob Cupp was hired to design the new course on the development, which was renamed Arrowleaf. However seven years and a reported \$15 million later, with no end in sight in the ongoing conflicts with the DOE, Merrill Chairman Charlie Wright opted to abandon the project. Ironically, 14 miles away at Bear Creek Golf Course in Winthrop, the owners' plans to add nine holes to the existing nine were thwarted by the DOE's sloth in acting on water permits. For five years, Bear Creek's paperwork was shelved from year to year, with the owners having to pay the agency annually to renew the permit applications. Bear Creek had had enough and cancelled its expansion plans.

In his office, Merrill Project Manager Terry O'Reilly summed his feelings up as he gathered up now-defunct golf course plans. "We had the vision and the plan, but the Department of Ecology just didn't have the will."

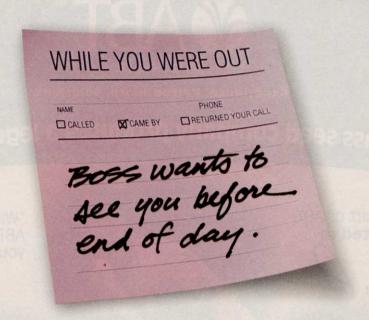
Georgia alumni welcome development for rec, fellowship

equally appreciate and fully applaud the efforts of Dr. Coley and his partners in bringing this landmark development to fruition. It will be an enormous asset to our membership."

"The Georgia Club is committed to financially support the National Alumni Association's efforts," Coley said. "Today, we also dedicate our talents for the purpose of expanding the avenues through which alumni members can stay connected to the University of Georgia. We will do so in a setting of recreation, fellowship, and reflection, to enhance the value of their collegiate experience."

The master plan for The Georgia Club calls for the two 18-hole golf courses, a gated member's club, a swim and tennis club, guest cottages, fitness center, tailgating fields, a 250-room hotel, plus a variety of single-family homes and villa residences. There are also plans for a 66-acre business park set along the University Parkway corridor.

The first of the two courses is under construction and is scheduled to formally open in the spring of 2001. It will offer membership to UGA National Alumni Association members. It will also accept limited outside play. The second course planned for the spring of 2002 is expected to be a private facility for exclusive use of club members.



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Ken Morgan forms design firm

GULF BREEZE, Fla. — William Kenneth 'Ken' Morgan has formed Morgan Golf Design, Inc., offering services for new course design, restoration, renovation, and the design of practice and teaching facilities.

Morgan has been senior design associate for Jerry Pate Golf Design in Pensacola, and production assistant and site coordinator for Jack Nicklaus Golf Services in North Palm Beach. He has been in the golf course design business for 10 years and his project experience has focused primarily on planning, design, and construction supervision of golf course design projects.

Morgan has a bachelor's degree in landscape architecture from the University of Georgia. The company is located at 121 San Carlos Ave., Gulf Breeze, Fla. 32561; 850-916-9785.



Camelback GC redo costs \$12M

SCOTTSDALE, Ariz. — Camelback Golf Club at Marriott's Camelback Inn is completing a \$12.1-million enhancement project that will include a complete redesign of the Padre Course and practice range, along with an expanded clubhouse, pro shop and restaurant

During the renovation period, which ends Dec. 31, the Indian Bend course has remained open.

The course renovation has been designed by Arthur Hills.

"The golfing experience at the new Padre golf course will be very unique to the Southwest," said Hills project manager Chris Wilczynski. "The course is not within a desert setting like most golf courses in this area. It is a parkland setting with large mature trees and lush green turf."

The finished product will be a classic course design with strategic bunkering, traditional square tees and very subtle land forms. Every hole will feature a new green, tees and bunkers. While some holes will maintain their current routing, others will be rerouted to increase the overall playability, competitiveness and appeal.

In addition to lengthening the course from 6,500 to 6,800 yards, three lakes are being added to create extra beauty and challenge.

Gibbs bringing longest hole to United States

MARQUETTE, Mich. — First he constructed the world's largest putting green. Then he built an "exact replica" of Abe Lincoln's Springfield, Ill., home, followed by a replica of Bishop Baraga's home. Marquette's Joe Gibbs now has a new goal. He wants to build the world's longest golf hole at his Chocolay Downs Golf Course, larger even than the 964-yard-long, par-7 7th hole at Satsuki Golf Club in Sano, Japan.

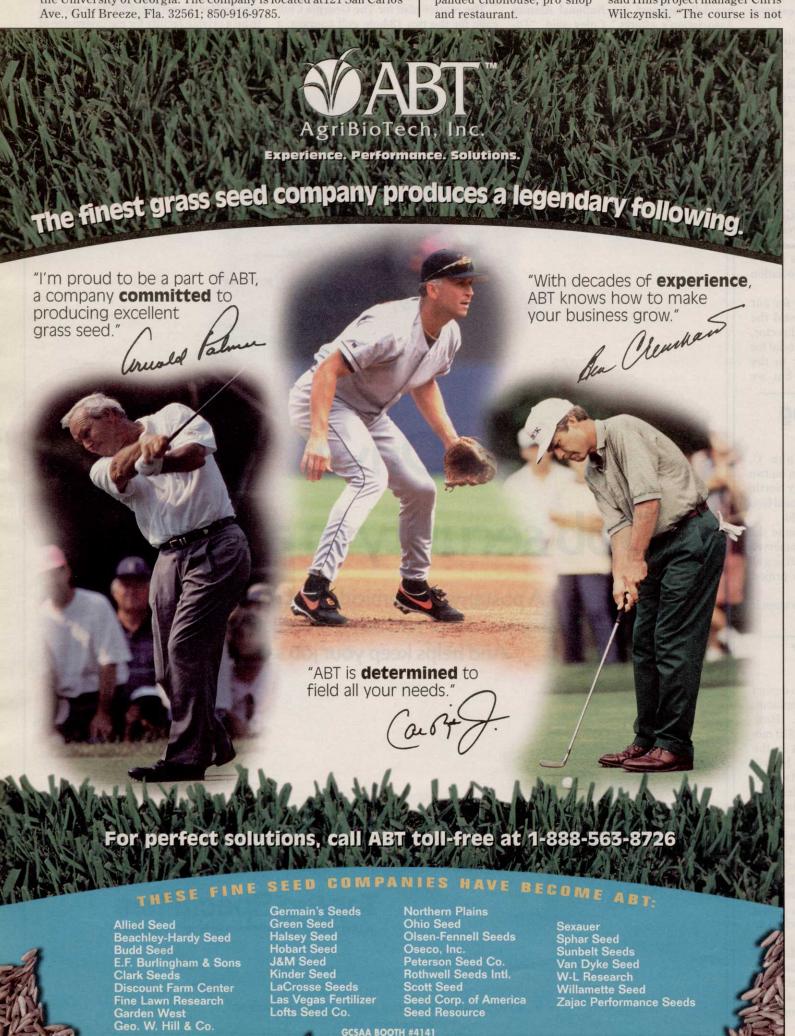
Gibbs intends to claim the record for the United States by building his 8th hole more than 965 yards long. The hole will be part of an additional nine holes now under construction at the 18-hole public golf course. The new nine will bring the number of holes up to 27 when completed in the year 2000.

Gibbs said part of his motivation is related to growing up in the World War II era, and remembering well the war with Japan.

"It just seems proper that the longest hole in the world should not be in Japan, but right here in the good old United States of America," he said. "We're very, very fortunate in that we have a lot of land to work with here. We have 604 acres, and with that we can be very liberal with the course layout."

"We've got 728 yards of fairway cleared right now, stretching from the blue tees to the center of the green. We'll be putting in a "tiger tee" about another 240 yards or so back," said Gibbs. "You'll have to be a longball hitter to play from the tiger tee. There won't be any fairway between the blue tees and the tiger tee — just a natural area and a landing zone."

The 728 yards of fairway will also be a forgiving 200 yards wide.



GOLF COURSE NEWS



BRIEFS



WHITE JOINS DPC

ORLANDO, Fla. - Douglas White has been named vice president of operations and business development by Diamond Players Club (DPC). The Orlando-based company operates Sweetwater Country Club and Diamond Players



Wekiva, Club both in Longwood, and has just opened Diamond Players Club Clermont. All are in greater Orlando. White, a former Granite

Golf, Inc. vice president, will direct the operations of the company's existing courses, and integrate the planning for additional courses around the country with other business opportunities, such as a golf and travel club and DPC brand-name merchandise. At Granite, White opened more than two dozen new courses and clubhouses over the past five years. White is a graduate of the University of South Carolina with a bachelor's of science degree in

CLUBCORP, CYPRESS FINALIZE DEAL

hotel, restaurant and tourism.

ClubCorp, (ClubCorp) and the Cypress Group LLC (Cypress), a New York-based pri-

vate equity firm, have closed on a \$300 million investment commitment to ClubCorp. In conjunction with this transaction, two rep-



resentatives from Cypress, James L. Singleton and Bahram Shirazi, have joined the board of directors of ClubCorp.

HONOURS MAKES ALA. PURCHASE

BIRMINGHAM, Ala .- Honours Golf, a company specializing in the development, acquisition and management of upscale golf courses throughout the Southeastern United States, has purchased Peninsula Golf & Racquet Club in Gulf Shores, Ala. This marks the second Honours acquisition in recent months along Alabama's Gulf Coast, coming on the heels of the purchase of Rock Creek in Fairhope. "Our goal at Honours Golf is to create a strong brand identity among golfers at every level," said Honours Chief Executive Officer Bob Barrett.

ClubCorp, Golden Bear launch Bear's Best concept

Joint-venture partnership to develop unique golf courses in Atlanta and Las Vegas

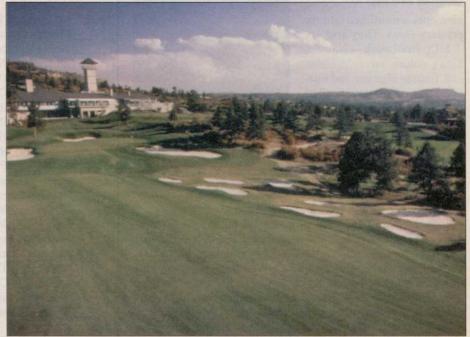
ALLAS — ClubCorp and Golden Bear International will develop two new properties under the signature name "Bear's Best." The first Bear's Best courses will be located northeast of Atlanta and in the western Las

The new public-access courses will feature replications of golf course designer Jack Nicklaus' favorite hole designs, such as Elk River No. 6, Castle Pines No. 18, and Muirfield Village Nos. 11 and 12.

"Over the past 30 years, I have had the opportunity to design nearly 200 courses and in just about every corner of the world," said Nicklaus, chairman of Golden Bear International. "There are certain holes that I have enjoyed designing and ones we hope have given golfers a lasting memory.'

The Bear's Best courses will be designed for group play. "These courses will meet a significant need for corporate entertainment and events," said ClubCorp Chief Operating Officer Jim Hinckley.

Sections of the practice facilities will



The 18th hole at Nicklaus-designed Castle Rock will likely be one of the replicas to show up at Bear's Best.

be reserved for each group. Electronic signage will direct individuals to their group's location. A catering staff will attend to the players' food and beverage needs immediately before and after play. Multiple bag drop-off points and parking will facili-

tate larger groups. Each location will feature a golf learning center for clinics.

ClubCorp and Golden Bear International launched the joint venture partnership in July 1998 to develop new proper-Continued on page 52

Too many signs, too little time COYOTE LAKES

Coyote Lakes Golf Club in Surprise, Ariz.

Editor's note: This is the final installment of a three-part series on managing the process of creating and nurturing a golf course's visual image, signage course details and printed graphics.
By FORREST RICHARDSON

n the first two installments, the topics were image and the arrival statement. These two areas are the most critical to creating a solid and memorable experience in terms of course image.

In the golf business, positive first impressions are essential. As we build more courses, the choices golfers have with regard to where to spend their dollars also grow.

The golfer can already choose from several types of daily-fee courses, ranging from pseudo-municipal to high-end resort. It is almost impossible to accurately classify courses the way we have come to know them: private, dailyfee, resort, municipal, etc.

The lines between types of courses are becoming blurry. Some resort courses are being built on adjacent public land and hence are part municipal to satisfy development agreements.

Indian communities are building courses that are often resort, daily-fee, municipal and private all at once. All this translates into a need for managers and owners to make sure that first impressions are well above par. It makes good business sense to build a positive and lasting image. Course names, visual image and the arrival statement at the clubhouse drive, and approach to the first tee, all need to be much more than adequate. They need to be crafted and thought out every bit as much as the detailing of bunkers and putting surfaces.

INDIVIDUAL ELEMENTS

We have developed a classification system in which course image and graphic Continued on page 48

KemperSports to manage four New Orleans golf courses

NEW ORLEANS - The City Park Improvement Association (CPIA) here has signed KemperSports Management to operate Bayou Oaks, a 72-hole public golf

'City Park chose KemperSports because of its outstanding national reputation for excellence in managing multiple course municipal operations," said CPIA President Judge C. Hearn Taylor. "We have heard great reports about the work KemperSports has done in Chicago and Cincinnati to revitalize their golf programs.'

Located 10 minutes from downtown. Bayou Oaks attractsahighvolume of golfers. Each course features oak and cypress



tree-lined fairways, bunkers and plenty of

Layouts include the Championship Course, a par-72, 7061-yard course consistently rated one of top 10 "Best Public Courses" in Louisiana by Golf Digest and current home of the New Orleans Metro Championships and former host of the USGA Public Links Qualifier; The Wisner Course, a par-72 measuring 6,968 yards and also ranked among the "Best Public Courses" in the state by Golf Digest, the Lakeside Course, a par-70 measuring 6,054 yards; and the Little Course, a par-71 measuring 4,948 yards.

Bayou Oaks also features a teaching academy, a two-tiered, lighted driving range, clubhouse, full-service restaurant,

Continued on page 52



Signage

Continued from page 47

elements are outlined into six primary areas. They are:

- 1. Up-front work Names, logos, colors, etc.
- 2. Course Signage and Furnishings - This covers all of the three-dimensional elements, including flag sticks, hazard markers and yardage, that physically need to be on the course itself.
- 3. Other signage Signage required for the site (entry road, parking, etc.) and clubhouse.
- 4. Printed graphics and promotional efforts All twodimensional materials, marketing materials, web sites, etc.
- 5. Merchandise imprinting The type, logo(s), colors, texture and style that are emblazoned onto anything and everything offered for sale.
- 6. Miscellaneous Items such as employee shirts, cart graphics, give-a-way bag tags, menus, etc.

To help with planning and budgeting, a comprehensive checklist can be an essential tool. It helps the course operator remember items while pointing out those that are unnecessary or unjustifiable based on type of play or operations.

We have re-printed this master Image and Graphics Checklist so it can be cut out and copied for future use. You'll notice each category is broken down into minute detail. Add other

items to the list as needed.

To go along with the list, here are my thoughts on each corresponding category, the basics on how to approach needs and avoid pitfalls that often crop up.

1. Up-front Work.



The imagebuilding process was thoroughly covered in parts 1 and 2 of this series. Perhaps most forgotten among this category is the all-important photog-





Golf Course Image & Graphics Checklist

	the same of the sa
1. The Up-front Work	3. Other Signage
Identify Consultants (designers, writers, etc.)	Entry feature
Script the Experience	
	Vehicle directional and regulatory (stop,
Determine Names	yield, speed limit, etc.)
Overall facility/development	Parking (disabled, reserved, etc.)
Course/nines	Clubhouse exterior
Individual holes	Clubhouse interior
Prominent features/hazards	Lockers and area
(lakes, hills, bun kers, etc.)	Scoreboard
Restaurant/grill/bar	Snack bar
Protect names via trademark/	Restaurant/grill
service mark	Maintenance facility exterior
Develop Logos	Maintenance facility interior
Main course logo	Waintenance facility interior
Members crest/seal	A Printed Craphics and Promotional Efforts
Variations of logo (horizontal, vertical, ex	4. Printed Graphics and Promotional Efforts
	Staple items
tremely small use, etc.)	Score cards
Type style guidelines	Yardage books
Color guidelines (black only ver	Daily pin position and/or course
sion)	conditions sheet
Other spin-offs (restaurant, grill, bar, clubs,	Blank sheets for tournament
etc.)	rules formatting
Protect designs via trademark/	Stationery
service mark	Calling cards
Commission Photography	Pocket folder
Review portfolios/capabilities	Computer formatted forms
Determine locations to shoot	
	(faxes, memos, etc.)
Provide Direction (for style,	Promotional Items
needs, specifics, etc.)	Postcards
Determine Scope of Needs (for all signs,	Bag tags
graphics, etc,)	Other give-a-ways
	Marketing Components
2. Course Signage and Furnishings	Brochures
Directional signs	Rack cards
Cart path directional (fixed signs	
	Black only print advertising for mat
such as stop, slow, and direc	Color print advertising format
tional)	Staff profiles/capabilities
Moveable cart directional	Group and outing rates/facili
Other (directional to tees, drop	ties
areas, comfort stations, etc.)	Media packet (photos, basic
Tee stations	information, etc.)
Hole plaque (diagram, yardages,	Web site
etc.)	
	Promotional video
Ball washer integration	On-hold recorded information
Water cooler integration	Inaugural items (for opening, invitations, etc.)
Waste receptacles	
Moveable Course Furnishings	5. Merchandise Imprinting
Tee markers	Kit-of-parts (logos, colors, and formats on
Seed mix bins	reproducible sheets)
Rope stanchions	Kit-of-parts (logos, colors, and formats on
Area indicators (drop area,	CD ROM diskette)
ground under re pair, area	Embroidery tape master
closed, etc.)	Computer formatted versions (black only
Hazard posts/markers	
	and color)
Aiming flags/poles	C. M. II
Flagsticks	6. Miscellaneous
Pin position indicators	Bag drop area (limits of liability, etc.)
Flags	Tournament items
Practice green stanchions (pins	Longest-, closets to-, etc. stanchions/cards
and tops)	Format for sponsorship indica
Putting course needs	tion (at tee, etc.)
Practice area targets	Temporary banner format
Benches	Cart assignment cards
Yardage	
	Cart markings
At-tee hole yardage plaques	Rental club bag markings
At-fairway yardage plaques (250,	Refreshment cart markings/menu
200, 150 and 100)	Employee dress
150 markers/posts	Shirts
Sprinkler head markings	Name badges
Driving range needs	Food/beverage
Fixed Course Signs	Menus
Restroom/comfort stations	Menus Tent cards
Course regulations/limits of li	Cup imprinting
ability	To-go containers
Warnings (reclaimed water use,	Napkins
environmentally sensitive, etc.)	Swizzle sticks
Interpretative (educational signs	Coasters
about flora fauna etc.)	Oth too order phone

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Signage

Continued from previous page

and then portray the essence of a golf course to future members or guests. Most course photography is boring, poorly directed or just plain awful. I recently visited a course in Utah that was, without question, built amidst some of the most beautiful natural terrain I have ever seen for a golf setting. But there, on the scorecard and brochure, was a terrible and embarrassing photo that made the course look no more distinctive than a run-of-the-mill operation that could easily have been located almost anywhere.

What would a professional photograph cost? Even at \$4,000 (a reasonable cost for two days of photography and nominal film and processing charges) such an investment would work out to a mere fraction of a cent each time the photo would be put to use over several years.

Confucius said, "A picture is worth 10,000 words". Somehow, popular culture has reduced the worth of a picture to what we now value at only 1,000 words. Perhaps this explains why some people do not place much importance on photography.

A decent and memorable picture is worth its weight in gold. Fight with conviction anyone who tells you there is no budget for good photography. This includes the person whose nephew knows someone who goes to school with someone who runs a camera store. Avoid this individual at all cost.

2. Course Signage and Furnishings.

The best advice is to remember that "less" is truly "more." Golf courses have existed for hundreds of years with few signs and yardage markings. Why, all of a sudden, must the modern course have scores of yardage indicators on every hole and signs directing every which way? Partially, to be sure, for speed of play and because the modern golfer now expects the luxury of knowing exactly how far they are away from the target. But, when well planned, the minimal course signs and markings will always function better. Less is more.

A growing trend is toward functionality. The days of soft, mellow colors on the course are fading.

Remember, targets and yardage plaques are not much use if people cannot find them. Don't be too cute. I'm all for creative colors on tee markers, but there is a quintessential pecking order that is very hard to beat. Black or blue usually mean "back tees." White is almost always "regular". And red is generally "forward." Red, white and blue are also standard indicator colors for 100, 150 and

200 yardages, respectfully.

Just as they stand well for rotating flags to signal up front (red), middle (white), and back (blue), on hole flags.

Bright lime green is the most visible color to the human eye. Over the next few decades U.S. cities and states will systematically go about replacing all of our "old" yellow road signs with this new and improved

colorization. Yellow still works well, especially on golf courses. Test out colors and then decide what works best for flag sticks, flags, markers, etc. If it's hot pink, well, don't necessarily count it out. Functional decisions should be afforded every opportunity to be implemented.



3. Other Signage.
Other signage reContinued on next page



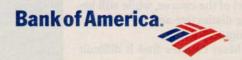
Signage at Coyote Lakes Golf Club in Surprise, Ariz.

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Mid-Atlantic/Northeast, Rick Nekoroski 978-777-8560 • Arizona/Pacific Coast, John Seeburger 949-442-4356.

Texas/Mountain States, Steve Sparks 775-832-4447 • Southeast/Midwest, Debbie Suppa 770-643-7788.





Signage

Continued from previous page

fers to signs at the entrance, clubhouse, and throughout the property. These efforts should tie in with that of the golf course and be in harmony with the style and feel of the overall image.

Separating these signs from those actually on the course is done because, on many occasions, they are completed during different phases and under separate budgets. Besides, these two sign categories have different functions. The nuances of course signage and furnishings are very unique.

4. Printed Graphics and Promotional Efforts.

Try, if possible, to have the same professional graphic designer working on all your needs. This is difficult, as not all graphic design firms are adept at signage. It's a shame when the image of a course is watered down as a result of the golf director handling printed materials (score cards, yardage books, brochures, etc.) while off in another direction is the superintendent handling signage, tee stations, course flags, etc.

The best scenario is to locate an individual or firm that can assist with all things related to image and design. If you can't find such a resource, at least demand that multiple consultants come together to find out who is doing what. Communication is key here. And that includes communication between management.

Have you ever been to a course where the logo is differently handled on merchandise, flags, entry signs and carts? I have. And while it may not seem too damaging, consider the positive feeling that comes from the consistent articulation and wellplanned roll-out of an image. When it's been done right in every detail, the customer is more apt to remember the experience. And, if that's not enough of a reason, consider that an orchestrated effort almost always costs less that if things are done differently between here and there. Effectiveness is the result of making sure printed materials and promotional efforts are considered along with your other needs.

5. Merchandise Imprinting.

I recommend approaching this, at least initially, as a "kit of parts." By putting together a computer disk and color palette of logos and logo variations. it becomes possible for vendors to create merchandise that fits within the look and feel of the course, while still being distinctive and, to a degree, unique.

Most courses find it difficult

The best scenario is to locate an individual or firm that can assist with all things related to image and design.

to justify on-going consultation. This is why an initial kit of parts can make such good sense. It is always there to refer to and can prevent merchandise markings from drifting away form the origi-

nal intent and spirit of a course's image.

6. Miscellaneous.



Forgetting some of these elements is very easy. If you operate a refreshment cart, make it stand out and fit within the course image. Make it functional and fun, if appropriate.

Remember employees are excellent first-impression opportunities. Put your course emblem/logo sensibly on their uniforms or shirts. Name badges, hats and shoes are all part of their wardrobe. Don't count these details out.

Forrest Richardson is a golf course architect based in Phoenix and president of Golf Group Ltd. Since 1985 he has worked in close association with Arthur Jack Snyder, consulting and designing projects throughout North America. Golf Group Ltd. provides graphic consulting for courses apart from their architectural work. You may reach Richardson at 602-266-6782.





Heritage

Continued from page 1 market conditions.

Heritage plans to become a leading owner/operator of golf course properties by acquiring high-quality private, resort and daily-fee facilities within major markets throughout the United States.

"The golf course management industry is very fragmented and has excellent growth prospects," said Husband, who, with his management team, created Cobblestone. "In fact, golf courses are increasingly becoming integral parts of residential housing developments and a primary component of housing's value. So there's a growing need for a quality operator like Heritage."

"We're delighted to be partnering with such an experienced, proven executive team," said GTCR Principal Joseph P. Nolan. "Their track record at Cobblestone was impressive; in just six years, these individuals built Cobblestone into the third-largest golf course management company in the industry. We're confident that they can be even more successful with Heritage Golf Group."

Husband brings more than 25 years of experience in golf

course operations and acquisitions to Heritage. He founded Cobblestone Golf Group and was most recently its president and chief executive officer. He sold Cobblestone to Meditrust in January 1998. [Meditrust later sold Cobblestone's courses to a joint partnership involving ClubCorp and American Golf Corp. in early 1999]

With the dissolution of Cobble-

stone, Husband soon became bored and approached an investment banking firm to help him find a private equity partner to start a small course acquisition/ management firm.

"We didn't intend to make it a large company in the first phase," Husband said. "We were going after a small amount of money, small compared to what we got. They started asking us 'Well, would you like \$100 million instead of \$25 million?" We had to rethink our strategy.

"The \$100 million over the next five years will give us access to \$500 million in golf courses. We think the timing is right and that there are a lot of courses out there where sellers' expectations have come down a little bit. We're looking for high-end properties in master-planned communities. We don't care if they are daily-fee or private... There's nothing wrong with \$10 green-fee courses, but it takes as much management time to run them as it does \$100 green-fee golf courses."

Husband didn't specify a price range he's willing to pay except to say: "You have to buy them responsibly and make reasonable returns. We have a lot of capital, but we're going to move relatively slowly because we are going to be very selective about the courses we buy. We have one soon to be under contract and another we hope to agree on in a couple weeks. We'll start with three or four courses maybe and see what happens.

'A lot of the courses we're looking at are not for sale. We'll go to the developer or someone with a property and try to convince them that we can continue the quality and accelerate their home sales at the same time. We can also give it a lot of personal attention because we have a very good group of people who we can put on particular projects. We basically have the Cobblestone group that we had when we were running 50 courses. So we are very comfortable with the idea of owning three or four courses and then adding four or six others."

In addition to acquiring courses, Heritage will consider management contracts or leases, particularly those with the option to buy at a later date. The firm will also consider partial ownership or joint ventures. "As a general rule, we'd like to buy," Husband said. "But we're very flexible."

In addition to Husband, Heritage Golf Group's executive team consists of Executive Vice Presidents Gary L. Dee, Andrew Crosson and William D. Keogh; Vice President John Hungerford; and Chief Information Officer Rich Canale.

Dee also has 25 years of experience in the industry, with a focus on golf course operations

Continued on next page



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Kemper

Continued from page 47

and banquet facilities.

Kemper Sports, in conjunction with City Park, has developed plans to renovate the pro shop. The company is alsodeveloping plans for capital improvements aimed at improving the overall agronomic condition and playability of the golf courses.

City Park, located in mid-city, is

the fifth-largest urban park in the nation, encompassing 1,500 acres.

KemperSports Management has hired Tom Fazio to design the new 18-hole championship layout at the site of the former Glenview Naval Air Station in suburban Chicago.

KemperSports won the right to acquire, build and manage the Air Station property in a competition earlier this year. Fazio has developed routings for the course.

The \$25-million project features a 40,000-square-foot club-house that will house the head-quarters of the Illinois PGA and the Illinois Golf Hall of Fame, an interactive museum highlighting the history of golf in the state.

The new facility is expected to open in 2001.

Located on Chicago's North

Shore, the former Glenview Naval Air Station (GNAS), now known as "The Glen," is being converted to include single-family, multi-family and senior housing; retail, entertainment and sports amenities; a business park; a new Metro train station; a U.S. Post Office; and a \$24-million recreation center. In addition, a 45-acre lake is being constructed at the heart of a 140-acre Great Park.

Bear's Best

Continued from page 47

ties together and initially envisioned the creation of several dozen projects over the next decade. The first properties that have resulted from this union are The Nicklaus Golf Club at LionsGate in Overland Park, Kan., near Kansas City, and The Nicklaus Golf Club at BirchRiver in Dahlonega, Ga., near Atlanta.

Both Bear's Best courses will be constructed in residential developments and will serve as an amenity for residents.

In Atlanta, the Bear's Best course will thread among luxury homes in the new community of Edinburgh, now under development in Gwinnett County by Pulte Homes.

In Las Vegas, The Ridges, a village of the master-planned community of Summerlin, will feature the Bear's Best course as its centerpiece.

Heritage

Continued from previous page and development. He supervised operations at Cobblestone.

Crosson brings Heritage a decade of expertise in acquisitions, golf operation and management. He was most recently responsible for all aspects of Cobblestone's acquisition program. William Keogh specializes in marketing and corporate development; he focused on enhancing revenue through membership and tournament sales programs at Cobblestone.

Hungerford has more than 20 years of experience in golf course management, operations and marketing. Prior to joining Heritage, Hungerford was Cobblestone's vice president of operations.

Canale joins Heritage after a 15-year career in accounting and computer science. He was most recently responsible for developing and managing all information and internal systems for Cobblestone's 45 properties and corporate office.

Founded in 1980, GTCR is one of the nation's leading private equity investment firms and long-term strategic partner for management teams. GTCR currently manages more than \$2 billion in equity capital invested in a wide range of companies and industries. Its primary industry focus includes outsourced business services, information technology services, marketing services, health care, transaction

processing and logistics.



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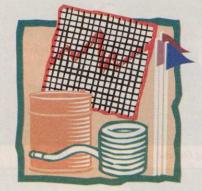
A separately excited motor gives the E-Gator features like overspeed control,

roll-away control, dynamic braking, and regeneration. And, of course, this Gator Utility Vehicle is like any of our others, in terms of styling, stability, durability, and reliability. Call us for a test-drive soon. You won't believe your ears.

www.deere.com







DROHEN TAKES JACKLIN POST

POST FALLS, Idaho - I. Andrew Drohen has joined Jacklin Golf as northeast marketing manager for the North-

eastern U.S. He will work with golf course architects and builders in his region to specify grass seed varieties for new golf course construction and renovation projects. Prior J. Andrew Drohen



to joining Jacklin Golf, Drohen was consultant/principal for Turfgrass Environmental Consultants.

PURSELL SNAGS HEEGARD

SYLACAUGA, Ala. - Dave Heegard has signed on as director of professional sales for Pursell Technologies Inc. (PTI). Heegard will be working with distribution partners to help gain access to new markets for Polyon professional formulations. Since 1997, Heegard has owned and operated, Heegard, Inc., a consulting firm that helps companies move products into the turf market.

ROOTS PROMOTES LONG, HUGHES

NEW HAVEN, Conn. - Roots, Inc. has promoted Ed Long to vice presi-

dent of sales for independent distributors, USA. Long, who has been with Roots since 1997, has more than 20 years of experience in the green industry. Roots Ed Long



has also appointed Jim Hughes as West coast territory manager.

BARENBRUG APPOINTS KAPSENBURG

TANGENT, Ore. — Barenbrug has appointed Roeland Kapsenberg as CEO and president of Barenbrug North America. Kapsenberg has worked for Barenbrug Group in the United States Eastern Europe and China.

HUNTER GOLF NAMES PORTER

SAN MARCOS, Calif. - Hunter Industries has appointed Monte Porter to general manager of Hunter Golf, a new division at the irrigation equipment manufacturer. Porter will direct all Hunter Golf manufacturing, product development and engineering, in addition to golf sales and marketing.

Eco Soil to refocus efforts on U.S. following third-quarter setback

Company to team up with J.R. Simplot and Cebeco Seeds

By ANDREW OVERBECK

RANCHO BERNARDO, Calif. - Following a third-quarter loss of \$903,000 and the subsequent 61-percent (as of Dec. 15) slide in the value of the company's

stock, Eco Soil Systems, Inc. is refocusing its efforts on the U.S. marketplace. The company, which manufactures and distributes the Bio lect system, chalked up the revenue shortfall to overexposure in Mexican agricultural markets.

wrong."

"We were very aggressively deploying equipment down there and were having a lot of problems getting paid," said Eco Soil President and Chief Executive Officer William Adams. "I believed that the risks in Mexico would be offset by the opportunity and I was

This marks a dramatic reversal for Eco Soil, which had made a profit of \$2.3 million in the same quarter last year.

The company's losses have left some investors less than pleased. A class ac-

tion lawsuit has been filed in U.S. District Court on behalf of investors who bought Eco Soil stock between April 13 and Nov. 3. The Nov. 24 complaint alleges that several of Eco Soil's top officers violated securities laws and that the company issued a series of false and misleading statements concerning

its involvement in the Mexican agriculture markets.

According to Adams, these claims are unfounded and the company intends to fight them vigorously. "Anyone who invested in Eco Soil who didn't know that

Eco Soil was invested in Mexican agriculture didn't read a thing," he said.

While the fourth quarter is expected to be another revenue loser, Adams is optimistic that things will turn around in 2000.

The company is making moves to refocus its efforts on the U.S. market and to continue to grow the turf side of its business that surprisingly

Continued on page 56

Sept.15 5 Oct. 15 3 Dec. 15 Sept.15 - Dec. 15 1999 ECO SOIL'S STOCK HAS SLIPPED 61 PERCENT SINCE SEPT. 15

ABT posts loss, but remains on track

Flowtronex

program

unveils leasing

By ANDREW OVERBECK

DALLAS - Targeting courses

that are looking to upgrade their

existing pump-station and irrigation

technology, Flowtronex PSI has in-

troduced a leasing program that will

allow golf courses to finance the

entire cost of an irrigation pumping

keep up with the new course that

has just been built down the street,"

said Willie Slingerland, marketing

director for Flowtronex. "But in

many cases they do not have the

capital or the ability to extend exist-

ing credit lines to finance an irriga-

outpace industry expectations by

record numbers, Flowtronex is bet-

ting on the fact that there will be a

greater need for renovations down

ceed at its current pace," said

Slingerland. "Now is the time for

the course built in 1962 to upgrade.

We feel that in the next five years

the viability of the leasing program

in the Dallas area and has decided

to roll the program out nationwide.

"We think this is needed in the in-

dustry and it is a service that is not

being provided," said Slingerland.

Continued on page 56

The company has been testing

there will be more renovations."

"New construction cannot pro-

the road once the market peaks.

As new construction continues to

tion upgrade."

"Older golf courses are trying to

HENDERSON, Nev. - AgriBioTech has posted a first-quarter loss for fiscal year 2000, despite record shipping volume. The company cited falling prices as the key reason behind a net loss of \$3.6 million.

However, ABT stated that a higher mix of proprietary to common seeds improved gross margin for the quarter and that the implementation of its strategic plan is on

"The revenue decrease reflects three factors: the decline in average sales price for seed products because of excessive worldwide supplies, a delayed harvest of turfgrass seed in Oregon that depressed our fall sales opportunity, and our ongoing strategy to focus on proprietary, higher-margin internally produced seeds at the expense of larger volume but lower-margin common variety sales," said Richard Budd, chairman and chief executive of-

The company is currently completing the due diligence process for a combination of long-term debt up to \$20 million and a new revolving credit facility for up to \$115 million.

"We continue to increase our ratio of proprietary products and reduce expenses," said Budd, who expects ABT to turn the corner in the third quarter.

Metallic Power passes utility vehicle test

SAN DIEGO — Metallic Power Inc. has successfully completed the firstphase demonstration of a prototype

zinc/air fuel cell system using Textron's Cushman-brand utility cart. The zinc/air fuel cellpowered cart achieved the same ground speed as a lead-acid battery-operated cart, refueled in

about 10 minutes compared to leadacid batteries' eight hours and was able to cover 25 percent more distance than when powered with lead-acid batteries.

"The success of this demonstration means we have met a significant investor milestone and we are on target for our 2002 product launch," said Dr. Jeff Colborn, Chief Executive Officer of Metallic Power. "This

demonstration marks the first step in making clean power a reality."

Continued on page 55

Golf Course News STOCK REPORT (12/15)

					RESIDUE NO A	
Symbol		%Change 1/1/99			52-week Range	Proj.5-yr Earn. Growth
AZN	42.25	-5.85	-9.63	29.35	35-48.94	10.2%
DE	42.75	28.81	4.27	23.05	29.48-45.94	9.50%
DOW	122.98	35.24	0.7	23.69	85.25-138	8.4%
FGCI	1.4	-92.91	8.57	N/A	0.72-21	N/A
GTA	14.88	-46.38	-16.17	11.69	14.5-27.75	11.5%
IR	49	3.7	-0.76	14.18	40-73.82	12%
LSCO	15.38	19.46	-4.25	12.6	12.25-19.5	15%
TEE	18.88	-34.76	-10.10	16.25	18.38-29.75	10%
TTC	34.38	20.63	2.82	20.01	23.5-39.5	13.%
TXT	72.88	-4.03	1.75	5.05	65.88-98	15%
	AZN DE DOW FGCI GTA IR LSCO TEE TTC	AZN 42.25 DE 42.75 DOW 122.98 FGCI 1.4 GTA 14.88 IR 49 LSCO 15.38 TEE 18.88 TTC 34.38	Price 1/1/99 AZN 42.25 -5.85 DE 42.75 28.81 DOW 122.98 35.24 FGCI 1.4 -92.91 GTA 14.88 -46.38 IR 49 3.7 LSCO 15.38 19.46 TEE 18.88 -34.76 TTC 34.38 20.63	Price 1/1/99 11/15/99 AZN 42.25 -5.85 -9.63 DE 42.75 28.81 4.27 DOW 122.98 35.24 0.7 FGCI 1.4 -92.91 8.57 GTA 14.88 -46.38 -16.17 IR 49 3.7 -0.76 LSCO 15.38 19.46 -4.25 TEE 18.88 -34.76 -10.10 TTC 34.38 20.63 2.82	AZN 42.25 -5.85 -9.63 29.35 DE 42.75 28.81 4.27 23.05 DOW 122.98 35.24 0.7 23.69 FGCI 1.4 -92.91 8.57 N/A GTA 14.88 -46.38 -16.17 11.69 IR 49 3.7 -0.76 14.18 LSCO 15.38 19.46 -4.25 12.6 TEE 18.88 -34.76 -10.10 16.25 TTC 34.38 20.63 2.82 20.01	AZN 42.25 -5.85 -9.63 29.35 35-48.94 DE 42.75 28.81 4.27 23.05 29.48-45.94 DOW 122.98 35.24 0.7 23.69 85.25-138 FGCI 1.4 -92.91 8.57 N/A 0.72-21 GTA 14.88 -46.38 -16.17 11.69 14.5-27.75 IR 49 3.7 -0.76 14.18 40-73.82 LSCO 15.38 19.46 -4.25 12.6 12.25-19.5 TEE 18.88 -34.76 -10.10 16.25 18.38-29.75 TTC 34.38 20.63 2.82 20.01 23.5-39.5

GOLF COURSE NEWS January 2000 53



Deere tourney raises \$18,700

SUPERSTITION MOUNTAIN, Ariz. — The Oshawa Airport Golf Club team from Oshawa, Ontario, Canada, placed first in the 13th annual John Deere Team Championship Golf Tournament, held Nov. 11-14 at the Prospector Course at Superstition Mountain Golf and Country Club here.

A total of 35 teams from across the United States and Canada competed in the finals.

"These teams are made up of men and women who not only enjoy the game of golf, but understand all it takes to produce and maintain excellent playing conditions and striking aesthetics," said Mike Mack, general manager,

commercial grounds care products group of John Deere's worldwide commercial and consumer equipment division.

Each team won their slot in the tournament finals by competing at a local golf tournament sponsored by their John Deere golf and turf products distributor. A total of 935 teams participated in 35 local tournaments, held throughout the U.S. and Canada, in preparation for this international event.

This year, 725 U.S. teams and 210 Canadian teams participated—earning contributions of \$14,500 to the Golf Course Superintendents Association of America's Foundation and \$4,200 to the Canadian Golf Superintendents Association's Scholarship Fund.



The winning Oshawa Airport Golf Club team.

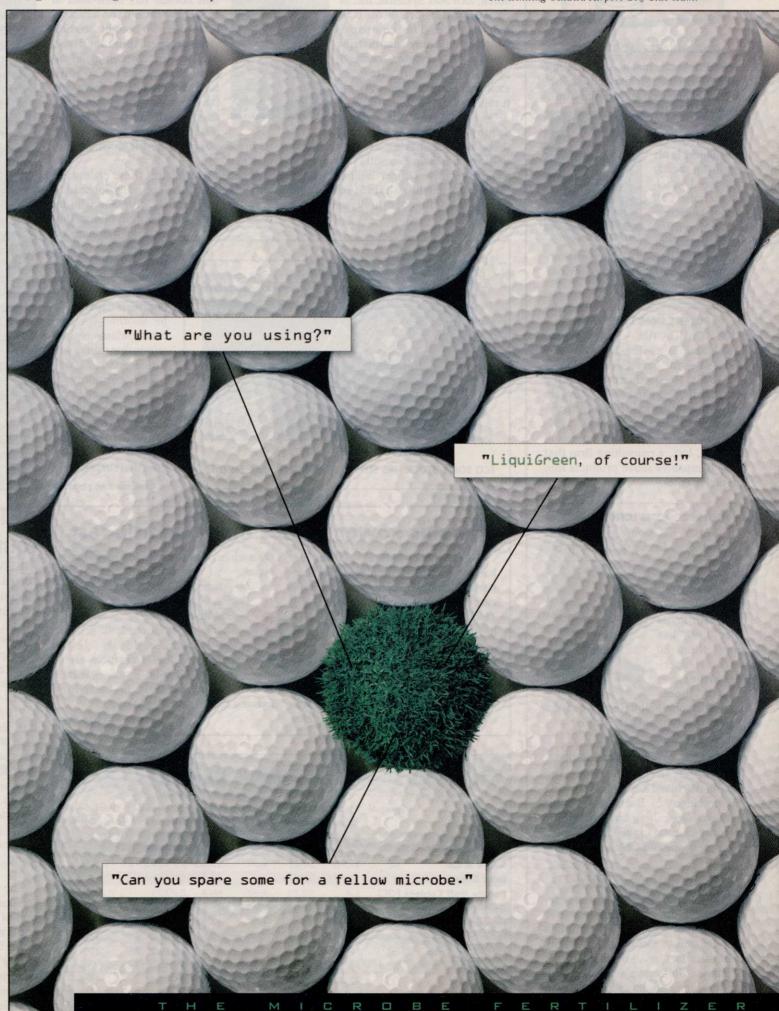
Hoerr wins Warren award

ELWOOD, Ill.— Blake Hoerr, a junior enrolled in the University of Illinois Turfgrass Management program, has been awarded the first Ben Warren Scholarship. Tyler Enterprises sponsors the \$7,500 annual scholarship for students enrolled in the Turf Management program at the University of Illinois. The scholarship is named in honor of Ben Warren, a pioneer in the turfgrass industry

"Ben Warren was a visionary man, who left an indelible legacy in the turfgrass industry," said Bruce Jasurda, chief operating officer of Tyler Enterprises. "He was a scientist with a great understanding of the importance of genetics in the production of strong, disease-resistant turf grasses."

The late Ben Warren was the owner of Warren's Turf Nursery, a sod production and turfgrass research company based in Palos Park, Ill. During his lifetime, Warren was granted 26 patents for turfgrass varieties, including A-20 and A-34, which are still on the market today. He also invented the root washer system, the automated sod cutter and a vacuum-cooled refrigeration system for transporting sod. He was one of the founders of the Illinois Turfgrass Foundation and Turf Producers International.

Hoerr was awarded the scholarship based upon his outstanding academic performance and his work experience in the turfindustry. Hoerr has worked at the University of Illinois Turf Farm and held an internship last summer with the groundskeeping crew for the Seattle Mariners. Upon graduation, Hoerr hopes to become an assistant groundskeeper for a professional baseball organization.





Sybron reworks distribution

Salem, Va. Biochemicals, manufacturer of Green-Releaf, has signed a distribution agreement with Milliken Turf Products. Sybron acquired the microbial technology in February 1999 from Jacksonville, Fla.-based Green-Releaf BioTech, Inc.

"Sybron took on Green-Releaf because we believe this technology is the future of turf maintenance," said Ted Melnik, vice president of Sybron Biochemicals. "Our new arrangement with Milliken will simply accelerate that pro-

The worldwide distribution capabilities of Milliken will enable Sybron to focus more resources on its core strengths of research, development and manufacturing.

"Sybron's next generation of technology represents a step forward in the continued evolution of microbial technology. The company's new patentpending technology will provide a more reliable product with faster more consistent bioperformance," said Melnik.

Lesco nets third quarter profits

CLEVELAND — Lesco, Inc. has reported a third-quarter net income of \$5.8 million for the three months ended Sept. 30, a 131 percent improvement.

The company attributed the improved profitability in part to improved sales mix, the phased reduction of certain lowermargin products, the benefits of planned warehouse consolidation, the elimination of Lesco Service Center opening expenses, improved cost controls and a reduced loss at Commercial Turf Products, Ltd.



IT GOES FARTHER, LASTS

Ask the microbes in your soil, they'll tell you. LiquiGreen™ is a slow release, non-burning organic source of nitrogen that is safer to

use and delivers more consistent results.

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- Root mass increases by up to 40%!
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Apply LiquiGreen and immediately, billions of microbes in the soil begin to convert LiquiGreen to available nitrogen. The LiquiGreen slow release formula keeps a consistent level of nitrogen in the soil, longer. More available nitrogen in the soil creates thicker and healthier turf.

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LiquiGreen helps you grow consistently, healthier plants that

nitrates will be showing up in

the water table.

The end result?

benefits your course as well as

the environment!

traffic areas - like tee boxes, greens

and fairway landing areas.

looking, better playing golf

course for your golfers. Plus,

LiquiGreen is as safe to use as it is hard-working.

It does not burn - it has a salt index that's 8-9 times

less than other nitrogen sources; you could virtually

triple the rate with no adverse effects! It also stays

put. There's very little leaching with LiquiGreen; no

And that adds up to a better

Ask any microbe....

Metallic Power

Continued from page 53

Engineers at Metallic Power replaced the six lead-acid batteries originally installed in the utility cart with a single fuel cell. The cart was driven on a surface with level changes and speed bumps where its performance data compared to that collected earlier from the lead-acid, battery-operated cart. Multipledrive and refuel tests were performed over a several-day period at Metallic Power's facilities in Carlsbad, Calif.

Using a prototype recycling unit, the zinc/air fuel cell was both emptied of its reaction product, zinc oxide, and refueled with fresh zinc fuel in about ten minutes. Product improvements next year should cut the refuel time to three to five minutes. The production version of the recycling unit will incorporate a single, easy-to-handle coaxial nozzle/hose configuration similar to today's gasoline refueling nozzles.

The Metallic Power development team continues to optimize the design of the zinc/air fuel cell system and refine its marketing strategy. The next major phase is a test of approximately 50 customer-evaluation units in the fall of 2000, with beta units to follow in late 2001. Metallic Power anticipates introduction of the fuel cell for commercial use in 2002.

In other Metallic Power news, the company has announced a partnership with Milwaukeebased engine manufacturer Briggs & Stratton Corp. to investigate and develop future power sources using Metallic Power's proprietary zinc/air fuel cell technology.

Briggs & Stratton is the world's largest producer of aircooled gasoline engines for outdoor power equipment.

Working with Metallic Power will give Briggs & Stratton the opportunity to evaluate a new portable power source," says Vince Shiely, vice president and general manager of electrical products for Briggs & Stratton.

Briggs & Stratton has contributed funds for development of a prototype fuel cell. Financial terms were not disclosed. Prototype testing of the fuel cell is expected to begin in December 2000.



Flowtronex

Continued page 53

The lease agreement is structured over a 24- to 60-month period. A credit application is required for systems costing up to \$100,000 and systems up to \$1 million require a more extensive financial report.

Slingerland expects that most of the business will be on the \$100,000-and-under systems.

"We can do the million-dollar projects, but usually on new construction, the irrigation system is built into the cost of the project," he said. "The need we see is for the smaller guys. They will make up the meat of this program."

Flowtronex can adapt the pump station to existing systems and the lease agreement includes shipping and installation costs.

Case, New Holland merger complete

RACINE, Wis. — The merger between Case Corp. and London-based New Holland has been completed. The new company, Case and New Holland (CNH), had combined revenues of approximately \$12 billion in 1998, supplanting John Deere as the largest maker of farm equipment.

"We intend to grow our combined businesses in established and developing markets, while agressively reducing costs through process improvements and increased efficiencies," said CNH Chairman and Chief Executive Officer Jean-Pierre Rosso.

Eco Soil

Continued from page 53

accounts for the majority of its revenues.

"To be honest, two to three years out, we didn't expect that a large percentage of profits would be coming from turf," said Adams.

Eco Soil's subsidiary, Turf Partners, accounted for \$35.3 million in revenues in the third quarter. "We have really turned the corner in turf with our sales force and we are getting the kind of response on proprietary products that we needed," said

More growth is on the way.

Eco Soil has signed a distribution agreement with J.R. Simplot to bring its fertilizer line east of the Mississippi River. "We are their principal distributor in the West," said Adams. "This agreement lets us compete more agressively in Florida, Texas, the Southeast and the Middle Atlantic states."

The deal with Simplot will also provide Eco Soil with an opportunity to gain entry into agriculture markets in the United States.

"Simplot is one of the largest potato growers in the world," said Adams. "Going forward, we think this deal is going to make a big difference in both turf and ag."

Turf Partners will also be expanding its role as a total source provider.

"We are developing an e-commerce system that will give us the opportunity to link vendors and customers together through our network," said Adams. "We are going to weave this together with our traditional and proprietary products to allow for a fully integrated approach to selling and services."

Eco Soil is also working on gaining entry into the European marketplace and has signed a letter of intent with Netherlands-based greenhouse giant Cebeco Seeds Group. Under the agreement, Eco Soil would have access to more than 40,000 greenhouses and Cebeco's seed-growing operations.

"What we intend to do with Cebeco, is to enter an exclusive European distribution agreement for our products and use their greenhouse operations to build a product line based on a BioJect platform to attack that market," said

Going forward, Adams expects the turf business to remain strong and the U.S. agricultural markets to pick up the slack from disappointing revenues in Mexico.

"We feel we have reached critical mass," said Adams.
"Our work will be converting to bottom-line profits soon."



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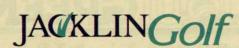
From a turf management perspective, **Putter** is a hardy

variety with fine leaf texture that features an upright growth habit, high shoot density and improved disease resistance. **Putter** is also very aggressive against *Poa annua*.

From a golfer's point of view, **Putter's** rich, dark, bluishgreen color looks great. From tee to fairway to green, **Putter** offers beauty, resilience and a true-line putting surface that greens up early in the spring and holds its color late into the fall for a longer season of use.

Top turf professionals trust **Putter** to improve the game from anywhere on the course and in any kind of climate. Recommended by Jacklin Golf and available through **Jacklin Seed** and **Medalist America**, trust **Putter** to help everything fall into place for you, too.







Syngenta

Continued from page 1

with Novartis, and is under renewed pressure from investors to shed its agrochemical business.

The transaction between Novartis and AstraZeneca, however, is far from complete as shareholder and regulatory approvals are required before Syngenta can get down to business. Novartis will hold a shareholder meeting on April 12 and AstraZeneca's will be on May 26. It is anticipated that the merger transaction will be approved in the second half of 2000.

Once the transaction is approved, Syngenta will be a force in the market. The company had combined sales in 1998 of \$7.9 billion and will have an estimated 24-percent global market share in the agrochemicals market with a presence in more than 100 countries. In comparison, previous industry leader, Monsanto has a global market share of 13 percent.

"The launch of Syngenta creates the first global dedicated agribusiness company, a leader in its industry that will be well positioned for growth," said Novartis Chairman and Chief Executive Officer Dr. Daniel Vasella.

Furthermore, the merger will result in \$525 million pre-tax savings by year three, and Syngenta will trim approximately 3,000 jobs in the combined worldwide crop protection employee base. The new company will have a workforce of 23,500.

Heinz Imhof, currently head of Novartis' Agribusiness, will become chairman of Syngenta and Michael Pragnell, presently CEO of Zeneca Agrochemicals, will become the CEO.

"Zeneca Agrochemicals and Novartis' Agribusiness are an ideal fit with complementary product portfolios and a strong international sales and marketing culture," said Pragnell. "Syngenta's unique focus and its science base will enable it to enhance value creation in agriculture at a time of substantial industry change."

Indeed, Syngenta is well represented in core markets. It has a number-one rank in the cropprotection market and is well positioned in herbicides, fungicides, insecticides, seed treatment and seeds.

According to Ed Ready, manager for environmental affairs for Zeneca Agrochemicals, the two companies match up well.

"Novartis has fungicides, herbicides and insecticides but they don't necessarily fit into the same markets, so there will not be a huge amount of overlap," he said.

Syngenta will also continue to have a strong presence in the

turf and ornamental markets.

"This business is about critical mass," said Ready. "With the resources to do the research, you can continue to bring out the new products that our customers need. The turf and ornamental business will continue to be an important part of that."

Syngenta's eight-person executive committee will include four from Novartis (N) and four from AstraZeneca: Michael Pragnell (AZ), CEO; John Atkin (N),COO crop protection; Jeff Beard (N), COO seeds; Bruce Bissell (AZ), chemical operations and global supply; David Evans (AZ), research and technology; David Jones (AZ), planning and business development; Christoph Mader (N), legal and taxes; Richard Steiblin (N), CFO.



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Dimension provides season-long

control of crabgrass, goosegrass, poa annua, and about 20 other tough weeds and grasses. Dimension doesn't stain, and it's labeled for use both on established turf and on ornamentals.

Dimension's low use rates and favorable environmental profile add up to less worry for you. The active ingredient is practically non-toxic to animals, birds, and insects. And it bonds to soil particles instead of leaching into groundwater.

Dimension offers the widest application window—6 weeks more than other preemergence products. So you can delay application for optimum control of goosegrass and other weeds. And split application can stretch control even further for areas with long growing seasons.

All in all, it adds up to a herbicide you can live with. And weeds just can't. Call 1-800-987-0467 or visit us at www.dimensionpro.com to learn more.

* 1998 GCSAA Plant Protectant and Fertilizer Usage Report. Product effectiveness for preemergence crabgrass control







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Dual wheel Gandy aerators tackle big jobs

G andy aerators, model 4972, weighing 848 pounds and model 4996, weighing 1,152 pounds, are heavy-duty professional aeration tools designed with dualwheel aerating heads which independently follow the ground contour. Model 4972 operates at a 6-foot aerating width, while the model 4996 covers an 8-foot span. Both mount on a tractor category 1, 3-point hitch. Interchangeable 3.4-inch coring spoons or 6-inch slicing knives allow operators to core



Gandy model 4972

or slice turf areas to reduce thatch build-up and soil compaction. Optional weight trays are available for either model. For more information, contact 800-443-2476.

Heated huts keep golfers warm

P orta-King's portable warming huts keep golfers warm in between holes. Strategically placed around the course, players can take the chill off hands and feet. Optional power source or electrical hook-up can allow players to warm up even further with hot coffee or hot chocolate.

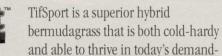
Porta-King durasteel warming huts come in a variety of setups, from stationary units to trailer units Standard on all huts are on-board power sources for electrical, lighting, heating and air conditioning and communications systems. For more information, contact 800-284-5346.





TifSport[™], continues a tradition of great grasses!

TifSport was developed by the USDA/ ARS and the University of Georgia, the same turf genetics group which also developed 419 Tifway, Tifgreen and Tifdwarf. These warm season grasses are highly regarded names on golf courses around the world.



ing sports turf conditions: Intense cart and foot traffic, lower and more frequent mowings, and the everpresent threat of pest damage.

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- TifSport Offers Genetic Purity
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- Strong and Flexible Under Pressure

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The Bunton BZT 2000

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Textron Turf Care and Specialty Products introduces the Bunton BZT 2000 Series zero-turn mowers. The Bunton BZT 2000 Series is available with a 19- or 23-hp Kawasaki V-Twin or a 25-hp Kohler Command engine. Equipped with a 48-, 52- or 61-inch side-discharge deck, the BZT 2000 can cover up to 29.5 acres in an eight-hour day

The BZT 2000 is also highly maneuverable. Twin steering levers control independent power to each wheel, for zeroradius turning in tight spots and for mowing quickly around trees, shrubs and other obstacles.

For more information, contact 888-922-TURF.



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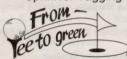
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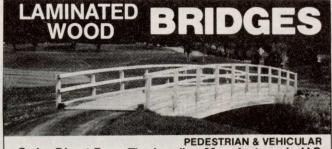
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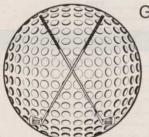
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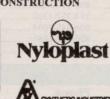
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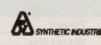
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Blue Ridge Golf

Continued from page 13

-vide expertise, guidance and profitability to the golf course owner."

Working out of offices here, Barber will travel throughout the country for agronomic consulting visits, but will focus on the East Coast from Washington, D.C., to the Carolinas for the other side of his work: maintenance management.

"If the opportunity exists, I would love to expand into course management," he said.

As a vice president of agronomy/regional manager with Golf South from 1996-99, Barber's background is wideranging. He earned a bachelor's degree in biology from the University of Missouri in 1975, a master's in horticulture and soils from Kansas State University in 1978 and then worked as a superintendent for five years. Returning to school, he earned a PhD in 1987 from the University of Nebraska, then took a job as a professor at Oklahoma State University for four years in research teaching.

When former Golf Course Superintendents Association of America President Bob Williams formed Golf Enterprise in 1991, Barber joined him as head of agronomy. When the company bought Jim Colbert Golf, its portfolio grew to 44 courses.

When American Golf bought Golf Enterprise, Barber took the post at Golf South.

He has overseen agronomy on courses from Idaho to Florida and from the Carolinas to California.

Already, Blue Ridge Golf has two maintenance management contracts, and Barber has performed agronomic audits for facilities as far away as Reno, Nev.

'I can customize my services to the needs of the clients," he said. "I will do single agronomic audits to maintenance management to superintendent searches.

Barber said the greatest need he has seen has been "finding good superintendents. That is the hardest challenge of the day-finding the right individual for the right club. They may be a tremendous superintendent but not like golf course management. Some don't want the problems of dealing with greens committees but love the golf course side.'

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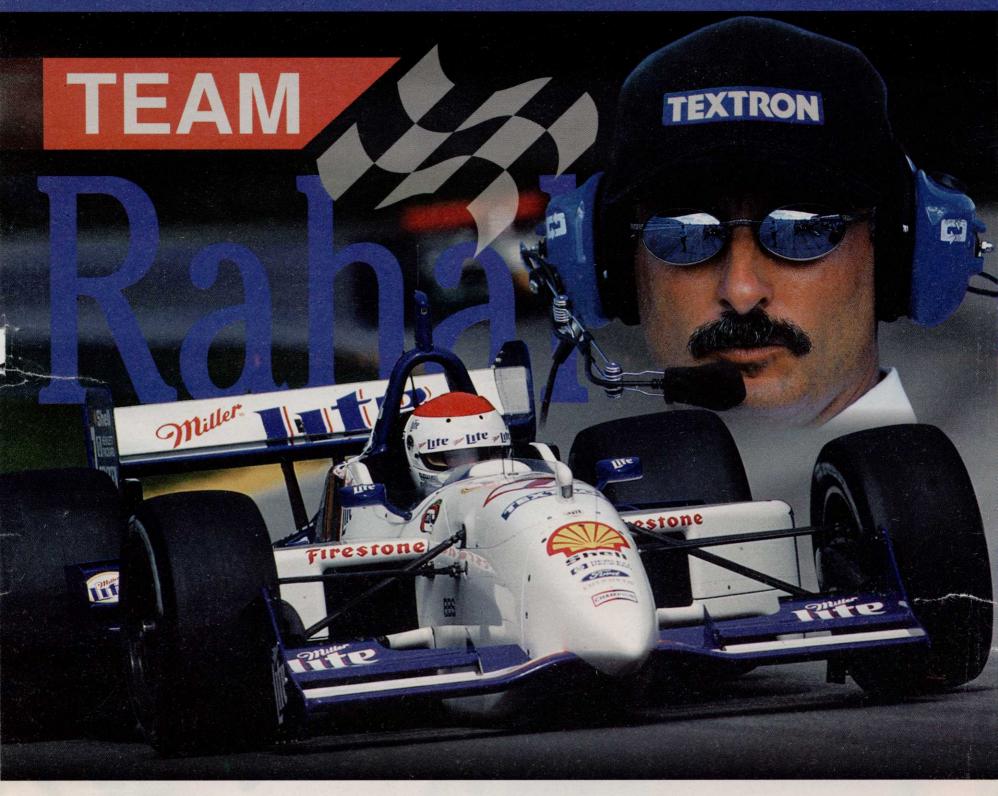


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