

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

10 years anniversary

A UNITED PUBLICATION
VOLUME 11, NUMBER 2
FEBRUARY 1999 • \$6.00

INSIDE

Past presidents speak up

Former GCSAA presidents offer insights, advice on eve of International Conference and Show 39

Development abroad

GCN's monthly international report focuses on Asian and European soil 73-76



WEISKOPF THE DESIGNER

Golfer-turned-designer Tom Weiskopf points out how he wants a hole created on one of his projects. For an engaging interview with the acclaimed architect/golfer, see page 49.

COURSE MAINTENANCE

Gray leaf spot devastates grasses 21
Preserving records an historical imperative 26
Superintendent salaries on the rise 32

COURSE DESIGN & DEVELOPMENT

1998 U.S. course openings near record 3
Nebraskans have golf course raising 49
Practice facilities run the technological gamut ... 53

COURSE MANAGEMENT

Corecaddies, Marriott team for better golf 77
JCA, Palmer go back to school 77
EITs and golf scrutinized 78

SUPPLIER BUSINESS

Scotts reshuffles distribution 83
Pursell expands facilities 84
E-Z-GO exec analyzes Asian market 86

Engelke breaks bentgrass care mold

By MARK LESLIE

PALM BEACH GARDENS, Fla. — With his sights keen on growing the cool-season bentgrass into the Deep South, Dr. Milt Engelke has broken the mold of turfgrass care and developed a regimen he feels will, once and for all, make his dream come true.

He already points to success here. Working with Old Marsh Golf Club su-

perintendent Steve Ehrbar, the Texas A&M professor said, "We feel strongly that we will be okay [with the regimen]."

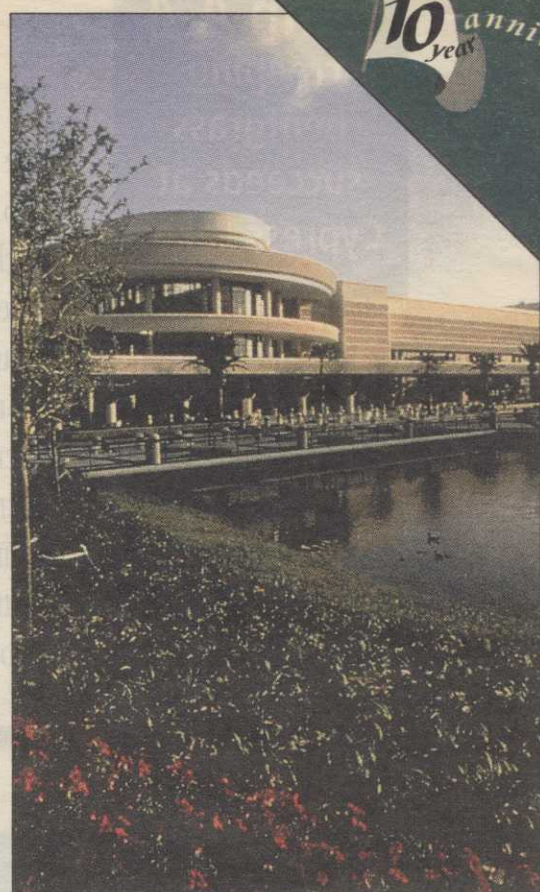
What does it entail?

- Lean water management, irrigating every fourth day.
- Frequent flushing.
- Watering, not syringing.
- Keeping the nutrition level up in the summer

Continued on page 29

ORLANDO '99: SUN, NO SOCKS, AND SEMINARS

The GCSAA International Conference and Show rolls into Orlando from February 8-14. Bring comfortable shoes, socks optional. Special preview section found on pages 39-45.



GOLF COURSE NEWS' BUILDERS OF THE YEAR



The 4th hole at Fieldstone Golf Club in Greenville, Del., built by Niebur Golf, Inc. and designed by Hurdzan/Fry Design. For more on GCN's Builder awards see pages 46-48.

BIG BUILDER



Joe Niebur

SMALL BUILDER



Tim Furness

Meditrust to sell off Cobblestone Golf Group

By PETER BLAIS

DEL MAR, Calif. — As part of a major reorganization, financially troubled

Meditrust, a Massachusetts-based real estate investment trust, plans to sell Cobblestone Golf Group of Del Mar. Cobblestone's management, headed by Chief Executive Officer Bob Husband, is among the half-dozen finalists in the bidding to acquire Cobblestone.

Meditrust, which bought Cobblestone in late 1997 for \$241 million, said the reor-

Continued on page 80

ABT: Changing the paradigm one phase at a time

By MICHAEL LEVANS

HENDERSON, Nev. — Adhering to its coolly-calculated, three-phase business plan — acquisitions, integration and transformation — AgriBioTech Inc. (ABT) has single-handedly changed the seed business over the past three years.

As 1999 shifts into gear, the company is ready to jump into its integration phase, the second step in its ultimate goal of "consolidating and transforming the turfgrass and forage seed sector in the



Continued on page 89

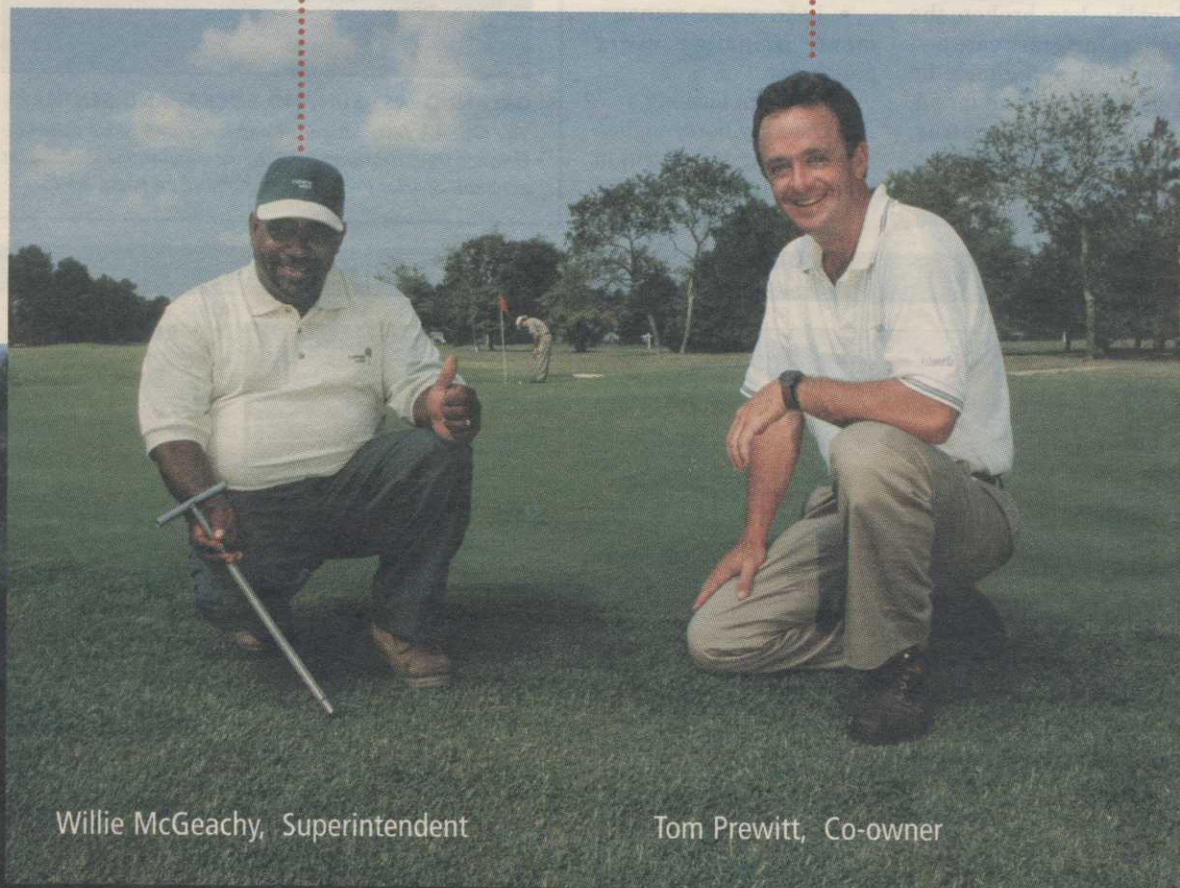
Dr. Johnny Thomas

Penn A-4 creeping bentgrass succeeds at Cypress Lakes

"We just couldn't keep grass on this green before. I'd worry about keeping the players happy, but now I sleep better at night with Penn A-4 bentgrass."

"We planted Penn A-4 in the fall of 1994, '95 and '96. We faced very poor grow-in conditions, including two hurricanes, and were still able to open for play eight weeks after seeding all three years. Willie and I have a very limited budget to work with, and have heard the hype about increased expense and labor involved with managing newer bent varieties. With Penn A-4, we've found this simply isn't true. The exceptional putting surface we have obtained here at Cypress Lakes more than outweighs any addi-

tional effort on our part. It's a relief to know we have superior heat tolerance working for us in the south, and on this green in particular where nothing seemed to grow next to our namesake cypress lake. We maintain a 0.125" cut throughout the summer, which makes for a truly consistent year-round putting surface with no adverse affect on plant health. We believe that Penn A-4 will continue to perform for our 18 greens here at Cypress Lakes, and we thank the team at Tee-2-Green for introducing it to us."



Willie McGeachy, Superintendent

Tom Prewitt, Co-owner

Number 4 green, Cypress Lakes Golf Course, Hope Mills, North Carolina

Tee-2-Green®

PO Box 250

Hubbard, OR 97032 USA

800-547-0255 in U.S.

503-651-2130

FAX 503-651-2351

bentinfo@tee-2-green.com

BRIEFS

WASHINGTON, D.C. — The methyl bromide phase-out deadline was extended to 2005 by language included in the omnibus spending bill passed by Congress in October, which President Clinton was not willing to veto. The measure pushed back by four years the 2001 phase-out date for the agricultural fumigant. The new deadline matches the phase-out date for other developed nations and allows more time for scientists to develop effective and economically viable alternatives.

...

DETROIT — Toll Brothers has acquired 381 acres in Northville Township, Wayne County, a northwest suburb of Detroit, that will be home to Northville Hills Golf Club, a country club community consisting of 650 single-family homes on an 18-hole Arnold Palmer Signature golf course. It will be built and owned by Toll Brothers.

...

NACO, Ariz. — The newly expanded Turquoise Valley Golf Course opened recently. The \$1-million project includes a nine-hole addition, upgraded putting green, and renovation of the original nine holes.

1998 U.S. course openings continue strong

JUPITER, Fla. — The United States enjoyed another banner year for golf course openings in 1998, according to the National Golf Foundation's (NGF) final tracking report.

The data shows a total of 448 new courses came on line, the second-highest figure ever. This also marked the fourth straight year the number of completions topped 400. The record of 468 was set in 1996.

Approximately 35 percent of the courses built in 1998 were additions to existing facilities.

An indication of things to come is reflected in the 1,069 courses still under construction on December 31. NGF data indicates 500 of them are likely to open this year, which would be a new record.

Type	In Planning	Under Construction	Completed
New facilities			
Daily Fee	429	579	224
Municipal	113	90	36
Private	51	95	33
Total	592	764	293
Expansions			
Daily Fee	72	217	108
Municipal	32	45	18
Private	11	43	29
Total	115	305	155
Grand Total	708	1,069	448

Source: National Golf Foundation

Four RTJ II staffers open own course architectural firm


PALO ALTO, Calif. — Once there was the "Four Horsemen," then there were three, and now there are none.

Robert Trent Jones II Golf Course Design's lead project architects — Don Knott, Gary Linn and Bruce Charlton — left the firm to form their own company, effective Jan. 15.


Their departure followed about 18 months after Kyle Phillips left one of the world's most ballyhooed stables of architects, a group Robert Trent Jones Jr. called "The Four Horsemen." The four worked together for 16 years. Their departure follows on the heels of the dissolution of Jones's construction division, Greenscape Ltd., on Dec. 31.

Jones, known for his attention to environmental concerns in golf construction, said he will not replace the trio, but will instead downsize his company and concentrate on designing a limited number of quality courses per year. He will retain Ty Butler, a young architect with the company, and work with projects that have "high-quality people and high-quality golf aspirations," he said.


Vice President of Operations Steve Schroeder, also left RTJ II to work with the new Knott Linn Charlton Designs.



Member
The Irrigation Association




GCSAA
Official Sponsor




UL LISTED


BEAUTIFUL SOLUTION NUMBER 7.



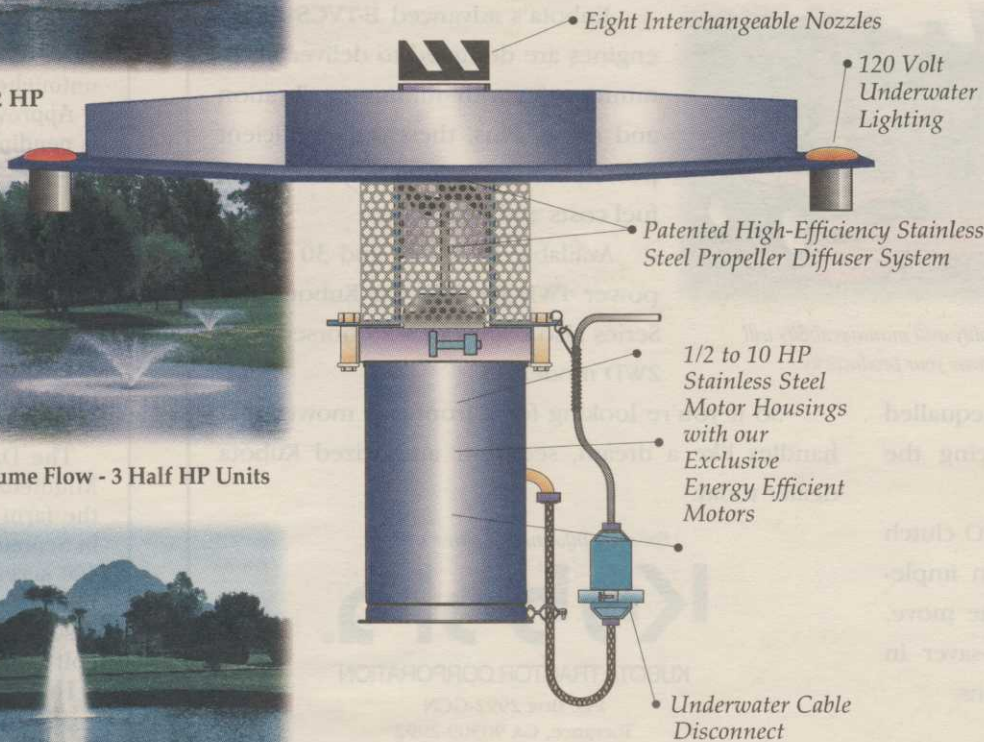
Crystal Geyser - 2 HP



Standard High Volume Flow - 3 Half HP Units



Wide Geyser - 3 HP



• Eight Interchangeable Nozzles

• 120 Volt Underwater Lighting


• Patented High-Efficiency Stainless Steel Propeller Diffuser System

• 1/2 to 10 HP Stainless Steel Motor Housings with our Exclusive Energy Efficient Motors

• Underwater Cable Disconnect

BEAUTY BENEATH THE SURFACE

Aqua Master is the industry's only manufacturer of UL LISTED aerating fountain pump systems. Take a closer look at our beautiful solution to your water quality problems.



Aqua Master
FOUNTAINS AND AERATORS
Superior Aquatic Management Systems

16024 CTH X, Kiel, WI 53042
PH. 920-693-3121 FAX. 920-693-3634
1-800-693-3144

www.aquamasterfountains.com
email: aquamaster@excel.net

R.I. developer converting poultry farm into course

HOPKINTON, R.I. — The new owners of Chickadee Farms here are planning to turn the 125-acre former poultry farm into an 18-hole course.

Plans even call for converting the old hen houses into a clubhouse and pro shop.

The developers received preliminary approval recently from the Hopkinton Planning Board.

But before course construction can begin, the developers must also meet Department of Environmental Management regulations and apply for a change in the current zoning classification.

The Hopkinton area currently has two other golf course projects under development at Fenner Hill and Brushy Brook.

Environmentalists oppose track

CRANSTON, R.I. — Environmentalists are protesting plans to turn 269 acres of Curran Reservoir land into a municipal course.

According to the *Providence Journal Bulletin*, Families Opposed to Ruining Environmental State Treasures (FOREST) are urging the city and the state not

to disturb the area.

In 1995, citing the expense of maintaining the park, the Department of Environmental Management approached the city of Cranston about developing the area.

Outgoing Mayor Michael Trifantice agreed to take over the land, but only if it didn't cost the city any money. He then commissioned the golf course plan and a feasibility study that found a golf course could actually make money for the city.

The final development decision will be up to the incoming mayor and city council.

New municipal links on Mich. planning boards

BROWNSTOWN TOWNSHIP, Mich. — Fritz Enterprises based in Taylor, Mich. has applied for a wetlands permit that could lead to the development of a municipal golf course and a 165-home subdivision.

Approximately 200 acres of the 435-acre site would be turned over to Brownstown Township for the development of a golf course. Infrastructure and course construction costs are estimated at \$15 million and could be funded by the Brownstown Downtown Development Authority.

About 63 acres of the site are designated wetlands and Fritz has pledged to create an acre of wetland for each acre of disturbed wetland affected and 1.5 acres of wetland for each acre of untouched wetland affected.

Approval of Fritz's application is pending.

Golf and horses team up in N.J.

BEDMINISTER, N.J. — Golfers and equestrians are teaming up here to preserve green space at Hamilton Farm.

The Daylar Group, based in Middletown, Conn., purchased the farm from Beneficial Corp. in September and plans to leave 100 acres for the United States Equestrian Team and use the rest of the land for an exclusive golf club.

Hurdzan and Fry are designing the 18-hole and par-3 courses. The design calls for bridge paths to be interwoven throughout the golf site.

Golf memberships will be sold by invitation only to 18 major Fortune 100 companies and will be open only to members and select guests.



What other mowers dream of becoming.

Nestled in their sheds at night, ordinary mowers dream of only one thing: growing up to be a Kubota F-60 Series. And it's easy to see why.

The Kubota F-60 Series features our exclusive Auto Assist 4WD with Dual-Acting Overrunning clutch. It automatically transfers power to the rear wheels when the going gets tough. Or, you can manually engage 4WD on the go. Either way, it gives you unequalled traction and maneuverability while reducing the damage to your valuable turf.

The durable, independent hydraulic PTO clutch lets you engage and disengage PTO driven implements on the move. A real time-saver in tight situations.



Available with 60" or 70" side discharge mower or 60" or 72" rear discharge mower.



Visibility and maneuverability will increase your productivity.

Kubota's advanced E-TVCS diesel engines are designed to deliver maximum power with minimum vibration and noise. Plus, these super-efficient powerplants go a long way in cutting fuel costs and emissions.

Available in 22, 25 and 30 horsepower 4WD models, the Kubota F-60 Series also comes in a 25 horsepower 2WD model.

So if you're looking for a front-end mower that handles like a dream, see your authorized Kubota dealer today.

For more information please write to:

Kubota

KUBOTA TRACTOR CORPORATION

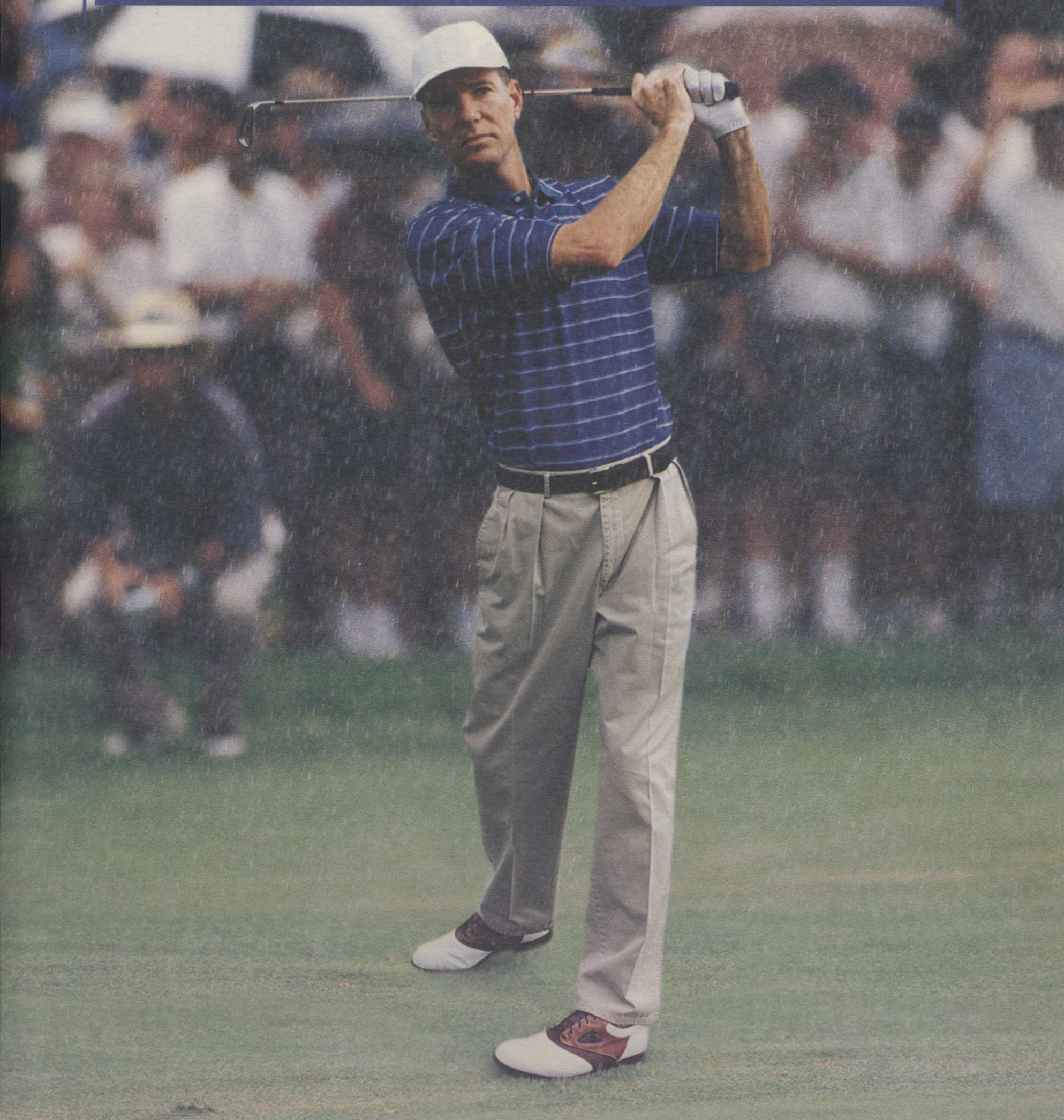
P.O. Box 2992-GCN
Torrance, CA 90509-2992
1-888-4KUBOTA ext. 407

Financing available through
Kubota Credit Corporation

©1998 Kubota Tractor Corporation



**Every season your course
endures the same stresses as a
major tournament course.**



A person wearing a blue long-sleeved shirt, blue trousers, and a blue baseball cap stands on a lush green golf course. They are holding a clipboard in their right hand and looking out over a vast, rolling green landscape towards a dense line of trees in the distance. The scene is captured in a cinematic style with soft lighting.

Shouldn't it have the
same protection?



Primo® used for Pre-Stress Conditioning helps keep 120 major tournament courses in championship condition.

Pre-Stress Conditioning with Primo helps prepare your course in advance for an entire season of wear and weather. Which is why 120 tournament courses depend on Primo.

Primo helps create denser, healthier turf for a beautiful, better-playing golf course. By using Primo, you'll help protect your course from the extremes of heat, rain, drought, and heavy traffic; improve your disease control program and even speed divot recovery.



That's because Pre-Stress Conditioning with Primo actually gives your turf bigger root systems and increased lateral stem development. All of which results in increased food reserves, more efficient water use, and thicker, healthier turf better able to withstand stresses throughout the season.

Your course undergoes the same stress as a leading tournament course, so why not give it the same protection. Use Primo for Pre-Stress Conditioning.

To learn more about Primo, call

800-395-TURF for the name of your Novartis Sales Representative. Or visit our website at www.cp.us.novartis.com



Alamo®
Award®
Banner® MAXX™
Barricade®
Primo®
Subdue® MAXX™

Primo is an important part of the Novartis Total Turf Program, the system of leading-edge products designed to help you protect and maintain your entire course throughout the year.

Controversy stymies Detroit's Humbug Island plan

DETROIT — Controversy is swirling around Humbug Island, where the developer Made in Detroit has proposed construction of 350 houses, golf course and marina.

While the plan has the support of government and business leaders, it has drawn wide criticism from conservation groups and recently a lawsuit from the Michigan Department of

Environmental Quality over protection of nearby Humbug Marsh.

The lawsuit alleges that the developers illegally cut down brush in a state conservation easement on the 400-acre island that is reportedly the last surviving marsh on the American side of the Detroit River. Made in Detroit has since submitted a new construction proposal.

Golf in World of Oz park

DE SOTO, Kan. — California-based Oz Entertainment is pushing forward for the development of the Wonderful World of Oz theme park complete with a golf course, water park, hotel and movie studio.

The company originally planned to build on a site in Kansas City, Kan., but is now negoti-

ating to develop the project on the 9,000-acre Sunflower Ammunition Plant in De Soto.

However, the \$618 million project faces major obstacles in the eyes of many financial and industry experts. In order to break even, they project that the park will have to draw 2.1 million people per year to a facility that is more than 200 miles from Kansas City.

Oz Entertainment is currently working with the Kansas Development Finance Authority to finance the project.

fertilizers so good, we put our name on them.

United Horticultural Supply is not your average fertilizer supplier.

We weren't satisfied with just performance and quality. We wanted genuine value for our customers.

Genuine value comes only when you're able to gather the best components on the market, combine them in a way for the best possible performance, then deliver that combination in the best possible manner.

That's United Horticultural Supply and **Signature Brand Fertilizers**.™ We've done all the work so you get the results you're after. You have our name on it.

Contact your local UHS representative for more information.



Wis. developers may have half year wait ahead

VERONA, Wis. — Madison Golf Development Group's plans to build a 27-hole course here may be on hold for as much as six months while officials rewrite the town's land-use plan.

In addition to the course, the 970-acre project will include 42 houses and a clubhouse.

The planning problem exists because the land sits on the Verona-Montrose township line and will require rezoning in order to move forward. Madison Golf officials are reportedly willing to wait until town officials complete the work.

Geese flocking to Illinois links

WILLOWBROOK, Ill. — In a recent report, the Dupage County Environmental Commission documented local concern over the nuisance created by Canada geese, which are reportedly wreaking havoc at area golf courses, schools and parks.

According to the commission, the best way to combat the problem is to stop creating habitats that geese favor — such as the large areas of mowed grass leading up to open ponds featured on many golf courses.

The commission is planning an upcoming conference to discuss solutions to the problem.

KROEGER PLANS PAR-3 COURSE

ROCKFORD, Ill. — Rick Kroeger, president of Kroeger Worldwide, a golf construction and consulting firm, is planning a nine-hole, par-3 course here in his hometown.

The 50-acre, \$400,000 project will include a driving range, ski hill and ice rink.

The proposed course will be aimed primarily at beginning golfers.



IN NATURE,
THAT WHICH
ADAPTS
SURVIVES

INTRODUCING A MOWER THAT UNDERSTANDS THE NATURE OF YOUR JOB

The all-new Reelmaster® 3100-D is more than an evolution of the species. It's a whole new breed that adapts instantly to the challenges of your course. Equipped with the Sidewinder™ cutting unit, you'll trim precisely around tricky bunker edges or trim areas. Shift the Sidewinder out as far as 24 inches on-the-fly to cut close without getting too close for comfort. And get the best possible view of what's ahead with the out-front operator station. Visit your Toro distributor for a demo, call 800-803-8676 ext. 152, or see the new Reelmaster 3100-D at www.toro.com/golf.



TORO. REELMASTER®

*No slips. No scuffs. No problem.
Exclusive Toro Series/Parallel
3wd traction system ensures that
power is delivered to at least two
wheels at all times, for constant
traction on slopes or soft turf.*



Celebrities fight over Dye course in Miami

MIAMI, Fla. — Residents of Miami's exclusive enclave of Fisher Island are faced with a tough decision on what to do with 40 undeveloped acres: add nine more holes of golf, or build 315 more condominium units?

The issue has caused quite a rift between the usually cordial residents of the island, who in-

clude corporate executives and celebrities such as Mel Brooks and Oprah Winfrey.

Suzanne Bosze has enlisted P.B. Dye to draw up expansion plans for the golf course, which would become a par-68 layout and cost an estimated \$3 million. Bosze estimates the addition would generate another 500

memberships at \$150,000 apiece.

However, developer John Melk, who recently acquired the land, is against the golf course proposal and is pushing for the construction of more condos. Existing condos on the island fetch \$1 million apiece. Melk expects to break ground by late spring, barring further controversy.

EXECUTIVE TRACK UNDER CONSTRUCTION IN SO. FLORIDA

DADE CITY, Fla. — Developer Chris Burdge is hard at work on the \$3 million Hidden Creek Golf Club being built on 128 acres west of Zephyrhills. Three holes of the 18-hole, par-63 layout have already been rough shaped and, weather permitting, the course is due to open this summer. High Tech Golf, along with builders and designers Jimmy Croom and Rich Osborne, have tackled the short-course project which will feature numerous bunkers, treacherous water hazards and heavy mounding.

Stick to News.

Trump pledges to use minority firms in Florida

WEST PALM BEACH, Fla. — Donald Trump has promised to hire minority construction firms to help build the Trump International Golf Club here, according to the Associated Press.

Because Trump is building the 18-hole, \$40 million course and clubhouse on 215 county-owned acres, 30 percent of the project must be handled by minority firms. The club is set to open in November.

"We still have a long way to go in completing the project and we fully intend to honor these very important commitments," Trump wrote in a letter to the Palm Beach County Commission.

Impact Golf nets lease to operate Fla.'s Quarry GC

BROOKSVILLE, Fla. — Bob Mallek, owner of Impact Golf, has reached an agreement with city officials here to operate and lease the Quarry Golf Course.

Mallek, the only bidder to fulfill the city's bidding requirements, will rent the golf course from the city for a reported \$24,000 a year.

As part of the deal, green fees will remain low and youth golf will continue to be promoted. Currently the course lets all golfers under 12 years of age play for free, as long as they are accompanied by an adult.

Mallek will be working to improve the course layout in order to attract more play.

THIS COURSE AIN'T NO LEMON

CITRUS HILLS, Fla. — The Citrus Hills Golf Club opened its third nine-hole layout at the end of January. The Terry LaGree-designed Skyview links joins the existing Oaks and Meadows runs. Skyview features hilly terrain and small well-protected greens. By all accounts, this 3,536-yard addition also has the most spectacular views. On a clear day, golfers can see all the way out to the Gulf of Mexico.

GOLF COURSE NEWS



**When readership is what you're buying
with your advertising dollars,
Golf Course News delivers.
o-cover, *Golf Course News* has the news
your customers need to know.**

**To deliver your message, call Charles von Brecht, publisher.
(207) 846-0600 • Fax (207) 846-0657**

United Publications, Inc. Providing the news in six markets: HME News, Gourmet News, Security Systems News, Golf Course News, Golf Course News International, Service News & CC News.

OF COURSE IT LOOKS FAMILIAR. YOU DESIGNED IT.

Customer input is essential to the design of every Toro product.

And considering that half the riding greens mowers in use today are Greensmaster® mowers, we've had plenty of feedback.

Literally thousands of professionals have helped us refine the Greensmaster over a span of more than 27 years.

The result is a line of greens mowers with all the advantages: precise cutting, low compaction, easy servicing, a comfortable ride and more.

We build the best by listening to the best,

year after year. Contact your Toro distributor, call 800-803-8676,

or see the Greensmaster at

www.toro.com/golf.



TORO GREENSMaster®

SERVICE ORDER
NUMBER

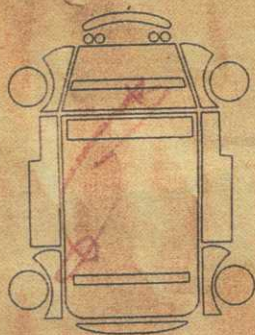
SEE REVERSE SIDE

072591

COURSE NAME WALSTON GREEN COUNTRY CLUB		ADDRESS 1287 BURNINGDOUGH DR.		CITY/STATE/ZIP JACKSONVILLE FL		PHONE NUMBER (904) 555-5665		Lubin' Larry's GOLF CAR SERVICE P.O. BOX 72 816 OIVOT, FL 32338		SERVICE ORDER NUMBER 072591	
DATE 12/4/96	MAKE/MODEL A-22	GAS/ELECTRIC ELECTRIC	DECAL NUMBER 16	HOURS/MILEAGE 125 HRS	DATE LAST SERVICED 9/12/96	NEXT SCHEDULED SERVICE 3/4/97	ACCOUNT NUMBER 002-7745-1935				

MANUFACTURER'S RECOMMENDED
LUBRICATION SCHEDULE

- ☐ YAMAHA
- ONCE A YEAR**
-LUBRICATE KINGPINS
- ☐ CLUB CAR
- EVERY 3 MONTHS**
-LUBRICATE BRAKE SHAFT, BRAKE
LINKAGE, ACCELERATOR PIVOTS,
5 FRONT GREASE FITTINGS
- EVERY 12 MONTHS**
-INSPECT FRONT WHEEL BEARINGS
-ADJUST, REPACK
FRONT WHEEL BEARINGS
- ☐ EZ-GO
- EVERY 3 MONTHS**
-LUBRICATE PARKING BRAKE
- EVERY 6 MONTHS**
-GREASE 7 FRONT END FITTINGS
- EVERY 12 MONTHS**
-ADJUST, REPACK
FRONT WHEEL BEARINGS
- *OTHER CARS REFER TO MAINTENANCE MANUAL



CIRCLE AREA OF REPAIR

MECHANIC COMMENTS:

PLEASE ALLOW ADDITIONAL
TIME FOR ANY SERVICE THAT
REQUIRES HOISTING THE CAR
TO ACCESS PARTS. (DOES NOT
APPLY TO YAMAHA CARS, WHICH
HAVE SPECIAL ACCESS
PANELS THAT MAKE HOISTING
ALL BUT UNNECESSARY.)

**YAMAHA GOLF CARS REQUIRE UP TO 90%
LESS ATTENTION THAN OTHER GOLF CARS.
THAT DESERVES A LOT OF ATTENTION.**

*Yamaha golf cars don't have to be brought in
every 3 months for one form of scheduled
lubrication or another like the other guys.
Simply lubricate the kingpins once a year.
That's it. Our front wheel bearings are sealed
and rarely need maintenance. There are no
front suspension grease fittings to maintain.
And the pivoting and rotating parts on
the chassis generally don't require
lubrication.*

*Which means, even including preventive
maintenance, the Ultima™ requires a lot
less of your time. And
a lot less of your
money. After all,
just because our
lives revolve around
golf cars doesn't
mean yours has to.*

CALL YAMAHA AT 1-800-843-3354.
WORK THROUGH OUR EXCLUSIVE COST
COMPARISON BOOK. YOU'LL SEE THAT
LOWER MAINTENANCE IS ONLY ONE WAY
WE MAKE YOU MORE PROFITABLE.

I hereby acknowledge that, unless I use Yamaha golf cars, it is my responsibility to have my cars lubricated every 3 months
based on the manufacturer's recommendations and that I agree to pay the parts and labor costs each and every time,
even though it's a big huge waste of money since I could use Yamaha golf cars and only worry about it once a year.

X *[Signature]*
CUSTOMER SIGNATURE

QUESTIONS? COMMENTS? TIRED OF SPENDING SO MUCH ON MAINTENANCE? CALL YAMAHA AT 1-800-843-3354.

MAINTENANCE

DO IT BY THE BOOK.



YAMAHA USA



Ariz.'s scaled-down Grayhawk project on schedule

SCOTTSDALE, Ariz. — Grayhawk Development has announced plans for a 27-hole golf course and a residential community on approximately 935 acres of desert land north of Scottsdale.

The site has previously been eyed by other developers, but city officials as well as neighborhood groups have effectively killed other

proposals because development plans called for too many home sites.

This time around, however, both neighbors and the planning commission are in favor of the scaled-down development, which will feature only 250 homes.

Grayhawk will be applying for a golf course use permit this spring.

Couples, Nicklaus at work in Texas

HOUSTON — Sunrise Colony Co. has unveiled plans for Royal Oaks Country Club, an 1,100-home private community situated in the Westchase district of Houston. The project will be built on the site of the defunct Andrau Airpark. Native Houstonian Fred Couples will design the 7,000-yard, par-72 course. Completion of the first homes and the opening of the course are anticipated by late 1999.

Nearby, in The Woodlands, Jack Nicklaus is designing the Club at Carlton Woods. The Nicklaus course is part of a planned exclusive gated community named after Texan course designer Carlton Gipson, who died last year. The \$5 million layout is scheduled to open in fall 2000.

Dallas residents fight course renovation plan

DALLAS — City officials are facing a fight from local residents who oppose plans to refurbish and upgrade the city-owned Tenison Park Golf Course.

After the city council approved a \$5 million contract, residents filed a lawsuit protesting plans that call for the razing of more than 250 trees. They are also outraged the city plans to double fees at the course.

The city maintains the course improvements will benefit the entire park. They promise that increased revenues generated from a premier golf course will be pumped back into the park's operational budget.

The city is appealing the injunction.

New 18-hole Texas facility contemplated

MANSFIELD, Texas — Developers Gary Brown and Larry Beard are proposing a major golf development here that would be the area's first public golf facility.

Brown plans to turn the city-owned, 322-acre site into an 18-hole course, with upscale homes, apartments and retail components.

City officials are excited about the growth potential of the \$6 million project. Under the agreement with the city, Brown and Beard would operate the golf club for 30 to 40 years, after which it would be turned over to the city.

CASPER/NASH TRACK OPENS IN LAS VEGAS

LAS VEGAS, Nev. — The Revere at Anthem, the first of four high-end, daily-fee courses planned for Del Webb's Sun City Anthem Community, opened in January. Billy Casper and Greg Nash combined forces to design the 7,010-yard, par-72 course built into a natural canyon landscape. The course is 15 minutes from the Las Vegas Strip.



for your



TORO NATIONAL SUPPORT NETWORK DEDICATED IRRIGATION SUPPORT FOR SUPERINTENDENTS

We're always prepared to answer your call for help. With 17 licensed irrigation experts on staff, the Toro National Support Network (NSN) offers fast system troubleshooting, problem-solving, remote diagnostics, or just friendly advice. Enroll your course today. Call 800-ASK-TORO, or contact your Toro distributor. With NSN, there's always help at the end of the line.

©1998 The Toro Company



IRRIGATION®

Hills, Graves and Pascuzzo all busy in Golden State

LA HABRA and YORBALINDA, Calif. — The lack of public golf facilities for residents here will soon be addressed. Westridge Golf Club in La Habra is expected to open in June 1999, and the Black Gold Golf Club in Yorba Linda expects to begin construction this month.

The 18-hole, 6,500-yard, Robert Muir Graves and Damian Pascuzzo-designed Westridge Golf

Club sits on a former oil field and is being built by Environmental Golf of Calabasas, Calif., which will also own and manage the facility.

Arthur Hills has nearly completed the design work on the 6,900-yard Black Gold Golf Club that sits in the foothills adjacent to Chino Hills State Park. The high-end municipal course is slated to open in September 2000.

Diamond Valley opens first track

RIVERSIDE, Calif. — The first phase of the Diamond Valley Golf Club is nearing completion, with the first 18 holes of the planned 36-hole layout due to open in mid-January.

The \$10-million course, built by Yen Ping Group, Inc. of Pasadena, Calif., is a public course and country club. Construction

on the second, and mostly private 18-hole course, will begin in the first quarter of 1999 and will include a larger clubhouse with banquet and meeting facilities.

The courses are part of a 107-residential development located in the sparsely populated hills east of the Domenigoni Valley reservoir.

Oaks impede new TPC layout

VALENCIA, Calif. — The Newhall Land and Farming Co. received planning commission approval recently for its 800-acre Westridge project that will include a PGA Tournament Players Club course and 1,700 homes.

However, since the approval, the Sierra Club has filed an appeal stating the development would harm rare oak savanna. The county board of supervisors has also agreed to review the project's conditional-use permit that allows for the removal of 147 oaks.

The battle to preserve this oak savanna from development has been raging since 1992.

San Diego links taking shape

DE LUZ, Calif. — Work has begun on the 18-hole Cross Creek Golf Course here in the hills west of Temecula, Calif., 45 minutes from San Diego. Clearing is underway as brush, trees, and trash are removed in preparation for construction.

More than 300 trees will be removed during construction, but developers are planning to replant around 800 trees on the completed course.

The par-71 layout is routed through dense areas of sycamore and oak trees and offers vistas of nearby avocado and citrus groves.

Cross Creek is slated to open in spring of 2000.

RENOVATION PLANNED FOR LOS ANGELES COURSE

LOS ANGELES — The Los Angeles Recreation and Parks Department plans to renovate the heavily played, 49-year-old Rancho Park golf course. The \$6-million improvement program includes upgrading the driving range and existing irrigation system and rebuilding all 18 greens. Work could begin by spring 1999.

Silence isn't golden.



Three more courses possible for Southern California

ONTARIO, Calif. — Sierra Lakes Golf Club broke ground in October and rough grading is underway on the 18-hole, 6,700-yard Ted Robinson-designed layout. The course will be a part of a 2,000-residence, Lewis Homes development. The project is due to be finished in October 1999.

Two more projects are underway in the

Ontario Inland Valley area. The city of Chino is in negotiations with the state of California for lease of 120 acres of land adjacent to the Ayala Golf Center. Plans call for a 6,600-yard, 18-hole course.

Additionally, Harvest Development Co. is awaiting approval from the city of Chino Hills for the proposed Oak Crest Golf Club.

Atlanta's Cherokee T&CC receiving major facelift to 36-hole complex

By PETER BLAIS

ATLANTA — "We've got everything torn up," said former GCSAA President Randy Nichols of his home course, Cherokee Town & Country Club here.

The original 36 holes, designed by Willard Byrd and Joe

Lee, are in the midst of a \$14 million renovation project overseen by Tom Fazio, said Nichols, Cherokee T&CC's director of golf maintenance.

Nichols closed down 18 holes in November 1997 so work could begin. Another nine closed in September 1998 and the final nine in mid-October. All 36 holes were out of play until the first 18 to go under the plow reopened in November.

In addition to the 36-hole



Randy Nichols

renovation, cart storage is being relocated under the parking lot behind the clubhouse and a new course maintenance building is under construction.

"Since the last [GCSAA] conference, I've only missed four days here," noted Nichols of his schedule since last February's Anaheim show. "We were working 12 to 13 hours a day during the summer. We're down to 10 now."

The grand opening of all 36 holes is scheduled for November.

"This warm, dry fall has really helped us out," Nichols said. "A couple small rains have slowed us down a bit, but nothing has stopped us yet. We're putting down about 80,000 square feet of sod a day."

Cherokee's course crew is laying the sod, installing the irrigation, completing the landscaping and removing trees. Medallist Golf is the course contractor.

"Fazio's been here himself probably eight times and has a representative who tries to get here every week," Nichols said.

Nichols said the members have been very understanding and patient during the two-year disruption.

"They went out and bought a lot of tee times at two real nice public courses," he said.

It's green.

Quiet power. That's the essence of the new Electric Turf Gator from John Deere. An electric utility vehicle designed to accelerate faster, climb hills with ease, and perform all day long.

A separately excited motor gives the Electric Turf 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



[The New Electric Turf Gator®]



Nothing Runs Like a Deere®

HILTON ACQUIRES TORREY PINES RESORT

LA JOLLA, Calif. — Hilton Hotels Corporation announced the purchase of the Sheraton Grande Torrey Pines December 29 from Torrey Pines Hotel Associates for a reported \$82.5 million. The renamed Hilton La Jolla Torrey Pines sits adjacent to the world renowned 36-hole Torrey Pines Golf Course.

State-of-the-Art.

HERITAGE®. THERE'S NEVER BEEN ANOTHER FUNGICIDE QUITE LIKE IT—AND NEVER WILL BE.

HERITAGE fungicide masters the art of disease control. With its distinctly different, state-of-the-art chemistry,

HERITAGE is unlike any other fungicide.

Not only does it act both preventatively and curatively against turfgrass disease, it also exhibits other important advantages, including:

- **Controls Most Turfgrass Diseases**

Controls most destructive diseases, including

Pythium, take-all patch, summer patch, anthracnose, and snow mold.

- **Novel Mode of Action**

Only strobilurin chemistry available that delivers highly effective systemic activity.

- **Reduced Risk Fungicide**

Displays a low-risk toxicological profile for reduced risk to environmental resources.

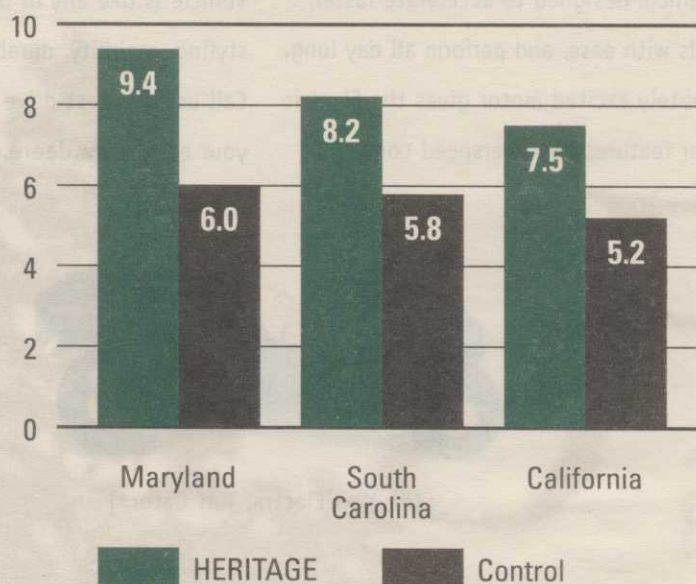
- **Extended Spray Intervals**

Applied at low use rates with longer spray intervals.

- **Improves Turf Quality**

Enhances the thickness and color of turf without stunting or plant growth regulator effect.

Turf Quality (Index 0 – 10)





State-of-the-art HERITAGE fungicide.
Make it a regular part of your management
program for a turf masterpiece.

For more information, contact your authorized
Zeneca Agent, or call Zeneca Professional
Products Toll Free at 1-888-617-7690. Labels and
MSDSs available 24 hours a day, seven days a week
via Fax on Demand. Please call 1-800-640-2362.

www.zenecaprofprod.com

HeritagE®
FUNGICIDE

CHANGING THE COURSE OF DISEASE CONTROL

Always read and follow label directions carefully.
HERITAGE® is a registered trademark of a Zeneca Group Company. ©1999. Zeneca Inc.
Zeneca Professional Products is a business of Zeneca Ag Products, a business unit of Zeneca Inc.

ZPP-HER-008

Let's keep new technology accessible



Michael Levans,
editor

News of Toro's alliance with ProShot golf, a provider of GPS technology — the second of the "Big 3" officially on board with this piece of the technological puzzle — is a sure sign that turfgrass maintenance has entered an adventurous age.

The possibilities are limitless, once engineers can make sense of all the elements and somehow put together a cohesive, plug-and-play "solution," or "modular package" — something that's not a whole lot different than the PC you have on your desk. You want to write a letter, you buy Word. You want to do a slide presentation you buy PowerPoint. You want to monitor turf temperature and water saturation...

Pin-point precision spraying, two-way communication between an active piece of equipment and a superintendent's central computer system, maybe even a robotic mowing crew. Some of it's here already, the rest is certainly in the cards.

While suppliers remain sensitive to the idea of supplanting personnel, they are well aware that a robotic mower, even a fleet of mowers, running from a central control is not far fetched — some would even say its within reach.

According to Toro's Dana Lonn, all someone needs to figure out is "collision avoidance."

"That's one of the problems we would like to solve," Lonn told me during a recent interview. "GPS isn't quite accurate enough to get you what you need. We're working on it. It's pretty easy to know where you are, it's pretty easy to know where you want to go. The most difficult part is not running over something. Big objects are easy to find, you don't have to worry about a tree because they don't move, but the small objects, say someone left a golf club on the course, you have to have something that's capable of seeing that."

The solution to collision avoidance will soon be found. But with any technological advance one's left to wonder just how long it will take for it to trickle down to the superintendent's desktop.

Meanwhile, Toro and John Deere are exploring new technologies and new ways of applying them as they get closer to a semi-autonomous vehicle. Both companies will have their new technology ideas in the spotlight at the show. Just how practical is the semi-autonomous vehicle? I'd ask them at the show.

• The NGF numbers are just about official. Another 448 courses have come on line in 1998, with a downright shocking 1,069 new facilities and expansions currently under construction.

I'm going to make a quick prediction: Talk of the alternative facility, The First Tee and other efforts assisting affordable accessible golf are not about to end anytime soon. This is the future of the business.

Golf is pushing toward a greater good

Golf and our society over the last decade have evolved in opposite directions, it seems. The golf industry is an engine driving toward more equality, morality and unity, while society has been steered by politicians and activists toward dissension and immorality.

Ten years ago, Ronald Reagan was president of the United States. The general public felt good about America, its future and its president. The Berlin Wall had fallen and Russia was about to collapse. The U.S. was held in high esteem in most other countries of the world.

In the little world of golf, the industry was peddling along at 200-odd new golf courses each year. Player figures were relatively stagnant. The fiasco over Butler National's white-only policy had not yet surfaced. Generally, golf was treading water.

Ten years ago this month, *Golf Course News* published its first issue and I attended my first International Golf Course Conference and Show. I recall my first two interviews:

- with Alice Dye concerning her efforts to get golf course developers and architects to build "forward" tee boxes to make the game more playable for women, youths and older players; and
- with golf architect Jeffrey Brauer regarding the pros and cons of sodding an entire course, since Tom Fazio was doing just that for the first time at Shadow Creek Golf Club outside Las Vegas.

They seemed innocent-enough interviews, but look at them more closely. It appears now that Alice's push (or was she using a horsewhip?) was a precursor of a mammoth, game-changing trend that has turned into an adventure of innovative, energetic programs and learning facilities to pull youths, women and other beginners into the game of golf.

Though sodding golf courses was unheard-of at the time, Brauer's insights proved true — perhaps even prophetic. The long-term savings related to sodding a course often more than negate the short-term savings related to seeding. But with sodding, a golf course can open quickly and speed up return on investment. Having greatly picked up steam, this method appears to have coincided with the acceptance that, yes, golf can be as much a profitable business as it is a game — a business that can stand without housing, and therefore one that can open to the general public rather than just the wealthy.

Golf as a game, meanwhile, has even gained in stature, perhaps because it stands in stark contrast to the world in which it must exist.

Players abide by the rules, everyone being equal. There are no shades of gray. Here's a novel idea for some of the folks in the White House.

Gamesmanship has to do with a contest of skills, not who can best "spin" the facts to make themselves look good and their enemy evil.

Golf's history is so strongly laced with tales of ethics that they rule — that is, RULE — the game and influence modern players. Compare them to the "ethics" of the world in 1999.

Ten years ago, there existed no Audubon Cooperative Sanctuary System for Golf Courses. Today, thousands of golf courses belong to the system, more are being added every month, and builders and architects have labored with environmentalists to forge a set of rules by which they will work with and for ecology. This is a great

Continued on page 66



Mark Leslie,
managing editor

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

www.golfcoursenews.com

Publisher
Charles E. von Brecht

Editorial Director
Brook Taliaferro

Editor
Michael Levans

Managing Editor
Mark A. Leslie

Associate Editor
Peter Blais

International Bureau Chief
Trevor Ledger

Contributing Editor
Terry Buchen, CGCS, MG

Production Director
Joline Gilman

Traffic Manager
Heather Walker

Editorial Advisory Board
Raymond Davies, CGCS
CourseCo
Kevin Downing, CGCS
Willoughby Golf Club
Tim Hiers, CGCS
Collier's Reserve
Ted Horton
The Pebble Beach Co.
Dr. Michael Hurdzan
Hurdzan Design Group
Mary P. Knaggs
Bass Rocks Golf Club
James McLoughlin
The McLoughlin Group
Kevin Ross, CGCS
Country Club of the Rockies
Brent Wadsworth
Wadsworth Construction

Editorial Office
Golf Course News
Box 997, 106 Lafayette Street
Yarmouth, ME 04096
207-846-0600; Fax: 207-846-0657
mlevans@golfcoursenews.com
mleslie@golfcoursenews.com

ADVERTISING OFFICES
National Sales:
Charles E. von Brecht
Box 997, 106 Lafayette Street
Yarmouth, ME 04096
207-846-0600; Fax: 207-846-0657
cvonb@golfcoursenews.com

Western Sales:
Robert Sanner
Western Territory Manager
2141 Vermont
Lawrence, KS 66046
785-842-3969; fax: 785-842-4304

Account Manager
Jean Andrews
P.O. Box 51
Fryeburg, Maine 04037
Phone/FAX 207-925-1099

Marketplace Sales:
Jean Andrews
Phone/FAX 207-925-1099

Circulation Manager
David Harrell
Subscription Information
Golf Course News, P.O. Box 3047
Langhorne, PA 19047
215-788-7112

United Publications, Inc.
Publishers of specialized business and consumer magazines.
Chairman
Theodore E. Gordon
President
J.G. Taliaferro, Jr.



Copyright © 1998 by United Publications, Inc. All rights reserved and reproduction, in whole or in part, without written permission from the publisher is expressly prohibited.

GOLF COURSE NEWS

LETTER TO THE EDITOR

On behalf of the entire Renaissance Village team, thank you for the wonderful two articles in your October issue. I must tell you, that of all the coverage we have been fortunate to have had in the past 18 months, you better than anyone captured the essence of Renaissance Village and what we are trying to do.

To have our labor of love be featured in your industry-leading publication is a real boost to our efforts and our credibility. I wanted you to know your reportage has already generated positive feedback and offers of help from several of your subscribers.

We look forward to being in touch with you and *Golf Course News* on the leads you generated as well as subsequent developments surrounding Renaissance Village. We have long recognized that we will not build this project by ourselves, that it will take the combined efforts of literally hundreds of others.

Thank you and your publication for being one of the early believers in us and for your part in getting us to where we are presently — further and faster than I ever dreamed. We look forward to sharing with you and your readers the many successes yet to come.

Father Leo
Rev. Leo F. Armbrust
Renaissance Village Inc.

NOTES FROM THE UK

Time to consider a better women's course

By BRIAN GRIFFITHS

The Marylebone Cricket Club's (MCC) change of heart in admitting women members recently might well lead to an intensification of media interest in the status of women golfers.

In the United Kingdom the Equal Opportunities Commission (EOC) busybodies have already been poking their noses into the Royal & An-

cient game regarding the status of women at golf clubs.

More women are now taking up golf. Television exposure of major women's events such as the Solheim Cup and the Weetabix Open probably helps to sustain interest — not to mention the Women's Tour team versus the European Seniors Tour match at Praia d'el Ray, Portugal in November 1998.

These, along with other social factors, help to maintain

Brian Griffiths is Chairman of Golf Consult International.

Continued on page 76

Lohmann: Alternative-facility development is good business — your business

By BOB LOHMANN

Serving as president of the American Society of Golf Course Architects (ASGCA) is a bit like visiting the observation deck atop a skyscraper: You can't miss the big picture, but your best thinking invariably follows the long elevator-aided descent, when both feet are planted firmly on the ground.

As my term winds down (John LaFoy will succeed me in March), I'm better able to evaluate what we've been able to accomplish over the past 10 months, and what architects can do to strengthen golf in the coming years.

The dominant topic has been "growth." Everyone in our business talks about growing and invigorating golf by making its courses and the game itself more accessible to youngsters. But what should architects do with their influence? We can work in concert with allied organizations, but how can golf course designers

Bob Lohmann is president of Lohmann Golf Designs and its sister construction division, Golf Creations; both are based in Marengo, Ill. Lohmann is sitting president of the American Society of Golf Course Architects; his term expires in March.

help attract young people into the game and keep them there?

After all, we can lay out learning centers, short courses and practice holes, but developers and municipalities — our clients — ultimately make the decision whether to build these alternative facilities.

Here's the crux of the issue: When it comes to creating facilities that attract and serve junior golfers, it's the chicken or the egg. Which comes first? Does the developer approach

the architect and say, "You know, I'd like to have a 3-hole short course in addition to the 18 you're designing."

Or is it the responsibility of the course designer to say, "You know, if we use this routing plan, we'll have room to include a 3-hole short course, as well."

When I took office last year, I called on my colleagues to put their money where their mouths are. Last April in Los Angeles, I told my colleagues that it's *our* job as golf course architects to make sure developers and municipalities, our clients, understand the value of creating these alternative facilities, which allow juniors and novices the opportunity to learn the game in fun, low-key environments.

We have a dual role: designer and advocate. With influence comes responsibility; this is part of our responsibility.

Well, I'm happy to report this message is taking hold — not because it was my idea or because ASGCA members do whatever the president says, but because it's good business.

If provided a comfortable learning environment, new golfers are more likely to become habitual, green-fee-paying golfers.

Today's youth are nothing if not brand loyal; they will play where they're comfortable, where they learned the game. Further, if a facility provides a place for kids to learn, parents will certainly be predisposed to play there.

ASGCA Associate Member Tom McBroom had made these realities clear to at least one his clients. Tom is in the process of renovating the Algonquin Golf Course in St. Andrews, New Brunswick, Canada. The current facility includes a regulation 18-hole course and an executive nine-hole layout. Tom is condensing these 27 holes down to a single 18; with

the extra room, he's adding a state-of-the-art practice facility that will accommodate an expanded teaching program.

In the stand-alone category, Ault, Clark and Associates have long been in the forefront of this phenomenon. According to partner Tom Clark, the firm has designed 15-20 dedi-

cated practice facilities during the last five years; half a dozen have been built, including Fair Oaks Golf Park in Fairfax with its putting green, chipping area, and 9-hole chip-and-putt.

After seeing the success of Fair

Oaks and another Ault, Clark facility — Hunter Mill Golf Park, located on the access road to Dulles International Airport — the Fairfax County Parks Authority developed yet another, Oakmarr Golf Complex in Oakton. Ault, Clark's two 27-hole practice facilities in Myrtle Beach — the night-lit Cane Patch and Midway learning centers — each do 1,500 rounds a day and out-earn their sister regulation courses.

Continued on page 68



Bob Lohmann

'Last April in Los Angeles, I told my colleagues that it's our job as golf course architects to make sure developers and municipalities, our clients, understand the value of creating these alternative facilities.'

Sweaty palms?
Furrowed brow?
Bloodshot eyes?

Don't let gremlins in your pump station keep you up at night.
Call FLOWTRONEX PSI.

No one has created more industry innovations. No one gives you better, more advanced service capabilities. No one maintains over \$2 million in parts inventory to ensure fast and accurate delivery. And no one engineers a better pump station to fit your unique needs.

It all adds up to the best engineered, most worry-free pump station in the world. One that gives you superior strength. Superior performance. And a superior night's sleep.

So before you make any decisions, talk to the people at FLOWTRONEX PSI.

Yes, we may cost a little more than the other guys. But, rest assured, you'll never suffer through one of their pump station nightmares.

FLOWTRONEX PSI
Pumping Systems

(800)786-7480 (214)357-1320
E-mail: ftxpsi@flowtronex.com

If Pump Station Paranoia Has You Losing Sleep,
Here's Some Peace Of Mind.

The Web!!!

No use to the Golf Course Superintendent...

Think Again!

START Using The Web.

Life as a superintendent will never be the same.

Coming Soon...

golfolutions.com

The Web Service for the Golf Course Superintendent

info@GolfSolutions.com

BRIEFS



BRANCH GEORGIA'S SUPER OF YEAR

COLUMBUS, Ga. — Don Branch of Green Island Country Club here has been presented the Georgia Golf Course Superintendents Association's 1998 Superintendent of the Year Award. He received the honor at the annual Georgia Golf Hall of Fame banquet.

MAGCS ELECTS MAIBUSCH

BATAVIA, Ill. — The Midwest Association of Golf Course Superintendents has elected Robert Maibusch president of the association. Maibusch is the superintendent at Hinsdale Golf Club in Clarendon Hills. Maibusch succeeds outgoing President Kevin Czerkies of Sportsman's Country Club in Northbrook. Vice president for 1999 is Don Ferreri, superintendent at Seven Bridges Golf Club. Brian Bossert of Bryn Mawr Country Club was elected secretary-treasurer. Elected to two-year terms as directors were Kevin DeRoo of Bartlett Hills Golf Club and Greg Thalmann of Fox Run. Dan Anderson of Fox Valley Golf Club was elected to a one-year term. Current directors with one year remaining are Luke Strojny of Poplar Creek Golf Club, James McNair of Orchard Valley Golf Club and Fred Behnke of Mount Prospect Golf Club.

CASINO MAGIC IN SILVER PROGRAM

A caption in the November issue of GCN identified Casino Magic in Bat St. Louis, Miss., as being a Audubon Gold Signature project. It is a Silver Signature project.

NO SOLUTION IN SIGHT

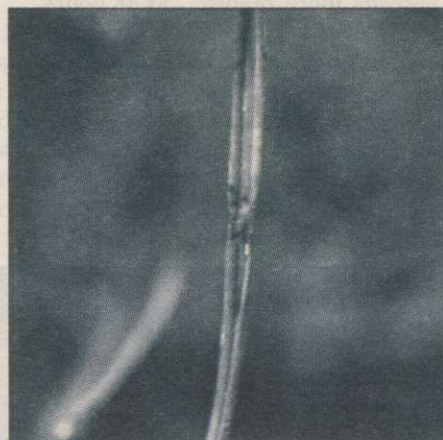
Out of nowhere, gray leaf spot devastates rye, tall fescue

By DR. ERIC K. NELSON

The 1998 gray leaf spot epidemic on perennial ryegrass and tall fescue has raised this previously little-known turf disease to a high level of respect from golf course superintendents and other turfgrass professionals who have witnessed its devastating effects.

Those responsible for developing turfgrass specifications for new golf course construction or renovation projects should be aware of the risk of planting straight perennial ryegrass, or seed mixtures where it predominates, and adjust future recommendations accordingly.

Since "Pennfine" perennial ryegrass was first released under Plant Variety Protection status in the early 1970s and the subsequent proliferation of hundreds



Gray leaf spot — up close and personal.

of new cultivars, some turf managers have been lulled into believing that perennial ryegrass is easy, inexpensive and invincible as a permanent monostand of turf.

Bouts with both winter kill and now disease on perennial ryegrass in the 1990s are beginning to change those perceptions.

HISTORY OF PROBLEMS

The fungus responsible for gray leaf spot on perennial ryegrass (*Pyricularia grisea*) also causes blast of annual ryegrass and gray leaf spot on St. Augustine grass. However, since it was first documented on annual ryegrass in Louisiana and Mississippi in the early 1970s, the fungus had been virtually unreported on any ryegrass until Landschoot and Hoyland (1992) of Penn State University first reported it on perennial ryegrass on golf course fairways in Pennsylvania.

Last year, the disease was observed decimating perennial ryegrass and tall

Continued on page 22



A leaf and debris blower can operate for hours with an auxiliary fuel tank. This version is the one put together for Ridgewood Country Club superintendent Todd W. Raisch by equipment manager Ronny Cestaro.

Terry Buchen photo

Leaf blowing all day with auxiliary tank

By TERRY BUCHEN

PARAMUS, N.J. — Faced with the frustration of their leaf blower running out of gas every 1-1/2 hours, superintendent Todd W. Raisch and his crew at The Ridgewood Country Club here found an easy solution.

Equipment manager Ronny Cestaro hooked up a portable six-gallon auxiliary marine fuel tank, similarly used for

outboard motors, with a hand-operated bulb-type fuel primer.

The Giant Vac Leaf & Debris Blower, which has its own gasoline-powered engine with an electric start off its own battery, is bolt-mounted to the flatbed attachment on a three-wheel Cushman Turf Truckster.

"We've had great results," said Cestaro.

Continued on page 23

CGCS to honor Gordon Witteveen

MISSISSAUGA, Ontario — The Canadian Golf Superintendents Association (CGSA) has nominated Gord Witteveen for the John B. Steel Distinguished Service Award for 1998. The award is given to those who have made an outstanding contribution to the advancement of the profession of the golf course superintendent.



Gordon Witteveen

Witteveen fits the bill. He was one of the founders of the CGSA and has been active in all facets of the organization for the past 30 years. Witteveen was also one of the first editors of *GreenMaster* magazine and continues to write a column called

Continued on page 23

GOLF AND THE ENVIRONMENT

Traveling the wildlife highways

By RON DODSON

In our daily human lives, we travel to a variety of places for a variety of reasons — to work, the grocery store, meetings and social gatherings, and to and from our homes. Some of us even travel from place to place on a golf course — down the fairways by cart or by foot from tee to green. Depending on the purpose of our travel, we use different modes of transportation and different routes.

Wildlife travels as well. Instead of sidewalks, roads and highways, they use their own network of paths and trails. Like humans, their routes depend on the purpose and destination of their travel. They may travel from a thicket of woods to find a pond or stream for water to drink. They

Continued on page 25



The pond buffer on the 16th hole at River Run Golf Course in Berlin, Md.

N.J. Turf Assn. honors Al's Dodson

SELKIRK, N.Y. — The New Jersey Turfgrass Association's distinguished Environmental Steward Award was presented recently to Ron Dodson, president of Audubon International, in Atlantic City at the Trump Taj Mahal.

This award is presented to people or organizations who have performed distinguished service demonstrating dedication to the protection of the environment and preservation of eco-systems. In addition to the award, Dodson's name will appear on the Master Plaque in the Turf Building at Rutgers University, New Brunswick, among such notable past recipients as Robert Shinn, commissioner of the New Jersey Department of Environmental Protection; Judy Bell, former

Continued on page 25

Gray leaf spot devastates

Continued from page 21

fescue from New York to North Carolina and west through Oklahoma and Nebraska. At the October annual meetings of the American Society of Agronomy and Crop Science Society of America in Baltimore, gray leaf spot was one of the top stories shared by many turfgrass agronomists.

FALLOUT FROM THE EPIDEMIC

The devastation caused by gray leaf spot has now caused many university professors and turfgrass agronomists to avoid recommending straight perennial ryegrass or tall fescue for many turf situations. Unfortunately, the warnings and revelations came too late for several superintendents who reportedly lost their jobs due to extensive damage to their perennial ryegrass fairways.

The crisis will stand as another harsh lesson about long-term reliance on mono-species turf stands. Turfgrass managers should be prepared to rapidly identify gray leaf spot and deal with it appropriately.

SYMPTOMS

The first symptoms of gray leaf spot are small oval leaf lesions that appear "water-soaked" and then turn a grayish tan hue bound by a darker band. Often, the lesions are mistaken for early stages of brown patch or other leaf spot diseases, so microscopic exam or laboratory culture for signs of the fungus may be necessary for confirmation of gray leaf spot.

During humid weather, grayish mycelia and conidia (spores) may be seen on gray leaf spot lesions. Eventually on a larger scale, 2-to 3-inch-diameter patches of chlorotic (light green) and twisted leaves appear in the turf. Whole plants may eventually be killed, leaving dead patches which enlarge and coalesce with additional waves of infection.

DISEASE DEVELOPMENT

Gray leaf spot has the same potential for devastating turf as

Pythium blight. However, gray leaf spot spreads more readily and apparently over a broader range of conditions. It can strike from May through October. Last year, some courses in Virginia were still seeing secondary infections from gray leaf spot in October. Under the right environmental conditions, including

high heat and humidity, this fast-moving disease has been reported to wipe out entire perennial ryegrass fairways in as few as 48 hours.

The gray leaf spot fungus produces microscopic conidia (spores) which are easily spread across the turf by wind currents, water splash, surface drainage patterns, maintenance equipment, or anything else that tracks across the turf. Conidia then

germinate where moisture is present on leaves for an extended period. Resulting fungal hyphae then infect the leaves and sheaths of the grass plants. Soon, millions of new conidia may be produced by the fungus and spread further across the golf course or geographic region as they were this year.

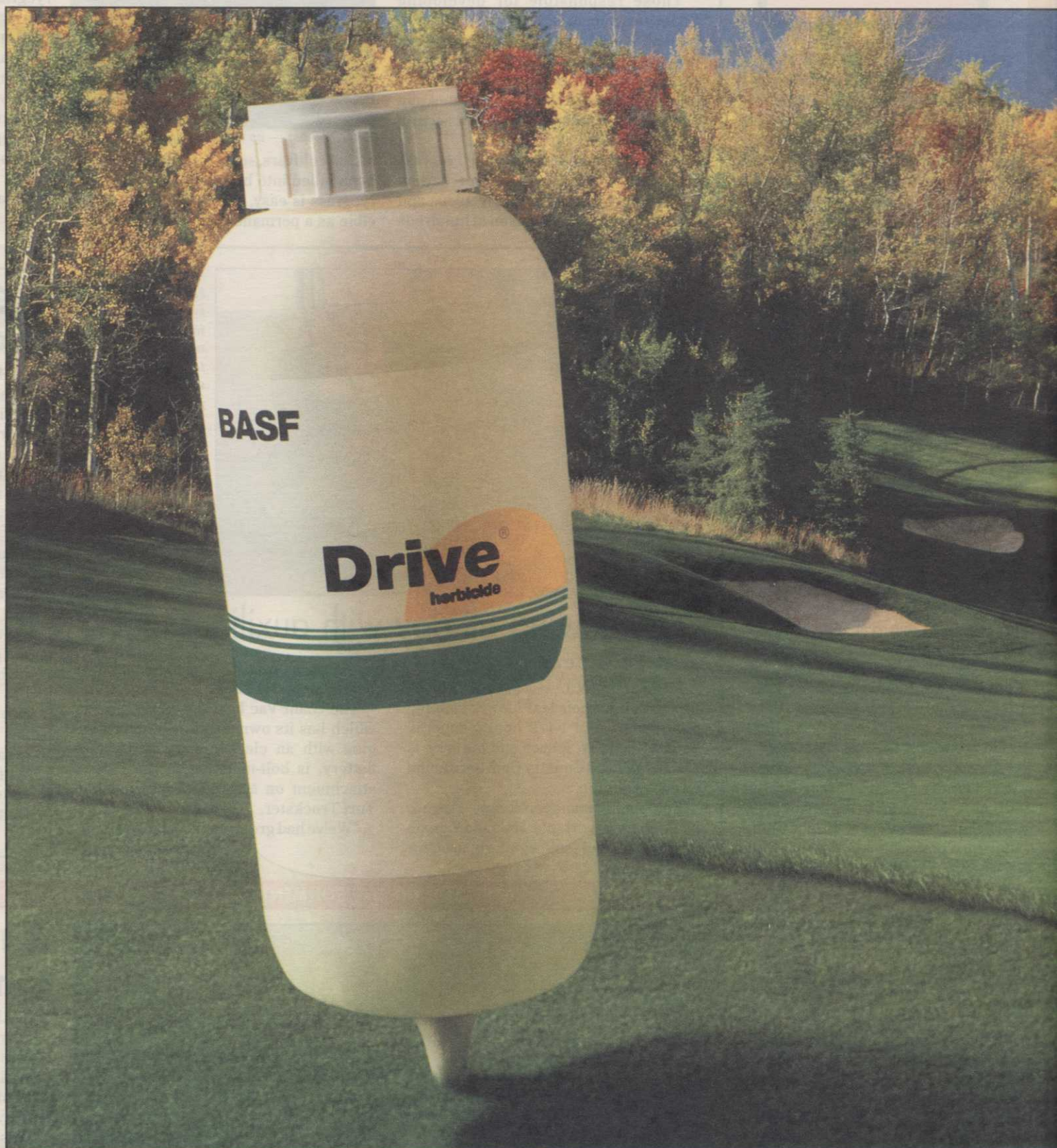
TURF SUSCEPTIBILITY & RESISTANCE

Gray leaf spot develops readily on perennial ryegrass (*Lolium*

perenne) and tall fescue (*Festuca arundinacea*), two species which, taxonomically, are closely related. In fact, some of the current turf-type tall fescues had actually been hybridized with perennial ryegrass during their breeding history in efforts to develop their finer leaf texture.

According to University of Maryland ratings of gray leaf spot damage among perennial

Continued on next page



Introducing Drive® herbicide – a herbicide that is revolutionizing turf management. Finally, there's a one-pass option that gets clover, crabgrass and dandelion. Now your most difficult-to-control broadleaf weeds will be no problem. Plus you'll rid yourself of grassy weeds as well – Drive provides 95% control of crabgrass.

All this with excellent safety to turf. You can use Drive on a wide variety of turf grass with minimal risk of root damage and no chance of injuring newly seeded areas.

In a post-emerge application, you get up to 45-day residual control with Drive. You can save yourself time

Dr. Eric Nelson is the senior technical agronomist for JacklinGolf. From 1989 to 1996



Dr. Eric Nelson

he was director of turfgrass research for Medalist/Northrup King. A 1981 graduate of the University of Rhode Island in turfgrass management/plant science, he has taught at Penn State, where he performed his graduate studies, receiving his Ph.D in 1990 in turfgrass breeding, agronomy, and bentgrass tissue culture.

Witteveen honored

Continued from page 21

"Gord Witteveen's Backpage." He has also been involved in promoting the golf superintendent at golfing events and in the media.

Witteveen has served as the superintendent of the Metropolitan Toronto Board of Trade Golf Facility North Toronto for the last 25 years and plans to retire in June of 1999.

Leaf blowing all day

Continued from page 21

"The marine fuel tank is strapped, with a piece of rubber, to the flatbed backrest area, with easy access for fueling at the same time as the Truckster is topped off. But it is easily removed when we remove the blower."

"The gasoline tank is located on the traditional area adjacent to the gasoline engine," Raisch said. "Because of its size and that it is operated at full throttle most of the time, it will

only operate for about 1-1/2 hours, tops. To allow for the blower to operate continuously during a morning or after a normal shift, we had two choices: hook up an auxiliary fuel line, fuel filter and fuel pump to the Cushman's fuel tank; or the choice we made."

Cestaro also mounted a yellow-colored flexible rod so the equipment operator knows where the blower shoot is when backing up for safety reasons.

"It provides our employees an easier and more efficient leaf and debris cleanup," said Raisch.

Gray leaf spot

Continued from previous page

ryegrass cultivars, there is a wide range of susceptibility and none were completely resistant.

Rutgers University recently reported that tall fescue cultivars exhibit a range of susceptibility as well. Its researchers also reported that all of the perennial ryegrasses they tested were susceptible (Vaiciunaas and Clarke, 1998).

Jacklin Seed is now screening new germplasm for improved resistance in the hope that we may develop more resistant cultivars. The important message is that all current cultivars of perennial ryegrass appear to be susceptible to one degree or another.

Compounding the gray leaf spot problem, we know that perennial ryegrass and tall fescue recovery from infestation is poor due to the thoroughness of kill and the non-spreading growth habit of both species. Therefore, even with curative fungicide applications, the turf will need to be inter-seeded for rapid recovery, unless there are resistant species such as Kentucky bluegrass or strong creeping red fescue present that can spread and fill the voids.

TURF SOLUTIONS

To our knowledge, there are no field reports of gray leaf spot damage on Kentucky bluegrasses, fine fescues or bentgrasses. Therefore, where they are adapted, these species provide the best recommended alternatives or complements to straight perennial ryegrass or tall fescue. Complete renovation or regular inter-seeding of existing stands of perennial ryegrass or tall fescue with resistant species are good economic and environmental solutions to the gray leaf spot problem in existing stands.

Jacklin Golf has developed protocols to assist in conversion of perennial ryegrass stands to other species. Copies of these recommendations are available on request.

References:

Landschoot, P.J. and F. F. Hoyland, 1992. Gray leaf spot of perennial ryegrass turf in Pennsylvania. *Plant Disease*. Vol. 76 (12) p1280-1282.

Vaiciunaas, S. and B. Clarke, 1998. Impact of cultural management practices and genotype on the development of gray leaf spot in cool-season turfgrasses. *Agronomy Abstracts*. 1998 Annual Meeting of the American Society of Agronomy. Baltimore, Md.

1998 Progress Report of the National Turfgrass Evaluation Program perennial ryegrass trials. USDA, Beltsville, Md.

Reprinted from Jacklin Golf's *On the Green*, Winter 1998 edition.

Always read and follow label directions.
Drive is a registered trademark of BASF Corporation.
©1999 BASF Corporation, NVA 99-3-73-0001

**A herbicide that gets rid
of Clover, Crabgrass and Dandelion
deserves to be on a pedestal.**

and effort, too. It's an ideal one-step alternative to the standard two-step pre-emergence crabgrass followed by post-broadleaf programs.

Have you ever wondered what things would be like if you didn't have to deal with clover, crabgrass and dandelion? Well, now you can find out with Drive. The herbicide that could be the biggest development in golf since the metal wood.

Drive
herbicide

Specialty Products

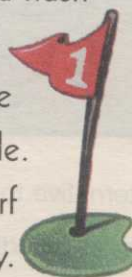
BASF

HERE.THERE. EVERYWHERE.

HOW'S THAT FOR APPLICATION GUIDELINES?



On greens. On tees. On fairways, roughs, flower beds, transplants — even in your divot mix. Milorganite delivers outstanding results for a uniform playing surface. No other fertilizer is easier on plants or simpler to use. Milorganite's slow release, organic nutrients won't burn or cause a flush of growth. Plus, it's high in micronutrients such as iron to promote dense, vigorous turf. And Milorganite resists leaching, for a sound environmental profile. So call your distributor today, or call Milorganite's turf professionals direct at **1-800-304-6204**. It's easy.



Wildlife highways

Continued from page 21

may travel from turfgrass areas of a golf course to tall grass areas where they find protection from predators. In a sense, these are wildlife highways and they are essential to its survival.

The fundamental reasons for much of human and wildlife travel is the same. All living things need food, shelter, water and living space to survive, and we often have to travel to different areas to find those fundamental components.

Wildlife moves around a lot to satisfy basic needs. Although golf courses may provide some habitat requirements, they may not satisfy all the needs of a specific species. So some wildlife may need to move beyond the boundaries of the golf course.

For example, in a rural setting, a golf course lake or pond may provide water and space for Canada geese, but a nearby farmer's field may serve as food source. The Canada geese don't care whose property satisfies which needs.

The challenge for golf course managers is to understand that their courses are part of a larger habitat and the wildlife highways on their course may go beyond their boundaries.

Look around a golf course. Where does wildlife travel? Which of the habitat components are they looking for? What components might they find on or beyond the course?

Answering these questions will help golf course managers not only solve conflicts between human and wildlife use on the course, but to enhance the habitat for wildlife.

Besides the wildlife highways, let us not forget the recreational value for humans. Remember that the history and tradition of the game of golf is rooted in nature.

If we're not interested in the natural part, why not turn the golf course into a football playing field with artificial turf?

Compare that image with a golf course with tall grasses, or a wildflower meadow, or stands of old trees interspersed with turfgrass. It is the contrast between the intensively maintained areas and natural areas of the golf course that is striking.

Somehow, the more golf courses become "managed" with more and more turfgrass, the less interesting, less challenging and the less satisfying they become.

We lose a sense of the "wild" and the beauty of being outdoors, not to mention the loss of valuable habitat for wildlife.

So, for the sake of wildlife and for our own pleasure and satisfaction, let's keep the wildlife highways we have and work toward expanding them.

Besides, without the beauty and little quirks of Mother Nature, golf just isn't the game it was meant to be.

N.J. Assn. honors Dodson

Continued from page 21

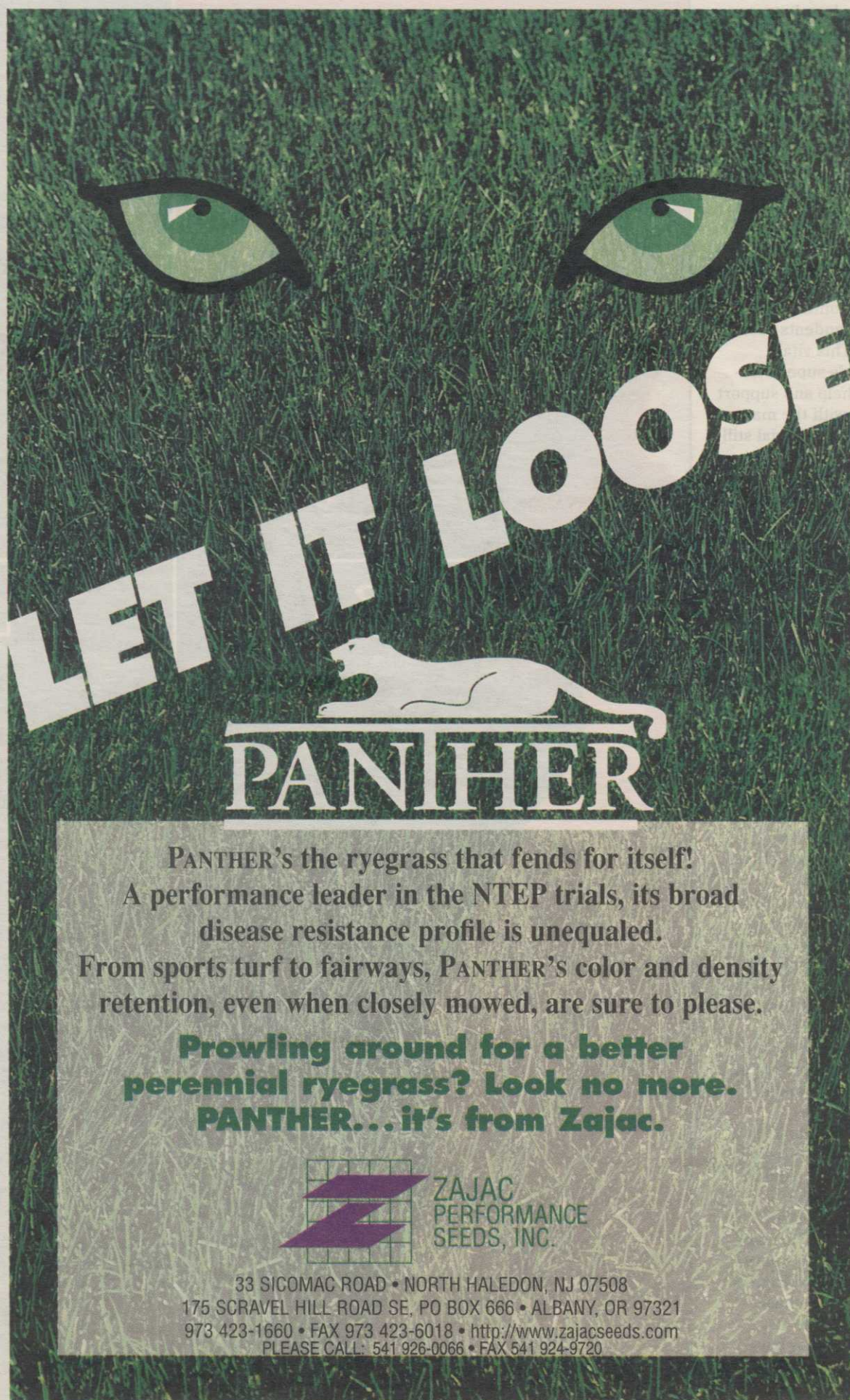
president of the U.S. Golf Association; and John Stossel, news correspondent.

The award was presented to Dodson for "his vision and pioneering efforts in the development of Audubon International's programs," including the Audubon Cooperative Sanctuary Program (ACSS). The ACSS educates and encourages people to become actively involved in protecting and enhancing wildlife habitats and conserving natural resources on properties

where they live, work and recreate.

Dr. Richard Caton, executive director of the N.J. Turfgrass Association said, "The benefit to the environment and protection of our ecosystem provided by these programs is enormous."

"The USGA's support has been invaluable in establishing the ACSS as the cutting edge of environmentally responsible golf course maintenance," Dodson said, "and the N.J. Turfgrass Association's recognition of our efforts is a testament to the commitment to environmental stewardship demonstrated by the turfgrass and golf industry."

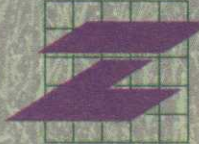


LET IT LOOSE

PANTHER

PANTHER's the ryegrass that fends for itself!
A performance leader in the NTEP trials, its broad disease resistance profile is unequalled.
From sports turf to fairways, PANTHER's color and density retention, even when closely mowed, are sure to please.

Prowling around for a better perennial ryegrass? Look no more.
PANTHER...it's from Zajac.

 **ZAJAC PERFORMANCE SEEDS, INC.**

33 SICOMAC ROAD • NORTH HALEDON, NJ 07508
 175 SCRABEL HILL ROAD SE, PO BOX 666 • ALBANY, OR 97321
 973 423-1660 • FAX 973 423-6018 • <http://www.zajacseeds.com>
 PLEASE CALL: 541 926-0066 • FAX 541 924-9720

Ron Dodson is president of Audubon International, headquartered in Selkirk, N.Y.

Historical preservation for superintendents is vital

By TERRY BUCHEN

WILLIAMSBURG, Va. — The historical preservation of everything that a golf course superintendent does, both now and in the future, is extremely important — not only for its influence on the world of golf, but for the professional historical record as well.

Witness the vast amounts of books, manuscripts, letters, reports, records, photographs, videos, equipment, et. al. that have been donated to the Golf Course Superintendents Association of America's (GCSAA) Historical Preservation Committee. They have been given by superintendents and their families, both young and old, living and deceased.

The exhibit of old equipment memorabilia has been on display at GCSAA headquarters for many months, which makes superintendents proud of their roots. This vital committee needs superintendents' further help and support to continue on with the many pieces of archival material still needed and wanted to make this "museum" the biggest and best in the superintendents' community.

A logical next step is to have a GCSAA Hall of Fame for living and deceased superintendent pioneer legends, to further capitalize on the many great advances that have been made in the profession. The GCSAA Hall of Fame could fill a void between the Distinguished Service Award and The Old Tom Morris Award by rewarding all of the superintendents who have been legendary in the highest form of professionalism that has existed since the association was founded in 1926.

Entering the Hall of Fame would be no easy task as any future inductee would have to earn it, plain and simple, by being nominated to the highest standards set forth during their entire career. The Historical Preservation Committee and, ultimately, the Board of Directors, would approve nominations.

Every good deed done by a superintendent would have to be well documented. And the Historical Preservation Committee would set the highest standards. The many state golf association halls of fame are starting to recognize superintendents who have contributed greatly to the game of golf. Why not have one for superintendents to honor their own?

... There are many good golf chat rooms on the Internet. An especially good one is www.traditionalgolf.com, which has a Golf Architecture and Design Forum. It is very lively, provocative and lots of serious and humorous fun for anyone who simply views its

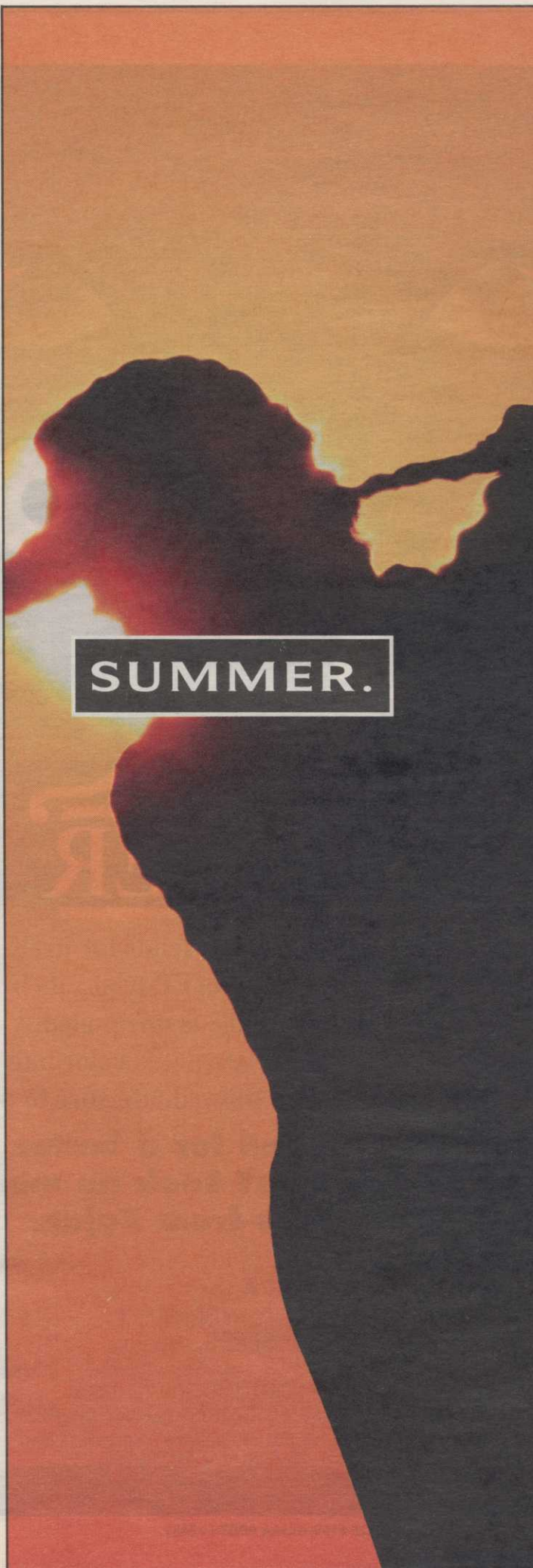
many daily postings, or who is a full-blown participant. Along with this architecture forum are a few home page short-cut listings for timely information on selected golf courses anywhere. There is even a Rules of Golf Discussion Group for any level of participation imaginable. Superintendents

will also have fun on this one.

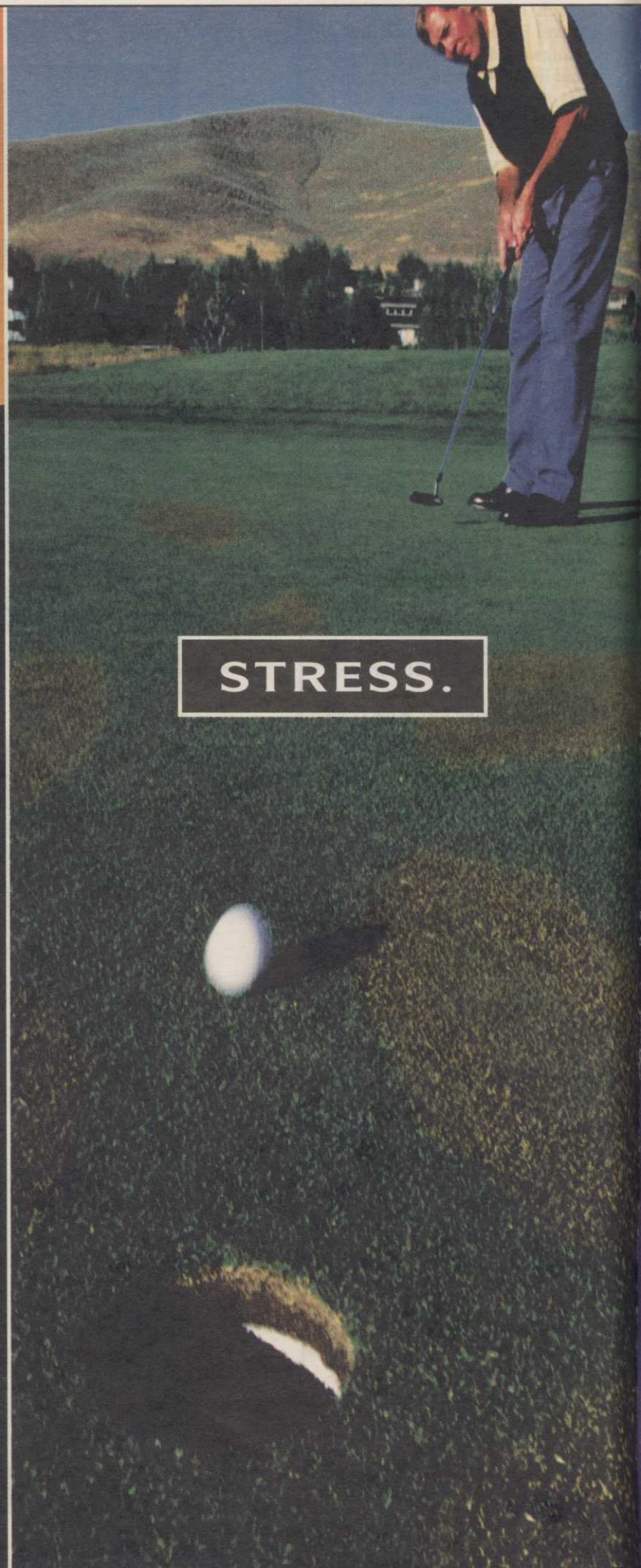
... One of the many great ideas in golf course management comes from Florida, where a few select facilities have on-course employees' restrooms. Many courses do not allow their employees to use the men's and ladies' restrooms

out on the course, so a third unisex restroom is added for employee use only. It saves a lot of time going back and forth to the turf-care center to use the facilities and is a good idea that will hopefully catch on.

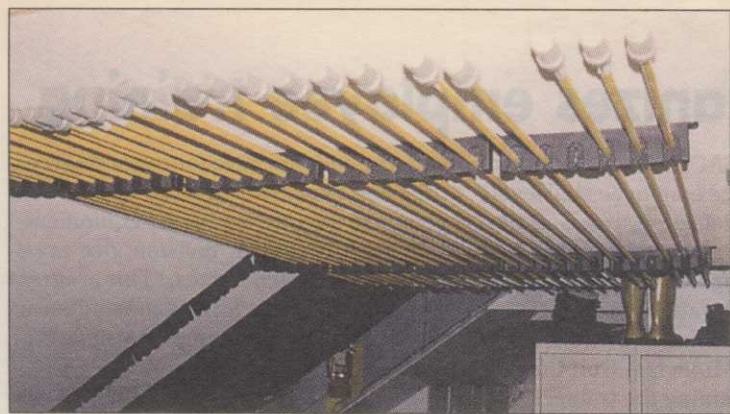
SAVVY SUPERINTENDENT



SUMMER.



STRESS.



Flagstick storage within easy sight and reach.

Flagstick storage in unused ceiling space

By TERRY BUCHEN

PARAMUS, N.J. — Irrigation technician Dave Zollinger turned wasted space into valuable at The Ridgewood Country Club here, at the same time solving where to store flagsticks for the 27-hole facility.

Zollinger's "brilliant idea,"

said superintendent Todd W. Raisch, "was to store all of our spare flagsticks on the horizontal and sloping ceilings, which is totally out of the way from any of our activities."

Zollinger bought enough fishing pole holders at a local



store to handle all the flagsticks. Each unit can hold six flagsticks. The holders have a foam-type slit so when the circular part of the flagstick is pushed all the way in it snaps into place.

Not only do the fishing pole holders work well, they are inexpensive, Raisch said.

"Storage space is always of paramount importance," he added, "and it is always fun trying to use storage space properly in all of the miscellaneous areas throughout our maintenance building complex."

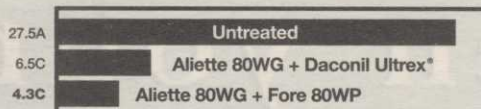
Zollinger's idea must have been a blast.

Get it with a tank mix of Fore® and Chipco Aliette®

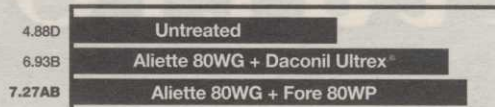
Hot. Humid. Overplayed. No wonder turfgrass surrenders so easily to Brown Patch, *Pythium* and other diseases in the summer. To relieve the stress on greens — and on you — tank mix Fore® and Chipco Aliette® fungicides.

Fore and Aliette are the only patented summer stress combination. Fore gives outstanding brown patch control, so that together the two can handle the entire summer decline disease complex. Not only is disease control enhanced by the tank mix, but turf quality and playability also improve.

Percent of Diseased Bentgrass



Turf Quality Rating



Treatments made every 14 days; ratings taken 71 days after first treatment. Quality ratings based on 1-9 scale. Numbers followed by same letters are not statistically different.

Source: Martin, Clemson University, 1996

Whether it's summer stress, algae or 14 other turf diseases, Fore belongs in every golf course's rotation. For more information on Fore or the Fore + Aliette tank mix, call 1-800-987-0467 or talk to your Rohm and Haas representative.



ALWAYS READ AND FOLLOW LABEL DIRECTIONS. Fore® is a registered trademark of Rohm and Haas Company. Aliette® is a registered trademark of Rhone-Poulenc. Daconil Ultrex® is a registered trademark of Zeneca. ©1999 Rohm and Haas Company T-0-272



CIRCLE #110/GCSAA BOOTH #2883

Swayze, Burris create turf, tree consulting firm

HOUSTON — Jack Swayze and Mike Burris have formed Swayze-Burris, Terra Turf Trees, LLC.

Swayze's association with the Houston green industry began in 1970 after graduation from Stephen F. Austin State University with a bachelor's degree in forestry. Since then, he has been involved in the residential, commercial and golf-related tree and landscape business in Texas. He recently spent several years in the golf landscape and tree management business with projects locally and internationally.

A 1974 graduating of Oklahoma State University, Burris' golf course superintendent career started on the East Coast and brought him in the early 1980s to Texas, where he has been involved with a number of Houston area golf courses. He is a past president of the South Texas Golf Course Superintendents Association and president of the Bermudagrass Research Foundation.

The Terra Turf Tree team will provide the following services:

- Terra — Sports turf and golf site works such as laser leveling, drainage and earthwork, etc.

- Turf — Agronomic consultation for golf and sports turf, green and T-area construction or renovation, sports turf facility construction and golf course renovation or construction

- Tree — Consultation (residential, commercial and golf), tree management programs for golf and commercial properties using GPS and GIS for mapping, mechanical tree transplant and planting services to the residential, commercial and golf markets.

WHIPPING GREEN INTO SHAPE

A member of the grounds crew at Jamaica's Tryall Country Club whips the greens to rid the putting surface of the earthworm casts prior to cutting the grass. Since it is soil-like, the worm cast material is similar to top dressing, allowing golfers to putt over a relatively smooth surface.



ISS organizes employee training

POMPANO BEACH, Fla. — As part of its effort to enhance employee skill levels and customer satisfaction, ISS Golf Services has created a special training center for assistant superintendents, according to company literature.

The classes, which will be held at the Pompano Beach Municipal Golf Course, will emphasize 'training the trainers' and increasing the skills and knowledge base of the ISS training team.

"Even though many of our assistant

superintendents have four-year degrees, they don't necessarily know how to train people to operate landscape equipment," said Paul Hickman, division vice president for ISS Golf Services. "This program gives them a very formalized and structured review of how equipment should be used."

The first two sessions, held in 1998, emphasized the diverse skills needed to maintain turfgrass in sports settings, particularly golf courses and professional baseball fields. Topics covered equipment operation, field calibration of chemical sprayers, and the anatomy and physiology of turfgrass.

Sessions include classroom activities in a specially renovated construction trailer, followed by outdoor demonstrations.

For instance, the turfgrass classes led by ISS agronomist Keith Kirchoffer included a review of literature, followed by an actual demonstration of healthy and stressed turfgrasses.

"We are making a concerted effort through our Associate Development Programs (ADP) to standardize the way we do things throughout the company," Hickman said. "The combination of classroom and hands-on experience is working well for us. And everyone who attends has to turn in a review and critique of the program."

N.C. Turf Council awards scholarships

Seven North Carolina turf students were awarded scholarships from the Turfgrass Council of North Carolina for the 1998-99 school year.

The students were chosen by interview, from the turf school in North Carolina, including North Carolina State University, Catawba Valley Community College, Sandhills Community College, Wayne Community College and Brunswick Community College.

North Carolina State University students were awarded a total of \$4,000, including the Anthony Angelichio Memorial Scholarship and the TRIMS Software International, Inc. scholarship.

The recipients were Grant Leonard of Chapel Hill, who plans to graduate early in December with an associate degree in turfgrass management.

Also, Allen J. McNally of Durham, who plans to graduate early in December with a four-year degree in turfgrass management; and Matthew C. Sandberg of Marshville, who plans to graduate with an associate degree in turfgrass management.

Four Catawba Valley Community College students received scholarships. They were Dan Kaminski of Nebo, who plans to graduate with an associate degree; Matteo J. Recchio of Sparta, who plans to graduate with an associate degree in turfgrass management; Christopher Walker of Lincolnton, who plans to graduate with an associate degree in turfgrass management technology; and John M. Gillespie III of Boone, who plans to graduate with an associate degree in turfgrass management.

With the
right soil,
you can grow
anything.
Even your
reputation.

EarthWorks - The Complete Biological Soil Management Company



As a premier manufacturer of Natural Organic Products we've had our share of success stories. And, with over 10 years in the turf business and 20 years in biological soil management consulting, we wonder why some say we're the next **overnight sensation**.

We started small and have developed a loyal following throughout the Northeast and Mid-Atlantic states. **Now the rest of the country is about to discover the EarthWorks advantage.**

We start with the soil first, and all of our products are agronomically formulated. We can provide you a comprehensive soil testing program, a full line of liquid bio-stimulants and the most complete line of Natural Organic Fertilizers available anywhere, **Replenish**.

Find out more by calling 800-732-TURF or look us up on the web at www.soilfirst.com.



Introducing The **Replenish** Line of Natural Organic Fertilizers

Texas A&M research: 4-day water cycle beats every day or two

By MARK LESLIE

COLLEGE STATION, Texas — Research by a graduate student at the Texas A&M campus here points out that golf course superintendents, even with sand-based greens, may want to consider watering only once every several days.

"I think some turfgrass managers have the misconception that on a well-drained green, overwatering or frequently watering is not bad," said Dr. Richard White, who oversaw the graduate research conducted by John Jordan during 1997 and 1998.

Jordan tested with nine varieties of bentgrass, watering one set of plots daily, another set every other day, and a third set every fourth day. He discovered that the best overall quality of the bentgrass always occurred when

irrigating every fourth day.

White said that 1998 was one of the hottest years on record, and 1997 was even more difficult because of high humidity.

"The real killer in much of the South is high humidity as well as high temperatures," he said. "I'd rather grow bent at 100 to 105 degrees air temperature at 30- to 40-percent humidity (like it was in 1998) than at 90 to 95 degrees and 70- to 80-percent humidity (as it was in 1997)."

White said that while the greens watered every fourth day became dramatically harder over the four-day span, the turf was healthier.

Less water and moisture means less disease and fewer pests.

One major difference Jordan noted in 1997 was the amount of algae.

"Where we watered daily or every two days we had a lot of algae," White reported. "In the four-day irrigation we only had a smattering of algae. Even with Seaside, a very old and algae-susceptible variety, we only had 10 percent covered by algae."

Asked about the decision to use a four-day cycle, White said it was simply guesswork. But, he added, grass can remain healthy over a much longer period without water.

"Within a USGA [U.S. Golf Association] green, there could be 2-1/2 to 3 inches of available water in the 12-inch soil profile. If grass is using 1/4 inch a day, you're looking at a 12-day supply of water."

But that assumes the turf has a 12-inch root system, something not typically present in a frequently

watered green, he added.

Indeed, Jordan found that from the first of June through August, the root systems in frequently watered plots decreased slightly, while those in the four-day treatment tripled and, in fact, had five times more roots.

Perhaps the most startling discovery came from a study in 1998 measuring the soil oxygen and CO2 levels.

"We teach — and I anticipated — that

Continued on page 32

New regimen takes bentgrass into Deep South

Continued from page 1

- Top dressing every three weeks.
- Light grooming and brushing every third week.
- Core aerifying twice a year, in early May and late September, removing the cores and top dressing with pure sand.
- Aerifying with solid tines every two to three weeks during the summer.
- Recognizing whatever you do impacts the environment the plant is growing in.

But the primary key is water, said Engelke, well-known for his bentgrass and zoysia breeding programs and as the developer of Crenshaw and Cato bentgrasses.

"There is a misconception that bentgrass needs to be watered continuously," he said. "Water actually develops an excellent environment for diseases. It causes poor microbial development; and attracts nematodes, which are aquatic animals."

"If we can manage the water, we can manage the root zone so that the grass will take care of itself," Engelke added. "With good root development, the plant will air-condition itself... Water moving through the plant will dissipate heat. Internally, the plant does this through evapotranspiration."

Indeed, in late December, three months after planting G-2 bentgrass over an existing sod layer, Ehrbar reported roots 6 to 7 inches deep. And, he said, he made only one fungicide application during the summer that he tested G-2, L-93 and Crenshaw bentgrasses before his final decision to plant.

"We found out that a drier soil profile is much less prone to disease than a water-soaked profile," Ehrbar said.

The four-day watering cycle was proven effective during research at College Station, Texas, where Iowa State graduate student John Jordan worked under Rexas A&M Associate Professor Dr. Richard White.

During 1997 and 1998 (the hottest summer on record in Texas), Jordan tested nine varieties of bentgrass, watering some plots every day, some every second day and others every fourth day.



Old Marsh Golf Club superintendent Steve Ehrbar, left, said the course designer, Pete Dye, has been supportive of the move to bentgrass.

"The best overall quality on all the varieties always occurred when we irrigated every fourth day," said White.

"Irrigation frequency," he said, "had a dramatic effect, particularly in '98 because John operated the system for a much longer period, starting in late May through early September. He found that between the first week in June and the end of August the root systems in the frequently watered plots actually decreased slightly. But in the four-day treatment, the root system actually tripled and had five times more roots than frequently watered plots."

Few roots in the frequently watered plots reached 6 inches, while some in the four-day cycle reached the gravel layer 12 inches down.

Does the turf appear less lush under his new regimen?

"For top growth, yes," Ehrbar said. "If we were applying more water than we needed, it would appear to look better. But you're only as good as your roots."

But White saw no reason these practices would not work elsewhere, so long

as the greens are sand-based or U.S. Golf Association-type, not "push-up" greens.

Ehrbar is still determining exactly what he must do to maintain his bentgrass, saying his plan "is not black and white. Every course is unique and different and we're building [the program] as we go. It's day to day. We monitor the grass."

"But our feeling is, if we can get through the day without watering, we do it. By the same token, if it needs water we will water it. In the wintertime there are times we can go over three weeks without giving it any water. But when summer comes we're lucky to go three to four days because the heat is up, evapotranspiration is up and the plant is pumping more water."

Engelke attributes the success of this Deep South experiment partially to the grasses themselves.

"The new genetics give you the edge," he said. "Those three [L92, Crenshaw and G2] are the most heat-tolerant bents of which we had sufficient seed. But these new varieties will grow at higher soil temperatures, and especially at soil temps that are at proper gas balance. You have to keep oxygen and CO2 in balance. If they get out of balance, that will impact the development of the plant. And that is influenced more by irrigation scheduling than anything."

It takes a special club to make the program work, said Ehrbar, adding: "The less play, the better off you are. And your members have to be supportive."

"It scares me to death," added Engelke, "that anybody thinks they can do this without understanding the agronomics. If you don't, you won't make it."

Dr. White agreed.

"This is not something to jump into one day," he said. "It takes planning and forethought. And the time to start this is not the middle of the summer. Start it when conditions are near optimum for growth of the plant."

Also, he said that if superintendents begin this regimen, they need to closely watch the greens, "particularly in a climate like ours where we might have low- and high-humidity days back to back, which can change things dramatically."

Sand Shaker™

by
TRUE-SURFACE®

AN ATTACHMENT
SYSTEM
FOR TOPDRESSING
DISPERSION
AND GRAIN
CORRECTION

Fits most triplex greens mowers

Horizontal
VIBRATION

V-Brush Design

Variable Brush
Height
Adjustment

System Includes Three Types
of Brush Sets



From the same people that
brought you the
Vibratory Roller
True-Surface®.
A name you can count on for
service!

1-800-443-8506

www.true-surface.com
Patent pending

**Sure—you could choose not to
use Banner[®] MAXX[™], but some
risks aren't worth taking.**



**Banner MAXX offers you the most effective, longest lasting
control of Summer Patch, Dollar Spot and Anthracnose.**



Play it safe with the best disease protection for your course. Banner MAXX provides reliable control of 21 turf diseases on greens, tees and fairways. Plus, its tank mix flexibility makes it the perfect foundation for your disease management program.

For the most control with the least amount of risk, choose Banner MAXX.

To learn more about Banner MAXX, call 1-800-395-TURF for the name of your Novartis Sales Representative. Or visit our website at www.cp.us.novartis.com



Alamo[®]
Award[®]
Banner[®] MAXX[™]
Barricade[®]
Primo[®]
Subdue[®] MAXX[™]

Banner MAXX is an important part of the Novartis Total Turf Program, the system of leading-edge products designed to help you protect and maintain your entire course throughout the year.

Our New Tournament Lake
PATENT PENDING

are registered trademarks of Novartis. Alamo Quarts are not registered for use in the state of California. Always read and follow label instructions before purchasing or using these products.

GCSAA BOOTH #1043

Survey reveals certified supers earn more, but all salaries are up

LAWRENCE, Kansas — A Golf Course Superintendents Association of America (GCSAA) analysis of member compensation and benefits indicates significant increases in both, due largely to job experience and education levels.

Two survey instruments, which did not vary notably, were distributed to GCSAA members in 1995 and again in 1998. Overall, the salaries for golf course superintendents increased 8 percent (from \$49,269 to \$53,205) during the three-year period.

Certified golf course superintendents (CGCS) with more than 20 years' experience commanded the most significant salary increase on average, at 17.9 percent (from \$56,618 to \$66,774). The certified designation recognizes the achievement of high standards of professionalism through education and experience. Those certified members, regardless of experience, gained 10.4 percent in compensation in the same time span. In total, certified superintendent salaries average 27 percent higher than those salaries of superintendents who are not certified. Fifty percent of all GCSAA members earn more than \$50,000 annually, while 15 percent earn more the \$75,000.

The median response to the 1998 survey profiles a superintendent with 10 years' experience gained at two different golf facilities, with 6.73 years at his/her current position. That compares with the 1995 survey of 12 years' experience with a current

position average of seven years. As also observed in 1995, the average age of superintendents is 40 years old. In 1998, superintendents managed budgets and payroll of \$500,000 (median national response) and averaged

15 direct reports.

"The marketplace is extremely responsive," said GCSAA Board of Director and Career Development Committee Chairman Tommy Witt. "What it is telling us is No. 1, a GCSAA

golf course superintendent's value is increasing; and No. 2, employers recognize the merits of having a certified golf course superintendent managing the physical asset of a facility."

The salary survey also reveals

that superintendents report to a variety of managers/employers. Leading the list is the general manager (26 percent), green committee (22 percent) and owner (19 percent). Those employers also display widespread support of GCSAA activities, with 96 percent paying association dues, 91 percent providing funds of seminar/trade show fees plus travel and 89 percent footing the bill for GCSAA superintendent chapter dues.

YOUR GREENS MAY BE PERFECT.



JUST ASK YOUR PLAYERS

Many a good score has been ruined by a poorly maintained bunker. All players want bunkers that are uniformly firm, consistently smooth and professional in their play. Our bunker rakes and their innovative implements will give you and your golfers the most playable bunkers of all.



Our New Tournament Rake.
PATENT PENDING

Less watering better for bent

Continued from page 29

in frequent watering we'd see an elevation of CO₂ and a reduction of oxygen. We did not," White said, "which particularly surprised me because we had an insignificant amount of root system at that depth.

"It flies in the face of things we have taught and believed. When we watered every fourth day [on plots with roots extended deeper than 6 inches], the next day we saw a decline in oxygen level. First, I think, because there was more water and a slowing diffusion level because we have thatch in that soil. Second, because there was a greater root mass and root activity below the 6-inch depth, and biological respiration is one of the things necessary to lower oxygen."

White said he feels the four-day water cycle "will help wherever you're growing bentgrass, particularly in the South and transition zone."

New web service for superintendents offers mass buying power

AUSTIN, Texas — Golf course superintendents will soon be able to tap into a new web service called GolfSolutions.com.

GolfSolutions.com was developed by a team of golf-industry professionals for superintendents worldwide. GolfSolutions.com will put dozens of resources at the fingertips of superintendents, re-

ducing the time it takes to accomplish everyday tasks such as obtaining real-time weather information, planning daily schedules and ordering any supply their course requires from vendors offering discounted prices, 24 hours a day.

Additionally, the web service will enable superintendents to

research the latest advances in their industry, and communicate online with colleagues and others in the golf course maintenance field.

Prior to the unveiling of GolfSolutions.com at the Golf Course Superintendents Association of America (GCSAA) Show in February, the web ser-

vice will be tested by 15 superintendents and 15 vendors. At the show, superintendents will have a chance to view a demonstration of GolfSolutions.com's Basic Services. Subscribers to GolfSolutions.com Basic Services, available at no charge, will receive an e-mail address, and will be able to purchase online

from hundreds of vendors and then track the status of those orders.

Subscribers will also have access to chat rooms and selected news services. GolfSolutions.com is structuring agreements to partner with a variety of companies that will provide additional benefits to members. One partnership will be with GCSAA chapters throughout the country. The chapters will be able to post their newsletters at no charge on GolfSolutions.com, and free access to the newsletters will be offered to subscribers of the web service.

GolfSolutions.com's Premium Services, offered for a fee, will be available in July. They will include all of the basic services, plus added abilities to create targeted vendor lists (personal catalog), create and distribute requests for proposals, participate in auctions, peruse industry trade publications, manage annual budgets, and use a convenient scheduling database. Additional features are currently being developed.

"GolfSolutions.com was developed with the input of superintendents to enable them to harness the internet to create new ways of doing what they do best — keeping their courses in top form," said John Mueller, president of the web service. "GolfSolutions.com can't cut greens, but it can help superintendents do a hundred other equally important jobs."

BUT HOW ARE YOUR BUNKERS?

Introducing The New Tournament Rake.

Our new-design finish implement delivers the perfect sand conditions for the best bunker play. So revolutionary it is being patented. Constructed of high grade, rust-proof stainless steel, its new and flexible raking teeth and specially designed blades create the ideal firmness and finish for bunker sand. And it operates silently. Only from Smithco.



SUPER STAR
Bunker Rake

Our Speed Boss Invention. The patented,

bunker finish speed control that prevents sand throw-out and greatly reduces the time and labor required for edging. You adjust and pre-set the finish speed and the system takes over automatically when the raking implement is lowered, then restores the normal ground speed when it is raised. So, you're the boss. Only from Smithco.



SUPREME
Bunker Rake

Many Other New And Exclusive Features.

Our liquid-cooled gasoline engine ■ hydraulic power steering ■ extra-high ground clearance for easy bunker entry and exit ■ and our patented, silent, electric-powered "E" model ■ Only from Smithco.

Our extensive line of bunker rakes and implements, with their many new and innovative features, offers by far the widest choice of models and pricing, to meet every need and budget. Call your Smithco distributor today for a demo. Seeing is believing.



SAND STAR "E"
Bunker Rake
PATENTED

ALWAYS OUT FRONT
SMITHCO
WAYNE, PENNSYLVANIA 19087
www.smithco.com

Orangebrook CC's Klitz cited by GCSAA

HOLLYWOOD, Fla. — Robert G. Klitz, general manager with Orangebrook Country Club/Golf Hollywood here, has earned two environmental management specialist certificates from the Golf Course Superintendents Association of America (GCSAA) for completing specialized programs for golf course development and storage, disposal and recycling.

GCSAA addresses the environmental impact of golf course maintenance by offering specialized training through its Environmental Management Program (EMP).

Programs in the Golf Course Development specialization address issues ranging from environmentally aware design to wetland and wildlife management on golf courses. Design, preconstruction, construction and renovation are a few of the topics reviewed in these seminars. Because there is a growing responsibility in golf course management to help preserve natural resources through safe chemical handling and establishing recycling practices, the storage, disposal and recycling specialization addresses the trend to conserve, maintain and reuse.

MOVING ON

Granger, others tackle new challenges

POMPANO BEACH, Fla. — Palm-Aire Country Club has named Fred Granger director of golf course maintenance. With 94 holes of golf (five courses plus a four-hole practice loop),



Fred Granger

Palm-Aire is the second-largest golf operation in one location in Florida.

From 1993 until Granger recently joined the Palm-Aire team, he was director of golf course maintenance at Turnberry Isle in Miami. A certified golf course superintendent, Granger holds degrees in ornamental horticulture and in business management.

For the first decade of his career, Granger was superintendent at the private Laguna Hills Golf Club in Southern California. From there he spent four years in Vero Beach, working on the two courses at Grand Harbor with golf course architects Pete Dye and Joe Lee.

LA QUINTA, Calif.—PGA West has appointed **Eric von Hofen** as golf superintendent, responsible for the Arnold Palmer, Jack Nicklaus and Tom Weiskopf private courses.

In January von Hofen oversaw preparation and supervision of the Bob Hope Chrysler Classic, which took place on the Arnold Palmer Private Course. He helped open the new Greg Norman Course in December.

Prior to his appointment, von Hofen was the golf course and grounds manager at the Naples (Fla.) National Golf Club. He has also been superintendent to PGA National Golf Club in Palm Beach, Doral Golf Resort & Spa in Miami, and John's Island Club in Vero Beach.

A graduate of Ohio State University's Agricultural Technical Institute, von Hofen is a Class A member of both the South Florida Golf Course Superintendent Association and the Golf Course Superintendent Association of America.

CALABASAS, Calif. — **Eric Bescoby** has been appointed to the new position of director of golf maintenance for Environmental Golf.

Bescoby will manage the business unit dedicated to maintenance at the firm's contracted courses and will begin efforts to increase the overall golf maintenance business.

Prior to joining Environmental Golf, Bescoby was associated with Rain Bird Sprinkler Manufacturing Corp. for 11 years. As

director of the Golf Division for Rain Bird, he was responsible for the engineering, marketing, sales and manufacturing of golf course irrigation products for worldwide distribution.

Bescoby is a graduate of the University of California-Davis and Arizona State University.

AUGUSTA, Ga. — The Club at Jones Creek has hired **Tony M. Brown** as superintendent.

A superintendent with more than 16 years experience, Brown holds a bachelor of science degree in horticulture and turfgrass from Clemson University. He has earned the designation of Certified Golf Course Superintendent

from the Golf Course Superintendents Association of America and has served on that organization's National Publications Committee in addition to being active in state and local industry organizations.

A native of North August, S.C., Brown and his wife and their two children have relocated to Augusta from Clemmons, N.C., where he was the superintendent at Salem Glen Country Club.

FOUNTAIN HILLS, Ariz.—Communities Southwest has hired **Mark Burchfield** as golf course superintendent at Augusta Ranch Golf Club in east Mesa.

Burchfield was educated at Riverside Community College as well as the Mundus Institute, School of Golf Course Management. He comes from Shalimar Country Club in Tempe, where he served

Continued on next page

PREVENT
GRUBS.
STOP THEM IN
THEIR TRACKS.
OR MAKE SURE
IT'S NOT EVEN
AN ISSUE.

Moving on

Continued from previous page

as superintendent. Prior to his stint at Shalimar, Burchfield worked at, and served as a member of the construction staff at The Raven Golf Club in Phoenix.

...

HILLSBOROUGH, N.J. — **Trent J. Inman** has joined the new Royce Brook Golf Club as the head superintendent. Inman

will supervise the overall maintenance and conditioning programs for the golf courses, including overseeing the grow-in phase of the fescue on the West Course and native wild grasses on the East Course, as they continue to mature following their opening last May.

A Purdue University graduate, Inman was the assistant golf course and property manager at Caves Valley Golf Club

in Owings, Md.

...

BLOUNT COUNTY, Ala. — **Mark Langner** has been hired by Limestone Springs, Ltd., to be superintendent at the community's new 18-hole golf course designed by former U.S. Open champion Jerry Pate.

Langner holds a degree in agronomy, with specialization in turfgrass management, from Mississippi State University.

Prior to accepting the position at Limestone Springs, he was head superintendent for the east course at Birmingham Country Club.

...

CONWAY, S.C.—Western Golf Properties, Inc., has promoted **Scott Scamehorn** to superintendent for Wild Wing Plantation here.

For the past two years, Scamehorn has been the super-

intendent at Lost Key Golf Club in Perdido Key, Fla. Prior to that, he was the assistant superintendent at Falcon's Fire Golf Club in Kissimmee, Fla. Both clubs are managed by Western Golf Properties, Inc.

He is a golf course operations graduate from Lake City College in Florida.

...

LA QUINTA, Calif. — **Marc Sundeen**, Rancho La Quinta's assistant golf course superintendent for 18 months, has assumed the head post for the community's Turf Maintenance Department.

A graduate of Penn State's Turfgrass Management Program, Sundeen has nearly 10 years of experience, including managerial roles at Pebble Beach and The Vintage Club. He also holds degrees in psychology and art history from the University of Minnesota.

Cook offering short courses

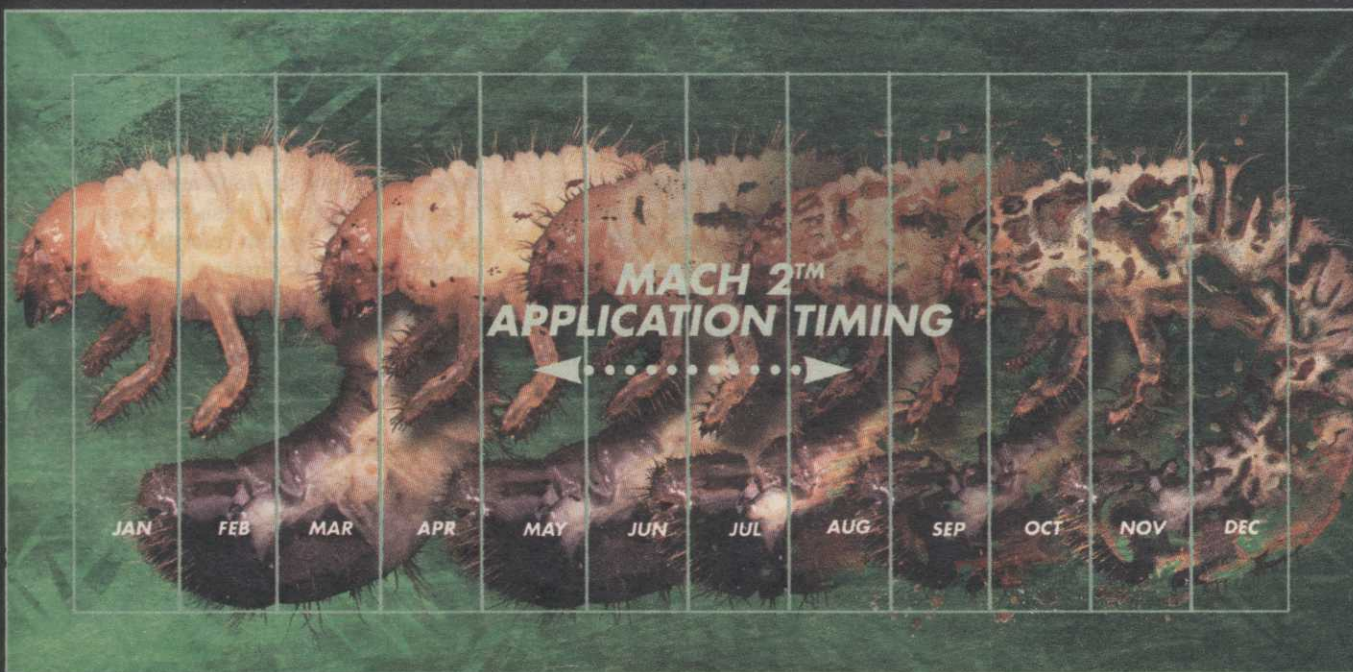
NEW BRUNSWICK, N.J. — Cook College's Office of Continuing Professional Education is offering short courses to help people enhance their knowledge and business opportunities in the green industry.

The "Advanced Topics in Professional Grounds Maintenance" series will offer "Turf Diseases," scheduled for Feb. 10, and "Managing Turf and Landscape Weeds," scheduled for March 17-18. Both classes will meet from 9 a.m. to 3:30 p.m. on the Cook/Douglass Campus here.

The "Advanced Topics in Professional Groups Maintenance: Turf Diseases" short course will help refine diagnostic skills. This one-day program explores disease management issues in landscape turf, while introducing advanced concepts in turfgrass pathology. Topics will include troubleshooting problems in landscape turf; the impact of the turf microclimate on disease; fungal classification and identification; fungicide selection and use; biological control issues; and turf diseases that may have been missed.

The "Advanced Topics in Professional Grounds Maintenance: Managing Turf and Landscape Weeds" short course will help landscape professionals learn to manage common and difficult weeds in the tri-state area. Many costly and unsightly weed problems can be avoided — or at least minimized — with a little planning and knowledge. Participants will develop their own weed-control program, which will address specific weed problems they routinely encounter.

For more information or to register, please call the Office of Continuing Professional Education at 732-932-9271.



Now you can control grubs preventatively or curatively. With a single application. Only with new MACH 2™ Turf Insecticide.

MACH 2 is a powerful killer with a new chemistry that accelerates the molting process of target insects.

Just hours after ingesting MACH 2, the insect stops feeding. Then it dies beneath the surface in 2 to 3 weeks. It's that simple.

With MACH 2™ Turf Insecticide, you'll kill target enemy insects all season long. Grubs. Cutworms. Armyworms. Sod webworms. Plus, odorless MACH 2™ is easy to apply.

You don't even have to water it in immediately.

So don't let grubs control your grounds, or your schedule. Depend on MACH 2™ Turf Insecticide.

It's all you need to prevent or cure.

For more information or for the distributor nearest you, call 1-888-764-6432 and visit our website at www.mach-2.com.

MACH 2™
TURF INSECTICIDE
ALL YOU NEED
TO PREVENT OR CURE.

Building long-lasting sod-wall bunkers like in the Old Country

By TERRY BUCHEN

ARCADIA, Mich. — In keeping with the links-type theme of Arcadia Bluffs Golf Club overlooking Lake Michigan here, course architects Rick Smith and Warren Henderson have incorporated many sod-wall sand bunkers with excellent results.

"In our sod-wall bunker design — drainage behind, below and around — the almost vertical stacking of sod is paramount for their long-term survival," said Henderson. "As long as there are very good drainage characteristics, the sod will last a long time and will not have to be replaced every two to three years."

Crews are using a locally grown bluegrass sod cut the normal 18-inch width and thickness for all the sod walls. The bottom row is laid approximately 6 inches above the bottom of the bunker soil subgrade. A 1-inch layer of soil is laid on top of each row and then the next row of sod is laid upside down, alternating back and forth (green side up; green side down, etc.) in the process.

As this occurs, the next row of sod is laid slightly back, keeping as vertical as possible while laying it back towards the existing soil slope, Henderson said.



Sod wall bunkers designed, constructed and maintained the easy way.

"All of our surface drainage around the sod-wall bunkers does not allow any water to get behind the sod wall," said Tim Furness, president of Furness Golf Construction, Inc., which is building the course. "This keeps the sod from getting too wet so it will not rot-out very fast at all."

Furness crews also are adding conventional 4-inch perforated ADS-

type drain tile and gravel, in a herring-bone design, to the bottoms of each bunker on 15-foot centers, or less.

"In maintaining our sod-wall bunkers, we have used a string-line trimmer, with the head flipped upside down, to mow the turf as closely as possible," said course superintendent Paul Emling. "Our maintenance goal is to try to keep the turf relatively short,



ON THE GREEN

so the individual rows and seams can be easily visible.

"If we did not do it this way," he added, "the turf would grow together and the rows and seams would not be visible, which would take the dramatic effect of the entire principle of building a sod-wall bunker, i.e. to be as vertical as possible while still affording a well-played shot."

Emling will experiment in various ways to achieve the look and playability that the owners and designers want. He may try using growth retardants; determining how different irrigation practices affect certain bunkers; overseeding with clump-type grasses such as sheeps and hard fescue; and blowing off excess sand from golf shots.

Durable, Flexible, Affordable



Durable

Fore-Par direction and rules signs are weather proof and golfer proof. Wind. Sun. A whack with a golf club. A swift kick. They'll stand up to almost anything. They retain their flexibility and appearance indefinitely, even under extreme weather conditions. Messages are screen printed on one or two sides with a tough, pliable coating that bonds to the sign's surface.

Flexible

Just one of the words used to describe Fore-Par service. Do you need a single sided sign printed on both sides? Just ask. Want a custom message? No problem. Have a special color requirement?

Slam-Dunk. Need them fast? Our specialty! When it comes to flexibility of service, nobody comes close to Fore-Par.

Affordable

New production techniques and improved raw materials have provided us with significant savings which we are pleased to pass along to our customers. If you thought the legendary Elasto-Signs™ were too expensive, it's time to take a second look. Our new affordable pricing plus years of durable service make Fore-Par Elasto-Signs™ the best buy on the market.

For more information on the Fore-Par accessories line, Call 800 843-0809, and get more for your money from Fore-Par.

FORE-PAR

DISTINCTIVE GOLF COURSE ACCESSORIES

16761 Burke Lane, Huntington Beach, CA 92647 • Tel: 714 842-8494 / 800 843-0809 • Fax: 714 842-7384

Our new XRT 272 can drive through anything.

Including this ad.

XRT 272™

Catch the XRT 272 utility vehicle at booth #2751 at the GCSAA show. That is, if you think you can handle it.

Club Car®

the
#1 RATED UTILITY VEHICLE
IN THE WORLD.

1-800-643-1010

www.clubcar.com

CIRCLE #115 / GCSAA BOOTH #2751

Club Car, Inc./Ingersoll-Rand • P.O. Box 204658
Augusta, GA 30917-4658 USA
706-863-3000 • Fax: 706-863-5808

MetGCSA honors PGA's Robson with Reid Award

GARDEN CITY, N.Y. — The Metropolitan Golf Course Superintendents Association (MetGCSA) has presented the 1998 John Reid Lifetime Achievement Award to Met PGA Section Executive Director Charlie Robson, citing him as "a tremendous advocate for golf course superintendents."

Robson has "never forgotten to recognize the superintendent's efforts," said MetGCSA Awards Committee Chairman John O'Keefe. The award is reserved for individuals who have "demonstrated a knowledge of, and commitment to, the game of golf and the science of golf course management."

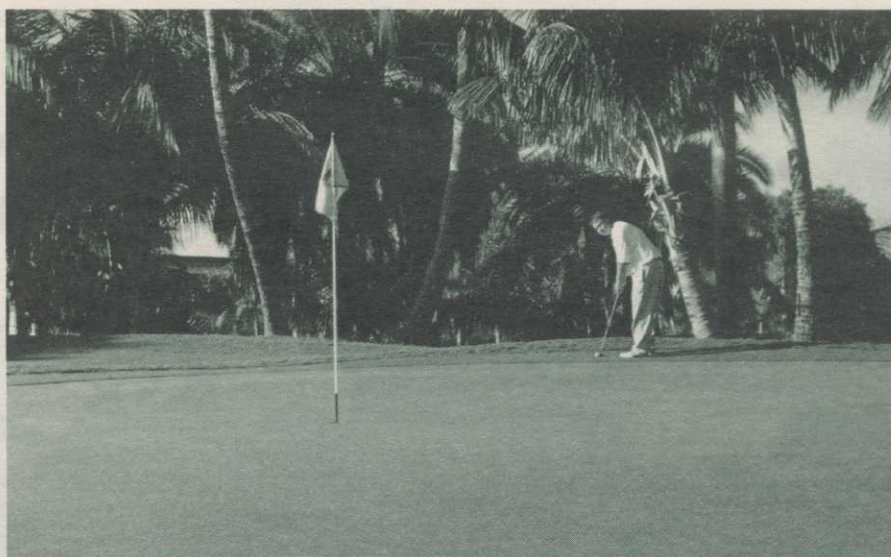
A graduate of Washington and Lee University, Robson

has guided the Met PGA since 1972, overseeing its growth from one employee and an annual budget of \$80,000 to six full-time and six seasonal employees and an annual budget of \$2.5 million. A Manhattan native, he lives in Garden City with his wife, Deidre, and three children.

Meadow Brook Country Club superintendent John Carlone, who has worked with Robson, told MetGCSA's Tee to Green that what "makes him [Robson] so remarkably good at what he does" is his ability to look at golf from everyone's perspective — the golf pro's, club manager's superintendent's and member's.



"New from the developers of Tifway, Tifgreen and Tifdwarf"



**Improved Speed and Consistency
Superior Color Retention
More Forgiving and Stress Tolerant
Smooth Transitions during Overseeding
Less Thatch Buildup than the other Superdwarfs**

Call

888/584-6598

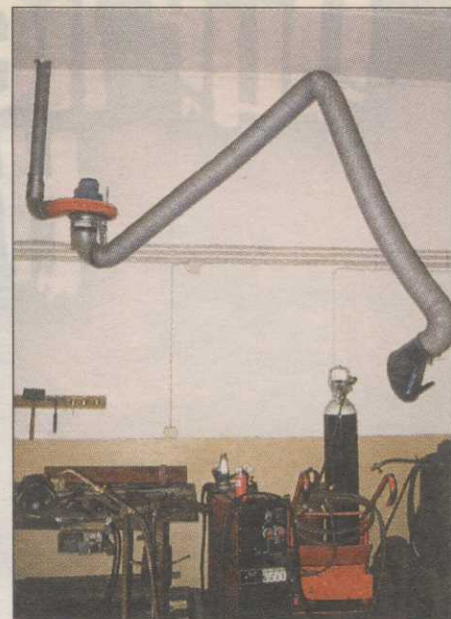
for information, Research Data and a list of Growers

TifEagle was developed by Wayne Hanna, USDA/ARS, Coastal Plain Experiment Station, Tifton, GA.

©1999 TifEagle Growers Association, Plant Patent No.08/900,007

Unauthorized Propagation Prohibited.

CIRCLE #137/GCSAA BOOTH #4472



Surahammars Golfklubb's exhaust system.

Exhaust system improves safety

By TERRY BUCHEN

VASTERAS, Sweden — Swedes have long been leaders in environmental preservation while providing employee safety. Partial proof of this is found at Surahammars Golfklubb here, where an overhead exhaust system removes fumes from the shop area when the arc-welder or acetylene torch tanks are used in the maintenance building.

"Breathing fresh air is such a concern that it is a federal law in Sweden that an exhaust fan like we have in our shop area must be used at all golf courses and similar shop areas in other type industries," said course manager Bo Borg.

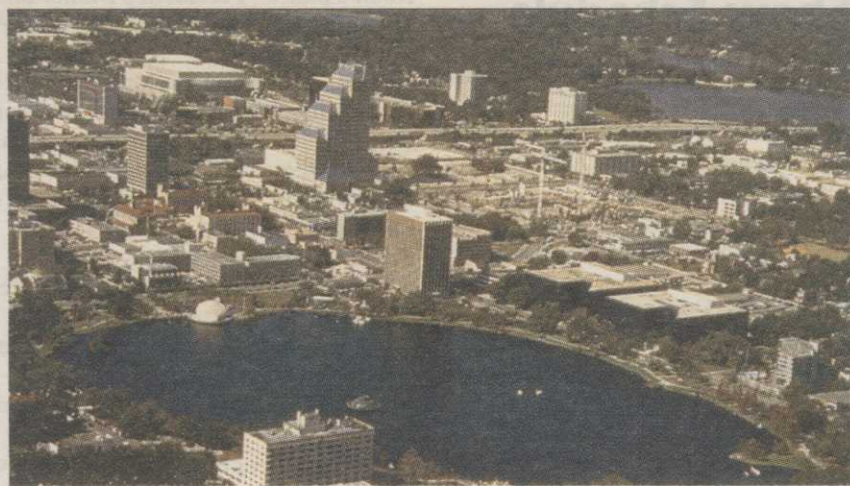
The 100-millimeter-diameter exhaust hose is flexible, so it easily can be moved to just above where the welding or torch work is being accomplished. The hose is connected to a 2-horsepower electric motor, which exhausts the fumes through a 75-millimeter-diameter metal stove pipe up through the roof, Borg explained.

The hose is approximately 3 meters long and can be moved in a 180-degree area along one wall in the shop, he said.

GCSAA REACHES 19K MEMBERS

LAWRENCE, Kan. — Continued strong growth in the Golf Course Superintendents Association of America (GCSAA) has pushed the association's membership total to more than 19,000, according to figures processed by the Member/Chapter Services Department.

Since January 1994, GCSAA membership has grown 46 percent (up from 13,000), representing all regions of the nation, and 65 foreign countries and all categories of membership. "This sustained and strong growth confirms that golf course management professionals value membership in the association," said GCSAA President George Renault III, certified golf course superintendent at Burning Tree Club in Bethesda, Md. "The golf course maintenance industry faces constant change. Therefore, those who pursue such a career must have the resources that allow them to perform at a high level. It is GCSAA's goal to provide its members the education, representation and information necessary to achieve success."



Aerial shot of Orlando, site of the International Conference and Show.

Orlando: More than booths and classrooms

By MIKE JAMISON

ORLANDO, Fla. — The Golf Course Superintendents Association of America Conference & Show has an impressive lineup of workshops and seminars, and an expo full of exciting new companies and established successful businesses.

But even the most dedicated of attendees can spend only so much time increasing knowledge, sharpening job skills and gathering informa-

tion on new products and services.

Then there must be time for fun, especially in Orlando, the world's No. 1 vacation destination.

The entire world knows about "the worlds" — Disney World, Sea World and all the other major attractions in the area. And they are certainly worth consideration when deciding how to spend your free time.

But there are other, less-traveled places to visit and interesting things to do.

Continued on page 44

Past presidents offer insights, advice

By PETER BLAIS

ORLANDO, Fla. — When incoming President Dave Fearis picks up the gavel for the first time at February's International Conference and Show in Orlando, he will be following in the footsteps of 62 other men who have led the Golf Course Superintendents Association of America to the prominent position the association enjoys today.

The golf industry has changed dramatically since Colonel John Morley was voted the association's first president back in 1926. The men who have followed him have been in a unique position to observe the changes in the golf industry.

We contacted as many of the GCSAA's former and soon-to-be-former presidents as possible and asked them two questions:

- What is the biggest change you've observed in the golf industry during your career?

- What single piece of advice would you give to incoming President Fearis?

Following are their responses:

George Renault — 1998 — Director of golf and grounds, Eagle's Creek Country Club, Naples, Fla.

Biggest change. "The effort to increase awareness of what the superintendent does within the industry and with the golfing populace. We have a lot more

work to do. It's understood at the better clubs. Everyone's got to sell themselves and we're trying to give them the tools to do it."

Advice for Dave. "Just be yourself and let your instincts guide you. Don't read too much into anything."

Paul McGinnis — 1997 — Head superintendent, Alta Mesa Country Club, Mesa, Ariz.

Biggest change. "In my 25 years, the No. 1 thing is the increase in the demand for quality at golf courses. Superintendents

are held to such a high standard that they are expected to maintain day in and day out. One of my first clubs was a 54-hole complex where we were mowing tees at 1 inch, fairways at 1-1/4 inches because

the ryegrass looked good. We weren't concerned as much about playability or what the golfer thought. Now that's completely reversed where sometimes we force mowing heights down because of what the golfer expects day in and day out."

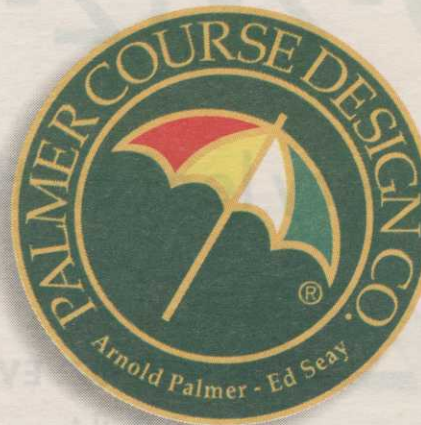
Advice for Dave. "Enjoy the ride and hold on tight. He's going to be so busy."

Continued on page 42



Paul McGinnis

THE KING AND HIS COURT



Services to fit your needs from the company providing quality and value in golf course architecture for over 25 years.

1-800-523-3757

Arnold Palmer Signature Course & Palmer Course Design Co. are Trademarks

GCSAA 70th International Conference and Show Schedule

Monday, February 8

6:30 a.m.-6 p.m. — Conference and Seminar Registration Open
8 a.m.-5 p.m. — Conference Seminars
8 a.m.-5 p.m. — Focus on the Military Seminar
5-6:30 p.m. — Military Networking Reception

Tuesday, February 9

6:30 a.m.-6 p.m. — Conference and Seminar Registration Open
8 a.m.-5 p.m. — Conference Seminars

Wednesday, February 10

6:30 a.m.-6 p.m. — Conference and Seminar Registration Open
8 a.m.-5 p.m. — Conference Seminars
8 a.m.-5 p.m. — Turfgrass Field Seminar
6-7:30 p.m. — Opening Session
7:30-8:30 p.m. — Opening Session Reception

Thursday, February 11

6:30 a.m.-3 p.m. — Golf Course Decision Makers Golf Outing
6:30 a.m.-6 p.m. — Conference and Seminar Registration Open

6:30-7:30 a.m. — Chapter Delegates Breakfast

7 a.m.-Noon — President's Dinner Show Voucher Exchange Booth Open for Early Bird Voucher Holders

8-9 a.m. — Research Breakfast

8 a.m.-2:30 p.m. — Certification Examination

8 a.m.-5 p.m. — Conference Seminars

8 a.m.-5 p.m. — Media Room Opens

9 a.m.-Noon — Science for the Golf Course Session

Noon-6 p.m. — President's Dinner Show Voucher Exchange Booth Open to All Voucher Holders

1-5 p.m. — Career Development Session (Breakouts: Media/Public Relations and Your Career Development; Top 10 Success Strategies for Superintendents Age 50-plus Years; Winning Strategies to Top Compensation).

Friday, February 12

6-7 a.m. — Innovative Superintendent Breakfast

6:30 a.m.-6 p.m. — Conference and Seminar Registration Open

7-8:30 a.m. — Innovative Superintendent Session

7 a.m.-6 p.m. — President's Dinner Show Voucher Exchange Booth Open

8-11 a.m. — Distributor Preview

8:45-10:45 a.m. — Golf, Government & Environmental General Session

11 a.m.-6 p.m. — Trade Show

Noon-12:30 p.m. — Certification Luncheon (by invitation)

12:30-1:30 p.m. — Certification Business Meeting

2-5 p.m. — International Society of Arboriculture Session

2-5 p.m. — National Golf Course Owners Association Session

2-5 p.m. — Greens & Grassroots Program

2-5 p.m. — Super Users Forum

3:30-6 p.m. — Educational Session: Bentgrass Management: Made in the Shade

3:30-6 p.m. — Educational Session: 'Stuff That Could Make a Difference'

5-6 p.m. — GCSAA Networking Reception

Saturday, February 13

6-7 a.m. — Innovative Superintendent Breakfast and Roundtable Discussions

6:30 a.m.-6 p.m. — Conference and Seminar Registration Open

7-8:30 a.m. — Innovative Superintendent Session

8-10 a.m. — American Society of Golf Course Architects Session

8-10 a.m. — Fifth Annual Collegiate Turf Bowl Competition

8 a.m.-Noon — Annual Meeting and Election of Officers

8 a.m.-5 p.m. — Conference Seminars

8 a.m.-2:30 p.m. — Certification Re-Examination

9 a.m.-5 p.m. — Trade Show

10 a.m.-Noon — American Zoysiagrass Association Zoysia Forum

10 a.m.-Noon — Club Managers Association of America Session

10 a.m.-Noon — Irrigation Association Session

10 a.m.-Noon — National Golf Foundation Session

10 a.m.-Noon — Student Forum: Student-to-Student

11 a.m.-1 p.m. — Chapter Managers Workshop

11:30-1 p.m. — Friends of the Foundation Meeting/Reception

Noon-1:30 p.m. — Student Chapter Lunch (by invitation)

1-5 p.m. — Conference Seminars

2-4 p.m. — Student Seminar: From Student to Superintendent

2-4 p.m. — Chapter Newsletter Editors Forum

2-4:45 p.m. — Educational Session: The Cutting Edge of Golf Course Management

4-5 p.m. — Student Mixer

Not Just the Same Old Potash!

K+Si

0-2-12-7 Silica

Makes every leaf on the green **StandUp**™!



3 OZ. EVERY FOUR WEEKS

- Builds up energy in the roots
- Hardens the leaf blade
- Gives a better roll & fewer ball marks
- Makes mowing easier

Ask your distributor rep for the technical details.

The only spray that lets you walk away...



Even at the end of a 14-hour day you're thinking ahead to the challenges of tomorrow. Your water aeration system shouldn't be one of them. With over 100,000 units operating in the field, Otterbine is the brand turf professionals rely on for durability and worry-free operation.

No more 6-hour assembly sessions

Unlike the competition, Otterbine aerators are shipped pre-assembled and ready to work. Only Otterbine uses a custom built, low speed, four pole motor that operates at half the RPM's of competitive high speed motors. Low speed motors mean greater motor longevity and the lowest operation costs in the industry. Only Otterbine aerators are constructed of 21st Century high-tech engineered thermal plastics and stainless steel for longer life under extreme operating conditions.

Unmatched aeration capabilities

Otterbine has the highest oxygen transfer rate of 2.3 pounds per horse power per hour, based on published independent testing by Auburn and Louisiana State University. Each motor is built to run at the lowest RPM rate so you can expect years of dependable service with

unmatched aeration capabilities, unlike high speed motors that sacrifice operating efficiency and aeration capability.



Otterbine aerators are built to last the longest.

No more inconvenient repairs

The Otterbine warranty is the best in the industry – 2 years on all moving parts and 5 years on all non-moving parts – while most standard warranties only cover you for 1 to 3 years. Plus, with over 60 authorized Otterbine service centers around the globe, you'll never have to worry about fixing an aerator yourself, or sending it long distances for service – which would mean long down times and greater expense.

Learn more about water management

Otterbine is the leader in the science of aeration. Read what we've learned in 40 years as the market leader in aeration – ask for your free copy of "Pond & Lake Management." It's a guide to help you make the right decisions on aerator sizing, placement, and the scientific reasons behind those recommendations.

Otterbine offers a diverse line of products that include both surface and subsurface aerators, lake dye, portable pumps, ozone generating and delivery systems, plus much more.



Water works with Otterbine.

3840 MAIN ROAD EAST, EMMAUS, PA 18049 1-800-237-8837 / (610) 965-6018

Ewoldt wins 1999 Leo Feser Award

ORLANDO, Fla. — Certified golf course superintendent Don Ewoldt of Sand Creek Country Club in Chesterton, Ind., will be presented the 1999 Leo Feser Award Wednesday, Feb. 10 at the Opening Session of the Golf Course Superintendents Association of America's (GCSAA) 70th International Golf Course Conference and Show here.

The annual GCSAA award honors the best superintendent-authored article, published in the association's monthly magazine, *Golf Course Management*. The winner's name is engraved on a plaque for display at GCSAA headquarters in Lawrence, Kansas.

GCSAA's Publications Committee selected Ewoldt's article, "The Restoration of Sand Creek," which was published in the February 1998 issue of the magazine. The piece detailed Ewoldt's experiences as project manager for a one-month restoration effort to stabilize eroding creek banks. He also included nearly a dozen photographs of the process.

"We can relate to those articles and I always turn to the superintendent-written articles first," he said. "With this, if someone else is doing the same type of project, they can call me and I can pass on what I know."

"Winning the award is very gratifying. But I didn't write it to win the award."

A GCSAA member for 12 years and a graduate of Iowa State with a bachelor's degree in agronomy, Ewoldt has been at Sand Creek Country Club since 1993. He also has been named a chapter winner for the 1999 Environmental Steward Awards and is actively involved with community activities including the Audubon Cooperative Sanctuary Program for Schools.

The award honors Leo Feser, a pioneer golf course superintendent and a charter member of GCSAA. Feser is credited with keeping the association's official publication alive during the Great Depression.

Past presidents

Continued from page 39

You don't realize the full scope of being president until you're there. I was out of town last year for a three-day weekend and when I came back, I had 40 voice messages. I don't even know 40 people. Sometimes it can be overwhelming. But it's a great experience."

Bruce Williams — 1996 — Director of golf operations, Los Angeles CC.

Biggest change: We've gone from the Arnie's Army era to the Tiger Woods

phenomenon, during which we've seen golf on television and the development of golf for the masses.



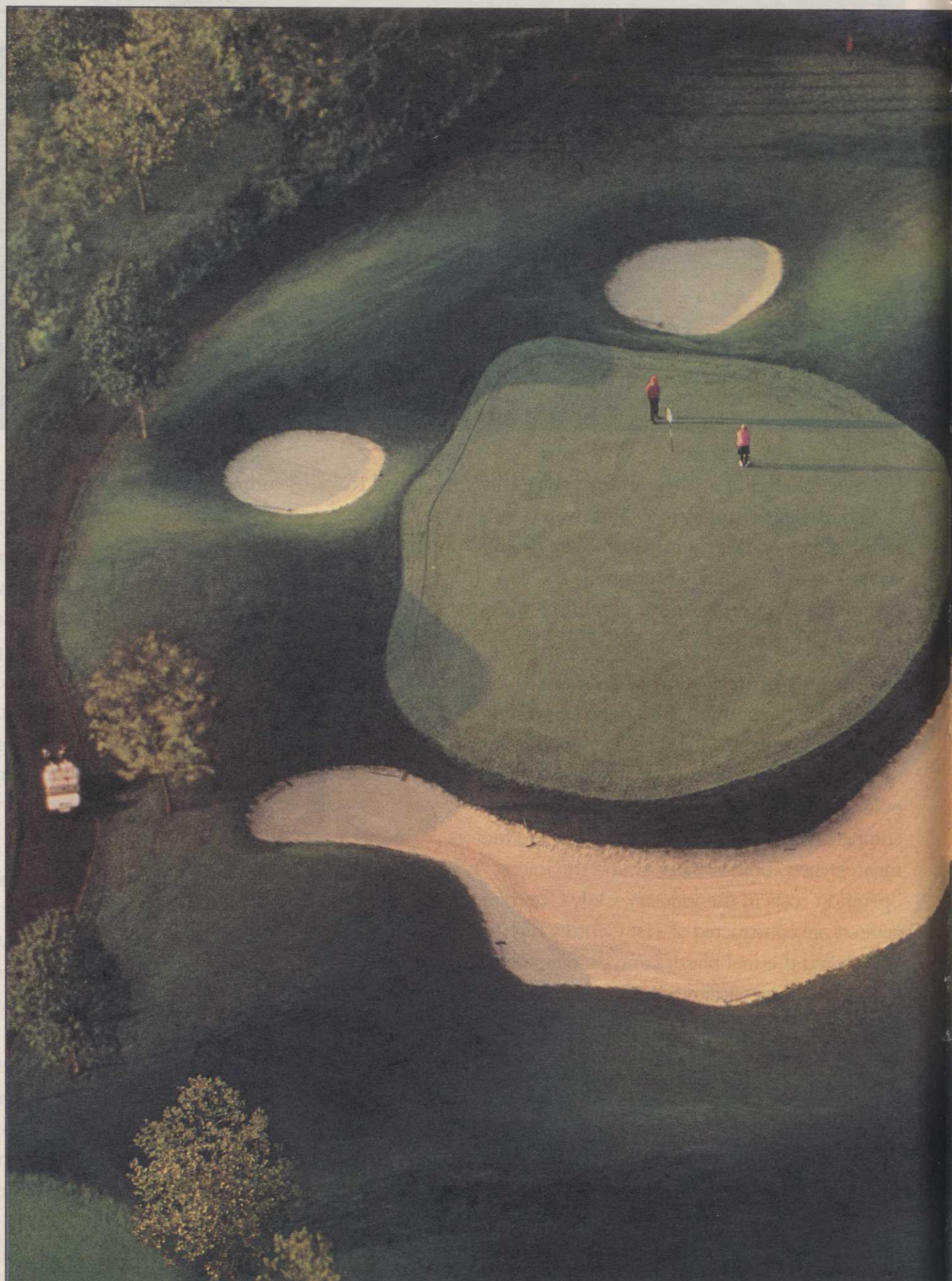
Bruce Williams

Coupled with this, we have a population that is very mobile. Back in the 1930s and 1940s, you played your own course and maybe another one here or there. But today, people on business or vacation travel worldwide and they have higher levels of expectations than ever before. Pat the superintendents

on the back. The standards and level of golf course maintenance have risen not only for private courses, but for public and resort venues, too. That's challenged superintendents to provide outstanding course conditions every day their courses are open. The winner is the golfer, who is enjoying playing conditions on public courses that were only available on private courses 20 years ago.

Advice for Dave: "Manage your time effectively. The demands for your time are on you from all different angles and you have to give justice to family, place of

Continued on next page



Show schedule

Continued from page 40

6-8:30 p.m. — GCSAA's Recognition Ceremony and Reception

9-11 p.m. — President's Dinner Show

Sunday, February 14

6:30-7:30 a.m. — Prayer Breakfast

8:30-11:30 a.m. — United States Golf Association Green Section Educational Program

8 a.m.-1 p.m. — Conference Registration Open

9 a.m.-Noon — International Summit

9 a.m.-Noon — Turf Equipment Technicians Association Session

9 a.m.-1 p.m. — Trade Show

12:30 p.m. — 18-Hole Challenge Prize Drawing

Past presidents

Continued from page 39

employment and the association. It's a challenge to budget your time properly. The one thing people are always surprised about is the huge time commitment during that one year. It jumps 30 to 40 percent. When you're president you get the normal mailings, but you may get an extra 20 pages of faxes a day, 10 to 12 phone calls from people who want to talk to the man at the top. Your time commitments to family and job don't change. I remember the time commitment when I was

president being another 20 hours a week...We end up taking it away from family and personal time."

Gary Grigg — 1995 — Head superintendent, Royal Poinciana Golf Club, Naples, Fla. Recently completed a 36-hole Art Hills renovation of the original design and is building a new maintenance facility.

Biggest change. "Turf students need to take more business courses than they used to. This is not as technical a business as it used to be in terms of agronomy and horticulture. It's shifting toward business, employee and risk management. I

used to spend most of my time on the golf course. Now it just feels good to occasionally get out there."



Gary Grigg

Advice for Dave: "The thing David's got going for him is that he's been at his club for a lot of years and has the total support of his club. If you don't have the total, 100-percent support from your club... The club usually comes first and the family comes second. It should be the other way

around, but the two get intermingled."

Joseph Baidy — 1994 — Director of courses and grounds, Turning Stone Casino Resort, a 27-hole Rick Smith design in Verona, N.Y., being built by the Oneida Indian Nation and scheduled to open its first nine holes in August, 1999.



Joseph Baidy

Biggest change: "I've been on golf courses since 1950. The playing conditions, equipment and demands on the golf course superintendent have all changed greatly. The profession demands a more professional management style and greater knowledge of the environment."

Advice for Dave: "Keep an open mind and try to project what the needs of the membership will be."

Randy Nichols — 1993 — Director of golf maintenance, Cherokee Town & CC in Atlanta. The 36-hole facility is in the midst of a Tom Fazio-designed renovation.



Randy Nichols

Biggest change: "The increased level of maintenance and the demands put on the golf course superintendent to provide tournament-level playing conditions almost every day."

Advice for Dave: "Listen to the membership and be cognizant of serving all the members."

William Roberts — 1992 — Partner R&G Management, operator of Red Fox Run Golf Course, Grosse Pointe Woods, Mich., and first-year law student at Cooley Law School in Lansing, Mich.



William Roberts

Biggest change: "Increased expertise of superintendents, enhancement of a very professional approach to the golf business, and increased recognition of the impact golf course maintenance/management has on the total golf industry."

Advice for Dave: "Enjoy your year as president as much as possible."

Stephen Cadenelli — 1991 — Course and clubhouse manager of Cape Cod National Golf Club, a Brian Silva design that opened last June in Brewster, Mass.



Stephen Cadenelli

Biggest change: "The heightened expectations of golf course maintenance on a daily basis. Course managers have always sought to improve things.

But at the same time, with technological advances and our own knowledge, we're providing conditions that just 20 years ago were unheard of on a daily basis. The tremendous exposure of televised golf and the conditions those courses provide for a short period of time create a level of expectation that any course at most any time should be perfect. But there is a lack of understanding of what it takes to do

Is it just us, or
does a course without dollar
spot seem like a much
happier place?

Remember, BAYLETON® Fungicide is still the most trusted dollar spot control and tank-mix partner around. So after being cursed at, walked on and beaten with clubs every day, your course can still be beaming. For more information, contact Bayer Corporation, Garden & Professional Care, Box 4913, Kansas City, MO 64120. (800) 842-8020. www.protect-your-turf.com



ALWAYS READ AND FOLLOW LABEL DIRECTIONS
© 1998 Bayer Corporation Printed in U.S.A. 99S107A0071-1

CIRCLE #104/GCSAA BOOTH #561

Continued on page 45

Touring Orlando

Continued from page 39

- There are numerous themed dinner shows throughout the tourist area. You can see horses prance, knights fence, magicians disappear and Miss Kitty's girls dance while you chow down on the house specialty. The locals' favorite is Sleuth's Mystery Dinner Theater, where you are asked to solve a mystery that is played out before you while you enjoy a four-course meal.

- Themed restaurants abound as well. You can dine with the stars at Planet Hollywood, the jocks at All-Star Cafe, the rock stars at Hard Rock, or my personal favorite, the good ol' boys at Race Rock right there on International Drive.

If you would rather escape the tourist dining for a night, try these local favorites: a delicious steak with a great view at Houston's in Winter Park or one of the unique dishes at Bistro Cappuccino in Lake Mary.

Another favorite restaurant for locals is Pebbles. One location is at Church Street, which offers plenty of night life after the food is served.

- Pointe Orlando has everything going for it, including location. It is just across and down the street from the Convention Center, and if eating, drinking, dancing, shopping and mingling are in your plans, you need look no further.

- If you are looking for elbow-to-elbow socializing in a lively, loud and singles sort of atmosphere, try Bahama Breeze on International Drive. You'll get plenty of all of the above, and it also serves decent food.

- Care to see just how big of an effect a six-month lockout can have on the best athletes in the world? Attend an Orlando Magic basketball game and see just how low the NBA can go. As a goodwill offering to disgruntled fans, each team is selling 500 tickets per game for \$10 each. Better seats are available at higher prices. Games are played in the Orlando Arena downtown, and usually begin at 7:40 p.m. Could be good for laughs, if nothing more.

- Many of you are coming from cities that have International Hockey League teams. Orlando is no different. The Orlando Solar Bears play an exciting, fast-paced style, and are always in contention in the Eastern Conference. Tickets start at \$6 and are easy to come by. The Solar Bears also play in the Orlando Arena.

• Packing your sticks for the trip? Getting a tee time in Central Florida can be difficult in mid-winter, as "snowbirds" and northern vacationers crowd the courses.

That chore is made easier, however, by Greater Orlando Golf Destinations (GOGD). Several of the area's leading golf courses formed GOGD to enhance Orlando's reputation

Getting a tee time in Central Florida can be difficult in mid-winter

as a golf destination and to offer one-stop shopping for tee times and golf vacations.

The work of many of the game's leading architects can be found among the GOGD 14, including Tom Fazio, Rees Jones, Ron Garl, P.B. Dye,

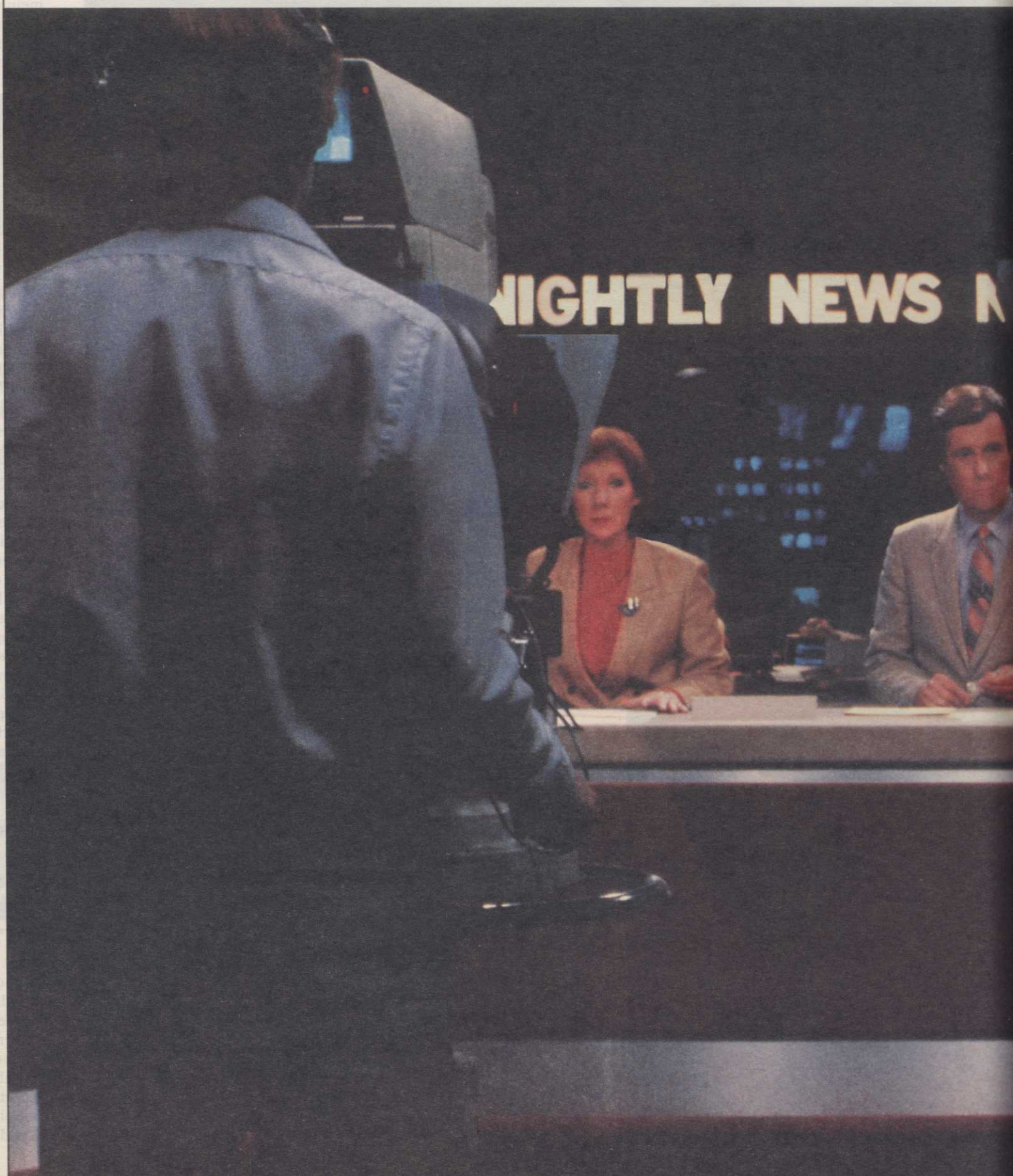
Bobby Weed and Joe Lee. For rate and course information, or to make a tee time, call 407-330-2355.

The courses include Black Bear, Deer Island, Falcon's Fire, Forest Lake, Kissimmee Bay, Legacy Club at Alaqua Lakes,

Metro West, Poinciana, Remington, Ridgewood Lakes, Rock Springs Ridge, Southern Dunes, Timacuan and Wekiva.

Orlando, Fla., didn't earn the title of world's No. 1 vacation destination on marketing hype and awesome weather alone. There is a lot to do here, folks. And variety galore. Just make sure you set aside enough free time to enjoy some of it.

We'll keep the pesticide industry from



Past presidents

Continued from page 39

that in terms of financial resources and the differences of one course from another."

Advice for Dave: "Enjoy the time. It's very special and will go by very quickly."

Gerald Faubel—1990—Manager of golf course and grounds, Saginaw (Mich.) Country Club.

Biggest change: "Many new

players don't really know the etique



Gerald Faubel

They want Augusta National-like

qu Shore of golf and don't have an understanding of the game. Their expectations are much greater.

conditions all the time. And they tend to play in competition with one another rather than trying to simply meet the challenge of the course."

Advice for Dave: "I've told every president since I was there to enjoy yourself and include your family. Your job is to represent our profession as it relates to the golf course industry."

Dennis Lyon—1989—Man-

ager of golf, City of Aurora, Colo., which has six courses with one under construction, Murphy Creek, a Ken Kavanagh design scheduled to open in 1999.

Biggest change: "Government regulation and the practicing superintendents' level of expertise have increased tremendously. With the two courses we've built in the 1990s, we got involved in wetland mitigation,

the U.S. Army Corps of Engineers, and the Environmental Protection Agency. I'm not saying that's bad; there is just a lot more concern with the environment that we have to accommodate. We



Dennis Lyon

know how far we've come on the professional side in terms of growing grass. But we've also come a long way on the managerial side, in terms of people management, diversity and the bottom line."

Advice for Dave: "Carry the message of GCSAA as far and wide as possible and enjoy yourself."

John Segui—1988—Retired. Living in Berwyn, Pa.

Biggest change: "Superintendents have moved toward light-weight mowing on fairways. We've always done that on the greens, but now you're even seeing it on fairways. The demand for green speed has really gone off the wall. The greens on many of these older courses just weren't meant to support the speeds you're seeing today."

Advice for Dave: "Enjoy it, but don't get too tied up in it. There is life after the GCSAA presidency."

Donald Hearn—1987—Head superintendent, Weston (Mass.) Golf Club.

Biggest change: "The lowering of cutting heights. Twenty-seven years ago we were mowing our



Donald Hearn

fairways twice a week at 1-inch height; now we're at three times a week at 5/8-inch. Tees and aprons were twice a week at 3/4-inch; now we're three times a week at 7/16-inch. Greens were four days a week and now we're at six."

Advice for Dave: "Don't listen to anybody. Make your own decisions. You'll make some mistakes, just like we all did. If you try to please everybody, you'll please nobody."

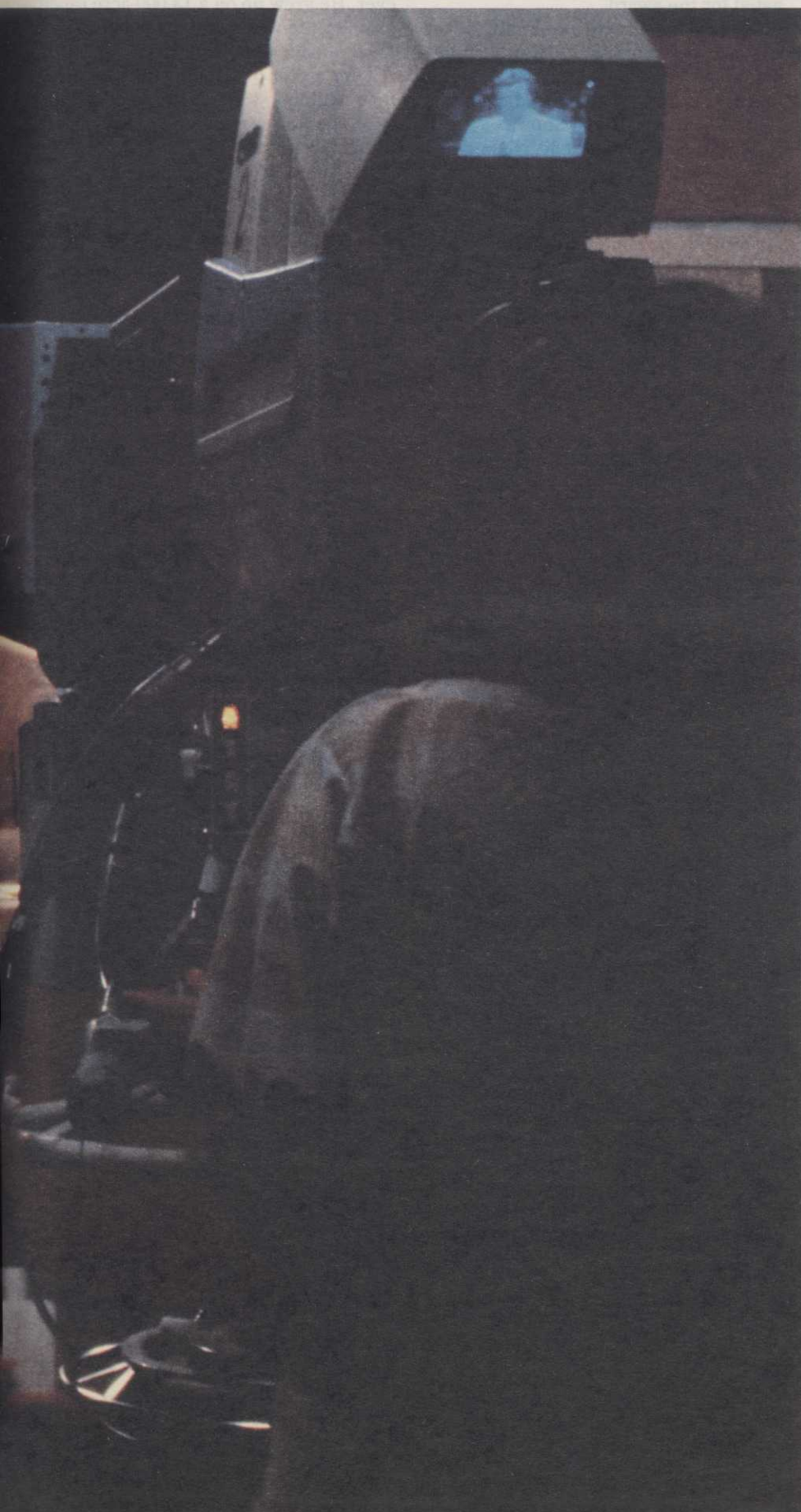
Riley Stottern—1986—Head superintendent, Casa Blanca Golf Club, Mesquite, Nev.

Biggest change: "The advances in computer technology in terms of business operations, irrigation and communication have changed the superintendent's role significantly."

Advice for Dave: "Take care of GCSAA and its members, but watch out for and take care of your family first. That's not easy, but it's very important."

Continued on page 90

becoming a victim of air pollution.



Ahh, television news in the 90s.

Tabloid journalism has sneaked its way onto the airwaves. And the pursuit of facts seems to have been replaced by the pursuit of ratings.

So the specialty pesticide industry needs a media watchdog that not only watches. But that also takes action.

Fortunately, we have one.

RISE. Responsible Industry for a Sound Environment.

RISE is a coalition of manufacturers, formulators and distributors from all areas of the specialty pesticide business.

In addition to promoting environmental stewardship, RISE makes sure the media doesn't report misinformation as fact.

We also hold editorial meetings with media decision-makers. And respond to negative articles or broadcasts that are incorrect. We've been very successful so far. Not surprising considering what our most powerful weapon is.

The truth.

Of course, there's still a lot more work to do. But rest assured, RISE is up to the task.

Because we know if we eliminate air pollution, the pesticide industry can breathe a lot easier.



1156 15th St., N.W., Suite 400,
Washington, D.C. 20005. ©1995 RISE RISE-0047-1

Joe Niebur: From the 'open range' to the fairways

By MARK LESLIE

COLORADO SPRINGS, Colo. — From cowboy to golf course builder, Joe Niebur apparently has transcended lifestyles as well as the "saddle" he rides in.

Niebur Golf, which the former cowhand created in 1991, has been named Golf Course Builder of the Year for 1998 by *Golf Course News*. The announcement followed an extensive survey of architects, developers and superintendents involved in projects for 18 builders nominated for the award.

Niebur will receive the award at the annual banquet of the Golf Course Builders Association of America in Orlando, Feb. 12, during the International Golf Course Conference and Show.

Of a possible rating of 80, Niebur Golf scored 78.675. MacCurrah Golf Construction, Inc. of Jacksonville, Fla., finished second with a rating of 77.96, and Landscapes Unlimited of Lincoln, Neb., placed third at 76.14.

"There are pros and cons on each side of going from a horse to a bulldozer," said Niebur from his headquarters here. "I miss the horse some days. The horse has more personality and doesn't cost \$250,000, either."

Nevertheless, heavy equipment — and the skill with which he and his crews can create golf courses — are responsible for the company's selection as the best of 1998.

"There are several golf course contractors that are good, but only a few are great — and Niebur Golf is in that category," said Dana Fry of Hurdzan/Fry Golf Course Design, which has worked with Niebur on several projects. "Joe's real fair and has some great people working for him. That's true with all those guys. That's why Landscapes and Wadsworth [Golf Construction] have

been so successful for so many years. The companies that have the staying power are the ones that have the quality leadership and the workforce behind them to get the work done. Joe's got that and he continues to get better at it."

Niebur's trail to business success may be unique among his colleagues, however. He grew up on a 13,000-acre ranch in Malta, Mont., riding herd with his horse Lester on 300 to 400 head of cattle.

After a year of college and a period of time building waterproof decks in Seattle, Niebur received a life-changing call from his father, Mark.

"Dad inherited some money and said he was going to build a nine-hole golf course, and would I come home to help? The entire family chipped in together, hired course architect John Steidel of Washington and built Merian Hills Golf Club.

"It was awesome and fun," Niebur recalled. "It was the first time any of us had ever done anything like that."

Niebur jumped on a dozer for the first time in his life, and brothers John, Tom and Jim laid irrigation pipe, dug this, plowed that and, *voila!*, Merian Hills Golf Club became a reality in 1982.

"Dad has since sold the course, but that golf course is still running and making money — a great little golf course," Niebur said.

How was shaping?

"It was so much fun I wanted to do it full-time," Niebur said. And, with some help from his friends — namely, his father, Steidel and John Cotter — he did.

Steidel took the lead for Niebur, con-

Continued on page 48



Joe Niebur



Decisions.

NX-PRO® with Poly-X PRO® delivers the economical, controlled release you expect from an SCU. Plus, its homogeneous analysis has all the essential nutrients your turf craves. Of course, if Poly-X PRO isn't quite what you had in mind, we have just what you're looking for. NX-PRO with Meth-Ex 40®. Just take your pick. NX-PRO will do the rest.

Available in greens or fairway grades. Call your nearest

Lebanon Turf Products Distributor. Or 1-800-233-0628.



NX-PRO and Poly-X PRO are registered trademarks of Lebanon Seaboard Corporation.

CIRCLE #131/GCSAA BOOTH #2872

Fieldstone: One of six projects completed by Niebur Golf in '98

GREENVILLE, Del. — Fieldstone Golf Club, one of six golf courses completed by Niebur Golf, Inc. in 1998, is a "spectacular project," said designer Dr. Michael Hurdzan.

Referring to the "difficult" piece of ground on which Fieldstone was built, Hurdzan said: "Some of the best golf courses come out of the worst sites. That was a very difficult site to work because of approximately 300 feet of grade change, lots of rock, streams and wetland areas."

"Niebur started moving dirt in late April 1998 and had the entire course grassed by Oct. 30," said co-designer Dana Fry. "That is amazing. In fact, I did not believe it could be done. Most important to me was the fact that the quality of the work was outstanding."

The 18-hole private golf club features a classic design, Hurdzan added, "in that there are lots of small bunkers, not big sweeping bunkers; the greens tend to be medium to smallish; and there are a lot of fescues around the bunkers and backdrops."

But, according to Niebur Golf President Joe Niebur, "The most distinguishing factor about Fieldstone is in the name itself. There was lots and lots of rock. We had to do a good bit of drilling and blasting. That rock was used to build stone walls along cart paths and greens and edges."

"The stone walls add such an elegant touch to it that will probably become a signature of the course."

The course was a dream of Wilmington golfers Buddy Reed and Dr. Barry Roseman. Andy Mottel is the superintendent.



BEST SMALL BUILDER • FURNESS GOLF CONSTRUCTION



The par-3 2nd at Fieldstone Golf Club, public access track in Auburn Hills, Mich. Art Hills drew it up, Furness made the rest happen. Opened in July, 1998, the course saw 15,000 rounds since.

The industry agrees, Furness Golf Construction near-perfect

By MARK LESLIE

CHARLEVOIX, Mich. — Fourteen years ago Tim Furness stood with a rake in his hand seeding a golf course in Asia. On Feb. 12 he will stand to receive a plaque declaring his company the Best Golf Course Small Builder of the Year for 1998.

Some might have guessed this about Furness, since he was, one, driving tractors on the family farm in Elkton at the age of 5 and, two, swinging a golf club at the age of 6.

Furness himself said: "When I started my company I knew we had the talent and ability to build great golf courses. Did I think I would be Small Builder of the Year? That would have been in my wildest dreams. But the last couple years, certain people — like Art Hills, who's probably the most frank guy you'll ever meet — have been praising us and we started to think, 'Maybe we are good.'"

Indeed, Furness Golf Construction, Inc. received near-perfect ranking from the developers, architects and superintendents on the three projects it completed in 1998. The principals were queried on such areas as meeting deadlines and budget, sufficient personnel and equipment, quality of work, and project supervisor. Of a possible score of 80, Furness finished at 79.2.

Furness Golf Construction will receive the *Golf Course News*-sponsored award in Orlando, Fla., at the banquet of the Golf Course Builders Association of America. The annual award was determined following a survey of architects, developers and superintendents involved in projects completed in 1998 by the 27 builders who were nominated. The Small Builder Award is chosen among companies that built fewer than four 18-hole golf courses during the year.

Furness was followed in the survey by Turf Drain Inc. of Novi, Mich., with a score of 78.17, and Quality Grassing & Services, Inc. of Lithia, Fla., at 77.48. In 1997, Quality Grassing won the award, followed by Turf Drain.

Just seven years ago, Tim Furness and brother Chris formed the company, rented an 850 John Deere bulldozer and an 862 John Deere scraper, and shaped a nine-hole golf course for an old friend.

"It was just the two of us," Tim recalled. Now there are 60 employees.

A 1984 Michigan State University (MSU) turfgrass graduate, Tim Furness attributes his success to his seven years working under Perry and Pete Dye in Asia and to his current crew, especially brother Chris, vice president of the company, and Senior Project Manager Pete Bohn.

"If I had to say who would I owe the most, it's Perry Dye," said Furness, who Dye hired right out of MSU and put to work in Japan. "He is the one who had faith in me and put a lot of responsibility on me as a very young man. He gave me confidence and taught me a lot."

From Pete Dye, Perry's father, Furness learned creativity, he said. "Creativity can't

Continued on page 48

Fieldstone, Furness fail to disappoint

AUBURN HILLS — Designer Arthur Hills and Furness Golf Construction have added another fine course to Michigan's ever-expanding golf stable. Fieldstone Golf Club opened for business in July 1998 and has met with rave reviews according to director of golf, Gordon Marion. "We had 15,000 rounds in 1998 and we hit a 99% satisfaction rate on the layout and conditions."

The 18-hole public layout is owned by the City of Auburn Hills and sits on 200 acres of diverse terrain that features meadows, wetlands, mature wooded areas, meandering streams and elevation changes.

Continued on page 67



Decisions.

NX-PRO with Meth-Ex 40 delivers the dependable, controlled release you expect from a leading nitrogen source.

Plus, its homogeneous analysis has all the essential nutrients your turf craves. Of course, if Meth-Ex 40 isn't quite what you had in mind, we have just what you're looking for. NX-PRO with Poly-X PRO. Just take your pick. NX-PRO will do the rest.

Available in greens or fairway grades. Call your nearest Lebanon Turf Products Distributor. Or 1-800-233-0628.

Lebanon
TURF PRODUCTS

CIRCLE #132/GCSAA BOOTH #2872

Niebur

Continued from page 46

tacting colleagues, and helped land Niebur a job as a shaper with Greenscape.

"I went from Malta, Mont., being a cowboy, to building a golf course [Salt Creek in Dana Point, Calif.] on the ocean and thinking, 'I've really been missing out on life,'" Niebur said.

Although six months later he was laid off, and got a job working for Cotter in Wadsworth's Southwestern region.

"John [Cotter] is the best," Niebur said.

"I admire him more than anyone else in the golf construction business. The way he ran the show and treated me..."

After three years with Wadsworth, Niebur joined golf course builder Stan Aldridge in Lake Orion, Mich., and they created Aldridge-Niebur in 1986. They remained partners until 1991 when Niebur went on his own.

Always having an entrepreneurial spirit, Niebur enjoys running his 150-person company, which swells to 250 in the summertime.

"The thing I like is, every day is a

different day," he said. "You wake up and you're going to be working in New Jersey or Southern California. Plus, we're building something people will enjoy for many, many years. And whenever you take people there, it's fun. The owners really appreciate the product. And there's a lot of satisfaction in that. They end up thinking we're the greatest guys in the world. Ten years later they treat you like you're an owner."

Niebur attributes the company's success to his employees, especially brother John, a general superintendent and vice

president; general superintendent Frank McGraw; Chief Financial Officer Greg Bartold; and Chief Operations Manager Dyric Snyder.

"I enjoy seeing the employees advance or take on more responsibility," Niebur said. "Also, sometimes I get focused too much on keeping it going and getting more work, but my guys are focused on building a great golf course. They feel the course is a part of them. Together, we make sure quality comes before profit."

Since he can't be on each site every day, Niebur said, "You need good employees, or you can lose control easily and they will do things that will get you in trouble."

Niebur pointed to the other finalists and all companies that are perennially near the top of the Best Builder Awards, saying: "Being in the top three, year after

Continued on page 67

Furness

Continued from page 47

be taught," he said, "but they were really good about letting shapers use our creativity. I discovered my creativity working with the Dyes. And the fact we were able to be creative in the field with Pete has reflected in our work with other people. It's helpful on everything we do."

When Furness left Dye Design in 1991 he was supervising multiple jobs in the Pacific Rim. Now, America, and in particular Michigan, is his stage.

And in 1998 Furness Golf Construction built the ballyhooed Arthur Hills-designed trio Bay Harbor (Mich.) Golf Club, Fieldstone Golf Club in the city of Auburn Hills and Red Hawk Golf Club in East Tawas.

One of the company's current projects is the much-anticipated, Rick Smith-designed Arcadia Bluffs standing high above Lake Michigan. An agronomic consultant working on that project said of Furness Golf Construction: "They're the best. They do terrific work."

"Their [Furness'] work went exceptionally well," said Gordon Marmion, PGA professional and director of golf at the city-owned Fieldstone Golf Club. "They did a lot of extras, especially when it came to drainage. We came close within budget, which is not easy in these circumstances, and especially working with municipalities."

A supplier in Michigan wrote: "I can't express to you enough how enjoyable it is to have builders like Furness doing business with [us]. Knowing full well we will be paid in full within terms is a comforting fact."

Furness cited his employees for these accolades.

"First of all, I wouldn't be here if not for the people working for me," he said. "I can't say enough about my shapers, project managers, the people in the office, our mechanic who keeps the equipment running every day. They're a fantastic group who I wouldn't trade for anything."

About Chris Furness and Bohn, he said: "They are both very talented. Pete and I started together with the Dyes on the same project. He joined Chris and me as a shaper and his abilities allowed us to expand to the second crew. I'm very fortunate to have

Continued from page 67

GOLF COURSE NEWS



Pennington Plantation Sweeps NTEP

Plantation ranked number one in 40 out of 44 categories against 129 different grasses, including Rembrandt, Millenium, Rebel Sentry, Crossfire II and SR 8210.

Pennington Plantation received the number one ranking for Mean Turfgrass Quality ratings of Tall Fescue Cultivars grown in full sun at 27 locations in the U.S. and was ranked in the #1 performing group in 40 out of 44 tables - or 91% of the time (1997 data based on 1996 National Tall Fescue Test results). Plantation repeatedly outperformed Rembrandt, Millenium, Rebel Sentry, Crossfire II, SR 8210 and a total of 124 other grasses. For Turfgrass quality, there's no beating Pennington Plantation.

For all your turfgrass needs, be sure to specify Pennington Plantation. If it's Pennington Seed, you know that quality is in the bag.

PENNINGTON SEED. QUALITY YOU CAN TRUST.



CALL PENNINGTON SEED AT 1-800-277-1412 FOR A DISTRIBUTOR NEAR YOU • www.penningtonseed.com

*Mean Turfgrass Quality ratings of tall fescue cultivars grown in full sun at 27 locations in the U.S. LSD values 1-4/129

CIRCLE #135/GCSAA BOOTH #5033

BRIEFS



GEORGE GETS MASS. JOB

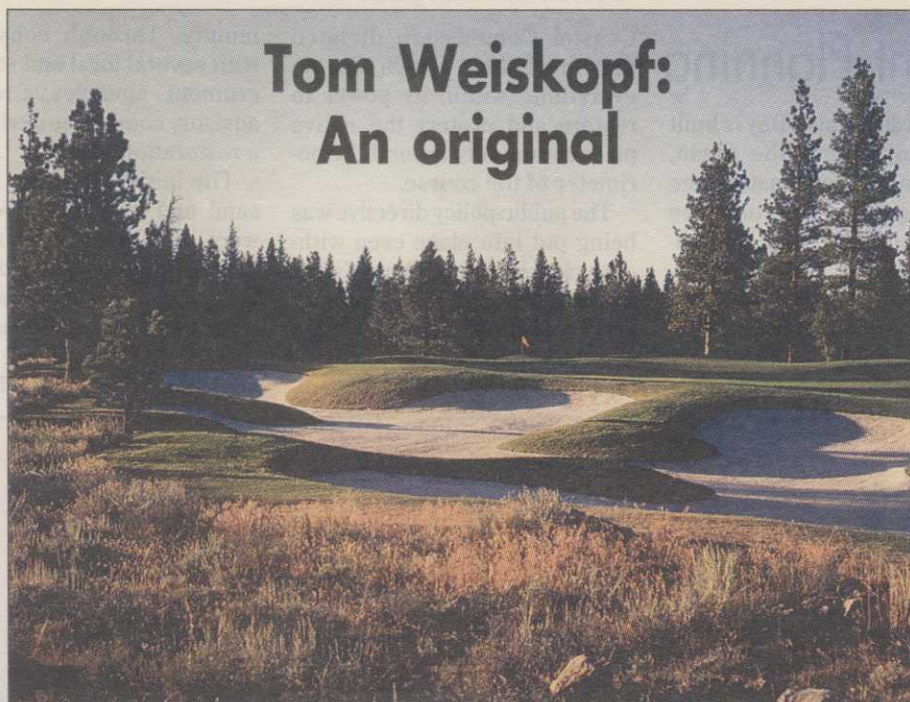
DANVERS, Mass. — WMSJ Co. Inc. has selected George Golf Design, Inc. to construct a three-hole practice facility and upgrade the existing driving range complex for Sun 'N Air golf facility. The facility will consist of three par-3 holes of 110, 200 and 170 yards, a combination of natural and artificial grass tees, and a short-game area which allows the practice of all shots within 50 yards of the hole. The third hole features a 6,000-square-foot green over water. This addition will provide an upscale golf practice and learning facility to the Boston area. Construction is under way by Quality Grassing & Services of Lithia, Fla. "This facility will provide the opportunity to teach every shot in the game," said course architect Lester George.

PLAYER INKS APPALACHIAN PROJECT

MOUNTHOPE, W.V. — Gary Player Design has been signed to design an 18-hole course as part of an extensive development near Beckley by Sun Mountain Enterprises, Inc. The project will include a hotel, outdoor amphitheater, conference center, driving range and residential components. The Sun Mountain property is situated in the Appalachian Mountains. The Player team was given the chance to study more than 2,000 available acres before it settled on the most dramatic 400 acres. The holes will be situated in and wind their way through valleys, featuring elevation changes of up to 100 feet. The design also will include numerous lakes and bunkering in Player's design characteristic. Construction of the lighted driving range is underway and the golf course is set to break ground in March. Sun Mountain Resort course opening is planned for July 2000.

ASGCA OFFERS DEVELOPMENT BROCHURE

CHICAGO — A free booklet, Golf Course Development Planning Guide, from the American Society of Golf Course Architects (ASGCA) is helpful to anyone taking the first steps to develop a new golf course. The 16-page brochure, with full-color illustrations and photography, covers all the key components involved in a new course project. To get a free copy, people should send a self-addressed, business-size envelope to the American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, Ill. 60601.



The greens complex of the Weiskopf-designed par-4, 435-yard 14th hole at Lahontan in Truckee, Calif.

When Tom Weiskopf quit the PGA Tour at 40, he was the fourth all-time money winner and sixth all-time tournament winner. In 1984 he joined Jay Morrish as a design team whose first creation, Troon Golf and Country Club in Arizona, was selected Best New Private Course in 1986 and whose Shadow Glen outside Kansas City and Forest Highlands in Arizona finished one-two in 1989. Morrish and Weiskopf went their separate ways in 1995, but Weiskopf has continued to design award-winning golf courses, most notably Loch Lomond in Scotland, already rated among the world's best. GCN Managing Editor Mark Leslie caught up with Weiskopf at his Scottsdale, Ariz., offices after the New Year.



Tom Weiskopf

Q & A

Golf Course News: Compare the satisfaction of seeing a finished course of yours to winning a Tour event.

Tom Weiskopf: The comparison would be the recognition for a lot of hard work. There is a lot of preparation that goes into tournament golf. There are a lot of determinations during four rounds of golf. And it's over a much shorter time frame than it is doing a golf course.

There is a tremendous difference. Playing tournament golf is a wisp-of-the-will existence. When you win a tournament, it is soon forgotten by the general public. Whereas when a golf course is finished and is being played, it is there for a long, long time and is in living memory for a long time.

GCN: How do you respond to grousing by golf course architects about Tour pros "jumping into the business"? Is it sour

Continued on page 58

AMP: Examples from California

By DR. ROBERT ABBOTT

The theoretical concepts behind Adaptive Management Planning (AMP) are not difficult since it is essentially the same experimental method taught at all good universities.

The difference is that AMP is a management strategy based on information derived through experiments designed within the context of social/economic policy constraints. Putting AMP into practice is much more challenging than an experiment back in the nursery area for a new fertilizer on your favorite strain of turfgrass.

PART 2

AMP tends to involve people from a variety of disciplines, and a considerable expenditure of energy and money. The real virtue of the AMP approach is that it enables superintendents and developers to move beyond the gridlock, head-butting, red-in-the-face frustration stance with the regulatory community. AMP elevates the interactions and communications into a let's-talk-it-over mode, so that they all can come up with answers.

But AMP is also very exciting because of the rewards of solving a tough problem, and achieving real understanding through a community effort that tends to create long-term professional relationships.

Here in Northern California there are many examples of AMP at golf courses. Two striking examples are observed at Pebble

Continued on page 50

Dyes designing 4th in Dominican

By PETER BLAIS

LA ROMANA, Dominican Republic — Architects Pete and Alice Dye are building their fourth course here at the Fanjul resort, home of Casa de Campo (Teeth of the Dog), one of the Dyes' best-known layouts.

Altos de Chevon, which means high above the (Chevon) river, began construction a year ago and is scheduled to open by fall 2000. It will be the third Dye-designed resort course here, joining Casa de Campo and The Links. Casa de Campo opened in 1971 and hosted the world amateur championship in 1974. La Romana Country Club, also a Dye project on the resort grounds, is a private layout.

Despite the devastating effects of last fall's Hurricane Mitch, course work quickly resumed. The green pads were under construction in early January, according to Alice Dye.

"We didn't have rain, like Puerto Rico," Dye remembered of Mitch. "We had much higher winds. They were clocked at 225 miles per hour. It denuded all the trees."

Continued on page 54



Wild Horse Golf Club forecast to be one of state's best.

Nebraskan neighbors build together

By MARK LESLIE

GOTHENBURG, Neb. — In Nebraska, "community" takes on a whole new meaning. And "community-owned golf course" does not necessarily mean "municipal golf course." Such is the case at Wild Horse Golf Club here, where more than 200 people not only hold shares in the course but probably also got down and dirty building it.

"I tell you what: These [Nebraska] people work together to help each other out," said Dan Proctor, who co-designed Wild Horse with partner Dave Axland of Bunker Hill Golf Course Design and Construction. "If somebody needs something, they go and help them. Local people did most of the tilling. After their work, they'd bring a tractor over to the site. Some

Continued on page 52

Adaptive Management Planning

Continued from page 49

Beach and Squaw Creek golf courses. There are undoubtedly many other examples around the county. I would like to hear about them.

THE PEBBLE BEACH PLAN

Ted Horton, at Pebble Beach Co., has managed a classical example of an AMP program.

The Links at Spanish Bay is built directly adjacent to the ocean, with a thin strip of coastal dune sand along the oceanfront. The coastal dune native plant community is fragile and many species are listed as threatened or on the endangered species list.

The Spanish Bay Resource Management Plan and California

Coastal Commission dictated that the Pebble Beach Co. do everything within its power to restore and protect the native plant community around the perimeter of the course.

The public-policy directive was being put into place even without a clear understanding of what would need to be done in terms of agronomic practices to achieve the objective of a sustainable coastal dune plant com-

munity. Through consultation with several local and state government agencies, a technical advisory committee devised with a restoration plan.

The initial efforts to bring in sand and replant native plants were only marginally successful. Continuous monitoring revealed that the plants were not holding up well in the sand that was used. This is where the creativity came into play. They did

not just give up, but planted other native species of the coastal scrub community that were also considered species of special concern. The coastal scrub plants have done much better, but they are also fragile.

Monitoring revealed that even a few people walking on the dunes had very lasting impacts. So they adapted again and put in a wooden boardwalk along the dunes to contain and delimit the foot traffic on dune sands.

THE LAKE TAHOE PROBLEM

Michael Carlson, superintendent at the Resort at Squaw Creek near Lake Tahoe, Calif., is also actively involved in an adaptive management type of program. Lake Tahoe is often considered the crown jewel of the Sierra Nevada Mountains. Water quality is a matter of tremendous concern to local residents, the tourism industry and the regional water quality control boards.

For decades, heroic efforts have been made to prevent nutrient loading and eutrophication. Squaw Creek runs right through the Resort at Squaw Creek Golf Course, which flows into the Truckee River. The original design work stipulated a very limited set of fertilizers and no pesticides. Weeds are controlled by burning and mechanical removal.

One of the results of a management regime with very limited fertilizer options, was the progressive increase in the amount of clover on the golf course. Clover flourished because it does not require nitrate-based fertilizer inputs. Now the resort is running experiments on test plots to determine if spot spraying with herbicides will result in any of the pesticide entering the ground water or surface-water runoff.

Ground-water quality is monitored regularly and a six-member Technical Review Committee evaluates the results. The programmatic emphasis is on monitoring, the experimental approach to problem solving, and working smoothly with a regulatory committee that reflects an articulate public's concerns for the environment.

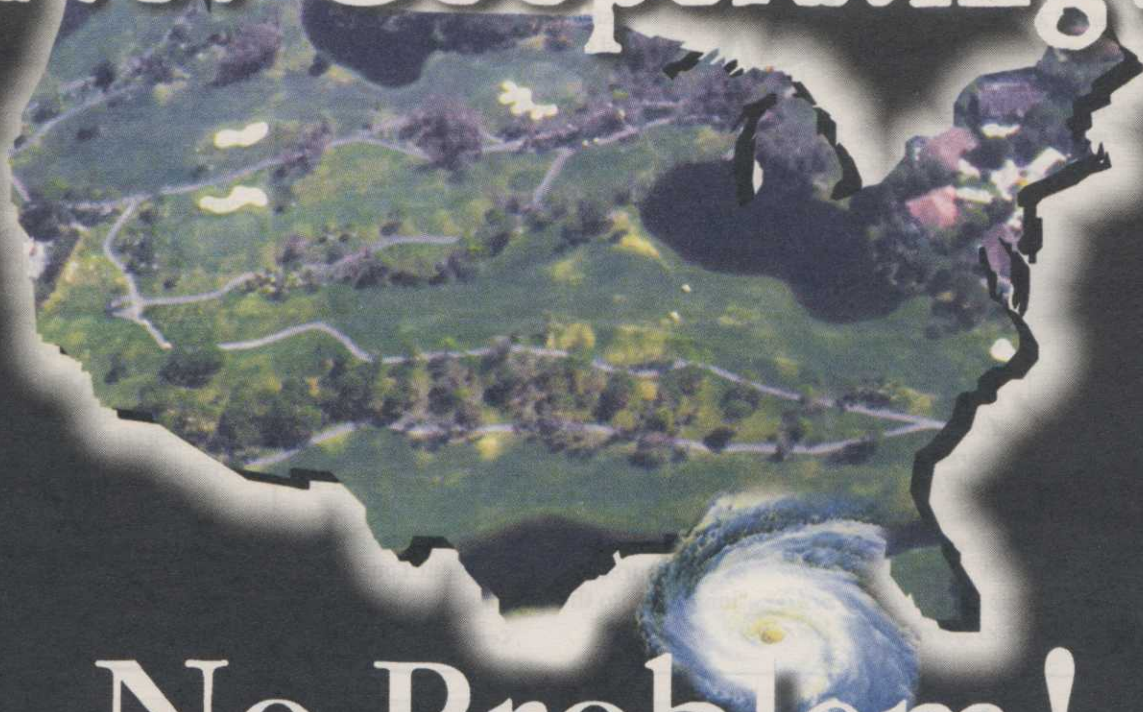
This is the second in a three-part series about Adaptive Management Planning (AMP). Readers with questions, comments or other examples of AMP are encouraged to communicate directly with Dr. Abbott, who will incorporate these into the final article of this series.

Dr. Robert Abbott

People may contact Dr. Abbott at: Strategic Environmental, 9 Constitution Dr., Corte Madera CA 94925; 415-924-8261; abbco@worldnet.att.net

GOLF COURSE NEWS

Mother Nature Not Cooperating...



No Problem! Primer 604 still performs

That's why Primer 604 is still the number one soil surfactant!*



AQUATROLS
Formulating For Effectiveness

5 North Olney Ave., Cherry Hill, N.J. 08003
1-800-257-7797 or 1-609-751-0309
Fax 1-609-751-3859
www.aquatrols.com

* Based on results from a GCSAA survey.

For More Information Call
1.800.257.7797





As Dependable As You.

DACONIL® for Dependable, Economical Performance Each and Every Day.

You're on the job each and every day. Why expect less from your fungicide. There's no better fungicide than DACONIL to deliver dependable and economical performance on your tees, greens and fairways. Each and every time you apply DACONIL, it delivers these advantages:

- Multi-site mode of action
- Sticks and stays for maximum protection
- Control of 14 diseases, including dollar spot, leaf spot, melting out, brown patch, anthracnose, rust, and red thread
- Both easy and economical to use
- For application on nine species and nearly 75 varieties of turfgrass
- Three flexible formulations—Ultrex®, Weather Stik®, and Zn

For dependable performance each and every day, it's DACONIL.

For more information, contact your authorized Zeneca Agent, or call Zeneca Professional Products Toll Free at 1-888-617-7690. Labels and MSDSs available 24 hours a day, seven days a week via Fax on Demand. Please call 1-800-640-2362.

www.zenecaprofprod.com

Daconil®
Fungicide

ZENECA Professional Products

Always read and follow label directions carefully.

DACONIL Ultrex®, DACONIL Weather Stik®, and DACONIL Zn® are registered trademarks of a Zeneca Group Company. © 1999, Zeneca Inc. Zeneca Professional Products is a business of Zeneca Ag Products, a business unit of Zeneca Inc.

CIRCLE #125 / GCSAA BOOTH #2060

ZPP-DAC-009

Nebraskan neighbors unite

Continued from page 49

didn't even own shares; they just wanted the course built."

Axland and Proctor hired one person to help with the course shaping. If they needed equipment or labor, Proctor said, "We'd ask one of the board members. If we needed a large tiller they'd go find it. If we needed 10 guys to

clean weeds out of the bunkers, they'd organize a crew."

The result?

Wild Horse has a lot of the character of a famous course which sits just 10 miles away: Sand Hills Golf Club, a track designed by Bill Coore and Ben Crenshaw which was named Best New Private Golf Course in 1995.

"This is a wonderful piece of ground. It is like a section of Sand Hills broke off on this 400 acres," said Proctor, who, along with Axland, worked with Coore and Crenshaw as shapers for Sand Hills and on California's famed Riviera Country Club, among others.

Proctor described the land as "soft, more compact, gently rolling but with a lot of character—perfect for golf. You can walk it."

While Sand Hills' trademark is a number of natural "blowout bunkers," Wild Horse had only a couple natural blowouts. So Axland and Proctor added about 60 more.

They moved only 5,000 cubic yards of dirt on the project, taking earth from the clubhouse site to build up the greens complexes.

A look of rugged, native grasses imparts a major element to the course's character.

"I won't be so conceited as to say it's in the class of Sand Hills," Proctor said, "but, in Nebraska, there's nothing other than Sand Hills you could compare it to."

The cost, too, is hard to beat.

Even with a top-of-the-line irrigation system, the course cost only \$1 million to build. The clubhouse and maintenance complex will cost approximately another \$400,000.

Raising the money was another "community effort" in this town of 3,500.

A small band of Gothenburg residents decided to build an 18-hole course in the town, then bought the land. They sold 40 of the 51 large house lots around the perimeter of the property, raising nearly a half million dollars. Then they sold nearly 1,000 shares in Wild Horse at \$500 apiece. Another \$1 million.

Gothenburg State Bank helped out with the financing and, early in the process, a dentist Dr. Jim Haver, signed a \$150,000 note to keep the project alive.

True to its community character, when Wild Horse opens in the spring it will charge \$25 greens fees, \$400 for a family membership, \$350 for individual memberships, \$175 for students, and annual cart fees of \$175 per family. An initiation fee of \$500 is payable over five years, according to Director of Golf Robert Wehnes. This type of fee is foreign to Wehnes, a Southern Californian and past member of Riviera Country Club.

Wehnes plans to open the back nine in March and the full 18 holes in April or May.

"They will get so much outside play that they can keep it affordable for the local people," Proctor predicted. "People play a lot of golf in Nebraska and when they hear of a good golf course, they go to it. This is a very fun course to play."

Wehnes agrees. Robert is the son of the late Bill Wehnes, an honorary life member of the PGA who first backed Arnold Palmer and whose slope and rating process was adopted by the U.S. Golf Association.

Having grown up playing the likes of Riviera, Pine Valley, Merion and other famous tracks, Wehnes said: "I understand good golf courses and grasses. And this is a great golf course. It needs a few years to mature, but I love the contour of it. You will not have a flat lie on any of the fairways. The greens are a nice size. And Josh [superintendent Josh Mahar] has done a great job, along with Dan and Dave, getting this course together."

The par-72 track covers 5,000 to 6,798 yards over four sets of tees, with some holes having up to six tee boxes.

The facility includes a 17,000-square-foot practice putting green, full driving range and practice chipping green with a bunker.

GOLF COURSE NEWS



We're making history (again).

After four seasons with FREEDOM II, you will hold these truths to be self evident: •FREEDOM II Kentucky Bluegrass is one of the quickest to emerge after planting. •FREEDOM II's vibrant green color in spring is a welcome addition to any mixture. •FREEDOM II holds up to heavy wear throughout the year—in parks and lawns, on athletic fields and golf courses. •FREEDOM II covers new ground in worry-free maintenance.



You first chose Freedom. Now choose the tried and true blue...

FREEDOM II

KENTUCKY BLUEGRASS

ARKANSAS VALLEY SEED
4625 Colorado Blvd.
Denver, CO 80216
303-320-7500

G.W. HILL OF INDIANA
12071 North State Road 37
Elwood, IN 46036
765-557-4455

JACKLIN SEED
5300 W. Riverbend Ave.
Post Falls, ID 83854
800-688-SEED

NATIONAL SEED CO.
5300 Katrine Ave.
Downers Grove, IL 60515
630-963-8787

CIRCLE #147/GCSAA BOOTH #653 & 753

Ranges, practice facilities pioneer advanced new era

By BOB SPIWAK

If you believe golf originated with Scottish shepherds whacking rocks into rabbit holes with their crooks, it makes sense to assume that driving ranges began earlier. Before the rabbit "scrapes" were considered targets, the herders probably hit the rocks in no particular direction.

How things have changed.

The range of today runs the gamut from a primitive field with (perhaps) yard markers, through facilities like that in

1ST OF 2 PARTS

the movie "Tin Cup" to multi-tiered techno-

logical marvels which are heated in winter, or cooled and misted in hot climates. For a constant climate, there are immense air-supported domes.

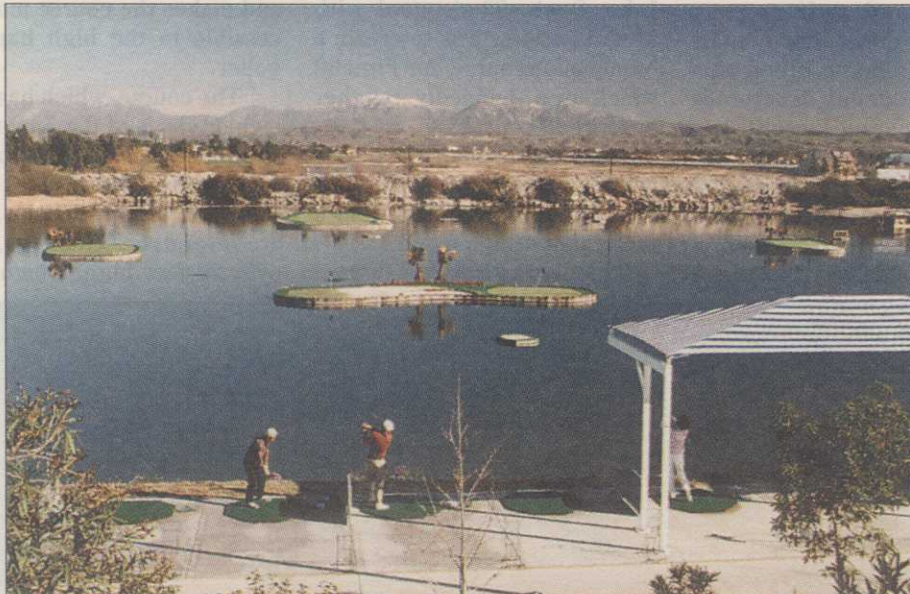
The facilities have a variety of automated features such as automatic ball washers and dispensers that place the ball on the tee for the golfer. There are a few which, from the time the new balls are unloaded, they are never again touched by human hands until time for discard.

There are aqua ranges where the targets float in the water as do the balls. One of these, The Islands Golf Center in Anaheim, was noted Top Driving Range in California and third best in the nation by *Sports Illustrated*.

Most operators prefer a more accurate name for their facilities and justifiably: They are not merely for hitting balls anymore. There are golf centers, which along with the range, offer instruction, chipping areas, bunkers, putting greens, putting courses and even full-sized, par-3 and regulation courses as part of the facility. Others, some called Family Entertainment Centers, offer everything from batting cages to Go-Kart tracks to augment the golf facilities. And, when the golf or other entertainment is over, some feature restaurants to entice the family to stay a little longer.

Like golf courses, range ownership covers the spectrum from private ownership to giant corporations with chains of facilities around the country or world. In a study conducted by The National Golf Foundation comparing the period 1994 to 1998, the upscaling of these venues is clear. Installation of a retail shop was up 20 percent, club repair 22 percent and club rentals nearly doubled. There were 20-percent jumps in practice putting greens and short-game practice areas. Teaching professionals on staff increased from 34 to 60 percent in that four-year period.

The name Hank Haney is known to most golfers as one of the shining stars among golf teachers. Haney owns three facilities in the Dallas area. "Teaching," says Haney, "is kind of our big thing." At his McKinney, Texas, facility, for example, 10 instructors are on staff. "Our



Practicing their distance, or settling a bet, golfers have islands as targets at The Islands Golf Center in Anaheim, Calif.



A three-deck practice center packs in golfers at The Golf Center in Des Plaines, Ill.

pros just teach, and that alone is going to make it better than at a golf club. They don't have to wear as many hats as a club professional," Haney says. "There's not a golf course that has practice facilities as good as ours."

Two of his three ranges have nine-hole courses, and after or during lessons, students can take their education from the tee line to actual playing conditions and be monitored by the instructor.

The industry has grown to the extent that it has its own association, The Golf Range Association of America (GRAA). Founder and Executive Director Steve di Costanzo started the organization in 1992 and soon after began publication of *Golf Range & Recreation Report* magazine. ("Recreation" was dropped from the name in 1998.)

di Costanzo was working for a Japanese-American magazine when he met a man who owned one of Japan's largest multi-tiered ranges. This person expressed surprise that few mega-ranges were being built in the United States. di Costanzo saw the opportunity and in 1991 took a sample range newsletter to the PGA Merchandise Show, concentrating on exhibitors associated with ranges. At this time most ranges were privately operated, although the future was being ushered in in the New York area where the first bi-level ranges were coming on line.

His newsletter well received, di Costanzo left his job and formed GRAA with its companion 16-page newsletter. At the end of the first year, 100 ranges

belonged to the association. Now, six years later there are over 700 worldwide.

Asked about the growing number of members and success of the range business, GRAA vice president Mark Silverman asserts: "It's really not about

golf, it's about land. The land is being banked and a range is the best income producer for the property at a given time." Silverman cited a range operator to whom he spoke on this subject.

"The range was prosperous, so I asked him what he would do if IBM came in to build a plant and made him an offer. He told me he'd have the place emptied in three hours."

Be that as it may, ranges throughout the nation and around the world are growing in number, size, in modern conveniences and increased creature comfort and service to their patrons. This, in turn, has spawned support industries; individual club makers to massive ball delivery systems, a variety of methods to heat the tee line (and expand the season) and the opposite, which cool the lines in the desert.

Balls by the thousands or dozens are used and later discarded. The largest-selling shirts in ranges around the country are made by Ashworth. At one, they cannot keep Nike merchandise on the shelves.

Ranges have gone upscale. There were no Big Berthas to rent at Tin Cup.

Best Value In The Industry

That's The Beauty Of A National.

Judge a National by the sum of its parts, and you'll conclude its dependability is surpassed only by its value. Designed around "off the shelf" parts, a National's rugged simplicity claims the lowest maintenance costs in the industry.

Contact us for a test drive:
1-888-907-3463
www.nationalmower.com

NATIONAL MOWER COMPANY
SINCE 1919 700 Raymond Avenue
St. Paul, MN 55114
Fax (651) 646-2887
Email sales@nationalmower.com



NATIONAL is a Registered Trademark of National Mower Company

Dove Valley Ranch opens

CAREFREE, Ariz. — The upscale Dove Valley Ranch Golf Course opened here Nov. 18.

The Robert Trent Jones Jr.-designed course features an abundance of saguaro cacti, mesquite trees and a variety of desert wildlife as well as 6.3 acres of lakes.

A special aspect of Dove Valley Ranch's construction involved RBI Golf's effort to revegetate one-third of the golf course which used to be an old berm. All existing vegetation on the site was moved to this and other undisturbed areas of the course.

PALM DESERT, Calif. — The Desert Willow Resort's much-anticipated second golf course, Mountain View, opened in October and is being billed as a kinder, gentler golf experience than the existing Firecliff layout.

Hurdzan/Fry designed the 6,913 yard Mountain View course along with PGA Tour professional and design consultant,

Desert Willow opens 2nd

John Cook. Their goal with Mountain View was to create a "companion course" for Firecliff which is a decidedly tougher desert golf course.

With that in mind, the Mountain View course uses the desert as more of a backdrop than a prominent design feature.

This allows for wider fairways

and makes the course more accessible to the high handicap golfer.

The course, which has spectacular views of the Santa Rosa mountains, also has a couple of unique design features.

On the 6th and 9th holes, there are several rock elements, some over 20 feet high, which were

created from casts to form replicas of the ancient Indian Canyons.

The course finishes in dramatic fashion at the 18th, a dogleg, 538-yard, par 5 which features a green flanked by a waterfall and a stream.

Desert Willows Resort is a public golf facility owned by the City of Palm Desert and managed by Kemper Sports Management.

Dyes in Dominican

Continued from page 49

But four months later, all the leaves are back."

The Dyes are familiar with the effects of hurricanes, having designed the Ocean Course at Kiawah Island, S.C., which was in the direct path of Hurricane Hugo during construction in 1989. "We never got the instant regrowth there that we got here. We had to nurture those trees. They were so badly salt-burned, they just wanted to die," Dye remembered.

Altos de Chevon sits on 200- to 300-foot bluffs overlooking the river. One nine leads south toward the river, with vistas of the sea in the background.

The second nine turns north, affording views upriver toward the inland mountains. "It's an absolutely magnificent piece of ground," Dye said.

The major construction challenges have been removing rock and obtaining topsoil, Dye explained. "There is no topsoil on 50 percent of the site, so you have to take it from where it is to where it isn't," she said. "This whole country has plenty of rock. The rocks range in size from a thimble to a baseball, but there are so many of them."

Special permits were required to cut any trees since simply removing trees is illegal. "They don't want to make the same mistake Haiti did, cutting down all the trees and having mud slides," Dye said.

Plans are to use paspalum as the major grass on greens and fairways, making it possible to use salt water for irrigation, Dye said. "That [using paspalum] will revolutionize this entire area," she said. "Obtaining irrigation water is a major problem throughout the Caribbean."

The Dyes' younger son, P.B., is designing a course farther east in Punta Cana. "Oscar de la Renta and Julio Iglesias are involved in that one," she said.

**THINK OF IT
AS A PAINT BALL.**

If you're shooting for results like these, POLYON® fertilizers hit right on the money. With one application, you can control the release of up to four months of turf nutrients, regardless of moisture levels, soil pH or microbial activity. The ultrathin, durable coating on every granule of POLYON fertilizer is temperature responsive—releasing more nutrients when it's hot and your turf needs them, less when it's cool. And unlike



Pursell Technologies is the official fertilizer sponsor of The First Tee Program, a Platinum Tee Club member and an Environmental Steward Award sponsor.

Nicklaus' finishing touches ready Four Seasons track

LAKE OF THE OZARKS, Mo. — Jack Nicklaus has made final adjustments to his first design in Missouri, the 18-hole track at Four Seasons Resort here.

Expected to open in summer 2000, the course will be the showpiece of Four Seasons' new waterfront golf community, Porto Cima.

Nicklaus' vision is to create a course that enhances the natural landscape and is chal-

lenging and enjoyable to all levels of players. Multiple tee boxes, generous landings and dramatic vistas will contribute to the course's distinctiveness.

"The golf course has a lot of variety. It's a great piece of property, and we're having a lot of fun with it," Nicklaus said. "If you had to rate this property on a scale of one to 10, it certainly would rank close to a 10."

Doc O'Neal's Golf World

By ANDREW OVERBECK

WESTFIELD, Ind. — When John "Doc" O'Neal hatched his plan for a premier multi-faceted golf training facility he knew exactly who to call on—longtime friend Pete Dye.

The two have collaborated with golf architect Tim Liddy to create "Doc O'Neal's Golf World"

an 80-acre site that will include a 22-acre driving range, an eight-acre short game range, an indoor training center and a 9-hole bentgrass course designed by Dye. "The primary intent of this facility is to provide a top-notch instructional facility dedicated to quality and service," said O'Neal, who conceived the project.

The planning for the facility was exhaustive. O'Neal visited over 50 driving and practice ranges across the country observing layouts and service. "This practice range will have good targets and visuals—actual fairways to hit onto, bunkers to cross, greens to hit—you just won't be out there on the range hitting airballs," said O'Neal. "When you hit a ball you will see it land every time, it will actually mean something to them."

The driving range will be 500 yards deep, double sided and have two separate fairways with four target greens each. The short game range will be a separate facility with a 15,000 sq.ft. putting green, a 6,500 sq.ft. chipping green, and an 8,000 sq.ft. bunker green.

The greens will have varied undulations, the chipping green will have different heights of grass, and there will be several different bunker depths.

"You will be able to practice almost every shot," said O'Neal.

There will also be a 70 yd long half-wedge area to practice short approach shots. Unlike the conventional driving range, golfers will pay by the hour instead of paying by the bucket. "They'll just walk out and see balls stacked up waiting for them," explained O'Neal.

O'Neal decided that a short 9-hole golf course would complement the training facilities. "I wanted Tim and Pete to design a traditional looking golf course, one that was scenic but approachable, one that juniors and women golfers could feel comfortable playing," said O'Neal. "After all, to a kid, a 280 yd par 4 is quite a monster."

The course will have five par four's and four par-3s and will be all bentgrass.

However, the training facility doesn't end outdoors. The club house will feature a video instruction area, an indoor bunker and chipping green, a golf fitness center run by Methodist Sports Medicine, and a repair and merchandise center.

O'Neal plans to spend the winter recruiting at least eight golf pro's to staff the facility. The club house and indoor facilities are due to open in June of 1999 and the outdoor ranges in August of 1999.

The 9-hole course is slated to open in spring of 2000.



other controlled-release fertilizers, POLYON fertilizers slowly and consistently meter nutrients without the risk of premature release, leaching or burning. For the easiest green around, call (800) 334-8583 for the formulator or distributor nearest you.

POLYON® is a registered trademark of RLC Technologies. The POLYON design and the GREEN color are trademarks of RLC Technologies.



Fertilizers of the Future

PURSELL TECHNOLOGIES
www.polyon.com



Mistwood Golf Course shows the artistry of architect Raymond Hearn.

Hearn's Mistwood opens

ROMEOVILLE, Ill. — Mistwood Golf Course, a par-72 layout measuring 6,727 yards from the back tees, has opened in this southwestern Chicago suburb. Designed by Plymouth, Mich.-based Raymond Hearn Golf Designs, it recaptures a site encompassing an abandoned quarry, floodplain and a 65-acre

lake — a site whose land use has proven problematic to the community for years.

"We tried to view existing site liabilities — on-site flooding, scarred landscape from the sand and gravel quarry — as features that could eventually be turned to the course's advantage," said Hearn. "Unlike

some designs — where the objective is simply to 'let the course happen' according to the contours of the land — Mistwood's holes really had to be created."

With input from the Baarstad Family, Hearn's design manages to mitigate flood plain problems around two creeks running through the property. The quarry remains and lake are incorporated as design elements that add visual appeal and challenge commensurate to the five sets of tees. The back two sets often require forced carries over these obstacles, whereas the front three, the most-forward of which plays to 5,231 yards, do not.

At Mistwood, Hearn's employed pot bunkers, grass swales, deep fescue rough, closely trimmed aprons, and a sod bunker.

SunCor, Irwin team on major expansion

PHOENIX — SunCor Development Co. has announced that it will expand the golf facilities at Palm Valley in the West Valley to include an 18-hole executive course, a lighted nine-hole pitch-n-putt course, and a lighted practice facility. Hale Irwin will design each component.

The new facilities will complement the existing Arthur Hills-designed 18-hole championship course at Palm Valley Golf Club and provide a greater variety of golf-related amenities to the West Valley.

All three developments will be built on the west side of Litchfield Road, opposite the existing Palm Valley clubhouse. The clubhouse itself is being expanded to better accommodate the new facilities.

"Golf is tremendously popular in this community, with a lot of that interest coming from the young families and seniors who live in the area," said Jay Ellingson, vice president of development for the Palm Valley master-planned community. "This expansion project will enable us to provide a variety of fun, high-quality playing options for players of all ages."

Further, Tom Patrick, vice president of SunCor Resort & Golf Management, said: "Growing the game through the promotion of junior golf is a major goal of Palm Valley, as well as all of SunCor."

The 18-hole executive golf course, which will be known as the Lakes Course, is scheduled to open in late 1999. It is being developed on 127 acres and will measure 4,755 yards from the back tees. It will feature six far-4s and 12 par-3s. Additionally, the golf course will be extensively landscaped using cottonwoods, palms and pine trees.

The Original and Still the Best!

For many years now, RegalStar® has been recognized as the best and most effective pre-emerge herbicide available for professional turf managers. But now, it's even better than before.



RegalStar® II

"SUPERIOR WEED CONTROL — THE BEST TURF QUALITY."



Regal Chemical Company • P.O. Box 900 / Alpharetta, GA 30009 • Phone 800-621-5208

- 1 We've improved the formulation to increase the synergistic action, making it even more effective. Patents are pending for synergistic activity.
- 2 RegalStar® II will deliver superior results at lower rates compared to earlier formulations.
- 3 Additional label uses: home lawns, ornamental beds and nurseries.
- 4 Research proven: Excellent results on cool and warm-season turf; even on newly sprigged bermudagrass.

Colbert team gets first development off the ground

By MICHAEL LEVANS

KANSAS CITY, Mo./SPRING HILL, Kan. — Colbert-Burns & McDonnell (CBM), a unique partnership created as a one-stop-shop for affordable, accessible golf design, development and management, couldn't have asked for a more ideal start than Sycamore Ridge Golf Course in Spring Hill, Kan.

For a city of 2,300 people, CBM helped secure financing; Jim Colbert and Finger Dye Span (FDS) did the design; Burns & McDonnell handled permitting issues and are currently executing course construction; and when the course is open in 2000, CBM will manage the course.

"Spring Hill is a near-perfect example of what CBM was designed to do," said Jim Colbert, PGA Senior Tour player, founder of Jim Colbert Golf Design and Development and public golf advocate. "It starts with a city or a county that has bonding capabilities, access to ground and water and has the political know-how to get a golf course project done. We then take the golf development from A to Z, right to the management of day-to-day operations."

"Spring Hill's annual budget is \$2 million," said Larry Lundine, CBM's director for project development. "We executed a \$9.8-million bond issue. The proceeds from the course will go to pay off the certificates with no tax dollars utilized." CBM esti-



From left, Spring Hill, Kan., Mayor Don Mattox, Jim Colbert and Dave Ruf, Jr., chief executive officer of Burns & McDonnell break ground at Sycamore Ridge Golf Course.

mates it will cost \$7.5 million to purchase the land and build the course.

"Our golf courses aren't necessarily going to be downtown locations," said Colbert. "Chances are, they'll be in neighborhoods nearby where there's ground available."

This means that CBM could meet with success if it sticks to its public-access mission within striking distance to a large populace. However, keeping their work outside of Metro areas could keep CBM from any direct First Tee funding, a fact

of which Colbert, a stern First Tee believer, is well aware.

"Our projects may not qualify as The First Tee projects, but, through The First Tee, we'll be able to partner with parks and recreation departments to bus kids back and forth to the course," said Colbert. "We'll be involved one way or another."

Colbert said the one-stop selling point of the CBM arrangement has opened many eyes in cities and counties that didn't think a golf course project was possible.

CBM got off the ground in November 1996, when Colbert decided to get involved in relationship that could offer a community the whole "ball of wax." He decided to team his design and operation expertise with Kansas City-based Burns & McDonnell, an international engineering, architecture and consulting firm.

"You have Jim Colbert with 30 years of operating and developing public golf courses. You add that to Burns & McDonnell, a 1,100-person engineering and project management firm and you have CBM," said Larry Lundine, CBM's director of project development. "Historically, a city would have to do 15 or 20 RFPs, one for clubhouse architect, one for the environmental permitting, one for the civil engineer, one for the course design, another for the financing. We have all that in-house."

"For example, we have a number of projects in the environmental permitting stage right now. I walk down one floor and we have a team from our staff of environmental permitting people who I can talk to to get updates. So the right hand always knows what the left hand is doing."

But even with these in-house capabilities, CBM is finding that it's tough to cut the pre-construction red tape. "We originally thought it would take a year and a half to get one of these projects done because you start from ground-zero," said Colbert. "But it's taking close to two years."

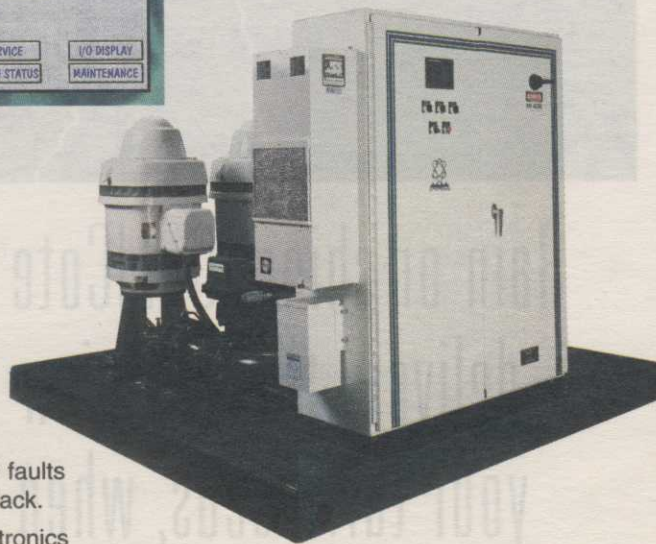
According to Lundine, CBM will be doing three to six projects in 1999.

THE MOST ADVANCED CONTROLS IN THE INDUSTRY JUST HAPPEN TO BE ON THE FINEST PUMPING SYSTEM Watertronics Pumping Systems, with Watervision® Controls



Watervision® UL Listed Controls:

- Provides remote access, Windows based, fully interactive control. Monitor your pumping system with the easy-to-use computer interface from your office or home.
- Intuitive, simple, point and press, touch-sensitive computer control panel with built-in maintenance and troubleshooting screens.
- "Ride Through" self diagnostics analyze system faults, and automatically keeps your station on line. No need to lose sleep during critical night watering cycles.
- Exclusive, patented, *Electronic Butterfly Valves* provide surge-free back-up pressure regulation in the event of VFD faults and smooth pump start-stop transitions that other stations lack.
- Breathe new life into your existing pump station with Watertronics touchscreen controls and electronic regulating valves.



Pumping System:

- All units custom-built to your watering schedule requirements, at costs comparable to others' off-the-shelf models.
- The only manufacturer to provide full dynamic testing of every unit at the factory, with certification of performance.
- Exclusive *Mechanical Seals* on vertical turbine pumps are maintenance-free, eliminating bothersome packing adjustments and spraying water.
- The most durable, best looking finish in the industry — baked epoxy undercoat plus baked UV resistant polyurethane top coat.
- One-piece, structurally engineered, seamless deck eliminates rust-prone welds, sharp edges and debris-collecting surface pockets.

Learn how over 30 years of irrigation pumping experience can make your life easier, and your watering system more dependable and efficient:
Call Watertronics today to get the whole story about superior Watervision controls, retrofit conversions, and custom pumping systems:

1-800-356-6686



WATERTRONICS®

525 Industrial Drive Hartland, WI 53029 fax: 414-367-5551

Q&A: Weiskopf

Continued from page 49

grapes, or is some of it justified?

TW: Some of it is very justified. They make a good point if their comments are directed toward those who don't spend any time trying to be involved in the business, trying to learn what it takes to design, to administrate during site visits through construction and the final project. In other words, if the pros are basically putting their name on a course. But there are some exceptions to the rule. There are some who make it a priority in their life and put it ahead of playing tournament golf and do spend as much time or even more time than those who are critical of the pros. Consequently, they put their heart and soul and effort into it.

I would argue the point [against pros/designers]. In past history, there hasn't been anyone who has not played the game at a pretty high level who has designed many great courses. I'm talking about a lot of great players who originally designed the old courses. Harry Vardon, Jack Neville, George Crump. Tom Fazio was a near-scratch player. Pete Dye is a very good player. I just don't see how you could not be a pretty good player and design. I think they have a tremendous advantage over somebody who isn't a good player. If they've done their homework and get involved in every detail that it takes throughout construction and site visits and into grassing — start to finish — and still can hit a 4-iron 2 feet from the hole, they should be a better designer because of their experience of seeing those who have played the game at its highest level on the greatest courses over the whole world.

GCN: Which Tour player/designers are committed, do you think?

TW: [Ben] Crenshaw. Jack [Nicklaus]. Jerry Pate. And John Fought is very committed to it. There may be some I haven't thought of. But for the most part they are signing their name on the dotted line.

GCN: Some complain that certain Tour pros design courses to fit their own game. Is that a tendency you struggle with?

TW: I think anybody would tend to put some favoritism in their course that came from the stronger parts of their game. That's human nature. That's something that you have to be extremely aware not to overdo.

The other thing — and I'm not defending [Jack] Nicklaus — is, that's the way he sees it. That is his canvas. That was also what he was hired to do. That owner hired Jack and liked his golf courses and liked the power of marketing Jack can get.

GCN: What makes a golf course a great golf course?

TW: Test of time. Only one factor. A great golf course doesn't just happen instantly. Courses, to me, only become great when they've hosted significant championships. The players in the game at that tournament know whether it's a great test of golf.

GCN: How would a Shadow Creek fit into that category, then?

TW: Until Shadow Creek hosts something significant like the Nevada State Open, you can't call it "great." I've played it twice and it is a wonderful course. But "great"? We've overused that term.

I have a hard time with these rating panels and dealing with the selection and the criteria of the members of these panels. I don't totally agree with it.

Granted, it's a way to get publicity. I think they'd be better off

listing them alphabetically.

Tom Watson made a terrific comment and I always keep it in mind. He said conditioning is important, but it is not the most important factor. If a golf course has to be in perfect condition for you to execute a well-placed shot and get excellent results, then the course is designed wrong. Tom named a course and said if it isn't in the finest condition how could you play it effectively, be-

cause you're always hitting over something to land it correctly.

GCN: You once said the best courses since the late 1930s will be built in the 1990s. It's 1999. Has that prediction come true?

TW: Yes. And I think it will continue because, starting about 1990, the pendulum has definitely swung back toward traditional designs — golf courses that mirror the strategic qualities, beauty

Continued on next page

Weather.



Rain or shine, GoldCote™ delivers the nutrition your turf needs, when it needs it.

Terra® Fertilizers with GoldCote™ release nutrients based on soil temperature, not moisture. As turf root activity and nutrient requirements increase with soil temperature, the release of nutrients also increases.

Your turf has exactly what it needs when it needs it. You can count on predictable, controlled release, and superior nutrition with fewer applications.

Q&A: Weiskopf

Continued from previous page
and maintainability of those courses that are so highly respected around the world.

GCN: Will you name a few?

TW: The first that comes to mind is Sand Hills [in Mullen, Neb.]. That's a very, very good example. Where I coming from is, if they're not maintainable, they're not playable.

GCN: Then what do you think of, say, the PGA West Stadium Course?

TW: It's spectacular. The imagination that Pete Dye put into that piece of ground and the results are as creative as you could imagine. It's memorable. It is truly a good player's golf course. But it's difficult to maintain and is not for the average player and his enjoyment.

GCN: What are the top three

points in your design philosophy?

TW: Beauty, variety and, most importantly, the margin for error on and around the greens.

Beauty comes from bunker styles, bunker locations on the golf holes. Bunkers, to me, are threefold. They are used either strategically, directionally, or as "saving" bunkers.

Variety I mean in two ways: variety of shots that are required; and variety of the golf holes.

About margin of error: I don't put a lot of contour in my greens because of the green specs. I protect myself because of the subtle rolls I put in. Then they can get the greens as fast as they want and they are still playable.

I design for a lot of pitching and chipping and places to play safe around the greens. I'm a fan of bump and run.

GCN: You talk of water and the overuse of it. What do you

think of it?

TW: I try to stay underneath six holes having water. The worst thing in the world is to lose a golf ball.

GCN: Differentiate your design philosophy for public versus private courses?

TW: On a private course, you're allowed more flexibility and versatility. And you can be much more illusionary and penal — simply because a shot is only blind once in a golfer's memory and they adjust their game to avoid the difficult situations. Whereas on a public or resort course they may be there only one time, and you want to be very straight-forward and not conceal things visually — no hidden bunkers. The greens are bigger, the challenges less severe and demanding.

I always remember a statistic: There are 26 million golfers in the U.S. That's anyone who plays six rounds of golf in their season. Ninety-two percent do not break 90. That's assuming they all know and abide by the rules. One half of one percent break 80. That's why I believe the design philosophy has to consider a margin of error most of the time.

GCN: What "problems" exist with modern courses that have not returned to traditional design?

TW: I think if the old architects were alive today they probably wouldn't design things much differently than we do. The problems are simple: The complement of residential communities internally within the golf course system. The hardest thing to deal with is the sewage and drainage systems, the traffic system. On the old courses, they all had peripheral housing, virtually void of any internal housing. But, we have to string these courses out to maximize frontage for residential lots. We have houses between every green and tee and eliminate one of the enjoyments of the game, comfortably walking. [Alister] Mackenzie and these other guys would use more mounding to conceal bad visual impacts — like cart paths, roads, or pump houses.

Another problem is the environmental impact today. Environmental constraints are unbelievable. All these great old courses are so gorgeous with wetlands. They violated so many of the things we can't do today. You can't even get approvals for properties that once were never a concern.

The third thing that's difficult is the availability of great land for golf. If you look at all the old courses, and a lot of them are plantations like Oakmont and Oak Hill, they were void of trees. They had good choices of land.

Architects today are doing a doggone good job of trying to go back in time. They've tried all the things in the '60s, '70s and '80s and those things are not quite as

Continued on page 60

Or not.



Talk to Terra about the entire line of high-quality Terra fertilizers with GoldCote. There's one that's right for your turf.



Terra Industries Inc.
P.O. Box 6000
Sioux City, Iowa 51102-6000
1-800-288-7353
www.terraindustries.com



Working with you.

Q&A: Weiskopf

Continued from page 59

accepted today. They get tired of hearing about all these old great courses, so they feel, "Let's try to copy those again."

If you look at guys who played in the '60s and '70s, they all tried to swing like Jack Nicklaus. They had that reverse C, that slide through the ball, because Jack was the greatest and we wanted to play like him. Then Curtis Strange and Nick Faldo came along, and dominated the game; and they went back to the old Sam Snead-Ben Hogan swing. The straight left side; you eliminate the slide because the equipment has changed, too. But the swing changed dramatically in the '80s and '90s.

Likewise, the three guys who had the greatest impact on architecture in modern times were Robert Trent Jones Sr., Pete Dye and Jack Nicklaus. Unbelievably contrasting styles. Everything is a copy or recopy from Day One, and Dye and Nicklaus were getting all the work, getting all the recognition, and everybody in the business said, "Let's copy Pete, let's do the mounds, the deep bunkers, the pot bunkers, the links-type look. Then they realized in the '80s it was still not as popular still as what was done in the first 30 years. And we've all gone back to the old '30s style. Even Pete has modified his stuff. Jack has modified his stuff.

It's just like the golf swing. They thought it was right because they were getting all the work, getting all the money, getting all the demands.

GCN: We were discussing the Tour players and how much time they spend on a design project. How much time to you spend on site?

TW: I quit playing. I gave up my career. I was 40 and fourth all-time leading money winner, behind Jack Nicklaus, Lee Trevino and Tom Watson. Architecture was what I wanted to do. It was a change of vocation. It was a change of lifestyle. Even though I was involved with the game, it was a totally different lifestyle. I started working for people. I always wanted to try it. And I always knew that if it didn't work I could go back and play. That's a nice option, isn't it? Fortunately, my first course with Jay, Troon, won the best new course. So I got instant recognition, and that's quite difficult. It takes anybody starting out in this business two to three years to get recognition because you have to get a variety of product for people to see. Then we won again, three years later, with Shadow Glen; and Forest Highlands was No. 2 by one vote. Within a four-year period — and probably we only had six or seven courses out there — we had two wins and a second. That's the hard

thing for young guys starting out: to get enough courses, with some variety, for people to see.

I didn't even think of the Senior Tour coming along.

As far as time on site is concerned, I have never been on a job where I have been less than twice a month, minimum. It usually takes eight to 10 months of construction time. I always walk the site with the ownership before accepting the job. I want to

know the ownership and their philosophy. And the marketplace they are in has to balance the scale with the site. I'm not going to work on a terrible site knowing the ownership doesn't have the money to make it a good site.

GCN: You mentioned the Senior Tour and you're 56 now. Any plans?

TW: I'm going to play a little more. But I will never allow my golf to overtake my commitment

and responsibility to my owners.

I still believe that I would not be the designer that I am without having the opportunity to have been a professional golfer and to play golf competitively on the great courses of the world. I look at that list of best courses and there are very few I haven't played.

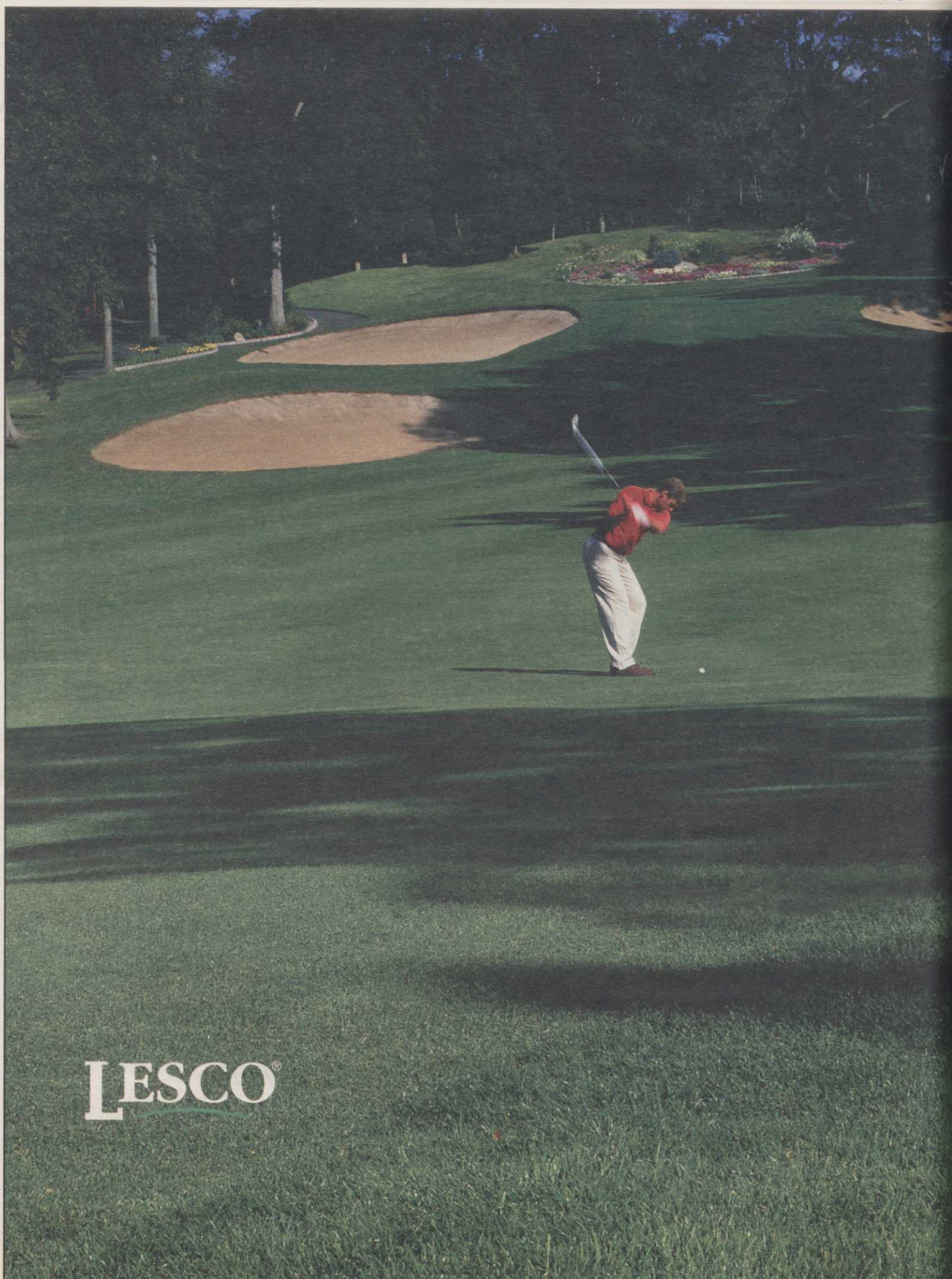
Also, back then, they had time on their side. The interest clock is running so hard and fast now that we don't have the time to look at

things and dwell on them, for the most part. They had two to three years to design a course. The two best courses I've done took a lot of time: Loch Lomond and Double Eagle. So I had time to make decisions and challenge myself.

The best courses I've ever been involved with were those I had more than enough time to make the right decision on.

Most of the time today, you

Continued on next page



LESCO®

Q&A: Weiskopf

Continued from previous page

never start on schedule. We give the owners a schedule, and it's always geared to grassing, and we always start two to three months later than we should have. And then you're hastily doing things.

So many things have changed. Go back to the turn of the century when they were playing with

the gutta percha ball and wooden shafts. And look at the contrast of the era of Mackenzie and [A.W.] Tillinghast and [Donald] Ross and [C.B.] Macdonald, and what they had to use to construct things with — mules and plows and they played over and around things. We play through things. We just eliminate things today. That's because lawyers were invented, everybody wants to sue everybody and you can't have a

blind shot anymore. And that should be part of golf.

GCN: Tell us about your staff.

TW: Dave Porter has been my senior designer the last five years. He has engineering and agronomic degrees and was a superintendent at Pebble Beach for three years. Tony Heckenkemper of Tulsa, Okla., does our working drawings. Judy McCray is my secretary. And we use three consultants: Larry Rodgers, who does

most all the irrigation design; Troon North superintendent Jeff Spangler, who is our Western agronomic consultant; and Terry Buchen, who is our Eastern consultant.

GCN: How many courses do you design per year?

TW: Four to six.

GCN: You were partners with Jay Morrish for 12 years. Has it been strange competing for jobs with Jay?

TW: I don't know if it has happened. We're never told who we're competing against.

But I can tell you this: I learned a tremendous amount from Jay Morrish. When I worked with him, we got along great and accomplished some wonderful things. We were a terrific team and complemented each other very well. But there will never be another one [partner] for me.

GCN: If you had to hire somebody else to design a golf course for you, who would it be?

TW: Pete Dye, no doubt. He has the most imagination and creativity of anybody's work I've ever seen. And we're only limited by our imagination in most cases.

Pete takes a bad piece of property that is void of character, that has no strategic value to work with — like big trees, rock outcroppings, ravines, drainage channels, streams and lakes — and turns it into something wonderful. When I play a Pete Dye course I look at it strategically and have never questioned the location of streams, lakes and bunkers relative to the shot he is asking the player to negotiate. He always has them in the right place.

Pete's unbelievable. I wouldn't even think of anybody else but him. But it will cost me in construction costs. You know what I mean. If I've got the extra \$1 million or so, Pete's who I want.

GCN: What is your favorite Weiskopf design?

TW: Loch Lomond [in Scotland], by far. It is an unparalleled piece of property. You wouldn't find a property like that anywhere in the world. It's on the most famous landlocked lake in the British Isles. It's at the base of the mountain range with the Scottish Highlands, 180 degrees around it. It has 500- to 700-year-old deciduous hardwoods, 10 or 11 different species that are from 3 to 6 feet in diameter. It has a 30-foot elevation change and it has a marsh, peat boggish wetlands, and two trout and salmon streams that run through the property. And 800 acres to put the golf course where it should be, with no houses.

GCN: Has this vocation lived up to your expectations?

TW: What I have found out about this business that is very interesting, fulfilling and intriguing is the fact that you have to really keep your eyes and ears open because you're working for someone else and using their money and reputation — not that yours isn't important, too. You have to be on the job a lot. It's a lot more difficult than people think. It's exciting, ever-changing. There are land mines that continually need to be dodged. And solutions have to be the right solutions. So you have to depend on a lot of people. That's what keeps me going. I think I'm as enthusiastic now as when I did my first course.

Always read and follow label directions.

PRE-M® and LESCO® are registered trademarks of LESCO, Inc. Rolling Hills Country Club, Wilton, CT CP-0173B

It's simple. PRE-M® is the country's leading pendimethalin herbicide. And no wonder. With over 12 years of proven performance and formulation improvements, PRE-M is here to help you succeed.

What's more, PRE-M comes from the leading supplier in the professional turf care industry, LESCO®.

Talk to your LESCO professional about new, special rebates for PRE-M purchases, or call 800-321-5325. And put the leading edge to work for you.

The Leading Edge.

PRE-M®

DALLAS — ClubCorp and Golden Bear International, which recently formed a partnership to build, own and operate Jack Nicklaus signature golf courses around the world, will develop their first joint venture project in Dahlonega, Ga., just one hour north of Atlanta.

The newly formed joint venture is developing the signature Nicklaus links and related club

ClubCorp and Golden Bear Int'l to develop first joint-venture project

facilities at BirchRiver, a new 1,043 mixed-use development. The layout will be semi-private when it opens in the summer of 2000, with plans for it to become fully private as the BirchRiver community matures.

"Our joint venture with Golden

Bear is the perfect merging of operational expertise and superb design capabilities, which, combined, will deliver some of the finest golf experiences in the world," said Dave Richey, vice president of development at ClubCorp. "We know this project

at BirchRiver is only the beginning of a highly successful partnership."

The new course at BirchRiver will be situated in the picturesque Chestatee River valley, surrounded by mountain views and known for its past and

present opportunities to pan for gold. The course will play across the river five times, and will feature a showpiece island green to challenge golfers. Other amenities will include a finely appointed clubhouse, swimming pool, tennis court, pro shop, and dining facilities.

"Over the years, we have teamed with ClubCorp on several notable projects, such as the Jack Nicklaus/Jack Nicklaus II signature course at the Aspen Glen Club (Colo.), the Golf Club at Indigo Run on Hilton Head Island (S.C.), and the Melrose Course at Daufuskie Island Club & Resort (S.C.)," said Ira Fenton, president of Golden Bear Financial Services. "Under our new formal joint venture, we look forward to creating many more memorable links to be enjoyed by golfers all over the world."

The BirchRiver community is being developed by Habersham Investment & Developer Corp., an Atlanta-based residential and mixed-use developer, in partnership with Owens Valley Farm, L.P. North Palm Beach, Fla.-based Golden Bear International is a privately owned company controlled by the Nicklaus family. It is involved in golf course design, residential community development, golf equipment and the production of televised golf events.

Currently, ClubCorp affiliates oversee 176 golf courses and annually prepare 14 million meals served in approximately 700 dining rooms. In addition, more than 20,000 Employee Partners are expert in the care of nearly 500,000 members and 250,000 guests who are warmly welcomed at ClubCorp properties each year.



Simply

Intelligent



Rain Bird's Central Control Systems

Rain Bird takes a quantum leap in irrigation technology with the easy-to-use Cirrus™, Nimbus™ II and Stratus™ multimanagement central control systems. Rain Bird's bold, graphic screens make it simple to track and manage your entire irrigation system. Weather-sensitive programming and water saving features allow you to control with more precision than ever before. If you're looking for an irrigation system that is simply intelligent, take a closer look at Rain Bird.

See the Rain Bird central control systems at the GCSAA Golf Show in Orlando, Booth 2161.

Cirrus. Nimbus. II. Stratus.

RAIN BIRD

Call your Rain Bird Golf distributor at 800-984-2255
or contact us at our web site—<http://www.rainbird.com>
CIRCLE #155/GCSAA BOOTH #2161, 2173 & 2273

Northeast Golf schedule full

The Northeast Golf Co. will begin 1999 with a diverse range of projects on the boards or under construction, including two new facilities scheduled for completion; Skyview Golf & Country Club (CC), an 18-hole, par-72 layout cut within the rocky terrain and open meadows of Sparta, N.J. and Strykers Glen, in Lopatcong, N.J., a 27-hole, daily-fee course featuring an 18-hole, 6,900-yard championship layout and Old Aggie, a nine-hole short course. Also in design are Colts Neck CC and Cannon Farms in Monmouth County, N.J.

Master planning and renovations are ongoing throughout the Northeast, including work on the 72-hole Bergen County, N.J. Golf System, Cedar Hill CC in Livingston, N.J., Sterling Farms in Stamford, Conn., Agawam Hunt in Providence, R.I., and Pleasant Valley in Sutton, Mass.

CASTLE ROCK, Colo. — When officials in this small town set out two years ago to build a quality, affordable course for town residents, they hired a resident.

They hired Jim Engh, whose first U.S. project, The Sanctuary, was *Golf Digest's* choice as 1997 Best New Private Course.

The 6,800-yard, par-72 Red Hawk Ridge was completed last summer, although the town has elected to hold off on its opening until April to allow for a longer grow-in period.

While Castle Rock, with 16,000 residents, lies just 25 miles south of Denver, its setting along the Rocky Mountain Front Range offered several prime course sites. Situated in the seat of Douglas County, the United States' fastest-growing county per capita, the Castle Rock course is expected to help fill the relative void of high-quality, affordable golf in south metro Denver.

The town had the luxury of choosing from four sites for its course. Engh developed a 12-point evaluation system for the selection process, ranking each piece of ground on elements like topography, general character, playability, location and construction cost.

"It was fun developing a system to evaluate the different sites," Engh said. "Rarely do you get that many quality options."

Engh's Red Hawk Ridge in tradition of Sanctuary



Architect Jim Engh had plenty of natural beauty to use in designing Red Hawk Ridge.

While it didn't win every category, the Red Hawk Ridge site emerged as the top choice, with its highest marks coming in topography and location. U.S. Home Corp. dedicated to Castle Rock the rugged 200 acres for the course as part of its

600-home development project.

The course features panoramic views of the Rockies to the west, and the 14,000-foot-high Pikes Peak to the south. Its natural character is rough terrain, scenic ridges and native stands

of mature scrub oak.

Topographic constraints have kept homes from being built on the last five holes, and cart paths were designed within the grading plan to maintain reasonable slopes.

"Most of the site's topographic changes and valleys already met the proportions for what the golf course needed," Engh said. "We were able to use the valleys as a starting point for a lot of the holes."

The course sets up for public play, with generous fairways bordered by distinct, native-grass rough typical of the southern Front Range. The brown hues of the native areas are preserved using a costly yet water-efficient perimeter irrigation design.

Red Hawk's difficulty, however, comes from its terrain, with a 400-foot elevation change. The landscape helped dictate the design, allowing much of the site's natural foothill characteristics to remain intact.

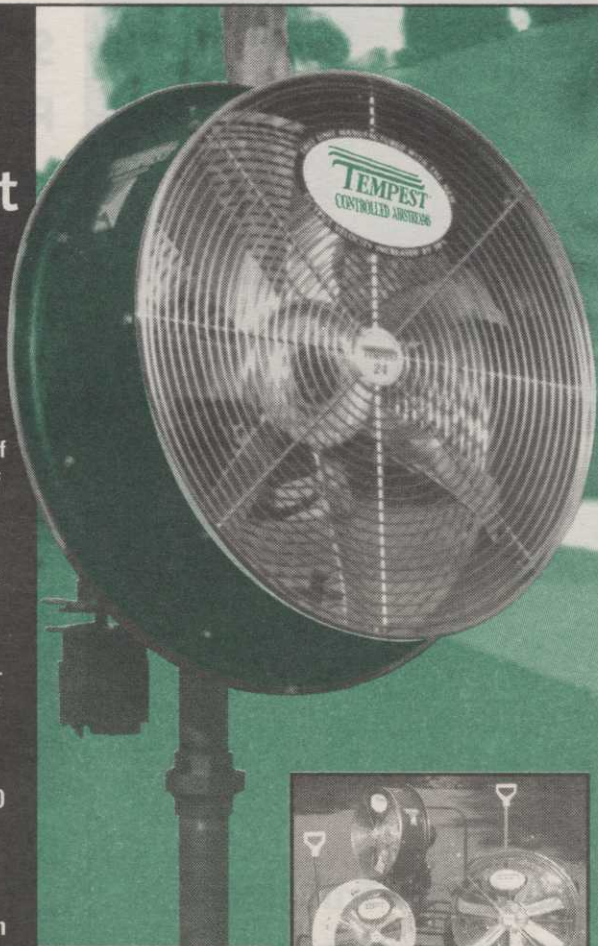
Most of the holes play downhill, including the 190-yard, par-3 No. 14. It's built along Red Hawk's highest bluff, playing down to the green carved into a steep hillside, and lined with a ribbon bunker on the front left. Special attention was given to the design of the hole, in keeping with Castle Rock's development regula-

Continued on page 64

We're Big Fans of the Perfect Green

Every golf course has a green that can be troublesome during hot, humid periods. Disease can result with the loss of the green. Now more golf course superintendents are turning to Tempest to keep their greens perfect and playable.

- More air movement - 7 blade performance
- Better reach - Exclusive Turbo 2000 shroud throws air further
- Quieter - Players can "silence" the fans
- Quality - Built to deliver years of service
- 18 electric and gas models



For more information call:
1-800-346-2143

TEMPEST
TECHNOLOGY CORP.

4645 N. Bendel Ave.
Fresno, CA 93722 / Fax (209) 277-7579



All Your Top Dressing Needs Simply Done.

Turfco's Mete-R-Matic III fills your top dressing needs in one package. No engine or hydraulics. Simply attach to your tractor or turf truck. Use a front loader to fill its large capacity hopper and you're set for top dressing. It's got all the simplicity and versatility you'll ever need.

- » Top dress the way you want, from 1/64" to 1/4"
- » Patented chevron belt spreads all material, wet or dry
- » Ground-driven for precise application regardless of speed
- » Large capacity hopper, six tires - low 16 PSI
- » Three-year warranty



Light dressings for frequent applications.



Medium applications for general maintenance.



Heavy applications for targeting the tough spots.

Originators Of The First
Powered Top Dresser In 1961

TURFCO

1-800-679-8201

www.turfco.com

Fax 612/785-0556

Red Hawk Ridge

Continued from page 63

tions, which are aimed at preserving natural ridge lines.

While working in Colorado's foothills, detailed documentation in extreme areas is essential. And the Red Hawk Ridge contractor, RBI Golf Inc. of Littleton, made sure not to stray from Engh's plans in the field.

"We knew Jim expected us to

build to exactly what he had on the plan, particularly the elevations," RBI Golf President Rich Maher said. "On most courses it isn't as critical. But with Jim's documentation, and on a site like Red Hawk, the elevations need to be precise. Knowing exactly how much dirt to move takes the guesswork out of the process."

After moving 810,000 cubic yards of soil, laying \$300,000 in sod and installing USGA greens,

concrete cart paths and the \$900,000 irrigation system, the project came in under the town's \$3.2 million budget.

The construction period of March through September 1997, however, was not without snag. Record rainfall in July and August stymied construction crews, and RBI Golf workers spent a good portion of the summer battling continual erosion problems.

"RBI did an exceptional job

working in the difficult conditions," Engh said, praising project supervisor Craig Robbins.

And then in March, the project's lead shaper, Dave Breckheimer, was killed in a car accident. One of the top shapers in the industry, Breckheimer had played a key role in building the nearby Sanctuary. A memorial for Breckheimer will be placed near the No. 8 green.

The course's modified double-loop layout allowed U.S. Home more frontage for its development, and drainage and other design features were incorporated into the design plan to accommodate the development's future construction.

"I think Jim really understands how to balance the economic constraints and needs of a development with the aesthetic and design considerations that go into building a golf course," U.S. Home Colorado Division President Jeff Whiton said.

Western Golf Properties has been chosen to manage the course. Although the fee structure has not been set, Hugh Edgman of Western Golf said he thinks the town will have no problem meeting its objective of providing a premiere, affordable golf experience to its residents.

"The design is far superior to what one normally thinks of in a municipal course," said Edgman, whose firm manages more than 90 courses. "It feels more like a private or high-end daily-fee course. The views are outstanding, and I think it will avail itself to all caliber of players."

South Hadley picks Maurer

SOUTH HADLEY, Mass. — A team headed by the Howard Maurer Design Group has been selected to provide golf course design and permitting services for a new 18-hole golf facility to be built by the town of South Hadley.

Construction on the course is scheduled to begin in the spring on a 240-acre town-owned property off Alvord Street.

Members of the design team include Maurer; Mike Toohill of ENSR of Northboro (environmental and permitting services); Pat Sheridan of Tighe & Bond of Westfield (project engineers and surveyors); Brian Vincenzi of Irrigation Consulting and Engineering of Pepperell (irrigation system design); and Dr. William Torello, director of the Turf Program at the University of Massachusetts in Amherst.

The Maurer design team is in the process of permitting the golf course. According to Maurer, "The course will be around 6,700 yards and will include full practice facilities. We are trying to use the natural features of the land to their fullest extent. There is a fantastic mix of uphill and downhill holes. Some holes will have spectacular views of Mt. Tom."

...

In addition to the South Hadley Golf Course, Maurer has the first nine of 18 holes under construction at Templewood (Mass.) Golf Course. Templewood's opening is slated for late summer.



RIGHT THEN



RIGHT NOW

The Next Generation Cushman® Turf-Truckster®

In 1964, we created the world's first Cushman Turf-Truckster...and a whole new class of vehicles. Imitators soon followed. But none with the same soul. The new Cushman Turf-Truckster features a truckload of improvements including the only fully automatic transmission in a heavy duty work vehicle. With the same rugged dependability as the original, the Turf-Truckster remains, as it began, in a class by itself. Call 1-888-922-TURF and drive the new Turf-Truckster today!



CUSHMAN JACOBSEN RANSOMES RYAN

CUSHMAN

TEXTRON

TURF CARE AND SPECIALTY PRODUCTS

Builders Assn. to honor Beard

For the second time in five years, the Golf Course Builders Association of America has tapped an educator to receive its annual Don A. Rossi Award, which honors "individuals who have made significant contributions to the game of golf and its growth."

Dr. James Beard, author of several basic texts and reference books on turfgrass management as well as hundreds of scientific papers and technical articles, will receive the award at the GCBAA's Annual Awards Dinner in Orlando, Fla., Feb. 12.

Last year's honoree was Arnold Palmer. The only other educator to receive the Rossi was Dr. Joseph Duich, retired professor of turfgrass science at Penn State University, who guided the development of the "Penn" varieties of hybrid bentgrass. Duich was honored in 1995.

"Anything that is good for the game is good for those of us who create its venues," said Jim Kirchdorger, president of ISCO Industries, of Louisville, Ky., and chairman of the GCBAA Rossi Award Nominating Committee. "And Dr. Beard has been very good for the game of golf. He has greatly influenced the academic research that has given us the materials and techniques that literally make it possible to build golf courses on sites that would have been unthinkable a generation ago."

Beard, now president and chief scientist of the International Sports Turf Institute in College Station, Texas, is best known for his work during a 17-year career as a professor of turfgrass science at Texas A&M University. He founded the Institute when he retired from the university.

While at College Station, he developed and guided research programs in stress physiology and culture, shade adaptation and wear tolerance, among others. His 658-page text, "Turfgrass: Science and Culture," has been a standard reference work since it was published in 1973.

His latest major work is the second edition of "Turf Management for Golf Courses," scheduled for release early in 1999.

Even with more than 600 published titles to his credit, Beard sees himself first as an educator. While at Texas A&M — and Michigan State University before that — Beard taught undergraduate courses as well as mentoring 46 graduate students. He now lectures on turfgrass all over the world. Texas A&M honored him as Professor Emeritus of Turfgrass Science in 1993.

Gill-designed Cedar Creek ready for summer opening

ALBERTVILLE, Minn. — Pilot Land Development Corp. has announced that construction of Cedar Creek Golf Course is complete and the track will open for play in the summer.

Located 30 minutes west of Minneapolis, Cedar Creek Golf Course and Residential Community is the first golf course development for Pilot Land Development Co., lo-

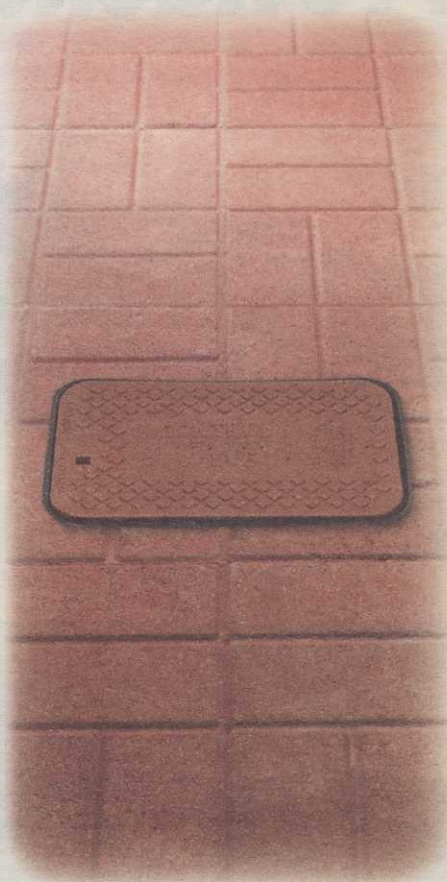
cated in Ham Lake. Kent Roessler and Don Jensen of Pilot Land spearheaded a planning effort that included housing and road layout, golf course design and wetlands mitigation.

The course, designed by Garrett Gill and Paul W. Miller of Williams, Gill and Associates, Inc., of River Falls, Wis., takes advantage of the natural attributes

of the site to appeal to a wide range of golfers.

A wide variety of unique golf holes were created contrasting natural areas to bentgrass greens, tees and manicured bluegrass fairways. Numerous bunkers and water hazards establish the course routing and place a premium on accuracy at Cedar Creek.

What You See!



What You Get!



New 3" extension for 10" round boxes

AMETEK® offers you the industry's most complete line of access boxes so you can design-in exactly the right unit for the application:

- * Round boxes in two different sizes
- * Rectangular boxes, including a flared bottom design, in standard and jumbo sizes
- * Extensions for every depth
- * Lid colors to blend into turf, brick, redwood, and mulched areas, plus purple for reclaimed water and black for electrical applications
- * Vandal-resistant locking options including our patented snap locks and pentagon shaped bolts
- * A consistent program of product improvements and upgrades

For specifications on the complete line of valve boxes, and the location of your nearest dealer, contact AMETEK®, Plymouth Products Division, 502 Indiana Avenue, Sheboygan, WI 53081. Tel: 800-222-7558, Ext. 388 for literature, Ext. 321 for distributors. (In WI, 414-457-9435). Fax: 414-457-6652. www.ametekwater.com



AMETEK®
PLYMOUTH PRODUCTS DIVISION

Norman's Tiburon opens in Naples

NAPLES, Fla. — The Greg Norman-designed golf course at Tiburon, a resort destination community developed by WCI Communities, has opened.

"The course at Tiburon will be unique to the Naples area because Greg Norman's design provides for a variety of contrasting elements," said David Fry,

senior vice president of amenities at WCI, "such as stacked sod wall bunkers and the use of a tangerine-colored coquina sand in the waste bunkers. The course will contain no roughs, with the highest turf being maintained at a fairway height of one-half inch. The golf course landscape plan has incorporated the use of in-

digenous plants in an effort to create expansive areas of native habitat bordering the fairways."

Construction on an additional nine holes is scheduled this year.

Tiburon, Spanish for "shark," is a master-planned resort community. In addition to the golf course and club, there will also be the Tiburon Golf Academy.



Naples, Fla., gets Greg Norman's newest design, Tiburon.

Providence is Still Number 1.

Leading superintendents rate Providence the best creeping bentgrass for the northern U.S. and Canada.



Seed supplied by United Horticultural Supply

"We chose Providence for its outstanding performance all over the U.S. and particularly in the Northeast. We established greens in the hot, dry summer of '95 and they have performed beautifully. Our new practice putting green was open for play eight weeks after seeding. My membership is very pleased with the quality of our putting surfaces."

Bob Miller —
The Golf Club of Purchase • Purchase, NY



Seed supplied by L.L. Olds Seed Co.

"Providence has performed as expected; with its upright growth characteristics, fine leaf texture, uniform density and color, it has truly been a winner for us. Since the day we opened, our customers have loved the consistency and smoothness of our putting surfaces."

Pat Shaw —
The Bog • Saukville, WI



Seed supplied by Professional Turf Center

"This is my fifth grow in and my first with pure Providence greens. It's a very fine, upright turf. Slightly slower to establish because of our cold and rainy fall, but now that we are maturing it's showing its true colors to be a great putting surface."

Gregg Radak —
The Reserve Vineyards and Golf Club • Aloha, OR

Golf pushing toward greater good

Continued from page 18

contrast to our ill-educated vice president and his weird concept of nature.

Ten years ago, technologies like Global Positioning Systems and laser earthmoving were far from the game of golf. Today they are here — and even instrumental in the operations of some facilities and some course builders. Out in the world, top-secret technology is being "sold" to foreign governments for campaign contributions.

The golf course is the great equalizer. There is no rich and poor on the golf course — just the best striking of the ball. Compare this to the political harangues and government policies that only tear apart Americans based on their income and social status.

Not to be lost in this reflection is the immense and amazing effect that Tiger Woods has had. Many have rightly compared his impact with that of a young Arnold Palmer had on many of us as we watched that new contraption called a television set. Kids of all kinds — black, white and yellow — have flocked to courses from Arkansas to Australia after being stirred by the play and charisma of this young man.

The good part of the decade that we have published is that golf has embarked on an upward spiral in which the game has thrived; more than one golf course per day has opened for four straight years; it has become the popular game of choice; daily-fee courses make up around 85 percent of new facilities; more and more kids are being taken off the street by new First Tee-type programs; and, yes, all seems well with the world.

The bad part of all this is that, as we approach the Year 2000, we in the golf industry must approach it while living in a world that operates under a far different value system. My hope is that we all attempt to walk daily above the muck and not get dragged into it.

Remember that old kids' song, "This little light of mine..."? Yah, that's me singing, man.

DOMINANT & DOMINANT PLUS Creeping Bentgrass
Blends combine the heat tolerance of SR 1020 with the cold tolerance of Providence, and our new SR 1119.

SEED RESEARCH
OF OREGON, INC.

Niebur

Continued from page 48

year, means more because it says I'm consistently building quality golf.

"In this economy I could do twice the amount of work. But I want to be consistent. The almighty dollar can get in the way really quick in this business."

In the meantime, developers are demanding more and more from builders, Niebur said.

"The fact is, there is a lot of competition, so the standard has gone up," he said. "And I think there are a lot more management companies, more consultants, and people are more knowledgeable than 10 years ago."

Time deadlines are at the top of the list in higher demands, Niebur said.

"The schedules have gotten so much more difficult," he said. "We're starting jobs later and they want them done ahead of time."

He alluded to a 36-hole project that was to begin construction in New Jersey in late January, on which the developer wants a finished product by Sept. 1. "That would have been a two-year job not long ago," he said. "But we've taken jobs that were bid as two-year projects and completed them in a year."

To whom, specifically, does he owe his success?

"I owe it to my Dad, for his taking a risk and building a golf course in Montana. It wasn't for the money. If he had not done it, I have no idea what I'd be doing today."

Meanwhile, Niebur Golf is diversifying, having constructed some commercial buildings and breaking ground on a golf course in Fayetteville, Ark., which the company will own.

His choice of golf course builder?

"I think Niebur would be appropriate," he laughed.

Furness

Continued from page 48

two guys who I can put in charge of the projects and budgets."

Furness intends to maintain a small operation, not working on more than two projects at a time — partly because of the difficulty in finding someone the caliber of his brother and Bohn and partly because he would not be able to give each project the per-

sonal attention he desires.

"When you hire Furness Golf Construction, you get Tim Furness, not somebody you never heard of," he said.

The face of golf course projects has changed in his 14 years in the business, Furness said. "I think the demands are higher because there are so many golf courses in Michigan and across the country, and the competition is high. The more competi-

tion there is, the better the quality has to be. For a course to be a standout course in Northern Michigan today, you have to do something darn special."

Plus, Furness sees fewer mom-and-pop-type developments.

"There was a day when a number of people decided they could build a golf course without a professional architect or builder," he said. "Due to Golf Course News, GCBA [Golf Course

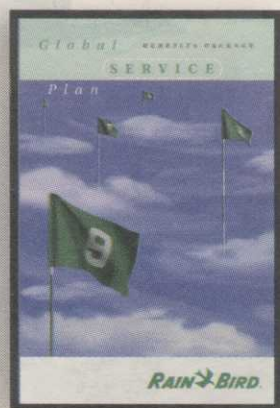
Builders Association of America], ASGCA [American Society of Golf Course Architects], etc. people now realize that, in the long run, it's as cheap to hire a professional as it is to do it yourself and then hire a professional to come in and do it right a second time."

A scratch golfer while in college, Furness hasn't golfed in years. But he plans to get reacquainted with the game when he retires.



It's 3 a.m.

You have a question about your central control system.
Where will you find the answer?



Rain Bird Global Service Plan. Here To Help When You Need It.

You don't keep "normal" business hours. And you can't wait around for people who do. Fortunately, with Rain Bird's new Global Service Plan (GSP), you won't have to. Now the smartest, most user-friendly central control systems on the planet can be equipped with the most comprehensive service and support plans in the industry. With toll-free support, 24-hour emergency paging, remote system diagnostics, computer hardware packages and many more service options, Rain Bird's GSP is just what you need, right when you need it.

See the Rain Bird central control systems at the GCSAA Golf Show in Orlando, Booth 2161.



RAIN BIRD

Call your Rain Bird Golf distributor at 800-984-2255
or contact us at our web site—<http://www.rainbird.com>

CIRCLE #156/GCSAA BOOTH #2161, 2173 & 2273

Furness/ Fieldstone

Continued from page 48

Fieldstone offers four different teeing areas with course length ranging from 4,932 to 7,002 yards. Typical of Hills' architecture, the landing areas are spacious, but an abundance of mature trees and strategically placed natural areas come into play.

The par five, 524-yard 6th hole best represents the challenges presented by the Fieldstone layout. From a tee box surrounded by trees, drives must lay up to a wetland and a second marsh area confronts golfers as they hit their approach shots into the green.

Lohmann

Continued from page 19

The success of these practice facilities, stand-alone and those attached to daily-fees, has begun to affect the private club mindset. Over the past 18 months, my firm has renovated and significantly upgraded practice facilities at nine separate private clubs in five states.

Academies and learning cen-

ters won't solve golf's access problems, of course. Many challenges remain before us. In the coming years golf needs to remain sensitive to supply and demand.

The industry must proceed carefully when developing upscale public courses, for instance. A course must fit the needs of its community; I'm troubled by the glut of posh "country clubs for a day" and the

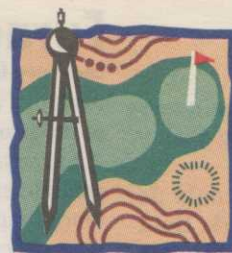
dwindling number of newly developed, affordable daily-fees.

Before a project breaks ground, golf course developers must pay closer attention to demographics: How many golfers live in this area? How often do they play? How much are they willing to pay? It's a disservice to build yet another upscale course in an community crying out for affordable golf.

And not everything in this

world relates to the big picture. I'm proud of several specific ASGCA projects we've been able to complete during my term:

- The First Tee Program: Here's another worthy effort to increase access. I'm proud to say ASGCA was one of the first organizations to lend its full support.



- An Environmental Approach to Golf Course Development: An updated version of this landmark piece, first introduced in 1992, was published earlier this month. We

continue to trumpet

golf's environmental credentials, and this effort continues to bear fruit. An official of the U.S. Environmental Protection Agency recently deemed golf a "model industry in the environmental conscience." He was referring to the positive steps we've taken to design, build and maintain golf courses in concert with nature. This is a solid indication that non-golfers are beginning to understand how courses enhance the environment.

- Suppliers Directory: ASGCA's fabled clearinghouse of supplier information — published for years as a big, bulky, binder — has finally been introduced on CD-Rom. This is important for our members because it's simply a better, more efficient way to sort through reference information. The golf industry will also benefit as ASGCA will soon offer the CD-Rom, previously a members-only item, to the entire industry.

Last year, I remember Past President Alice Dye telling me the best was yet to come for golf. At first, I thought she meant my presidency. But then I realized she was referring to, among other things, the numbers: Golf is growing in every area, outpacing all major sports in the United States.

Player participation, once flat, has surged to almost 27 million — growing by 25 percent during the 1990s. Early returns indicate that more than 400 courses opened for play in 1998. The PGA Tour has never been more prosperous. And *College Sports News Daily* recently reported that NCAA golf scholarships are available in more schools than football scholarships — and that "competition for recruits is menacing."

Young people are finding that golf can provide avenues for success that previously existed only for those with professional ability.

Golf is a beautiful game. It's important to take stock and evaluate the statistics, including course development rates, number of rounds played, dollars spent on the sport, tournament attendance, television ratings and other indicators of growth. However, we must not let the number crunching and trend setting blind us from what has kept golf in the hearts of players worldwide — an elegant simplicity and accessible tradition unparalleled in modern sport.

It's lonely at the top.

Quiet, too.

We've kept it quiet long enough. And since the golf world has hailed E-Z-GO as the #1 golf car in the world for more than five decades, we thought we should toot our horn just a little. After all, our efforts have produced some rather deafening statistics: eight of the ten most prestigious courses in the world use E-Z-GO; over half the golf cars in existence bear our name; two-thirds of all new courses choose E-Z-GO. We set out to quietly create the best golf car in the world, and ended up making quite a commotion.



THE #1 GOLF CAR IN THE WORLD.™



U.S. architects and their courses

State	City	Course Name	Work*	Type*	Holes	Status*
Andy Johnson Design						
Colorado	Firestone	Coal Ridge GC	N	D	18	U
Andy Raugust Golf Architect						
California	Stockton	Reserve at Spanos Park	N	D	18	U
California	Brentwood	Deer Creek	N	D	18	P
Texas	Austin	Pebble Creek	N	D	18	P
Washington	Camas	Camas Meadows	N	P	18	U
Armstrong Associates						
Connecticut	Woodbury	3 River Farms GC	N	D	9	P
Massachusetts	Adams	Greylock Glen	N	R	18	P
Massachusetts	Belchertown	Coldspring GC	N	D	18	P
Massachusetts	Hadley	Seven Sisters GC	N	D	9	P
New Hampshire	Stratham	Stratham GC	N	D	18	P
Arthur Hills & Associates						
Arizona	Scottsdale	Camelback Resort	R	R	18	P
Delaware	Wilmington	Delaware Park GC	N	D	18	P
Florida	North Port	Marsh Creek	N	D	18	U
Florida	Naples	Fiddler's Creek	N	P	18	U
Florida	Daytona Beach	LPGA International	N	R	18	O
Maryland	Chevy Chase	Chevy Chase Club	R	P	18	O
Michigan	Bozette	Hills Course/Bozette Hgh	N	R	18	U
Ohio	Hanover	Longaberger GC	N	D	18	U
Ohio	Toledo	Inverness Club	R	P	18	U
Oklahoma	Oklahoma City	Gaillardia G&CC	N	P	18	O
Puerto Rico	Los Croabas	El Conquistador	A	R	9	P
Beidel Design Associates Inc.						
Bermuda	Warwick	Riddell's Bay G&CC	R	P	18	P,U
Ohio	Port Clinton	Loch Ness GC	N	R	18	U,P
Pennsylvania	Limerick	Turtle Creek GC	N	D	18	O
Pennsylvania	Mt. Joy	Groff's Farm GC	N	D	18	O
Pennsylvania	Ebensburg	Ebensburg CC	N	R	18	P
Pennsylvania	Lower Burrell	Hill Crest CC	R	P	4	P
Virginia	Tazewell	Valley View GC	N	D	18	P
Booth Golf Design						
Maine	York	The Ledges	N	D	18	O,U
Maine	Litchfield	The Meadows	N	D	18	O
Maine	Gray	Spring Meadows	N	D	18	U
Maine	Saco	Deep Brook GC	N	D	9	P
Maine	Blue Hill	Blue Hill CC	A	P	9	P
Maine	Saco	Saco/Biddeford GC	A	P	1	O
Maine	Kennebunk	Webbhanet GC	R	P	3	O
Maine	TBD	TBD	N	P	18	P
New Hampshire	Somersworth	Lily Pond GC	N	M	18	P
New Hampshire	Manchester	Derryfield CC	R	M	18	P
Boswell Golf Design						
Georgia	Atlanta	Horseshoe Bend CC	R	P	18	U
Georgia	Big Canoe	Big Canoe GC	R	P	27	P
New Jersey	Rivervale	Pascack GC	R	D	18	P
Burns Golf Design						
Indiana	Kendallville	Cobblestone GC	N	D	18	O
Ohio	Xenia	Sebastian Hills GC	N	D	18	U
Washington	Everett	Legion Memorial GC	R	M	18	O
Cabell B. Robinson Ltd.						
Cyprus	Limassol	Aphrodite GC	N	R	18	P
Greece	Pylos	Navarino Resort	N	R	54	P
Italy	Rapallo	Rapallo GC	R	P/R	18	U
Morocco	Azemmour	Golf d'Azemmour	N	R	36	P
Spain	Mijas	Los Aguacates	N	R	18	P
Cal Olson Golf Course Architects						
Arizona	Tucson	Tucson Mtn. Ranch	N	R	18	P
California	Mammoth Lakes	Sierra Star	N	R	18	U
California	Fontana	Diamond Hill	N	D	27	P
California	Long Beach	Skylinks	R	M	18	P
California	Burbank	DeBell	R	M	18	P
California	Hemet	Tres Vistas	N	D	18	P
California	Pomona	Cal Poly Univ.	N	D	18	P
Canada, Que.	Quebec City	Golf du Parcours/Riviers	N	D	18	P
Mexico	Baja	Desiderata	N	R	27	P
Nevada	Pahrump	Mountain Falls No.	N	D	18	P
Nevada	Pahrump	Mountain Falls So.	N	P	18	P
New Mexico	Las Cruces	Sonoma Ranch	N	D	18	P
Carl Thuesen, ASLA						
Montana	Great Falls	Gannon Ranch	N	D	18	P
Washington	Colville	Elks Club GC	A	P	9	P
Casper/Nash & Associates						
Arizona	Surprise	TBD	N	D	18	P
California	Lincoln	TBD	N	D	18	U
California	Carlsbad	TBD	N	M	18	P
California	Palm Desert	Sun City Palm Desert	A	D	9	P
Nevada	Henderson	TBD	N	D	18	U
Texas	Georgetown	TBD	N	D	18	U
Charles F. Ankrom						
Florida	Sebring	Sun 'N Lake G&CC	D	18	9	U
Clifton, Ezell & Clifton Golf Design Group						
Florida	Naples	Grey Oaks/Palm	A	P	9	U
Florida	Clermont	The Legends	N	D	18	P
Florida	Lady Lake	The Villages	N	D	45	U
Florida	Plantation Bay	Prestwick	N	D	18	O
Florida	Orlando	Oakmonte Grove	N	D	18	P
Florida	Lady Lake	Hacienda Hills	A	D	9	O
South Carolina	Tega Cay	Tega Cay	A	D	9	U
Texas	Austin	Stonewater	N	D	18	P
Clyde Johnston Designs Inc.						
Florida	St. Johns Co.	St. Johns G&CC	N	D	18	P
Georgia	Cumming	Hampton Creek GC	N	D	18	U
Indiana	Sellersburg	Covered Bridge	A	D	9	P
Indiana	Edinburgh	Timbergate GC	N	M	18	U
Indiana	Clarksville	Wooded View GC	A	M	9	P
Indiana	Edinburgh	Alpha & Omega	N	D	9	P
Mississippi	Robinsonville	River Bend Links	N	D	18	O
North Carolina	Wallace	River Landing 3rd	A	P	9	U
North Carolina	Wallace	River Landing 4th	A	P	9	P
North Carolina	Wilmington	Wilmington GC	R	M	18	O
North Carolina	Hickory	Lake Hickory CC	R	P	27	P
South Carolina	Greenwood	Greenwood CC	R	P	18	O
South Carolina	Hilton Head	Sea Pines CC	R	P	18	P
South Carolina	Parris Island	Paris Island GC	R	M	18	P
South Carolina	Myrtle Beach	Shaftesbury Glen	N	D	18	P
Coore & Crenshaw Inc.						
California	Santa Barbara	Dos Pueblos GC	N	D	27	U
Indiana	South Bend	Univ. of Notre Dame	N	D	18	U
New York	Riverhead, L.I.	Friarshead GC	N	D	27/36	P
South Carolina	Beaufort	Spring Island	N	P	18	P
Cornish, Silva & Mungeam Inc.						
Connecticut	Waterford	Waterford GC	N	D	18	P
Connecticut	Oxford	Oxford GC	N	D	18	P
Connecticut	Hebron	Black Ledge GC	A	D	9	P
Connecticut	Huntington	Brownson GC	R	P	18	U

* Under Work: A-Addition; N-New; R-Renovation;
 * Under Type: D-Daily fee; P-Private; R-Resort
 * Under Status: O-Opened in 1998; P-Planned; U-Under construction

State	City	Course Name	Work	Type	Holes	Status
Cornish, Silva & Mungeam Inc. (cont.)						
Connecticut	Weston	Aspetuck Valley	R	P	18	U
Connecticut	Stamford	E. Gaynor Brennan	R	M	18	U
Florida	Delray Beach	Gulfstream GC	R	P	18	P
Florida	Palm Beach	The Breakers	R	R	36	P
Florida	Hobe Sound	Jupiter Island GC	R	R	18	U
Florida	North Key Largo	Card Sound GC	R	P	24	P
Florida	Vero Beach	Vero Beach GC	R	P	18	U
Guatemala	San Isidro	San Isidro GC	N	P	18	U
Illinois	Olympia Fields	Olympia Fields GC	R	P	18	P
Maine	Berwick	Outlook Farm GC	N	D	18	U
Maine	Cape Neddick	Cape Neddick GC	A	D	9	U
Massachusetts	Brewster	The Captains	A	M	18	U
Massachusetts	Paxton	Paxton GC	N	D	18	U
Massachusetts	Grafton	Magill GC	N	D	18	P
Massachusetts	Peabody	Peabody GC	N	M	18	P
Massachusetts	Natick	Natick GC	N	M	9	P
Massachusetts	Plymouth	Waverly Oaks GC	A	D	9	U
Massachusetts	Warren	Scottish Meadows	N	D	18	P
Massachusetts	Westford	Westford GC	N	D	18	P
Massachusetts	Chatham	Chatham GC	N	D	18	P
Massachusetts	Lexington	Hanscom Field	N	D	18	P
Massachusetts	Lakeville	Lakeville GC	N	P	18	P
Massachusetts	Billerica	Billerica Youth Links	N	D	9	P
Massachusetts	Oak Bluff	Farm Neck GC	R	R	18	U
New Hampshire	Campton	Owl's Nest	N	D	18	O
New Hampshire	Greenland	Breakfast Hill GC	N	D	18	P
New Jersey	High Bridge	High Bridge Hills GC	N	M	18	U
New Jersey	Millstone	Charleston Springs No.	N	M	18	O
New Jersey	Millstone	Charleston Springs So.	A	M	24	P
New Jersey	Colts Neck	Pegeasus GC	N	D	18	P
New Jersey	West Depotford	West Depotford GC	N	M	18	P
New Jersey	Augusta	Augusta Golf PaRk	N	D	18	P
New Jersey	Manalapan	Battleground GC	R	P	18	U
New York	E. Fishkill	Bison Run	N	D	18	P
New York	Ticonderoga	Ticonderoga GC	R	D	18	P
New York	Brookfield	Buffalo GC	R	P	18	P
New York	Old Westbury	Glen Oak	R	P	18	U
North Carolina	Greensboro	Sedgefield GC	R	P	18	P
Pennsylvania	State College	State College GC	N	D	18	P
Rhode Island	Cranhston	Alpine GC	R	P	18	P
Tennessee	Chattanooga	Black Creek GC	N	D	18	P
Tennessee	Chattanooga	Lookout Mountain	R	P	18	O
Vermont	Jay Peak	Jay Peak GC	N	R	21	P
Craig Schreiner Golf Course Architect						
Florida	Vero Beach	Johns Island GC	R	P	36	U
Kansas	Olathe	Cedar Valley GC	N	D	18	P
Louisiana	Baton Rouge	N/A	N	D	18	P
Mexico	Guanajuato	N/A	N	D	18	P
Ohio	Solon	N/A	N	P	18	P
Texas	Marshall	Cedar Grove Plantation	N	D	27	P
Wisconsin	Lake Geneva	Hawks View GC	N	D	36	P
Dasher Golf Design						
Florida	Davenport	Highlands Reserve	N	D	18	O
Georgia	New Hope	Bentwater	N	D	18	U
Georgia	Skidaway Island	Marshwood at Landings	R	P	18	P
Georgia	Smyrna	Vikings GC	N	P	18	P
Denis Griffiths & Associates						
Colorado	Winter Park	Fairways at Pole Creek	A	R	9	U
Georgia	Dawsonville	Chestatee	N	D	18	U
Georgia	Statham	Georgia Club	N	P	27	P
Ohio	Clayton	Moss Creek	N	D	18	U
Tennessee	Murfreesboro	Old Fort	A	D	18	U
Tennessee	Old Hickory	Hermitage	A	D	18	U
Virginia	Fairfax	Twin Lakes GC	A	D	18	O
Design 3						
Michigan	Lakeside	Chikaming CC	R	P	9	U
Michigan	Ravenna	Moss Ridge GC	N	D	18	U
Michigan	Jackson	Hickory Hills GC	A	D	9	U
Michigan	Mt. Clemens	Selfridge Ang GC	R	D	18	U
Michigan	Spring Lake	Spring Lake CC	A	P	3	U
Michigan	Belmont	Blythefield CC	R	P	18	U
Michigan	Brutus	Hidden River G&C	N	R	18	O
Michigan	Manton	Emerald Vale GC	N	D	18	O
Michigan	Southfield	Evergreen Hills GC	R	M	9	U
Desmond Muirhead Inc.						
Georgia	Canton	BridgeMill	N	D	18	O
Fairways Inc.						
Minnesota	Annandale	Whispering Pines	A	D	9	U
Fazio Golf Course Designs Inc.						
California	Palm Desert	Canyons at Big Horn	N	P	18	O
Florida	Naples	Bonita Bay/Sabal	N	P	18	O
Florida	Longwood	Legacy at Alauqua Lakes	N	D	18	O
Georgia	Villa Rica	The Georgian/Frog	N	D	18	O
Indiana	Newburgh	Victoria National GC	N	P	18	O
Ohio	Chardon	Sand Ridge GC	N	P	18	O
South Carolina	Myrtle Beach	TPC of Myrtle Beach	N	D	18	O
South Carolina	Bluffton	Belfair Plantation/East	N	P	18	O
Finger, Dye, Spann Inc.						
Kansas	Spring Hill	Sycamore Ridge GC	N	M	18	U
Missouri	Springfield	River Cut GC	N	M	18	O
New Jersey	Morristown	Spring Brook CC	R	P	18	U
New Mexico	Albuquerque	The Pines & Paa Ko	N	D	18	U
New Mexico	Santa Fe	Marty Sanchez Links	N	M	18	O
New Mexico	Farmington	Riverview GC	A	D	9	O
New York	Rye	Westchester CC	R	P	36	U
New York	White Plains	Metropolis CC	N	D	18	U
Texas	Beaumont	Golden Triangle GC	N	D	18	P
Texas	Universal City	Olympia Hills GC	N	D	18	U
Texas	Conroe	Boardwalk/Lake Conroe	N	D	18	P
Flatt Golf Services Inc.						
Kansas	Elkhart	Point Rock GC	R	M	9	U
Kansas	Manhattan	Stagg Hill GC	R	D	18	P
Missouri	Neosho	Neosho Muni GC	A	M	9	P
Missouri	Marshfield	Marshfield CC	R	P	18	U
Missouri	Mexico	Arthur Hills GC	R	P	18	U
Missouri	Jefferson City	Railwood GC	N	D	18	U
Texas	Ft. Hood	Clear Creek GC	A,R	D	27	P
Forbes Design Group						
New Hampshire	Canterbury	Canterbury Woods GC	N	D	18	P
New York	Stosset	Woodcrest Club	R	P	18	P
North Carolina	Fayetteville	Methodist College GC	A	P	9	O
Gary Koch Golf Inc.						
Florida	Lutz	The Groves	N	P	18	P
Gary Player Design						
Florida	Orlando	Osceola GC	N	D	18	P
Georgia	Augusta	Big Three GC	N	D	27	P
Georgia	Atlanta	Rocky Creek GC	N	D	18	P
Mexico	Cabo San Lucas	Maravilla Resort	N	R	18	P
Michigan	Traverse City	Northern Knight	N	R	18	O
New Jersey	Princeton	TPC @ Jasna Polana	N	P	18	O
New York	West Nyack	Manhattan Woods	N	P	18	O
Virginia	Manassas	Broad Run	N	D	18	P
Virginia	Leesburg	Bacon Hill	N	D	27	P
West Virginia	Beckley	Sun Mountain	N	R	18	U
George Golf Design Inc.						
Massachusetts	Danvers	Sun 'n Air Range	A	D	3	U
North Carolina	Arden	High Vista CC	N	P	18	U

DESIGN & DEVELOPMENT

State	City	Course Name	Work	Type	Holes	Status	State	City	Course Name	Work	Type	Holes	Status
George Golf Design Inc. (cont.)							Hurdzan/Fry Golf Course Design (cont.)						
North Carolina	Greensboro	Starmount Forest CC	R	P	18	P	Vermont	Burlington	Burlington GC	R	P	18	O
Virginia	Alexandria	Belle Haven CC	R	P	18	P	Wisconsin	Hudson	Troy Burne	N	D	18	U
Virginia	Richmond	CC of Virginia/Tuckahoe Creek	R	P	18	18O	J. Michael Poellot Golf Design Group						
Virginia	Portsmouth	Elizabeth Manor CC	R	P	18	O	Brazil	Salvador	Sauipe Resort GC	N	R	18	U
Virginia	Chesterfield	First Tee/Chesterfield	N	D	18	P	California	Pleasanton	Pleasanton GC	N	M	18	P
Virginia	Goochland	Kinloch GC	N	D	19	P	California	San Jose	Coyote Creek GC	N	M	18	P
Virginia	Virginia Beach	Princess Anne CC	R	P	18	P	California	Antioch	Roddy Ranch GC	N	D	18	U
Virginia	Roanoke	Roanoke CC	R	P	27	P	California	Sacramento	Wildhawk GC	N	D	18	O
Virginia	Midlothian	Salisbury CC	R	P	18	O	California	Santa Clara	Santa Clara G&T	A	M	2	P
Virginia	Salem	Mowles Spring GC	N	M	18	P	California	Salinas	Corral de Tierra CC	R	P	18	P
Golf Design Services (Les Ferber)							China	Zhongshan	Agile G&CC	N	P	36	P
Alberta, Canada	Canmore	Silvertip GR	N	R	18		Florida	Bradenton	Estuary GC	N	D	18	P
Alberta, Canada	Cochrane	Links of Gleneagles	N	D	18		Maryland	Urbana	Whiskey Creek GC	N	D	18	P
Alberta, Canada	Banff	Banff Springs GR	R	R	18		New York	Tuxedo	Sterling Forge GC	N	D	18	P
Alberta, Canada	Cardston	Lee Creek Valley GC	N	D	18		Taiwan	Mintai	Mintai Int'l GC	N	P	18	P
Alberta, Canada	Lac du Bonnet	Granite Hills GC	N	D	18		West Indies	Antigua	Royal Antigua GC	N	P,R	18	U
Alberta, Canada	Slave Lake	Gilwood GC	A	D	9		Jackson Golf Inc.						
BC, Canada	Balfour	Balfour GC	A	D	9		Florida	Ferdinand Beach	Royal Amelia	N	D	18	P
BC, Canada	Cranbrook	St. Eugene Mission	N	D	18		North Carolina	Highlands	Highlands Cove	N	R	18	P
BC, Canada	Sicamous	Hyde Mtn. GR	N	D	18		North Carolina	Statesville	Statesville CC	R	P	18	O
BC, Canada	Westbank	Vintage Hills GC	N	D	18		North Carolina	Charlotte	Carmel CC	R	P	18	O
BC, Canada	Westbank	Acorn Mountain GC	N	R	18		North Carolina	Marvin	Firehorn CC	N	D	18	O
Manitoba, Canada	Steinbach	Quarry Oakes	A	D	9		North Carolina	Wilmington	Magnolia Greens	N	D	18	O
Saskatchewan, Canada	Saskatoon	Moon Lake GC	A	D	9		North Carolina	Wilmington	Magnolia Greens	A	D	18	P
Saskatchewan, Canada	Kerrobert	Kerrobert GC	N	D	9		South Carolina	Edgefield	Mt. Vintage	N	D	18	P
Saskatchewan, Canada	Saskatoon	Cathedral Bluffs GC	N	D	18		South Carolina	Manning	Wyboo GC	N	R	18	P
Golf Engineering Group Inc.							South Carolina	Greenville	Stone Bridge	N	D	18	P
Alabama	Montgomery	Emerald Mountain	N	P	18	U	South Carolina	Gaffney	Sunny Slope Hills	N	D	18	P
Alabama	Montgomery	Back 9 Pitch & Putt	N	D	9		South Carolina	Anderson	Brockstone GC	N	D	18	O
Alabama	Eclectic	Eclectic Municipal	N	M	18	P	South Carolina	Florence	The Crossings	N	D	18	O
Golf Group Ltd.							Virginia	Manassas	Lake Manassas West	N	D	18	P
Arizona	Avondale	Flatstick/Coldwater Spgs	N	D	18	P	James J. Engh Golf Design						
Arizona	Kingman	Vista Bella	N	D	18	P	China	Dongguan	Hillview GC	N	P	36	O, P
Arizona	Tubac	Tubac Golf Resort	R	R	18	U	Colorado	Castle Rock	Red Hawk Ridge	N	M	18	
Arizona	Chandler	San Marcos GC	R	D,R	18	P	Colorado	Copper Mountain	Copper Creek GC	R	R,D	2	O
Arizona	Phoenix	Cave Creek Park	N	D	9	P	North Dakota	Bismarck	Hawk Tree GC	N	D	18	O
Arizona	Phoenix	Del Rio GC	N	D	18	P	Washington	Richland	Columbia Point	N	M	18	O
Arizona	Yuma	Portales GC	N	D	18	P	Jay Morrish						
Mexico	Puerto Penasco	Costa Diamante	N	D,R	18	P	Arizona	Tucson	Stone Canyon GC	N	P	18	U
Nevada	Winnemucca	Vista Ridge	N	D	18	P	California	Carmel	Tehama GC	N	P	18	U
GolfPlan							Texas	Lewisville	GC at Castle Hills	N	D	18	U
California	Gilroy	Eagle Ridge GC	N	D	18	U	Jed Azinger/Gordon Lewis						
California	Folsom	Folsom Lake GC	N	M	18	U	Florida	Tampa	Heritage Harbor	N	P	18	U
California	Rescue	Green Valley Oaks	N,R	D	18	U	Florida	Tampa	Heritage Isles	N	P	18	U
California	Riverside	Gavilan Hills GC	N	D	27	P	Florida	Tampa	Heritage Green	N	D	18	P
California	Bakersfield	The Links GC	N	D	18	U	Florida	Fort Myers	Heritage Palms	N	P	27	U
New Jersey	Ocean View	Sequest Oaks GC	N	D	18	P	Florida	Estero	Stoney Brook	N	D	18	U
Pennsylvania	Erie	Stonebridge GC	N	D	18	P	Florida	Sarasota	Heritage Oaks	N	P	18	O
GolfScapes							Ontario, Canada	Otterville	Otter Run	N	D	18	P
California	Davis	Wildhorse	N	D		U	Jerry Matthews Natural Course Design						
Illinois	Sheridan	Timber Creek	N	R		U	Iowa	Clear Lake	Clear Lake	N	D	18	P
Illinois	Ottawa	Fox River	N	R		U	Michigan	Mt. Pleasant	Bucks Run GC	N	D	18	P
Iowa	Council Bluffs	The Hills	R	D		U	Michigan	Midland	Currie	A	M	9	P
Kansas	Manhattan	Colbert Hills	N	D	18	U	Michigan	Manistee	The Challenge	N	D	18	U
Missouri	Branson	Holiday Hills	A	R	2	P	Michigan	Romulus	The Legacy GC	N	D	18	U
Texas	Midland	Hogan Park	A	D		U	Michigan	Rochester Hills	Socra	N	M	9	P
Texas	El Paso	Painted Dunes	A	D		U	Jerry Pate Golf Design						
Texas	Cedar Hill	Rawhide GC	A	D	18	P	Alabama	Allgood	Limestone Springs	N	D	18	O
Texas	Benbrook	Whitestone	N	D		P	Arizona	Flagstaff	Flagstaff Ranch	N	P	18	O
Texas	Frisco	Blackstone	N	D		P	California	La Quinta	Rancho La Quinta	N	P	18	O
Texas	McKinney	Stonebridge	N	D	27	P	Florida	Miami	Doral/Silver	R	R	18	O
Gordon G. Lewis							Mississippi	Philadelphia	Dancing Rabbit II	N	P	18	O
Florida	Naples	Arrowhead	N	D	18	O	Mississippi	Hattisburg	Canebreak	N	R	18	O
Florida	Naples	Vanderbilt	N	P	18	U	New Jersey	Colts Neck	TBD	N	P	18	U
Florida	Naples	Cypress Woods	N	P	18	U	Jim Lipe Design Inc.						
Florida	Naples	Pelican Strand	N	P	27	O 18, U 9	Louisiana	Baton Rouge	University Club	N	P	18	O
Florida	Naples	Forest Glen	N	P	18	U	Louisiana	Alexandria	England Oaks GC	N	D	18	P
Florida	Naples	Bentley Village	A	P	9	U	Louisiana	Benton	Palmetto CC	R	P	18	P
Florida	Naples	Valencia	N	D	27	O 18, 9 P	North Carolina	New Bern	Taberna CC	N	P	18	O
Florida	Bonita Springs	Bonita Fairways	A	P	18	O	Joe Finger Golf Course Architects						
Florida	Estero	Spring Run	N	P	18	U	Arkansas	Little Rock	Pleasant Valley CC	R	P	27	U
Florida	Fort Myers	Summerlin Ridge	N	D	18	U	Texas	Kerrville	Scott Schreiner	R	M	18	P
Florida	Fort Myers	Shell Point	N	D	18	P	Joel Goldstrand Design						
Graves & Pascuzzo Ltd.							Minnesota	Lutson	Superior National	A	M	9	U
California	San Ramon	Bridges at Gale Ranch	N	D	18	U	Minnesota	Annandale	Whispering Pines	A	D	9	U
California	Morgan Hill	The Institute	N	P	18	U	Minnesota	Alexandria	Lake Geneva GC	N	P	18	U
California	La Quinta	La Quinta CC	R	P	18	P	Minnesota	Perham	Perham Lakeside	A	P	9	U
California	Marina	Marina Dunes	N	R	18	P	Minnesota	Woodbury	Eagle Valley GC	N	M	18	O
California	Camarillo	Sterling Hills	N	D	18	U	Minnesota	St. James	St. James CC	A	D	9	O
California	San Diego	Maderas CC	N	P	18	U	Minnesota	International Falls	Falls CC	A	P	9	O
California	San Jose	Thunder Bird GC	N	D	9	U	John Fought Design LLC						
California	La Habra	Westridge GC	N	D	18	U	Arizona	Tucson	The Gallery	N	P	18	O
California	Brentwood	Brentwood Lake CC	N	D	18	P	California	Palm Springs	Cimmeron	N	R	36	P
California	Nipomo	The Woodlands	N	D/R	45	P	Michigan	Traverse City	Great Northern GC	N	P	18	P
Massachusetts	Southwick	The Farm	N	D	18	P	Minnesota	Wayzata	Wayzata CC	R	P	18	U
Massachusetts	Kingston	Indian Pond	N	P	18	U	Oregon	Sunriver	Sunriver Resort	N	R	18	U
Greg Nash Design							Texas	Arlington	Sunset Ranch	N	D	18	P
Arizona	New River	TBD	N	P	18	U	Washington	Orchard	Trophy Lake	N	D	18	P
Hale Irwin Golf Design							Washington	Auburn	Washington Nat'l	N	D	18	P
Arizona	Prescott	Prescott Lakes	N	D	18	U	John Harbottle Design						
Arizona	Goodyear	Palm Valley	N	D	18	U	California	San Jose	Cinnabar Hills	N	D	27	O
Indiana	W. Lafayette	Coyote Crossing	N	D	18	U	California	Newport Beach	Big Canyon	R	P	18	O
Nevada	Sparks	Redhawk	N	R	18	P	California	Los Angeles	Brentwood	R	P	18	U
North Carolina	Wake Forest	TPC at Wakefield	N	P	18	U	California	Pleasanton	Castlewood	R	P	18	O
Utah	Bryce	Bryce Canyon GC	N	D	18	P	California	San Jose	San Jose CC	R	P	18	U
Heckenkemper Golf Course Design							California	Antioch	Lone Tree	R	M	18	U
Arizona	Scottsdale	Westworld GC	N	D	18	U	California	Livermore	TBD	N	D	18	P
Oklahoma	Kingston	Chickasaw Point GC	N	R	18	U	California	Long Beach	Virginia CC	R	P	18	P
Oklahoma	Oklahoma City	James Stewart GC	N	M	9	U	California	San Leandro	Tony Lema	R	M	27	P
Oklahoma	Oklahoma City	Lincoln Park GC	R	M	18	U	Idaho	Boise	Banbury Meadows	N	D	18	U
Howard Maurer Design Group Inc.							Idaho	Sun Valley	Quigley Canyon	N	M	18	P
Massachusetts	South Hadley	South Hadley Muni	N	D	18	P	Minnesota	Onamia	Sanctuary at Izatys	N	R	18	O
Massachusetts	Templeton	Templewood GC	N	D	18	U	Minnesota	Onamia	Black Brook at Izatys	N	R	18	U
Massachusetts	Weymouth	Weatherlane GC	N	P	9	P	Nevada	Genoa	Sierra Nevada	N	D	18	O
Massachusetts	Plymouth	White Cliffs GC	R	P	18	U	Nevada	Reno	Arrow Creek	N	P	18	U
Massachusetts	Attleboro	Atlantic GC	N	D	9	P	Nevada	Reno	Hidden Valley	R	P	18	P
Hurdzan/Fry Golf Course Design							Keith Foster Golf Course Design						
Alabama	Huntsville	The Ledges	N	P	18	U	California	Auburn	Dark Horse	N	D	18	P
Alabama	Sylacauga	N/A	N	D	18	O	Colorado	Commerce City	Buffalo Run	A	M	9	P
California	Palm Desert	Mountain View	N	R	18	P	Colorado	Aurora	Colo. Golf Assn. Facility	N	D	45	P
Canada	PEI	Dundarave	N	D	18	U	Illinois	Zion	Shepherd's Crook	N	M	18	U
Colorado	Keystone	Keystone/River Course	N	R	18	U	Illinois	Elgin	Elgin Muni	N	D	18	U
Colorado	Westminster	Heritage at Westmoor	N	D	18	U	Illinois	Madison	Gateway Nat'l	N	D	18	O
Colorado	N/A	N/A	N	R	18	U	Maryland	Cambridge	Hyatt Resort Course	N	R	18	P
Connecticut	Silverthorne	Shorehaven	R	P	18	U	Maryland	Cambridge	Hyatt Resort Course	N	R	18	P
Delaware	Wilmington	Fieldstone	N	P	18	U	Missouri	St. Louis	Persimmon Woods	N	P	18	O
Florida	Naples	Royal Wood	R	P	18	O	Nevada	Las Vegas	Anthem	N	P	18	U
Kentucky	Pineville	Pine Mountain	N	M	18	U	Nevada	Sparks	D'Andrea	N	D	18	U
New Jersey	Swanton	Sand Barrens	N	D	9	U	Tennessee	Paris	The Tennessean	N	D	18	U
New Jersey	Bedminster	Hamilton Farms	N	P	18	P	Texas	Ft. Worth	Colonial	R	P	18	P
New York	Endicott	En-Joie	R	D	18	O	Texas	San Antonio	Longhorn	N	D	18	P

GOLF COURSE NEWS

DESIGN & DEVELOPMENT

State	City	Course Name	Work	Type	Holes	Status
Stephen Kay Golf Course Architects (cont.)						
New York	West Nyack	Manhattan Woods GC	N	P	18	O
New York	Union Vale	Links @ Union Vale	N	P	18	U
Sunshine Design						
Florida	Johns City	Royal St. Augustine	N	D	18	P
Florida	Jacksonville	Iron Eagle Golf Village	N	D	18	P
Georgia	Jekyll Island	Pine Lakes	N	R	18	U
Georgia	Jekyll Island	Oleander	R	R	18	P
Georgia	Jekyll Island	Indian Mound	R	R	18	P
Massachusetts	Lenox	Cranwell Resort & GC	R	R	18	O
New Jersey	Ocean Co.	Renaissance G&CC	N	P	18	U
Pennsylvania	Pocano Pines	Wild Pines GC	N	P	18	O
Thomas McBroom Associates						
Barbados		Southern GC	N	R	18	P
Canada, B.C.	Vancouver	Fraserview	R	M	18	O
Canada, N.B.	St. Andrews	The Algonquin	N	R	18	U
Canada, N.S.	Baddeck	Bell Bay	N	D	18	U
Canada, Ont.	Oakville	Rattlesnake Point	N	P	45	U
Canada, Ont.	Sudbury	Timberwolf	N	D	18	U
Canada, Ont.	Uxbridge	The Granite Club	N	P	18	U
Canada, Ont.	Aurora	Kings Riding	N	P	18	U
Canada, Ont.	Maether	Rocky Crest	N	P	18	U
Weed Golf Course Design						
Delaware	Seaford	Glen Mills	N	D	18	U
Florida	Amelia Island	Ocean Links	N	R	18	O
Florida	Ponte Vedra Beach	Ocean Course	R	R	18	O
Florida	Clay County	TBD	N	D	18	P
Minnesota	Stillwater	Wynstone GC	N	D	18	P
South Carolina	Hilton Head	Hilton Head National	A	D	9	O
Virginia	Bristol	The Farm GC	N	P	18	U
Whole-in-One Design Group						
Delaware	Seaford	Seaford G&CC	A	P	9	O
Georgia	Hiram	Creekside CC	N	D	18	U
Maryland	Berlin	Greenfields Golf Park	N	D	18	P
Maryland	Leonardtown	Tudor Hall	N	D	18	P
Maryland	Rock Hall	TBD	N	R	18	P
New York	Yorktown Heights	Sanctuary CC	R	D	9	P
North Carolina	Garner	Meadowbrook CC	R	D	18	P
William Gill & Associates/Texas						
New Mexico	Aztec	Ancient Trails GC	N	D	27	P
New Mexico	Albuquerque	Atrisco GC	N	D	27	P
Texas	Carrollton	Coyote Ridge GC	N	D	18	O
Texas	Midland	Nueva Vista GC	N	D	18	U
Texas	Abilene	Lytle Creek GC	N	D	18	U
Texas	Eden	Eden GC	N	M	9	U
Texas	Ft. Worth	Carswell GC	R	D	18	P
Texas	Wichita Falls	Wichita Falls C	R	P	18	P
Texas	Austin	Balcones CC	R	P	36	P
Texas	Graham	Graham CC	R	P	9	O
Texas	Emory	Land's End GC	N	R	18	P

State	City	Course Name	Work	Type	Holes	Status
William Gill & Associates/Texas (cont.)						
Texas	Big Spring	Comanche Trail GC	R	M	18	P
Wogan & Sargent Inc.						
Massachusetts	W. Bridgewater	River Bend	N	D	18	U
Massachusetts	Sturbridge	CC of Massachusetts	N	D	18	P
Massachusetts	Devens	TBD	N	D	18	P
Wogan & Sargent Inc. (cont.)						
New Hampshire	Goffstown	Stonebridge GC	N	D	18	O
New Hampshire	Moultonboro	Ridgewood CC	N	D	9	O
New Hampshire	Laconia	Laconia CC	R	P	18	U
New Hampshire	Franklin	Franklin Greens G&CC	A	D	9	P
New Hampshire	Barrington	Nippo Lake GC	A	D	9	P
New Hampshire	Gilford	Gilford CC	N	D	18	P
Rhode Island	Foster	Brush Meadows	N	D	18	P

(The information contained in this chart was obtained from architects responding to a Golf Course News survey used to determine the Golf Course Builder of the Year.)

U.S. architects and their phone numbers

Architect (Contact)	Telephone
Andy Johnson Design (Andy Johnson)	970-926-3436
Andy Raugust Golf Architect (Andy Raugust)	209-942-1200
Armstrong Associates (Marvin Armstrong)	603-547-3132
Arthur Hills & Associates (Art Hills)	419-841-8553
Beidel Design Associates (Ed Beidel)	410-480-4661
Booth Golf Design (W. Bradley Booth)	207-646-8382
Boswell Golf Design (Bill Boswell)	770-220-0392
Burns Golf Design (Steve Burns)	904-277-4474
Cabell B. Robinson Ltd. (Cabell Robinson)	011 34 95 2590250
Cal Olson Golf Course Architects (Cal Olson)	949-489-8888
Carl Thuesen ASLA (Carl Thuesen)	406-252-5545
Casper/Nash & Associates (Greg Nash)	602-265-5612
Charles F. Ankrom Inc. (Charles Ankrom)	561-283-1440
Clifton, Ezell & Clifton Golf Design Group (Lloyd Clifton)	407-860-1223
Clyde Johnston Design Inc. (Clyde Johnston)	843-842-3367
Coore & Crenshaw Inc. (Bill Coore)	512-477-5441
Cornish, Silva & Mungeam Inc. (Brian Silva)	508-278-3407
Craig Schreiner Golf Course Architects (Craig Schreiner)	847-487-5313
Dasher Golf Design (Mike Dasher)	407-645-3446
Denis Griffiths & Associates (Denis Griffiths)	770-867-4480
Design 3 (W. Bruce Matthews III)	517-336-5959
Desmond Muirhead Inc. (Desmond Muirhead)	949-644-5050
Fairways Inc. (Ronald Bloom)	218-943-1391
Fazio Golf Course Designers Inc. (Tom Fazio)	828-693-0052
Finger Dye Spann (Ken Dye/Baxter Spann)	281-496-4300
Flatt Golf Services Inc. (Larry Flatt)	913-686-3636
Forbes Design Group (Ross Forbes)	910-488-4549
Gary Koch Golf Inc. (Tom Mattera)	813-591-5526
Gary Player Design (Tim Freeland)	561-624-0300
George Golf Design Inc. (Lester George)	804-272-4700
Golf Design Services (Les Ferber)	403-678-4803
Golf Engineering Group Inc. (Ward Northrup)	561-738-7425
Golf Group Ltd. (Forrest Richardson/Arthur Jack Snyder)	602-266-1301
GolfPlan (Ronald Fream)	707-526-7190
GolfScapes (Jeffrey Brauer)	817-640-7275
Gordon G. Lewis Golf Course Architect (Gordon Lewis)	941-597-4448
Graves & Pascuzzo Ltd. (Bob Granes/Damian Pascuzzo)	925-939-6300
Hale Irwin Golf Design (Hale Irwin)	314-567-0902
Heckenkemper Golf Course Design	918-628-1255
Howard Maurer Design Group Inc. (Howard Maurer)	508-478-9684
Hurdzan/Fry Golf Course Design (Mike Hurdzan/Dana Fry)	614-457-9955
J. Michael Poellot Golf Design Group (J. Michael Poellot)	408-867-5600
Jackson Golf Inc. (Thomas Jackson)	864-268-4891
James J. Engh Golf Design Group Inc. (James Engh)	303-663-1000
Jay Morrish & Associates Ltd. (Jay Morrish)	972-539-3465
Jerry Matthews Natural Course Design (Jerry Matthews)	517-485-0480
Jerry Pate Golf Design (Jerry Pate)	850-968-0731
Jim Lipe Design Inc. (Jim Lipe)	318-797-1700
Joe Finger Golf Course Architect (Joe Finger)	830-257-6418
Joel Goldstrand Design (Joel Goldstrand)	612-551-1511
John Fought Design LLC (John Fought)	503-678-4330
John Harbottle Design (John Harbottle)	206-566-3915
Keith Foster Golf Course Design (Keith Foster)	314-997-7373
Kenneth M. Kavanaugh Golf Course Design (Ken Kavanaugh)	520-323-8232
Kyle Phillips Golf Course (Kyle Phillips)	916-797-2141
L.A. Links Inc. (Lorrie Viola)	248-366-9447
Lindsay Ervin & Associates Inc. (Lindsay Ervin)	301-261-0449
Lohmann Golf Designs (Bob Lohmann)	815-923-3400
Mark DeVries Golf Course Architect (Mark DeVries)	616-363-9801
Michael Strantz Studios (Michael Strantz)	843-881-4774
Nicklaus Design (Jack Nicklaus)	561-626-3900
Nugent Golf Associates (Dick Nugent)	847-438-5222
Olde Reliable Designs (Ted McAnlis)	561-627-4513
Palmer Course Design Co. (Ed Seay)	904-285-3960
Pearson Golf Design (Tom Perason)	561-863-0041
Pete Dye Inc. (Pete and Alice Dye)	561-276-9728
Phillips Golf Design (William Phillips)	602-730-1536
Rainville and Bye (David Rainville/Gary Bye)	714-838-7200
Rainville & Bye Golf Course Architects (David Rainville/Gary Bye)	714-838-7200
Raymond Hearn Golf Designs (Raymond Hearn)	734-254-1057
Renaissance Golf Design Inc. (Tom Doak)	616-941-7499
Richard Associates (Ray Richard)	508-888-5417
Richard M. Phelps Ltd. (Dick Phelps)	303-670-0478
Robbins & Associates (Rick Robbins)	919-319-1004
Robert Trent Jones II (Robert Trent Jones Jr.)	650-326-3833
Ron Kirby Inc. (Ron Kirby)	561-776-6434
Ronald M. Garl Golf Course Design Inc. (Ron Garl)	941-688-8383
Sanford Golf Architects (John Sanford)	561-743-1897
Schmidt/Curley (Brian Curley)	602-483-1994
Sechrest Golf Inc. (Don Sechrest)	816-421-2520
Serafin Golf Course Design Inc. (Barry Serafin)	614-939-0022
Signature Course Design Inc. (Edward Carton/Scott Applegate)	561-220-1200
Stephen Kay Golf Course Architects (Stephen Kay)	914-699-4437
Sunshine Design (Chris Commings)	904-287-9892
Thomas McBroom Associates (Thomas McBroom)	416-967-9329
Weed Golf Course Design (Bobby Weed)	904-249-3005
Whole In One Design Group (Richard Mandell/Robert Rauch)	919-419-1934
Williams, Gill & Associates — Texas (George Williams)	915-695-0220
Wogan & Sargent Inc. (George Sargent)	603-934-3230

Continuing Markers' 10 year tradition... Innovative New Products for the Golf Industry

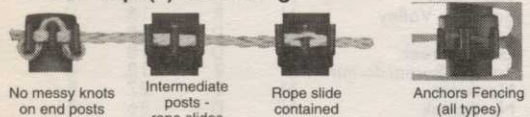
Don't RAKE your traps... GROOM THEM with The SmartComb™

- The rake that won't break and it floats, too!
- Polysafe™ plastic over wood handles will not shatter or splinter.
- PolySafe™ replacement handles fit any conventional rake
- PolySafe™ cart rake handle
- 36 month rake head replacement warranty
- Unique tine configuration grooms traps
- Tear drop design for added strength

Yes! ...there IS a better way to control foot & cart traffic!

Introducing the SmartPole System™ with Triple Cleat™ Caps & Sleeves

- Ribbed Design - less weight, more strength
- Easy to Install • Unlimited Versatility
- Holds Rope(s) or Fencing



The "Finishing Touch" to course and grounds beautification



- SmartMulch™ Recycled Rubber - available in rolls, bulk, square, rounds and custom shapes.
- Inhibits insect breeding, allows water to pass through
- Great for high traffic areas
- Special shapes with artificial turf inserts available

Contact your Markers Distributor or call:

1-800-969-5920

MARKERS, INC.

33597 Pin Oak Parkway
Avon Lake, Ohio 44012
(440) 933-5927
Fax (440) 933-7839
www.markersinc.com

"Quality Products at Reasonable Prices"

DON'T MISS OUR BOOTH!

1. Bring this coupon to Booth #4053 at GCSAA
2. Get a Buck (\$1 to first 100 visitors daily)
3. Fill out our Marketing Questionnaire - 2 questions and enter drawing for \$500.00 Grand Prize.

Name _____ Phone () _____

Course _____

Address _____

City/State/Zip _____

Be Sure to check out our new
Prizmatically
carved SmartSigns™!

*Patent pending

Ownership dispute threatens Mimosa Leisure Estate

BY ANDREW OVERBECK

CLARK FIELD, the Philippines — Controversy is swirling around the ownership of the Mimosa Leisure Estate here which was seized Dec. 14 by the Clark Development Corp. (CDC), the state-owned entity that had leased the land to Mondragon Leisure & Resorts Corp. (MLRC).

MLRC, the company that developed Mimosa, reportedly owes the CDC 427 million pesos (\$10.9 million) in rent and 4.8 billion pesos (\$123 million) to Filipino banks. Citing violation of contract, the CDC terminated MLRC's lease and seized the assets of Mimosa's 540-acre site which include a 36-hole Nelson, Wright, Haworth-designed golf course, a Holiday Inn hotel, villas and a casino.

MLRC officials protested the seizure and won a temporary restraining order on Dec. 15 from a regional court which bars the CDC from taking over the property. CDC president Rufo Colayco disputed the restraining order saying that it had no effect because the CDC was already in possession of the prop-

erty. In response, Colayco deployed CDC security forces and members of the Philippine National Police's Special Action Forces to guard against potential violence.

MLRC claims that Colayco's actions superceded ongoing contract negotiations between the two parties and that the seizure

was an irreparable injury to the company. In a Dec. 21 motion to the Court of Appeals, MLRC contended that the seizure of Mimosa could cause bank creditors to call on their loans and thereby precipitate the collapse of MLRC. MLRC also emphasized that the CDC only has

Continued on page 94



photo by Andrew Overbeck

One of the two Nelson, Wright, Haworth-designed courses at the Mimosa estate.

Junction™ The Essential Fungicide for Greener Greens.

Excellent algae, brown patch and dollar spot control, plus other fungal diseases

Junction™

Vital component in resistance management → Convenient dry flowable

Booth
#4369



Griffin L.L.C.
1-800-237-1854
Valdosta, GA 31601

Always read and follow label directions. © 1998 Griffin L.L.C. Junction is a trademark of Griffin Corporation. 6011-01

CIRCLE #145/GCSAA BOOTH #4369

CCA battles over club contract

HONG KONG — CCA Management Co. Ltd. based here won the first round of its court battle Dec. 10 against the Sand River Golf Club of Shenzhen, China, but the judge reserved a ruling on damages.

CCA was seeking \$2 million in damages from Sand River for terminating its 10 year contract which began in 1995. Sand River ended the contract after only 10 months because in that time five CCA managers had resigned. The club claimed that there was an oral agreement that they could end the relationship with CCA if another manager left, a claim that CCA denies.

A judge in the Court of Instance stated that although the constant turnover of management staff had been damaging to Sand River it did not amount to a breach of contract by CCA because they had no way of guaranteeing that another manager would not leave the club. The judge noted that CCA's damages claim was inflated and that he hoped the two parties could settle the matter without further litigation.

• ASIAN UPDATE •

Projects in China, Philippines roll into 1999

BY ANDREW OVERBECK

CHINA

• KUNMING, Spring City Golf and Lake Resort — Spring City celebrated its official grand opening Nov. 30. The 18-hole Jack Nicklaus-designed Mountain course has been open for play

since January 1998 and the second 18-hole Robert Trent Jones II-designed Lake course is due to open in the first quarter of 1999.

• SHENZHEN, Mission Hills — The Jumbo Ozaki course is now open for play full time. The

course has been tested from the start, playing host to the last leg of the Johnnie Walker Super Tour in November and the Volvo Asian Matchplay and Hugo Boss Foursomes in December.

The Nick Faldo course is still under construction and proceed-

ing quickly according to new superintendent, Danny Potter. 13 holes are now grassed with closed turf zoysia and the whole course is due to open for play in early 1999.

These new courses, in addition to the existing 36-hole Nicklaus course, bring the hole total at Mission Hills to 72 — the most extensive project in China to date

• SZECHUAN PROVINCE — Heritage Golf will be construct-

ing the 18-hole Chongqing Golf and Country Club which is set to be completed in late 2000.

INDONESIA

• BINTAN — Over 200 tourists en route to golf courses and resorts on Bintan island south of Singapore were turned back Dec. 21 by a group of 200 to 300 local demonstrators protesting low resettlement compensation for their land.

The protesters sat in the road leading from the ferry terminal blocking traffic for over two hours forcing some 150 incoming tourists to return to nearby Batam Island and Singapore.

This is the second such protest in as many months as villagers continue negotiations with PT Buana Megawisatama, the Indonesian firm dealing with the land resettlement for the island's Bintan Beach International Resort.

• JAKARTA — Golf course construction in Indonesia has ground to a halt with many golf projects in an indefinite holding pattern. However, according to some golf course builders in the region the advantages to building at present are great.

"With the economic crisis, local costs in rupiah did go up, but that was offset by the massive devaluation," says Paul Blackadder, a project manager with Pacific Golf. "On the Klub Golf Cengkareng project in Jakarta we saved \$38,000 on fuel costs, \$250,000 on equipment hire, and we were able to slash our cement, PVC, electrical cable, and labor cost budgets."

With local costs bottoming out, the advantages for foreign investors appear to be abundant.

THE PHILIPPINES

• BAGUIO, Camp John Hay — The Nicklaus re-design is well on its way to completion and—the opening date is scheduled for May of 1999.

• CAVITE, Forest Hills — The Environmental Compliance Certificate for the Arnold Palmer layout is nearing completion and construction will be commencing in the beginning of 1999.

• TAGAYTAY, Tagaytay Highlands — The two Midlands courses are due to begin construction in January 1999. The 36-hole addition will sit below the existing 18-hole Highlands course and will be accessible via an imported tramway.

According to Del Ray, Calif.-based designer, Richard Bigler, these two courses will be infinitely easier to build than the first course and "when we get all three of them done I don't know of any place in the world that will be set up quite like that."

SINGAPORE

The Warren Golf and Country Club designed by Nelson & Haworth is under construction in northwest Singapore. The

Continued on page 94

Your Choice for Treating Localized Dry Spots

Just Got Clearer.

AQUEDUCT®

Proven to be the most effective surfactant to treat LDS and promote the rapid recovery of turf under stress

AQUATROLS

Formulating For Effectiveness

5 North Olney Ave., Cherry Hill, N.J. 08003
1-800-257-7797 or 1-609-751-0309
Fax 1-609-751-3859
www.aquatrols.com

For More Information Call
1.800.257.7797





Wright overlooks plans for the first standard golf course in the Seychelles.

Wright finds golf in the Garden of Eden

By ANDREW OVERBECK

PRASLIN ISLAND, the Seychelles — As ASGCA member Rodney Wright has designed his way across the Pacific Ocean, he has moved from one island paradise to another. But Wright's latest adventure has brought him to one of the ultimate island locations in the world — Praslin

Island which is a part of the Seychelles archipelago in the Indian Ocean, 1,000 miles off the coast of Africa.

In comparison to other island locations that he has worked over the last 25 years, Wright said the Praslin site is one of the best. "This site is beautiful. It has much of the drama of Mauna

Lani in Hawaii combined with the mystique of Bali Golf in Indonesia. It is a special place."

And Wright is not the only man to be impressed by the island's beauty. When Portuguese explorers discovered the Seychelles in the 16th century, they initially thought they had

Continued on page 94

FRANCE

SNC Golf to raise golf's image via design

By TREVOR LEDGER

PARIS — A radical project designed to improve the public image of golf in France is under way just outside Versailles.

Fromanger and Adam, the largest golf course architecture company in France, have formed a new company, SNC Golf de St. Marc. The company's first act was to buy an abandoned site which it had started to work on before the developer went bankrupt.

Partner Mark Adam explained the move: "We purchased the site ourselves, formed the new company and are now using the project as an example of how golf courses can work."

The first phase of the development is to open the first nine holes in the spring of 1999.

According to Adams, this 'phase building' approach is central to Golf de St. Marc's ethos. "When the first nine is finished we will start work on the buildings. The aim is to show that, financially, golf courses can work. Phased investment, [one outlay at a time], is very important in this respect. In effect we are putting our money where our mouths are."

Such a move is unique in France, a country where golf remains anonymous to all but a few.

Between 1990 and 1993, 102 golf courses were built in France. Last year there were two and, come the end of 1998, another two could feasibly be completed.

In fact, since 1993 only 26 further courses have been added, which, is a very low figure for a country which enjoys fairly inexpensive land costs and boasts a nation of sports lovers.

Continued on page 93

Let's cut this short

- If you need a bluegrass that's long on close-cut tolerance, you need Total Eclipse.
- It was the #1 variety* in high-stress sites like Kentucky, New Jersey, Missouri and Maryland.
- It has shown superior disease resistance to leaf spot, melting out and brown patch.
- Every bluegrass fairway mix should contain the dark green color of Total Eclipse.
- Make a point to specify it in your next order.

TOTAL ECLIPSE
Kentucky Bluegrass

*NTEP data available upon request. Based on 1997 report.



ZAJAC
PERFORMANCE
SEEDS, INC.

973-423-1660



PETERSON SEED CO.

612-445-2606



Seed, Garden &
Turfgrass Supplies

606-371-8423



A DIVISION OF J.R. SIMPLOT COMPANY

800-688-SEED



CIRCLE #148/GCSAA BOOTH #653 & 753

Griffiths

Continued from page 10

the steady growth of the women's game. Unarguably women face constraints in—and upon entering—the game of golf. Their basic facility, the women's course, is too often seriously flawed, the course and the card being carved out from courses which have been designed for men.

Too often women's courses are ill-thought out and lacking the due care required to make them fun to play. Frequently, the women's courses are merely an afterthought. As both old and new courses become necessarily more commercial, the question of the woman golfer takes on a heightened financial significance.

For the first time women golfers are a serious and expanding de-

mand sector that promoters and clubs ignore at their peril—considering that women represent almost 30 percent of all golf demand.

Historically, women have hardly mattered in golf (*Catherine of Aragon, wife of Henry VIII was rebuked for wasting time at golf in 1523*). Such pioneers were a rarity until the turn of this century and the growth of the railways helped the

nascence of the first golf boom, when women began to take seriously to golf and have done so ever since with this trend accelerating in recent years.

Many women's golf clubs played on club and public courses but very few women's clubs controlled their own facility. Even fewer survive. However, two of these survivors are distinguished exceptions: they both own and

manage their courses and celebrated their respective centenaries in the early 1990's.

The handbooks, published to celebrate their centenary years give a fascinating insight into women's golf over the last 100 years. Into the spotlight step: The Wirral Ladies Golf Club (1894); The Formby Ladies Golf Club (1896).

As established women's courses, both are relevant guides for others as we approach the new millennium. Nevertheless, even with purpose built courses, the obstacles for women entering golf are still daunting, just as with anyone else but more so.

Purpose built, one-stop schools with beginner handicap courses where all facets of golf can be learned in order to achieve a handicap card would be a help to all beginners today.

Event courses could not be replicated on club courses because the end result would be too difficult, thus spoiling the all important pleasure element of a round of golf. In the US, there appears to be a preference for women's club course of around 5200 yards, par 72; just 79 yards shorter than the mean of our two centenary courses.

Some recent evidence of the difference between the women's and men's game was highlighted by the tricky negotiations over the 'length allowance' agreed upon at the Praia d'el Rey Cup mentioned earlier.

A difference of 620 yards—34 yards per hole—was adopted. In contrast, the difference between the Solheim and the Weetabix cards and the two centenary courses is 64 yards per hole.

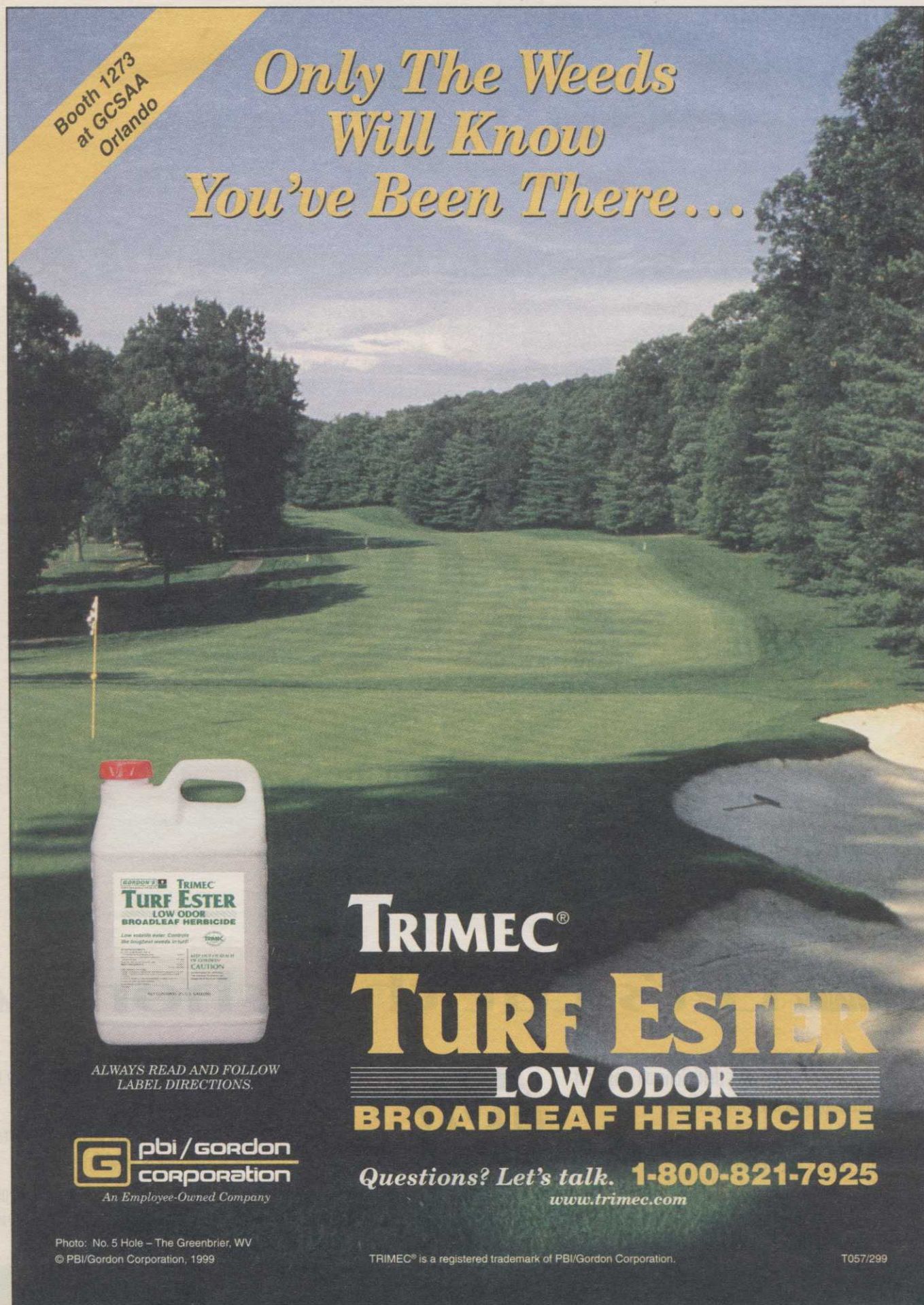
So, what might a fair length allowance be in club events? Against a new average length of 6,000 yards for men's courses in Britain, the calculation throws up the figure of 800 yards.

This 44 yards per hole may be a fair benchmark from which to negotiate prior to club events involving men and women.

Perhaps this insight might encourage women to look critically at their own courses to see whether they can be made more interesting and fun to play, never mind improving the chances of beating up the men.


There is at least a precedent for such a course of action. Some years ago a new project on continental Europe was blessed with a mischievous architect who designed a much easier course for the women than that played by the men. Ever since then the annual matches against the ladies have seen the men getting soundly trounced on almost every occasion.

Although the owner was furious yet helpless, the women members have loved the designer ever since.



**Booth 1273
at GCSAA
Orlando**

**Only The Weeds
Will Know
You've Been There...**



TRIMEC®
TURF ESTER
LOW ODOR
BROADLEAF HERBICIDE

Low volatile ester. Controls the toughest weeds in turf.

KEEP OFF TURF UNTIL 24 HOURS AFTER APPLICATION. CAUTION: Do not apply to wet grass.

NET CONTENTS: 2.5 U.S. GALLONS

TRIMEC®
TURF ESTER
LOW ODOR
BROADLEAF HERBICIDE

ALWAYS READ AND FOLLOW LABEL DIRECTIONS.

G pbi / Gordon
CORPORATION
An Employee-Owned Company

Questions? Let's talk. 1-800-821-7925
www.trimec.com

Photo: No. 5 Hole - The Greenbrier, WV
© PBI/Gordon Corporation, 1999

TRIMEC® is a registered trademark of PBI/Gordon Corporation.

T057/299

BRIEFS



CROWN GOLF OPENS TWO

GLENVIEW, Ill.—Crown Golf opened two new courses in October; South Mountain Golf Course in Draper, Utah and River Valley Ranch Golf Course in Carbondale, Colo. South Mountain, which was designed by David Graham and Gary Panks, is located on rugged, mountainous terrain 30 minutes south of Salt Lake City. In contrast, River Valley Ranch, near Aspen, Colo., was built in a river valley with 13,000-foot Mt. Sopris in the background. Jay Morrish designed the 18-hole championship course.

MATRIX ADDS CUTCHINS

WILLIAMSBURG, Va.—Beverly Cutchins has been named vice president of Golf Business Advisors, a Matrix Golf and Hospitality company based here. Cutchins has more than 15 years of experience in the private club and resort sports sector. Prior to joining Golf Business Advisors, she had been with Kingsmill Resort in Williamsburg. In addition to assisting Golf Business Advisors with its current consulting services, Cutchins will bring additional consulting assistance to clients in the areas of membership, spa, fitness, tennis and resort programming.



Beverly Cutchins

GMG GROWS PORTFOLIO

NASHVILLE, TENN.—Golf Management Group has signed a management agreement with Old Hickory Country Club. Nashville-based GMG now manages the turfcare operations at four courses, two in Nashville and two in suburban Hendersonville. Golf Management Group is an affiliate of Edwin B. Raskin Co., a Brentwood-based 44-year-old, real-estate investment, management and development company that began golf management activities in 1981.

GOLDEN BEAR PROMOTES O'BRIEN

NORTH PALM BEACH, Fla.—Golden Bear Golf, Inc. has promoted Andrew O'Brien to vice president/marketing. In his new role, O'Brien will be responsible for marketing, licensing and branding of the Golden Bear name and implementation of the company's tactical marketing plans for 1999, as well as for helping to develop new business opportunities in this area.

Forecaddies making a comeback at Marriott

By JOHN TORSIELLO

An innovative forecaddie program at the Seaview Marriott Resort in Galloway, N.J. has been such a success that the company is considering expanding the program to other Marriott-owned courses.

Rob Bartley, director of golf at Seaview, located near Atlantic City, said the feedback from golfers playing the resort's two courses—The Pines and The Bay Course—has been "98 percent positive" in the program's first year.

The unique aspect of Seaview's caddie program is that the service is mandatory, making it one of the few resorts where golfers must be accompanied by a forecaddie. Bartley said Seaview's program was patterned after a similar program at Coeur D'Alene Resort Golf Course in Idaho. The price of a forecaddie is included in a golfer's greens fees. Tips—the club recommends at least \$10 per bag—are encouraged.

"The forecaddie program has been a way for us to differentiate ourselves from other courses in the area," said Bartley. "It's been a huge success in its first year. We think of our forecaddies as on-course concierges. No other employee spends as much time



Forecaddies at the Seaview Marriott Resort in Galloway, N.J.

with the customer as they do. There is certainly a potential that it can be molded to other Marriott facilities."

Brendan Lenihan, director of guest services at Coeur D'Alene, said that resort's mandatory forecaddie program, now in its eighth year, has been popular among golfers.

"I think the program has been successful because it is mandatory and not optional. I don't know if it would work if golfers had a choice," he said.

Lenihan said forecaddies have positively affected speed of play at Coeur D'Alene.

Continued on page 79

UCA, Palmer join forces to build network of U.S. university clubs

By ANDREW OVERBECK

COLUMBIA, S.C.—University Clubs of America (UCA) and Arnold Palmer Golf Management have formed an exclusive joint venture to develop and operate university- and college-affiliated golf clubs across the United States. The UCA-Palmer collaboration began Oct. 21, with its first course here at the University of South Carolina.

According to E. Linwood Johnson, President of UCA, this partnership will be the first step in a major expansion for UCA, which builds customized golf courses and themed clubs to suit the needs of individual colleges and universities, which in turn offer memberships exclusively to their alumni and university supporters. Terms of the partnership state that all participating clubs will bear the UCA brand and be managed by Palmer Golf.

"UCA's resource is club design, marketing and its ability to cater to the needs of individual universities," said Peter Nanula, president and chief executive officer of Palmer Golf. "They're niche experts. This partnership brings together the best

Continued on page 82

K-State's management program draws students

MANHATTAN, Kan.—Kansas State University's golf course management program is up and drawing attention from not only students, but from other universities as well, said Jack Fry, associate professor of horticulture, forestry and recreation.

"Our golf course management program is the first of its kind to shift emphasis to business and other academics. Most other programs just offer the traditional turfgrass management program," Fry said.

Offered as a new option under K-State's horticulture major, the golf course management program focuses on more than how to get and maintain the optimum playing surface. It also covers all aspects of managing an 18-hole course, including business, hospitality and food-service operations.

"The program was developed with help from experienced golf course superintendents, who emphasized that skills students can develop in business, communications and personnel management are as important as the education they receive in plant and soil sciences," Fry said.

"The Golf Course Superintendents Association of America (GCSAA) and the PGA Tour are advisers to the program and are working with us in structuring internships and evaluating the program's effectiveness in educating the next generation of golf course superintendents and facility professionals," he said.

"Enrollment has been good. We have nearly 40 students, including several students from out-of-state and K-State students who switched their majors when the program became available," Fry said.

That's what Jonathan Bakalar did. The junior from Charlotte, N.C., was majoring in business, but switched when the golf course management option became available. "I've been playing golf since I was a little kid. I love it," he said. "I want to be a golf course superintendent or be a

Continued on page 82



KEMPER GROWS ILLINI PORTFOLIO

NORTHBROOK, Ill.—Kemper Sports Management has signed a three-year agreement with the Village of Worth to manage Water's Edge Golf Club. The course is scheduled to open in May. Kemper begins operations immediately. Built alongside the Cal Sag Channel in Worth, Water's Edge is located 15 miles from the heart of downtown Chicago with lush natural grasses, protected wetlands and dense forest. A highlight of the 18-hole championship course is the 10th hole, a par-4 that sits high above the course and offers a beautiful view of 14 other holes. Water's Edge also features a driving range, clubhouse, pro-shop, and full-service restaurant.

REITs and golf: A happy marriage

By LAURENCE HIRSH

The latest factor contributing to the boom in the golf course industry is the Real Estate In-

Laurence Hirsh is president of GolfPropertyAnalysts, a Pennsylvania-based golf appraisal firm. The following article appeared in a recent GPA newsletter.

vestment Trust (REIT). In order to most accurately measure the REIT's impact on the golf course industry, a little background information is in order.

A REIT is defined by The National Association of Real Estate Investment Trusts (NAREIT) as "a corporation or business trust that combines the capital of many inves-

tors to acquire or provide financing for all forms of real estate." It acts kind of like a mutual fund for real estate. In order to qualify as a REIT under the Internal Revenue Code a corporation or trust must:

- be a corporation, business trust or similar association;
- be managed by a board of directors or trustees;
- have shares that are fully transferable;

- have a minimum of 100 shareholders;
- have no more than 50 percent of the shares held by five or fewer individuals during the last half of each taxable year;
- invest at least 75 percent of the total assets in real estate assets;
- derive at least 75 percent of gross income from rents from real property, or interest on mortgages on real property;

- derive no more than 30 percent of gross income from the sale of real property held for less than four years, securities held for less than one year or certain prohibited transactions;
- pay dividends of at least 95 percent of REIT taxable income.

REITs were created to provide investors with the opportunity to participate in the benefits of ownership of larger-scale commercial real estate or mortgage lending, and receive an enhanced return, because the income is not taxed at the REIT entity level. This means that a diverse range of investors can realize investment opportunities otherwise available only to those with larger resources. This opportunity first became available when President Eisenhower signed the real estate investment trust tax provisions into law in 1960. The basic provisions of this law remain unchanged, although there have been a number of improvements to the law over the past 30 years.

The REIT industry has benefited from tax reform initiatives enacted in the 1980s. These initiatives eliminated the incentive of tax-sheltered real estate vehicles and promoted a return to the fundamentals of capital formation and investment in real estate for income and appreciation. A tax change in 1986 allowed REITs to manage their properties directly, and a 1993 change removes a significant barrier to pension plan investment in REITs.

There are more than 300 REITs operating in the United States today. Their assets total in excess of \$61 billion. More than 80 percent of these trade on the national stock exchanges:

- New York Stock Exchange - 147 REITs
- American Stock Exchange - 42 REITs
- NASDAQ National Market System - 12 REITs

In addition, there are dozens of REITs that are not traded on a stock exchange.

The first golf property REIT (National Golf Properties) was formed in 1993 by acquiring much of the assets of American Golf Corporation. Since that time five other major REITs have entered the golf course business or been formed to do the same. These include:

- Golf Trust of America (exclusively golf);
- Patriot American Hospitality (hospitality);
- Starwood Lodging (hospitality);
- Meditrust Corporation (acquired Cobblestone Golf Group);
- Presidio Golf Trust (by Arnold Palmer Golf Management Company).

Performance of the Golf REITs can be measured, but with caution because their history is so short. National Golf Properties (TEE) has risen steadily from

Continued on next page

Good things come to those who wait.

Better things come to those who don't.



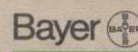
*All incentive items shipped directly to you, not packaged with mini-drums. Prizes do not come attached to product.



It pays to be the early bird with the Mini-Drum Advantage Program. As in the past, it's your opportunity to earn free merchandise just for buying your MERIT® Insecticide and BAYLETON® Fungicide supply a bit earlier. Aside from the great turf, you can expect

even better prizes this year and the ability to collect points for up to two seasons. Watch for your merchandise catalog and program details in the mail or call 1-888-456-MINI.

www.protect-your-turf.com



Hirsh/REITs

Continued from previous page

around \$20 per share in December, 1994 to a high of \$35 in June, 1997 and has since settled back into the \$30-\$32 range since February, 1998. Golf Trust (GTA) is the only other exclusively golf REIT with any history and it's only about 15 months old being initially offered at around \$21 per share and rising to approximately \$32 per share as of May 2, 1998. As of January 12, 1999 National Golf Properties is trading just under \$28/share and Golf Trust is trading at 26 3/8.

Presidio Golf Trust never got off the ground, becoming a casualty of the volatile stock market in mid-1998 and Meditrust announced plans to sell Cobblestone in late 1998. Reportedly, there are as many as six finalists in the bidding to acquire Cobblestone in a process which should be completed in the near future.

GTA and NGP have performed admirably but to date only control a total of 150 courses along with another 100 or less owned by the other REITs. One would assume that with 16,000-plus courses in the United States alone that this is only the tip of the iceberg.

As previously mentioned, REITs are required to return 95 percent of their revenues to stockholders. This comes from the operating leases and rents established partially based on acquisition prices. In a competitive market, this means higher prices and thus, increasing rents to support the acquisition prices. An interesting byproduct of this requirement is that in many instances, existing ownership sells to the REIT and then has the opportunity to 'lease back' the operation. Accordingly, existing owner/managers have the unique opportunity of 'cashing out' and exercise their knowledge of the property, the market and clientele to continue the business growth and continue their opportunity to make a living.

In some cases, this creates a 'partnership' with the lessor (REIT) which may ask the lessee (seller) to accept stock in the REIT as part of the sale proceeds. This can be good or bad, depending on the stock market.

While it may seem that all courses are attractive to REITs, that is not always the case. Most REITs are not interested in proposed construction or in recently opened properties with little or no operating history. REITs are typically interested in properties with positive historical cash flow that can be more accurately projected into the future. This, along with the importance of the potential lessee's ability to meet rental payments would seem to indicate that REITs are typically only interested in properties which are generating positive cash flows, have been well positioned and are in markets with strong future prospects.

Why are REITs paying so much for golf courses? This is a question I often hear.

First and foremost, REITs (and other golf course buyers) are 'paying so much' for courses because there are more buyers with substantial funds in the marketplace than ever before. This creates keen competition

that when combined with favorable interest rates, numerous lenders (compared to 10 years ago) and the continued growth of golf logically and naturally produces upward pressure on golf course values. Additionally, some REITs are cash buyers, meaning there is no debt service in the equation and thus the ability to pay more and make the cash flow grow over time.

In conclusion, what REITs mean to the golf course industry is that there has never been a better time to sell a golf course. As an appraiser, I have seen transactions I never thought possible. As a broker, I have had a buyer offer to pay my commission rather than wait for the seller to list property just so the buyer could get first crack at the property. Golf courses are in the mainstream of the real-estate investment world now and higher quality management and the growth of the game have made Wall Street and the rest of the investment community look at golf much differently (and more positively) than 10 years ago.

Of course, with all this optimism comes a word of caution. Where does this stop? We all know that real estate (like all

Continued on page 81

18 LEADING FORMULATORS AGREE ON ONE THING.



Meth-Ex 40. The nitrogen source of choice for the industry's best fertilizers.

Specially formulated to release nitrogen by hydrolysis and microbial activity, Meth-Ex 40-0-0 delivers

12 to 16 weeks of sustained plant growth.

Guaranteed. For a proven nitrogen source, look for any of the names pictured above. Or call your nearest Meth-Ex 40 dealer.

METH-EX 40

Meditrust

Continued from page 1

ganization will divide most of its other properties into separate real estate investment trusts (REITs), according to the San Diego Union-Tribune.

The reorganization ends an aggressive diversification strategy Meditrust launched last year. Meditrust shares fell 56 percent by mid-November as its debt

soared and the company was enveloped in a broader controversy over special tax benefits derived from its newly acquired status as a "paired-share" REIT, the Union-Tribune reported.

"Obviously the world has not reacted very well to the conglomeration of properties that they accumulated," Husband told the paper. [Several *Golf Course News* calls to Husband and Cobble-

stone were not returned]

"We're trying to keep the company here . . . and we're trying to keep what we've built here," he told the *Union-Tribune*. "[The restructuring] 'has nothing to do with the success or failure of Cobblestone.' Rather, the decision reflects Meditrust's desire to 'return to its roots' and a judgment it would be relatively easy to sell its golf unit.

Cobblestone has nearly

doubled in size in the past year-plus. Before the Meditrust buyout, Cobblestone owned 25 resorts and facilities with 29 courses. The firm now has 45 properties with 50 courses.

According to the *Union-Tribune*, Meditrust's woes began in 1997, when it paid \$383 million to acquire Santa Ana Cos., which operated under an unusual business format known as a paired-

share REIT. The structure allowed Meditrust not only to own real estate, but to also operate businesses through an affiliated company whose shares traded in tandem with the REIT's. Congress outlawed such arrangements in 1984 under provisions of the tax code that let REITs avoid corporate taxes, but a handful of paired-share companies were excepted under a grandfather provision.

Meditrust and Starwood Lodging, another paired-share REIT, drew congressional scrutiny after each company embarked on an acquisition binge that maximized the special tax benefits of paired-share REITs. The strategy was curtailed after a new law restricted Meditrust and others from using the "paired share" REIT structure to make acquisitions.

Starwood Capital is a private investment company established in 1992. It has a number of subsidiaries, including Starwood Hotel and Resorts, "which is now the largest hotel company in the world," said Troon Golf President John Sauter. One of Starwood's holding is Westin Hotels. Troon is Westin's exclusive golf course operator.

"We still have a relationship with Starwood Hotels where we manage golf with them on some joint properties," Sauter said. "Some are properties they own. Some are properties we own. Some a third party owns and both Westin and we manage."

Starwood Hotel and Resorts is a paired-share REIT, Sauter explained. Starwood is in undergoing a restructuring that keeps the REIT, but all future business and transactions will be done within a traditional "C" Corporation. "It has to do with some law changes," Sauter said, "that Congress enacted that said Starwood, Meditrust and Patriot — essentially the three biggest paired-share REITs — could no longer operate under that structure."

Starwood has not made as big an investment in the golf business as Meditrust, Sauter said. Starwood owns numerous hotels that have playing agreements with nearby courses owned by others. But Starwood itself actually owns only about a half-dozen courses.

Commenting on the Meditrust/Cobblestone situation, Sauter said: "It wasn't that Meditrust didn't believe in the golf business. It was that they grew really fast and had some major financing problems that hit them. When this law change took affect, it had a very adverse effect on their capital structure. They need to dispose of some assets. This golf company [Cobblestone] tends to be one of the more liquid, clearly distinguishable businesses that they can sell.

"The other reason they [Meditrust] are getting out is that
Continued on next page



A WALK DOWN YOUR FAVORITE FAIRWAY MAKES YOU APPRECIATE YOUR HARD WORK AND LONG HOURS.

LESCO is there.

Some days everything seems just right. Other days are less than perfect. But one thing is for sure. Building, growing-in or maintaining a golf course presents many challenges. And it's up to you to turn the challenges into opportunities. The problems into solutions.

A business relationship with a company focused on your needs helps. Someone offering service, convenience, technical expertise and value. Someone who

understands what you're up against. Someone like LESCO.

SERVICE. LESCO is there with the most complete line of products available anywhere. Everything from seed, fertilizer, control products and application equipment to flags, cups and markers. Plus so many additional services.

Like custom blending, soil testing, grassing specifications and agronomic program development...just to mention a few.



CONVENIENCE. LESCO is there with 67 LESCO Stores-on-Wheels®, more than 230 LESCO Service Centers® and a variety of direct delivery options. No one makes it easier and more convenient to obtain the products you need...when you need them.

TECHNICAL EXPERTISE. LESCO is there with turf professionals who appreciate the challenges you face and are fully prepared to answer your questions. Turf management and product use recommendations are all part of the job...part of the convenience and service.

VALUE. Put it all together and what you get is an overall commitment from a company dedicated to meeting your needs. That's called value. And value is what that walk down the fairway is all about. Call 800-321-5325. LESCO is there.

LESCO®
GROW WITH US™

Forecaddies

Continued from page 77

D'Alene. "Five hours a round is the norm at resort courses. Here, it's 4:17 a round. With forecaddies, we don't need marshals out on the course. They move play along."

The Seaview program is run by Caddie Masters Enterprises of Fairfax, Va. Caddie manager Kieran Bell said the forecaddies serve a variety of purposes.

"The forecaddies certainly affect speed of play," he said. "They have a local knowledge of the course. They go out ahead of the foursome to spot balls so you eliminate a lot of time spent hunting for stray shots." The caddies also give yardages, rake bunkers, clean clubs, fix ball marks and read greens.

Bell said the Seaview program "is the first time forecaddies have been marketed to a great extent." He added that feedback from players has been positive. The club has rating cards that golfers fill out concerning the performance of their forecaddie and that 90 percent of the ratings have been excellent.

When Seaview went to a cart path only rule on its Pines Course, officials worried about speed of play. The forecaddies have eliminated that fear, said Bartley.

"We were worried that the cart path only rule would add three quarters of an hour to rounds on The Pines Course. But with the forecaddies, the average round

has not gone up significantly."

Beyond the speed of play issue, Bartley said the forecaddies have brought smiles to the resort's maintenance crews.

"The maintenance people are kissing my feet," he said with a chuckle. "Having forecaddies raking bunkers and fixing ball marks on greens really has improved course conditions on a day to day basis."

Bartley said Seaview adopted a mandatory forecaddie program for several reasons.

"We wanted to make the program an added plus for golfers here. And, it just wouldn't have worked had we allowed golfers to an option. What if the four-some ahead of you didn't have a forecaddie and you did. It would have made for some uncomfortable moments on the course."

Seaview toyed with the idea of installing laser yardage finders in its golf carts. "But that just didn't fit with what Seaview is. We wanted a person dealing with the customer and that's what the forecaddies do for us."

Bartley said that while he has fielded some complaints about mandatory use of forecaddies, the vast majority of comments have been favorable.

"I've had a few people say they didn't want a forecaddie because they weren't comfortable having somebody watch them play," said Bartley. "But the majority of people have enjoyed the experience."

Bartley said some 1,200 people were interviewed for the Seaview program with 275 hired.

"The biggest challenge we have is maintaining a consistency among our caddies."

See us in Booth #3483
at the GCSAA
Show



IF YOU THINK LOCALIZED DRY SPOTS
LOOK BAD ON THE GOLF COURSE,
IMAGINE HOW THEY REFLECT ON YOU.

Hirsh/REITS

Continued from page 79

businesses) goes in cycles. With such a low percentage of golf courses under professional management, it would seem that there are many opportunities. Can the golf boom go bust? Some say when the economy slows down the leisure dollar will be the first affected. This is tempered by those that note the extended period of time needed to add to the supply of golf courses where there aren't now enough. Nobody knows. If you're a golf course owner looking to sell, examine any proposals carefully and make sure it's right for you. If you're a buyer in the golf course market, plan on competing with 'the big boys.'

Meditrust

Continued from previous page

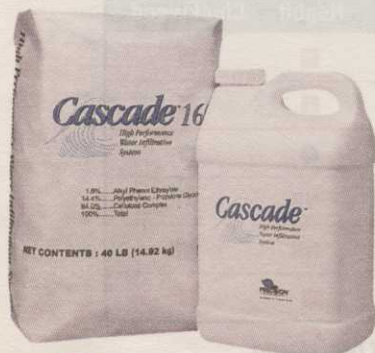
they got confusing to the market and analysts. They were initially a health-care REIT, then they started buying hotels, then they bought this golf company. So they have these three different businesses operating within Meditrust right now. The stock market is saying 'Get out of the health-care and golf business and go back to being a core, middle-market hotel company.'

Meditrust plans to sell up to \$1 billion of assets, including Cobblestone and Santa Anita, to pay down about \$525 million in debt, the *Union-Tribune* reported.

GOLF COURSE NEWS

Everyone depends on you to keep the course looking healthy, lush and green. Now there's a breakthrough in wetting agent technology that can keep you from turning red—*Cascade*™, the proven high performance water infiltration chemistry from Precision Laboratories. In fact, rigorous university tests show that *Cascade* fights hydrophobic soil conditions and eliminates LDS for months. Tests also show that *Cascade* promotes faster, deeper water penetration throughout the root zone for improved turf color and quality. And because *Cascade* controls LDS better and longer, it saves you money, time and labor compared to conventional wetting agents that can require monthly, weekly, even daily applications and more frequent irrigation.

Now you can find out if the localized dry spots on your golf course are caused by hydrophobic soils with our *Soil Test Kit Offer* below. Included in this offer is a detailed independent lab analysis, which will provide you with the information needed to develop the most effective management program possible. So don't let LDS color your reputation. Instead, let *Cascade* help you manage healthy turf that you—and everyone else—can be proud of.



www.precisionlab.com

©1999 Precision Laboratories, Inc.
Cascade is a trademark of Precision Laboratories, Inc.

Cascade

Call 800-323-6280 for more information,
or for a Cascade distributor near you.

Evaluate Your Soil for LDS and Save up to \$35

Order a LDS Soil Test Kit for only \$15 (regularly \$25). The kit will help you evaluate your soil for LDS conditions, and the price of the test kit includes independent lab testing. We'll also include a \$25 cash refund good on your first purchase of 5 gallons/bags or more of *Cascade*. That's a total savings of \$35. So order yours today!

Offer Expires 9/30/99.

2GCN

Just call toll-free 800-323-6280, or complete and mail this form with a check made payable to:

Precision Laboratories, Inc.
P.O. Box 127
Northbrook, IL 60065-0127

Please Print Name _____

Title _____

Name of Golf Club _____

Address _____

City _____

State _____ Zip _____

Phone No. () _____

CIRCLE #154/GCSAA BOOTH #3483 & 3583

University clubs

Continued from page 77

university club organization with the extensive resources of the Palmer organization."

According to Paul Degenhart, chief operating officer of UCA, the new relationship with Palmer will help to expand the vision that UCA set out to create with their first club at the University of South Carolina in 1993. "The Palmer

partnership will help us expand the number of projects that we can handle by bringing their organizational and operational skills, and financial resources to the table." Joe Redling, chief operating officer of Palmer Golf, is equally optimistic. "This partnership will work because UCA has the credibility and access to the university community, and we share a commitment to exemplary

service and quality standards."

Growth of the University Club network is a primary goal for the new partners. Degenhart projects that UCA-Palmer will build 20 courses over the next five years.

Construction is about to commence at another UCA-Palmer project at the Auburn University Club in Auburn, Ala., and letters of interest to construct additional clubs have been signed with

Vanderbilt University in Nashville, Tenn., the University of Louisville in Louisville, Ky., and the University of Kentucky at Lexington. UCA-Palmer has a half dozen more projects pending with other schools including the University of Tennessee and Texas A&M.

UCA customizes each club design and operation to meet the specific theme and need of each university client. At each school,

UCA integrates campus architecture into each clubhouse design and creates club-specific logos. For example, the theme of the new club at Auburn University will be "a new habitat for tigers" and the golf course is being designed by Auburn graduate and golf course designer, Bill Bergen. Further, UCA creates membership programs that support the particular profile of existing alumni and their geographical dispersion.

Although the University of Louisville club has yet to break ground, the school is noticing the benefits. "This has been a good business decision for the university, we have earmarked the profits to create 22 new scholarships and the response from alumni has been overwhelming," says Tara Singer, assistant vice president for alumni relations.

K-State

Continued from page 77

general manager at a country club."

Bakalar says the course management program was one reason he stayed at K-State after his parents moved from Lenexa to North Carolina a few years ago. "It's a one-of-a-kind program," he said.

Erick Horton, a senior from Overbrook, said: "I thought the program would be a great opportunity to get involved in the golf industry. My dream job would be golf superintendent at Augusta National, where the Masters is played." His resume currently includes jobs at his hometown course and at the Manhattan Country Club.

Horton and fellow students are particularly excited about the internship components of the program. Students are to complete two internships. One will be in turf management at Colbert Hills Golf Course, the 18-hole, PGA-caliber course now under construction in northwest Manhattan. The second will be in golf course management or food service/hospitality operations at a Tournament Players Club or other select courses in the United States.

"The upperclassmen in the program will serve internships on Colbert Hills starting in the spring, probably working on course construction," Fry said.

Scheduled for completion in spring 2000, Colbert Hills also will include a clubhouse, nine-hole teaching course and driving range. The golf course was spearheaded by SENIOR PGA Tour golfer Jim Colbert, a K-State alum. The course is being built through a partnership with the university, PGA TOUR GOLF COURSE Properties Inc. and the GCSAA. Additional support is being provided by the John Deere Company and Rain Bird. For more information, contact 785-532-1430.

We'd like to show you the weeds PENDULUM® controls. But they never showed up.

The reason they never showed up? Because PENDULUM® herbicide is a highly effective preemergent turf herbicide. Compared to the competition, PENDULUM demonstrates a higher level of control across a broader spectrum of weed species. With PENDULUM, weeds won't ever see the light of day. For the PENDULUM herbicide distributor nearest you, call: 1-800-545-9525, Ext. 1676.



PENDULUM offers unsurpassed weed control								
Herbicide	Crabgrass	Goosegrass	Foxtail	Poa Annua	Oxalis	Spurge	Henbit	Chickweed
PENDULUM	■	■	■	●	■	●	■	■
Barricade ^a	■	●	●	●	▲	●	■	■
Dimension ^b	■	●	■	●	■	●	●	●
Team ^c	■	●	●	●	●	●	NR	NR
Ronstar ^d	●	■	NR	●	●	NR	NR	NR
Surflan ^c	■	■	■	●	▲	●	■	■

Level of control

● Medium

▲ Medium-High

■ High

NR Not registered

^aNovartis

^bRohm and Haas Co.

^cDow AgroSciences

^dRhône-Poulenc



® Registered Trademark, American Cyanamid Company © 1998 Always read and follow label directions.

The Power of Cyanamid Pendimethalin

**HOWARD JOHNSON'S PROMOTES ERNST**

MILWAUKEE — Howard Johnson's Enterprises, Inc. has announced the promotion of Joe Ernst to director of commercial sales and technical services. Ernst will be responsible for the management of all commercial sales and marketing for the company. Ernst, who brings 18 years of experience to the job, has been named employee of the year. Jerry Schroeder, previously with the Van Diest Supply Company, has been named territory manager Western region. Schroeder will be headquarter in Kearney, Neb.

AMERICAN EXCELSIOR'S CABALKA REAPPOINTED TO ASTM

ARLINGTON, Texas — American Excelsior Company, a manufacturer and distributor of erosion control products, including Curlex excelsior blankets, reports that Dwight Cabalka has



Dwight Cabalka

been reappointed as chairman of the ASTM subcommittee on Erosion Control Systems, D18.25, Sediment and Erosion Control Technology.

Created in 1996 with Cabalka serving as its first chairman, subcommittee D18.25 is contained within Committee D-18 on Soil and Rock. According to the International Erosion Control Association (IECA), subcommittee D18.25 is responsible for developing standards for erosion control materials and systems based on the ASTM process.

CARNEY BRINGS EXPERIENCE TO GROWTH PRODUCTS

WHITE PLAINS, N.Y. — Growth Products Ltd. has added Patrick Carney to its staff of technical sales representatives. Carney's territory will encompass the states of Kentucky, Indiana, Illinois, Iowa, Wisconsin and Minnesota. Prior to his hiring at Growth Products, Carney was a Certified Golf Course Superintendent at Owl Creek Country Club in Anchorage, Ky. The Indiana University Southeast graduate has held similar positions at various courses throughout Indiana and Kentucky.

NATURE SAFE NAMES GARCIA AS NEW REGIONAL MANAGER

COLD SPRING, Ky. — Nature Safe Natural & Organic Fertilizers has named Vic Garcia as its new regional sales manager. Garcia will be in charge of the Midwest and Northwest Regions. He has over ten years experience in the turf industry. Garcia resides in Fishers, Indiana.

Scotts reshuffles the deck, turns to distributors for golf market

MARYSVILLE, Ohio — Scotts Company has reorganized its North American Professional Business Group, a move the company said will strengthen distribution and technical sales support, integrate brand management across market segments, and reduce annual operating expenses by approximately \$2.1 million.

According to Scotts, the savings will be equally split between reduced head count and lower shipping costs.

In mid-December, Scotts' ProTurf division head count was winnowed from approximately 100 to 40 employees, a reduction of 60 percent.

In turn, Scotts will now sell into the golf market via four independent distributors: Turf Partners, Inc., a subsidiary of Eco Soil, in the Midwest and Northeast; BWI Companies, Inc. in the Southwest and Southeast; Wilbur Ellis Company in the Pacific Northwest, and Western Farm Services, Inc. in California.

"We've maintained some of those

people for the Tech Rep. group to work with the distributors," said Kristen Bibby, Scotts' manager of its investor relations office. "So there will still be tech reps, but it will be a Scotts' tech rep. working with a sales person from the distributor."

Scotts is retaining a field sales force and field-based technical group to provide distributor training, address questions from customers, and maintain involvement in university trial work.

The reorganization consolidates several prior divisional marketing, sales management and customer service, into a single group staff. In addition to cutting costs, the consolidation integrates brand management across all customer segments in the Professional Business Group for the first time.

Scott Todd will lead the new Turf and Ornamental Organization. Most recently Todd was vice president of the horticulture division within Scotts' Professional Business Group.

JAMES HAGEDORN NAMED TO NEW POSITION AT SCOTTS

MARYSVILLE, Ohio — The Scotts Co. has named James Hagedorn to the newly created position, President, Scotts North America.

Hagedorn, 43, will be responsible for directing the sales, marketing and operations of Scotts' North American Consumer Lawns, Consumer Gardens, Consumer Growing Media and Professional business groups; the newly formed Consumer Pesticides Business Group; and the Business Process Development unit.

In addition, Hagedorn continues as a member of the board of directors. Hagedorn most recently served as executive vice president, Scotts' U.S. business groups, having joined the company in 1995 following its merger with Miracle-Gro.



John Deere opens \$38 million skid steer operation

LOUDON, Tenn. — John Deere's Worldwide Commercial & Consumer Equipment Division has opened a new, \$38-million business operation incorporating engineering and assembly 30 miles southwest of Knoxville, Tenn.

The 300,000-square-foot Commercial Worksite Products (CWP) facility will house production of the company's new line of skid steers, the first designed and delivered by John Deere.

Deere plans to market the new line of skid steers into the golf market, as well as the landscape, rental, nursery and seed and sod markets.

"With our long experience in the skid steer business and our engineering and manufacturing expertise, we felt it was time for us to design and build the product ourselves," said Chuck Mogged, general manager of the CWP business.

Continued on page 87

Toro teams with ProShot

Adds GPS to its stable

By MICHAEL LEVANS

MINNEAPOLIS, Minn. — Toro has added a critical piece in its effort to solve the technology puzzle with the inking of its alliance with ProShot Golf, a provider of GPS-based information and communication products to the golf industry.

According to the agreement, Toro becomes an equity partner in ProShot and will share engineering expertise and gain access to its distribution network. ProShot will assist in the integration of GPS technology into Toro equipment and provide support to the golf course owners, managers, and superintendents.

The goal, said Toro, is the development of a modular, desk-top-based, course-wide decision-support system for turf and irrigation.

"ProShot has taken a practical application within our market, tracking golf carts, and they've made that work," said Debra Bly, new technologies marketing manager for Toro's Center for Advanced Turf Technology, an internal think tank consisting of agronomists,

'GPS is just one of the many enabling technologies that go into a semi-autonomous vehicle.'

—Toro's Debra Bly

engineers, plant nutritionists and marketing people designed to cross the boundaries of Toro's professional business group. "We can take that and build on it instead of trying to build on other applications we've looked at in other industries."

"GPS just happens to be one of the technologies you might use to help solve customer problems," said Dana Lonn, director of the Center.

A first step, said Lonn, could be the integration of ProShot's GPS technology with Toro's GIS-based T-Map, the electronic map utilized in Toro's irrigation control.

"With T-Map we can tell the superintendent where the sprinkler heads are because they don't move around," said Lonn. "Now the ProShot component will allow us to track things that are moving around the course. You can bring that information back via radio, real-time, with bi-directional radio link to all those machines. You can now move data out from the central computer onto the golf course then move it from the course back to the central."

Today that technology is used primarily for cart location and player interaction with the clubhouse. Lonn suggests that the information could

Continued on page 87

Pursell expands plant capacity, all markets on the move

By MICHAEL LEVANS

SYLACAUGA, Ala. — Pursell Technologies Inc. (PTI), the supplier of the Polyon fertilizer coating technology, has quadrupled the capacity of its existing plant that handles production for the company's golf, agricultural, horticultural and consumer market segments.

According to David Pursell, president and chief executive officer of PTI, the company has added higher-capacity equipment, enhanced existing equipment and constructed new rail lines and shipping facilities as part of the expansion.

"In the first and second quarter of the year, the spike of need

shoots up," said Pursell. "Since we're supplying all of these markets, we need to handle large volumes of product. You can handle it two different ways: through capacity or through storage/inventory. You want to maximize your inventory turns, so if you have a lot of capacity you can run your inventory 'just-

in-time' and ship it out the door. If something doesn't move you just have to sit on inventory for a long time."

Although this recent re-investment is directly linked to the growth of all its market segments, it's been Pursell's consumer business that has seen

You want to maximize your inventory turns, so if you have a lot of capacity you can run your inventory 'just-in-time' and ship it out the door.

—David Pursell

the biggest spike.

"On the consumer side, Pursell Industries [a separate company that manufactures for the consumer side] has formed a partnership with Bayer, which is getting ready to enter the U.S. lawn and garden market. Pursell Industries has inked an exclusive supply agreement to handle all of Bayer's controlled release," said Pursell.

To help pave the company's entry into this new segment, Bayer plans on spending more than \$20 million on consumer advertising.

"With consumer, golf and our other segments growing, we have to keep up with the demand of Polyon. So, instead of going to a new location and building a new plant, we decided to reinvest in the site we have. We have one plant that we're pumping all this product through. The more product you put through, the lower your cost becomes," said Pursell.

The company's next plant will probably be built on the West Coast in the next 18 months, Pursell added.

...

In other Pursell news, the company is getting ready to ink arrangements with distributors and formulators in the European golf market. "We've been a little more reactionary than proactive on the European front," said Pursell. "The golf side is growing over there, but slow release, except in horticulture, is truly in its infancy."

1999

New England Regional Turfgrass Conference & Show

March 2-4, 1999 Rhode Island Convention Center Providence

A Combined Six States Show...

Show & Conference Pass Includes

- Opening Reception
- Admission to Trade Show
- Educational Sessions
- Keynote Speaker
- Show Reception
- Luncheon Voucher(s)

Over 350 Turf Related Booths Await You...

Meet professionals on the cutting edge of turf management. See the latest in equipment, products and supplies. Join fellow lawn, golf, sports, landscape, municipal and other turf industry professionals.

GCSAA/ETONIC SEMINARS:

Monday, March 1 • 8am - 4pm

Negotiating Employment Contracts and Estate Planning

TRADE SHOW HOURS:

Tuesday, March 2 • 4pm - 7pm

Wednesday, March 3 • 10:30am - 2pm / 4pm - 6pm

Thursday, March 4 • 10am - 2pm

EDUCATIONAL SESSION HOURS:

Tuesday, March 2 • 9am - 4pm

USGA Seminar & Keynote Speaker

Wed. & Thurs., Mar. 3 & 4 • 8:30am-11am • 2pm-4pm

Informative Presentations

- Golf Course Management • Lawn/Landscape Care
- Athletic Field & Municipal Turf Management
- Equipment Management • Student Career Seminar

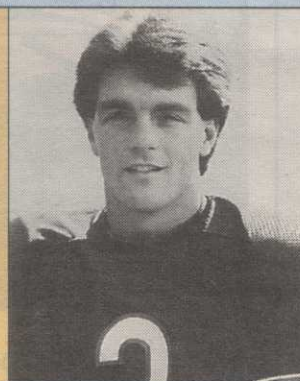
Certification Credits

Pesticide Applicators Recertification Credits have been requested for all New England states.

**Keynote Speaker
March 2nd**

Doug Flutie

*Quarterback for the
Buffalo Bills*



Presented by:

The New England Regional Turfgrass Foundation
in cooperation with the University of Rhode Island
and the University of Massachusetts

*for the benefit of the New England Golf & Green Industries. Proceeds
dedicated to the support and development of turf research and education.*

China looking more green

GUANGZHOU, China — China's turf business is expected to grow by 40 percentage points annually over the next few years according to a study by Han Liebao, head of the lawn research center of the botanical college at China Agriculture University.

Growth projections are based upon the increasing number of golf courses, airports, highways and parks that are being built. Han estimates that China currently needs around 300,000 tons of grass seed annually.

Local planters are working hard to meet the demand and are reaping the benefits. A square meter of sod can generate up to 5,000 yuan (\$600) which is two to three times more income than a comparable crop of rice.

Watch your mail for your registration form or call
(401)848-0004 or visit us online at **www.NERTF.org**

Lofts donates to Peter Selmer fund

NEW BRUNSWICK, N.J.—Dr. Richard Hurley, executive vice president of Lofts Seed, recently acknowledged the company's commitment to turfgrass research at Rutgers University by presenting a check in contribution to the Peter Selmer Lofts Scholarship Fund.

The check, which totaled \$575,000, was presented to Dr. Bruce Carlton, Executive Dean, Cook College/Rutgers University. This represented royalties paid to Rutgers on the 1997 production of Lofts Seed varieties that were developed in cooperation with Rutgers University.

Since 1982, Lofts has paid a total of \$6,389,251.28 to the Rutgers University in support of their leadership in turfgrass development.

Century Rain takes Koonz Sprinkler

MADISON HEIGHTS, Mich.—Century Rain Aid, a wholesaler of landscape irrigation and landscape specialty products, has announced the purchase of the turf irrigation division of Koonz Sprinkler Supply, a major New England distributorship.

Koonz Sprinkler Supply was founded in 1965 by Bill Koonz, Sr., who expanded the company to seven locations throughout New Jersey and eastern Pennsylvania. The branches are situated in Berlin, Egg Harbor Township, Rochelle Park, Springfield, Toms River and Wall Township, N.J., and Westchester, Pa.

Koonz Sprinkler Supply was among the oldest and best-known regional distributorships in the U.S. Under the terms of the acquisition agreement, Koonz will continue to operate Koonz Golf Supply, a Rain Bird golf distributorship in Springfield, N.J.

Century has expanded operations on the East Coast over the last year and has acquired or opened ten new locations throughout Connecticut, Massachusetts, New Jersey and Pennsylvania.

Century Rain has acquired or opened more than 40 branches in 23 states and Canada in the past two years.

BASF forms TopPro Specialties

RESEARCH TRIANGLE PARK, N.C. — BASF Agricultural Products Group and Micro Flo Co., a subsidiary of BASF, will join their specialty and professional products businesses to form TopPro Specialties.

"By consolidating complementary product lines for turf, pest control operators [PCOs], horticulture and homeowners," said BASF Group Vice President Hans J. Loose, "we can serve our customers more effectively."

According to Micro Flo Presi-

dent Buddy Formby, "For the first time, BASF and Micro Flo will specifically dedicate field sales staff to the turf and ornamental business segment."

TopPro Specialties began operations Jan. 1, and will have its headquarters in Memphis, Tenn.

YAZOO/KEES TO ACQUIRE HCC'S DIG-IT

JACKSON, Miss. — Yazoo/Kees Power Equipment has signed a letter of intent to acquire HCC's Dig-It tractor and towable backhoe products, the Huskie utility vehicle product line and the Power King product line.

Manufacturing of the three lines will be moved to the 166,000 square foot Yazoo/Kees facility and corporate office location in Jackson.

QUELANT™-Ca

Calcium & Amino Acids

CALCIUM DEFICIENCY CORRECTOR

Addition of calcium to the soil by traditional means is not usually efficient or effective in treating the calcium deficiency of turfgrass. Once applied, the common forms of liming materials can rapidly change to compounds that are insoluble in water and not readily available to the plant. Continuous applications over long time periods are necessary to effect even modest improvements in calcium uptake.

Quelant™-Ca is a newly available amino acid chelated calcium product that corrects calcium deficiencies in turfgrass upon application. Quelant™-Ca provides readily available calcium chelated with amino acids so that it is easily absorbed by the leaves and/or the roots of the plant regardless of most soil and water conditions. The unique formulation of amino acids used for chelation was



developed not only to facilitate absorption by the leaves and roots, but to increase mobility of the calcium within the plant as well.

Quelant™-Ca is normally applied as a foliar spray and may also be applied through fertigation. Either way, it is tank-mix compatible with herbicides, soluble fertilizers, insecticides, fungicides and plant growth regulators. It will even help improve the efficiency of most of these treatments by increasing their absorption and translocation within the plant.

Best of all, Quelant™-Ca is economical to use and it protects the environment.

Quelant™-Ca — a true systemic. It's new...it's unique...and nothing else works quite like it!

For more information about Quelant™-Ca call
Nutramax Laboratories' at: 800-925-5187



The Nutritional Company
nutramax
LABORATORIES, INC.
AGRICULTURE DIVISION
Baltimore, Maryland



Asian market perspective: E-Z-GO's Dan Boling weighs in

Dan Boling is manager of Asian sales for E-Z-GO. Based in Singapore, Boling recently oversaw equipment contracts with two courses in China and a further two in India. As an insider of the Asian golf market, Boling was recently in conversation with *Golf Course News's* Trevor Ledger.

GCN: What is your perception of the state of golf in Asia right now?

BOLING: This economic crisis has affected all sectors in the golf industry

regardless of whether it's machinery, irrigation, golf carts, designers — it's had an effect on everybody.

I don't think this is something that will change in the next three to six months, this is going to take some time to sort out but it's a cycle and we feel that it will only be a short period of time before it starts to turn around.

GCN: Do you have a timeframe in mind?

BOLING: My opinion is that we haven't

QA

really hit bottom yet in some of the countries. I think that may happen around the first part of next year, and that will be a period of what I consider "flat line."

After that point, it should start to work its way back up and I would hope that would happen some time around the end of 1999.

GCN: You have just closed two deals in India and two in China. Are these the major markets in Asia right now?

BOLING: India, of course, is just coming on board. China did so a couple of years ago. China is now only second to Japan as a market for golf cars in Asia.

GCN: What happens next for E-Z-GO in Asia?

BOLING: We know this crisis is part of a cycle. We are in it for the long run and have developed new models which have considered specific designs for the Asian market.

I think that with the overall economic situation, the customers will remember who continued to service them instead of abandoning the region.



Dan Boling

GCN: What effect has the formation of Textron Turfcare and Specialty Products had on E-Z-GO in Asia?

BOLING: They are still undergoing their changes and we are not directly affected as yet. There is a turf side to Textron and a golf car side.

GCN: Do you foresee the success of E-Z-GO in Asia being used as a springboard for other members of the group such as Ransomes or Jacobsen?

BOLING: Already my office here is combined with different divisions of Textron. Although we are in different parts of the industry we are able, due to sharing an office, to look at each other's different types of business.

GCN: With the devaluation of many currencies in Asia, are the management companies taking advantage of cheaper property prices?

BOLING: It seems as though they might well be waiting for the market to hit rock bottom. A lot of people are looking and I would say, yes, there will be some purchases by foreign investors but I don't think the market has flat-lined yet.

GCN: When that low point is reached how do you see the new market emerging?

BOLING: I think that it will be a more cautious and mature market, but Asians love golf.

As a matter of fact, what most people aren't talking about is the fact that the golf courses are getting more play than they ever have.

Obviously the rates are cheaper now and, although we are not seeing much construction, there are enough golf courses in Thailand, for example, to allow people to get on a golf course quite easily.

Although the market is being hit by the economic situation, I think everyone agrees that golf is actually growing. There is still very positive growth in people playing.

GCN: So the crash has, in effect, allowed the market the opportunity to emerge in a much healthier state?

BOLING: Exactly, I believe so. The amount of people playing right now is proof that the sport is going to continue to grow and the reduction of green fees has lead the managers to realize that they need to keep them within the grasp of the average person.

When the tournaments are played — the Johnnie Walker Classic in Thailand, for example — I am sure you will see a very large crowd because the interest is still there.

GREEN LAWNGER™

Instantly Restores The Color To Dormant Or Discolored Turf!

Green Lawnger™ Turf Paint from Becker-Underwood is the fastest way to restore the natural green color to turf which is dormant, discolored or damaged.

Ideal for golf courses and sports turf! Green Lawnger helps keep fairways, tees and greens looking healthy and lush. Revitalizes worn areas of stadium turf and brightens up stressed or overplayed fields.

Easily applied with many types of sprayers, Green Lawnger blends in beautifully with most grasses. Won't wash or wear off.

Call or write for more information!



BECKER UNDERWOOD INC.
THE COLOR OF INNOVATION™

801 Dayton Avenue
Ames, Iowa 50010 U.S.A.
515-232-5907
Fax 515-232-5961

Toll-Free 1-800-232-5907

CIRCLE #164/GCSAA BOOTH #3161

Performance, value and versatility: All par for the course.

As a mowing machine, the front-wheel drive Steiner 230 offers superb performance, durability, traction and stability. But that's only half the story. In less than five minutes, a wide range of Quick-Hitch™ attachments enable your 230 to become nearly any kind of maintenance machine you can imagine. You can sweep, blow, grade, aerate and more. And, every Steiner attachment is exceptionally easy to use, designed for maximum productivity and built to last.

On fairways, nothing cuts like a Steiner. And, when the going gets rough, nothing works harder. For the ultimate in quality, versatility, performance and long-term value, take a closer look at an all-around champion. Visit your Steiner dealer today.

STEINER

A turf tractor with a different twist

STEINER TURF EQUIPMENT, INC.
289 N. Kurzen Rd. • P.O. Box 504 • Dalton, OH 44618 • Phone: 330/828-0200 • www.steinerturf.com

Mfg. in Dalton, OH

CIRCLE #165/GCSAA BOOTH #1251

ABT/integration

Continued from page 1

United States."

In its wake, the small, independent seed companies, which once dominated the market, are left to ponder the idea of selling. Those that remain independent could eventually be relegated to the sidelines, jumping into the game only to fill the gaps ABT has left uncovered.

"They are a force," said Turf-Seed/Tee-2-Green's Tom Stanley. "They probably have half of the forage and turf market under their control. We just have to find our niche and be one of those companies that do well in niche markets. Whatever crumbs are left over we'll be there to pick them up."

"Consolidation of the industry isn't really that bad," said Tom Pape, vice president and general manager of Seed Research of Oregon. "Hopefully what will happen is that the margins will improve in our industry, taking some of the smaller brokers out of the picture."

ABT Acquisitions: Since January 1995, ABT has acquired 33 companies in the sector, and has three pending acquisitions it expects to close soon. As a result of the acquisitions, ABT is now the sixth-largest seed company in the world and the largest forage and turfgrass seed company with \$475 million in annualized net sales.

Some of the familiar names that have been acquired by ABT include Lofts Seed, Germain's, W-L Research, E.F. Burlingham & Sons, Olsen Fennell Seeds, Seed Corporation of America, Green Seed, Willamette Seed Company, Peterson Seed Company, Kinder Seeds, Zajac Performance Seeds and Van Dyke Seed.

ABT has acquired other seed and seed-related businesses that focus on and serve golf course superintendents in the West and Southwest: Las Vegas Fertilizer and Garden West Distributors.

"ABT's acquisition plan called for building a large, vertically integrated company with a national platform in production, distribution and research and development [R&D]," said Dr. Johnny Thomas, ABT's chairman and chief executive officer. "We are proud of all our acquisitions because they share our vision and each bring strong components to our platform."

Deere/Skid Loaders

Continued from page 83

ness unit. "As we place more emphasis on commercial and golf and turf products to increase sales overall, skid steers represent a natural outgrowth of our Division."

The new line of skids is comprised of four models: the 240, 250, 260 and 270. They will feature Deere's patent-pending vertical lift system, a 45-degree dump angle, 35-degree bucket rollback and a sloped rear deck for 360-degree visibility.

Integration: According to ABT, the company is now transitioning to the integration of acquired companies. To be called "Project ABT," the company is about to organize its acquisitions and assets into a single, customer-driven, team-based business.

The plan was created using cross-functional employee teams, while organization and implementation plans are being finalized by other such teams. Implementation will begin over the next weeks and months and accelerate during the process.

ABT NAMES BLUM TO NEW POSITION

HENDERSON, Nev. — AgriBioTech Inc. (ABT) has named Tony Blum to its newly created position of vice president, director of communications, planning and development. Blum will report to Kent Schulze, president and chief operating officer. Blum joined ABT in February, 1998 following service in market research, planning and communications positions at the former Northrup King Co., now part of Novartis Seeds and Mycogen Seeds. He has also held management positions at Jefferson Davis Associates Inc. and Marketing Directions, both marketing research firms.

ABT RAISES \$15 MILLION IN CONVERTIBLE DEBT

HENDERSON, Nev. — On January 4, AgriBioTech reported that it raised \$15 million in long-term debt that it will use to pay off short-term debt, complete pending acquisitions and boost working capital. AgriBioTech said the debt is convertible into stock at a fixed, undisclosed price. The company said details of the financing will be made available once the offering is completed. The company is seeking to raise money through debt and equity and it's also trying to sell a stake in itself of at least 20 percent. In October, the company hired Merrill Lynch & Co. to help find a buyer. A month later, it hired Deutsche Bank Securities — whose parent, Deutsche Bank AG, is one of AgriBioTech's creditors — to help also.

"Our overriding goal for 'Project ABT' is to create the most customer-focused, customer-driven company in the seed industry because we know that if our customers succeed we will too," said Kent Schulze, president and chief operating officer of ABT.

With integration will come the question of company/brand identity. According to ABT, it will hold firm with some existing company brands and plans to

launch new, ABT brands.

"We have strong brands, and we respect and are grateful to the former owners for creating these strong brands," said Schulze. "We intend to use some of these strong brands going forward to take advantage of the equity in them and also create a strong ABT brand. ABT will use our existing and new brands to achieve our strategic goals in the various channels in which we compete."

As far as its goals are concerned, ABT management said it planned to first achieve a 45-percent market share; second, reach \$500 million in sales by 2000; and third, acquire an industry-leading elite germplasm and R&D position. The company said it's two years ahead of its original plan in achieving the first two of these goals, and has achieved the third.

"We want to create the kind of R&D-based seed company that brings improved products to the market so that custom-

ers' needs are served," said Thomas. "Our products of the future will in all likelihood cost more, because of our R&D investment in them, but we believe our customers will benefit. We want to bring the R&D and biotechnology revolution and all the good things that it means to turfgrass users in the United States."

"It has changed the way our industry will operate forever," added Seed Research's Pape.

Toro/ProShot

Continued from page 83

eventually aid irrigation, control spraying, or assist sensors measuring course status, such as moisture and plant nutrition.

While an autonomous or semi-autonomous vehicle controlled from the superintendents' desktop might be a few years away, Lonn and Bly certainly aren't ruling out the development of such a device.

"GPS is just one of the many enabling technologies that go into a semi-autonomous vehicle," said Bly.

"That definitely falls into our

"It's like buying a home computer system," said Lonn. "You buy the base and you'll be able to plug in what you want."

— Toro's Dana Lonn

course," said Lonn. "The most difficult problem that no one has solved yet is the collision avoidance problem. But I don't think GPS is quite accurate enough to get you what you need."

In the meantime, Lonn said that Toro's Center for Advanced Turf Technology will be working to add modules that will allow superintendents to use technology to make better decisions around the course.

"It's like buying a home computer system," said Lonn. "You buy the base and you'll be able to plug in what you want."

"You do this in pieces," added Bly. "It's constantly evolving."

First in Versatility, Dependability, and Reliability

AERA-vator®



FIRST
PRODUCTS INC.

*The Tool
Versatile
Enough for
Golf Course
Aerification,
Seeding or
Renovating*

"We were in need of aerating our new 27-hole golf course and the native soils to the north being sandy/rock, I was ruining the bearings on our crankshaft style machine. Luckily I requested a demo of the AERA-vator and found the right tool to help our situation. It loosened the soil, gave it the much-needed air and pushed some rocks down without disrupting the playability. I ordered one immediately for our course and have implemented a program exclusively for the AERA-vator. I also like the durability of the tines, it saves us time and effort which translates to dollars. Thanks again for such a great product."

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

First Products Inc., Tifton, GA
1-800-363-8780, from GA call 912-382-4768

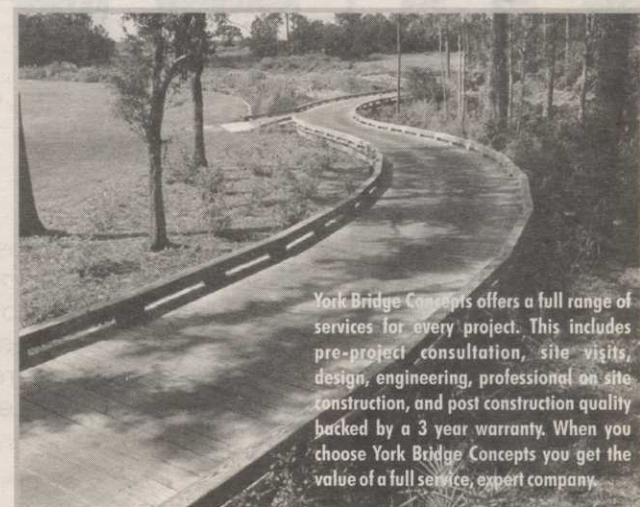
CIRCLE #172/GCSAA BOOTH #3748



TIMBER BRIDGE SOLUTIONS

YOUR FULL SERVICE TIMBER BRIDGE COMPANY.

*Vehicular Bridges, Pedestrian Bridges,
Covered Bridges, Shelters, Gazebos,
Boardwalks, and Retaining Walls*



York Bridge Concepts offers a full range of services for every project. This includes pre-project consultation, site visits, design, engineering, professional on site construction, and post construction quality backed by a 3 year warranty. When you choose York Bridge Concepts you get the value of a full service, expert company.

Southern USA Northern USA Western USA
(800) 226-4178 (800) 383-0555 (800) 474-4990

Visit our web site for more information: www.ybc.com

CIRCLE #173/GCSAA BOOTH #3753

Cornish and Graves: It's all here

GOLF COURSE DESIGN

GEOFFREY CORNISH AND ROBERT MUIR GRAVES

By MARK LESLIE

Golf Course Design by old friends and colleagues Geoffrey Cornish and Robert Muir Graves is golf's equivalent to those PBS shows — you know, Bruce Springsteen and Friends, or Plug-in-a-Bigtime-Name and Friends.

Two elder statesmen of golf design, Cornish and Graves, have basically taken their traveling road show (presented in the far corners of the continent from Harvard University westward), spiced it up with chapters from various other experts of note, and squeezed it all into 446 highly informative pages.

You want to know about "The Game and the Course"? It's here, explained in seven chapters. You want to know about "Construction and Grow-in"? It's here in seven more chapters. You want to know about "The Business of Golf Course Design"? It's here in four chapters.

"I emphasize," said Cornish, "that this work is not intended to compete with [Dr.] Mike

Hurdzan's magnificent *Golf Course Architecture*. Our book is a mundane textbook and reference work, in part intended to influence future generations."

Many landscape architecture instructors, he said, "find they must devote a few weeks to course design because their graduates will often encounter a golf course in their future master plans. Many of these instructors attend our seminars and have used our notes but apparently needed a textbook."

Cornish and Graves, who between them have designed hundreds of courses in North America, start at the beginning: The history of golf and golf course design. Then they take us through the steps, whether they be broad-based (planning the course; selecting the site and routing the course; designing a golf hole; planning major changes and practice facilities; building the course) or specific (drainage, irrigation, turfgrass

selection). Finally, they cap it off with the business side of the industry (financing, permitting and monitory, even training the golf course architect).

What they are not expert in, they have called on their "Friends" for assistance. Here's Audubon International President Ron Dodson contributing on planning the course; Kenneth DeMay, FAIA, on planning adjacent real estate; architect Bill Amick on short courses and Cayman golf; James McBarrett on irrigation; Dr. Norm Hummel and United States Golf Association (USGA) agronomists John Foy and Jim Moore on grassing the course; USGA Green Section National Director Jim Snow on turfgrass selection; and architects Desmond Muirhead and Thomas Marzolf on design.

Here's W. Gary Paumen, with Richard H. Elyea, Virgil Meier, Dean Mosdell and Christine Faulks contributing on construction methods, equipment and commodities from the builder's viewpoint. And National Golf Foundation Vice President Richard Norton writing on golf course financing; L.A. Group

Continued on page 90

The Good Doctor is in

THE GOOD DOCTOR RETURNS

GEOFF SHACKELFORD

By MARK LESLIE

He gave us *The Captain: George C. Thomas Jr. and His Golf Architecture* and *Masters of the Links: Essays on the Art of Golf and Course Design*. Now young Geoff Shackelford has strode into the realm of fiction in a sometimes cutting tale called *The Good Doctor Returns*.

The Good Doctor, for those outside the loop, is Dr. Alister Mackenzie, thought by many to be the greatest golf course designer of all time. And in this whimsical excursion, Shackelford may earn himself a few karate chops rather than kudos.

The book is written in the first person, from the point of view of a young golf course architect who gets hired by Dr. Mackenzie, who (we faint) did not die as we thought on Jan. 6, 1934, and has returned "to show the world again what it means to build a masterpiece."

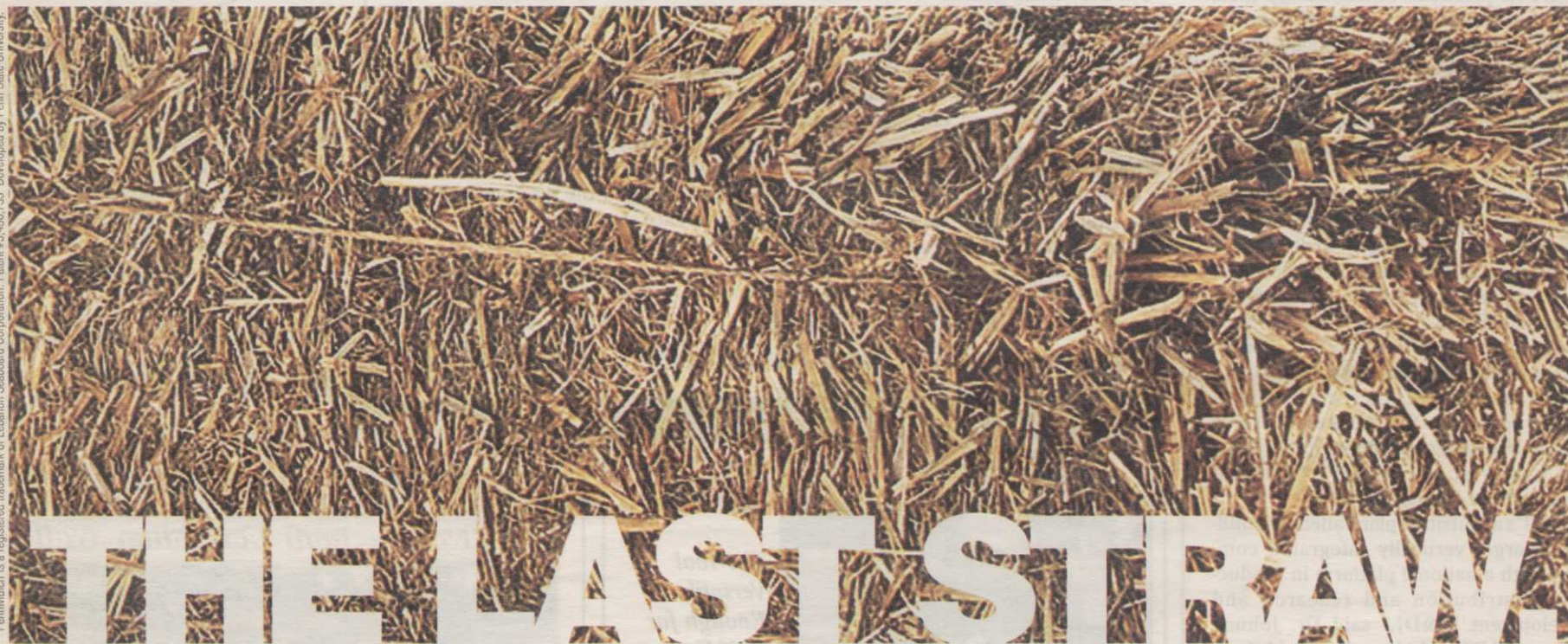
A thorough student of Dr. Mackenzie, his writings and philosophy, Shackelford uses Mackenzie's voice and his own to lambaste current-day designers.

Herewith, a few of those views:

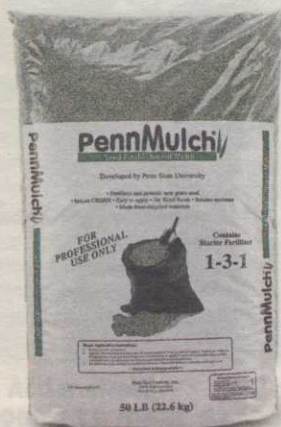
- Regarding bunkers, Mackenzie says, "My experience with today's courses is one of despair and disbelief."
- Regarding hazard placement, "I am even more disturbed by the trend of narrowing fairways and growing five-inch rough just off the sides ... I find that rough grass is of little interest as a hazard."
- Regarding watering, "I never thought I'd see the day

Continued on page 90

PennMulch is a registered trademark of Lebanon Seaboard Corporation. Patent #5,456,733. Developed by Penn State University.



THE LAST STRAW



You'll never have to mess with straw again. PennMulch's patented green pellets are enhanced with superabsorbent polymers and starter fertilizer. Here's how it works. As soon as water is applied, PennMulch® expands to retain moisture in the seed bed, providing 36% better seed establishment than straw. Plus, it's easy to spread, weed-free and won't blow away. PennMulch is ideal for golf construction, overseeding and divot repair; multi-use sports field repair and lawn areas. For a performance and cost comparison, call your Lebanon Turf Products Distributor. Or 1-800-233-0628.

Lebanon
TURF PRODUCTS

Bombardier NV ready for fairways, roadways

The Bombardier NV Neighborhood Vehicle is an environmentally-friendly and quiet mode of transportation. What makes the vehicle unique is that it's designed for the fairways and the roadways. In "golf" mode, the Bombardier NV Neighborhood Vehicle reaches a top speed of 15 mph (to help it comply with golf course standards). In "drive" mode, for off the course, the Bombardier NV reaches a maximum speed of 25 mph, providing drivers with a fun and sporty vehicle for getting around town.

The Bombardier NV is great for the golf course and the country club, and also for trips to the store or visiting friends in the neighborhood. For more information, contact 888-638-5397.

CIRCLE #201

Chipco releases price-per-day chart

To determine the cost-effectiveness of a current fungicide, green industry professionals must determine the price-per-day of control by assessing the product's spectrum of disease control, length of fungicide residual and need for tankmixes or additional fungicide applications.

That is why the Chipco division of Rhone-Poulenc developed the Chipco Signature and Chipco 26GT price-per-day pocket chart.

Rhone-Poulenc realizes that those in the turf and ornamental industry make tough decisions everyday. Choosing a fungicide is one of them. And, the majority of decision-makers focus on the answer to two questions.

- How effective is the product at combating disease and promoting plant quality?
- What is the cost of achieving that control and quality?

The effectiveness of a fungicide can be determined through word-of-mouth, reading up on product research or simply learning from one's own experiences. However, properly weighing the information, calculating and comparing the cost for that control is more difficult that it would first appear. For more information, contact 919-870-5718.

CIRCLE #202

Flowtronex PSI introduces OTIS III

Flowtronex PSI has launched a new generation of easier-to-use, more "intuitive" and informative pumping system operator terminals. The product, OTIS III (Operator Terminal Information System), allows end-users to set pump parameters and monitor performance data such as flow, pressure, motor rpms and pump station events such as alarms and system shutdowns. This new version of OTIS displays significantly more data, simplifies data access and takes some of the guesswork out of operation.

The new product also allows the user to scroll down through up to 32 lines of data. In previous versions of OTIS, the user could not automatically scroll down to access additional, related data on the screen, but rather had to type commands that range from pressing one button to a series of buttons. With more display space, there are fewer abbreviations in the data. Bruce Weir, Flowtronex PSI chief engineer, noted that terms and usages on the display now identically match those in the operating manual, lessening confusion on the part of the user.

OTIS III is compatible on stations which have the same PLC (programmable logic controller) as today's models. Earlier stations use another PLC which is not currently compatible. Stations with PLC from another manufacturer are in the minority. For more information, contact 214-357-1320.

CIRCLE #203



Vermeer's self-propelled stump cutter in action.

Vermeer ready with self-propelled stump cutter

Vermeer Manufacturing Company, a pioneer in stump cutting technology since 1957, recently introduced the industry's first-ever self-propelled stump cutter mounted on rubber tracks in its horsepower range. The SC505 has been designed to go where towable stump cutters can't, climbing and descending inclines and traveling through narrow openings with ease.

The 50 HP (37 kw) Perkins diesel engine provides power to the patented gear-driven cutter wheel system. With chip decks removed, the SC505's turf friendly tracks can be retracted to a narrow profile of only 35 inches (89 cm) from the outside edge of each track, allowing the SC505 to maneuver through confined areas and backyard gates. The standard operating and transport position is 51 inches (129 cm) wide for optimum stability. The hydraulically-driven two-speed ground drive system can travel at a speed of 120 ft. (36 m)/minute.

For more information, contact 1-888-VERMEER.

CIRCLE #204

Zip Abrasive back in golf market

The Zip Abrasive Company, manufacturer of abrasives for over 75 years, announces the return of its Reel Sharpening/Back-Lapping Compound to the golf course market for 1999.

Not since the mid 1980s has Zip Reel Sharpening Formula lapping compound been available to this market. Zip Lapping Compound has always been in high demand because it performs its many metal finishing applications noticeably faster and with superior results.

With the current growth in the golf industry Zip Abrasive is reintroducing its patented Reel Sharpening formula of lapping compound and has set aside production to meet the expected demand. After 75 years Zip's unique effectiveness sets it far above the other compounds currently available. For more info, call 216-426-0707.

CIRCLE #205

Howard Johnson's launches HJCT-2

Howard Johnson's Enterprises Inc. has launched their new premium golf course line of products featuring "HJCT-2." Howard Johnson's Coated Technology with TR2 is a patented coating process for nitrogen and potassium.

Thirteen layers of ultra-thin coating protect the nutrients from moisture and temperature more effectively than the thicker, less accurate coatings. This polymer-based coating technology will provide greater control over turf color, growth and quality. For more information, contact 414-276-4656.

CIRCLE #206

The Rainmaker

SO₂ GENERATOR



INCREASED

- ★ FERTILITY
- ★ TURF GROWTH AND COLOR
- ★ WATER PENETRATION
- ★ EFFECTIVENESS OF APPLIED FERTILIZERS

REDUCED

- ★ FERTILIZER COST
- ★ LOWER pH OF WATER
- ★ ALGAE IN RESERVOIRS & DISTRIBUTION SYSTEMS
- ★ BICARBONATES & CARBONATES
- ★ CALCIUM & SODIUM DEPOSITS

For More Info

Call or Fax
(559) 439-4431



P.O. Box 26084
Fresno, CA 93729

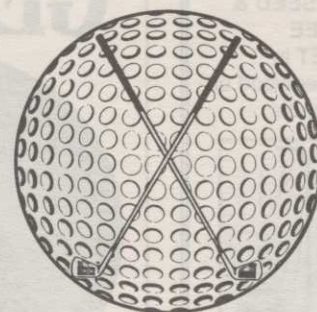
www.so2gen.com

GCSAA Booth #5141 & #5143 - Hall E-2

CIRCLE #174/GCSAA BOOTH #5141 & 5143

Formost Construction Co.

Serving the nation for over 30 years.



"Doing One Thing Well"

STATE LIC. #267960

P.O. BOX 559

TEMECULA, CALIFORNIA 92593

(909) 698-7270

FAX (909) 698-6170

CIRCLE #170

Past Presidents

Continued from page 45

Eugene Baston — 1985 — Superintendent and maintenance director, Anyang Benest Golf Club, Kyonggi-Do, South Korea. Also lives part of the year in Georgia.

Biggest change: "The advent of the new grass varieties and advances in light-weight maintenance equipment over the past 10 years. The breeding programs with the bentgrasses, particularly in the Southeast, have yielded more tolerant bents. It's still not easy to grow bentgrass down here, but it's easier than it was."

Advice for Dave: "Develop a sense of humor and a thick skin. Seriously, the

association is going in the right direction. Most of all, he should encourage everybody to keep up with the advances in the industry, particularly in terms of computer usage."

James Timmerman — 1984 — Golf course superintendent Orchard Lake (Mich.) Country Club.

Biggest change: The advances in technology, which will probably even accelerate. Keeping up with everything is even more difficult than it used to be.

Advice for Dave: Be aware of the whole spectrum of superintendents, not just certain segments like the private club industry. Every superintendent, from the smallest Mom-and-Pop operation up to the most exclusive private club has certain needs. Be aware of them and try to tailor programs to meet those needs.

Robert Osterman — 1983 — Retired. Living in Bethel, Conn.

James Wyllie — 1982 — Retired. Consulting with golf course architect Tom McBroom and living in Brampton, Ontario, Canada.

Biggest change: "The quality of the turf is the biggest change. Fairways today are the same quality as greens were in the 1950s. Bunkers are often manicured to the point where they are no longer hazards."

Advice for Dave: "Continue to build on the excellent educational tools that GC-SAA provides to its members and the public. The superintendent today is an integral part of the management team and needs business skills along with agronomic knowledge. However, this advanced technology must be combined with the basic fundamentals and common sense so necessary for all good keepers of the green."

Michael Bavier — 1981 — Head superintendent, Inverness Golf Club, Palatine, Ill.

Biggest change: "People play and see many more courses than they used to, so we end up being compared to Augusta National and places like that. People are demanding more because they've seen



Michael Bavier

more. They are also playing more. We used to have very few midweek players. Now it's not unusual to get 150 to 200 rounds midweek at what is a very private club. We've doubled our crew

size in the past 25 years to keep up with the demands."

Advice for Dave: "You've got to decide on your priorities. Association, family and club top the list. You have to juggle the traveling and demands of being president of this association, while not forgetting about family and your job. Many guys have found that they've had to move on to a new job shortly after being president. Dave's a sharp guy and should do very well."

Melvin Lucas — 1980 — Retired. Consulting with architects Northeast Golf (Rob McNeil) and G&G Hauser of Vienna, Austria. Living in South Dartmouth, Mass.



Melvin Lucas

Biggest change: "A superintendent's tenure at a course isn't as long as it used to be during my dad's and my time. Make a few mistakes today, and you are out of a job. Job security is not what it used to be. There is a plethora of young, well-educated people out there looking to get head superintendent jobs, but they don't have a lot of experience, and that concerns me."

Advice for Dave: "GCSAA should recognize that we are the international leader in golf greenkeeping. We should embrace and enlarge that community feeling that we (US and Canada) are the leaders."

Charles Tadge — 1979 — District superintendent for the Hamilton County Park District, Cincinnati, Ohio.

Biggest change: Technology, with all the computerized irrigation systems and the Global Positioning Systems. There are things you can do now that you wouldn't ever have thought about doing years ago. So it probably doesn't make for less work, but it does make it easier to accomplish things.

Advice for Dave: Keep on top of membership services and keep providing good things for the members.

George Cleaver — 1978 — Retired from the golf business in 1982. Operating a floor refinishing business in Lewes, Del. 1926-1977 next month in GCN.

Cornish/Graves

Continued from page 88

members on using a team approach to permitting and construction monitoring; and architect Mark Mungeam (a Cornish protege) on training an architect.

Loaded with photographs and drawings, this book could be to those interested in designing a golf course today what Cornish and Ron Whitten's *The Architects of Golf* is to people interested in golf course design yesterday.

Golf Course Design, 446 pages, hardcover, \$54.95, published by John Wiley & Sons, Inc., distributed through major book stores and through foreign channels in Asia, Australia and Europe.

Good Doctor

Continued from page 88

when they would install irrigation on the great links of the British Isles.

• Regarding narrow fairways bordered by long grass, it "makes bad golfers! And narrow fairways destroy the harmony and continuity of the game, causing a stilted and cramped style, destroying all freedom of play and creative shotmaking. And isn't that the real joy of the game? Creating shots and making bold recovery plays?"

• Regarding green committees, "Many have ruined my handiwork by planting trees like rows of soldiers along the borders of the fairways and turning once beautiful properties into jungles."

• Regarding length, "No other game has the diversity of playing fields golf has, yet I have seen many courses ruined in an attempt to extend them to so-called 'championship' standards."

During a diatribe against "the disturbing trend" toward stroke play in competitive events, MacKenzie says: "Many poor and downright dull courses have been made in the last 60 years in a futile attempt to eliminate the element of luck. You can no more eliminate luck in golf than you can in any sport or in life. You can't punish every bad golf shot, and you can't create situations where complete fairness is assured. If you succeeded you would only make the game, and life, uninteresting."

Bemoaning his belief that modern design work is more consumed with the scientific side of construction than artistry, he says: "The result will be a generation of courses that will be seen for what they really are: expanses of green grass, trees and water, merely for socking the ball around and nothing else."

For his part, the narrator declares of Augusta National: "There was virtually nothing left of the Doctor's original design at Augusta other than the routing and a couple of bunkers."

And he tells Mackenzie he can't ask Augusta National's greens committee "if the fool who built the 16th green was drunk and blind."

Well, the Good Doctor gets his site for a final golf course — a property on the ocean in San Diego with grassed-over dunes, sandy soil and undulating land.

The rest is yours to read. Look for folks you know. (For instance, I found Dan Proctor and Dave Axland, identified only as Dan and Dave, two of the world's great shapers.)

There are others, believe me. One in particular I'd like readers to hazard a guess at.

Tell me, who is Bill Mario? Let me know who you believe he is through fax (207-846-0657) or e-mail (mleslie@golfcoursenews.com).

The Good Doctor Returns, 180 pages, hardcover, \$19.95. Available through *Golf Course News* Bookshelf: 207-846-0600, ext. 211.

EPAERATION
THE LEADER IN SUB-SURFACE ACTIVATED OXYGEN AERATION

Your Water, as Nature
Intended It...

The Choice of Top Developments
Resorts and Golf Courses!

Low Cost — Installation,
Operation, & Maintenance
Proven Technology —
Hundreds of Installations

Reduce algae blooms — no chemicals.
Prevent thermal stratification.
No moving parts or electrical in the water!
Runs on 120 VAC.

CALL: 1-800-556-9251

2615 Meadow St., San Luis Obispo, CA 93401
FAX 805-541-6149. www.epaeration.com

CIRCLE #175

Call 1-888-TURF-888
(1-888-8873-888)
for...



The Original
Wood-Slatted
DIVOT SEED &
SOIL TEE
BUCKET in
REAL redwood or
REAL cedar.

CIRCLE 'ROUND
THE POLE
and
CIRCLE MAKER
— keep on your
feet while
marking circles
on the green.



THE BULLET tile cleaning
nozzle and NEW ADAPTOR.
Please note the
3/4" hose thread
inside the 1" hose
thread.

Ask Your Golf Course Distributor for
INNOVATIVE MAINTENANCE PRODUCTS

From
Master of the Links

P.O. Box 1865, Lombard, IL 60148-1865

CIRCLE #176/GCSAA BOOTH #5063

GOOSE!
GOOSE!
GEESE!



Tired of nuisance geese?
ReJeX-iT® AG-36 can help!

Spray this proven repellent on turf
to invisibly repel unwanted geese
from your valuable grass.

Call 1-(800) HAD-BIRD, or visit us at
<http://www.rejexit.com>

EPA Registration No: 58035-9

CIRCLE #177/GCSAA BOOTH #4452

Golf Course Classifieds

To reserve space in this section, call Jean Andrews 207-925-1099.

FOR SALE

BUY DIRECT!

ATTENTION GOLF COURSE SUPERINTENDENTS,
GOLF COURSE IRRIGATION CONTRACTORS,
AND IRRIGATION CONSULTANTS :
We manufacture high quality **direct burial splice kits** and sell direct. Call Joe Collura at Northstar Industries **1-888-549-8155** for your **free samples** and specification sheets – or fax your request to 909-653-8820.

FOR SALE

- 45 Toro VT-3 satellite control boxes, \$140 each.
 - Toro Groundsmaster 72 (needs engine work) \$1800.
- Call: 219-356-5807

HELP WANTED

GLOBAL COURSE SHAPER

Available for mobilization, located in Shanghai. Experience – 34 years golf course construction, China experience. Work papers in hand valid for 1999. Resume and Letters available. New Cat shaping dozers available. Short/Long term.

Fax/Phone: 011862164197664
E-mail: lonestar@uninet.com.cn
http://hattrick.qrc.com/eastgate/lonestarshaping/

CONSTRUCTION

Golf course contractor with operations nationwide seeking Project Managers/Earthmoving Superintendents/Shapers/Irrigation Superintendents. Salary and benefits are competitive. Mail resume to: **Ryan Incorporated Central, Attn: Karla Simpson, P.O. Box 206, Janesville, WI 53547** or fax resume to **608/754-2293**.

Equal Opportunity Employer

SHAPERS ONLY!

Sub-contract shaping. Higher wages plus profit sharing. References required. The "shaping only" company.

Golf Courses Consolidated
P.O. Box 14878

North Palm Beach, FL 33408
or **ForShapers@Juno.com**
or fax resume to 561-692-3387

HELP WANTED

NATIONAL SALES MANAGER

Leading manufacturer of pumping stations is seeking a National Market Development Manager for the Golf and Turf Irrigation markets. Primary responsibility will be to ethically attain monthly goals by managing the distributor network and making sales calls on developers and consultants.

Mail or fax your resume and salary history to: SyncroFlo, Inc. - Human Resources Manager 6700 Best Friend Rd. - Norcross, GA 30071 Phone: 800-886-4443 - Fax: 770-447-0230

GOLF COURSE CONSTRUCTION

Wanted, creative individuals to train and fill positions as site supervisors and shapers for a progressive and energetic construction company. Fax resume to: **Intergolf Construction - Fax: 914-693-9506, Tel: 914-693-2024.**

EXPERIENCED PERSONNEL

Seeking experienced Superintendents, Assistant Superintendents, and Shapers. High profile projects with competitive pay and benefits. Fax resume to:

John Copeland and Joe Pierman
Fax: 561-227-0352

SHAPERS WANTED

Golf Course Construction Shaper Needed. Must be willing to travel. Fax resume and date available to **616-547-7009**.

FERRELL'S JOBS IN HORTICULTURE
Need Good Employees? - advertise your openings, to cost effectively connect with more than 2,000 job candidates. Job Hunting? - find employment in the Green Industries with the twice-a-month newspaper that lists more than 200 positions nationally. 6 issues \$24.95. Call: **800-428-2474. Web site: www.hortjobs.com**

●SHAPERS/FINISHERS/LABORERS●

Quality and experienced individuals needed. Minimum of 3 years experience. Excellent potential to grow with aggressive company.

Fax resume with references to:
EAGLE GOLF CONSTRUCTION, INC.
(810) 632-6270

HELP WANTED

TERRITORY SALES MANAGER

Small, well established, manufacturer looking for a territory sales manager for SE United States. Candidate will live in territory. Candidate will call on distributors and end users of our products. We manufacture turf maintenance equipment & mowers. Extensive travel. Truck & trailer provided. We offer a competitive compensation and benefits package. For consideration, please send your cover letter and resume to: **Territory Sales Manager, Turf Equipment, c/o Golf Course News, PO Box 997, Yarmouth, ME 04096**



ENVIRONMENTAL GOLF

National golf construction firm is seeking qualified shapers, supervisors, foremen, lead men, irrigation superintendents and installers. Applicants must have a minimum of 3 years related golf course experience. Send resumes to:

Environmental Golf
24121 Ventura Boulevard
Calabasas, CA 91302
Fax: 818-591-3012
EOE M/F/D/V

SERVICES

LASER MEASURING

Laser measuring and sprinkler yardage markers. We do it all! Laser measure & installation of custom metal yardage markers for all types of sprinkler heads.

Fairway Yardage Designs
1- 800- 368- 2448

REAL ESTATE

GOLF COURSE FOR SALE

18 hole, 6,700 yd, 5,000 sq. ft. club house, pool, fabulous opportunity in growing retirement community. South Eastern Arizona, 1 hour from Tucson \$750,000.

Financing Available
1-520-991-8000

KIMBERLING GOLF COURSE

Alfonso Creative Golf Enterprises, Inc. announces the sale of the most Entertaining and Challenging 9 holes in Missouri. **Kimberling Golf Course** – a par-34, 2100 yard jewel located on 34 picturesque acres in Kimberling City, MO. 12 miles south west of the heart of **Branson, MO**, and 1 mile north of **Table Rock Lake, The Bass Fishing Capital of the Ozarks**. Large club house with administrative offices, golf shop, restaurant and banquet facilities with full service kitchen. Plus a Cayman range and a 'Short Game Training' course within the existing 9 holes. **Contact Vince Alfonso, Jr. (417) 739-4370.**

GOLF COURSES FOR SALE

Four 18 hole championship golf courses! Locations include Northwest Louisiana, Austin, Texas area, New Orleans area, and the Atlanta area. One private and three semi-private. Offered individually or as a package. Serious inquiries only. **Contact Mike Mitton at (318) 929-2380.**

SERVICES

Pond & Lake Liners

PVC • HDPE • EPDM • RPP
Hypalon • Turf Reinforcement
Erosion Control

- Over 20 years of Experience
- Custom Fabrication
- Installation Services

Parker, CO 800-524-8672
Kingwood, TX 888-546-4641



Colorado Lining
INTERNATIONAL

www.coloradolining.com

Booth #4445 at the GCSAA Show

We'll Seal Your Lake Empty or Full!

ESS-13 Eliminates
The Need For A
Synthetic Lake Liner

Seepage
Control, Inc.

P.O. Box 51177
Phoenix, Arizona 85076-1177
800-214-9640 Fax 602-829-1106

Since 1958

NOTICE

REQUEST FOR PROPOSAL

The City of Somersworth, New Hampshire, desires to lease 248± acres of real property located on Rt. 108, Somersworth, New Hampshire, for the expressed purpose of developing an 18-hole daily fee golf course.

The Parcel is currently known as the Lily Pond Parcel. The City of Somersworth, New Hampshire, requests proposals from parties interested in developing such a facility and operating it under the lease and other contractual agreements made in the best interest of the City of Somersworth.

The purpose of the lease offering is to identify qualified parties interested in forming a partnership with the City of Somersworth to develop a daily fee public golf course in the City. The role of the City shall be to provide the land, design and permits in return for financial considerations from a private developer who will cause the facility to be constructed and operated under terms of a lease agreement.

Copies of the Request for Proposal are issued by the City of Somersworth with proposals due by 5 p.m., March 15, 1999. To receive a copy of the RFP, contact:

Daniel R. DeSantis
Director of Development Services
157 Main Street
Somersworth, NH 03878
(603) 692-4262



LANDSCAPES UNLIMITED INC.

Landscapes Unlimited, Inc. (LUI) will be conducting interviews at this year's 1999 GCSAA Annual Convention in Orlando, FL (February 11, 12 & 13, 1999).

LUI has career opportunities available for candidates with golf course construction experience and/or college/technical school graduates wanting to start a career in the golf course construction industry. Qualified maintenance oriented mechanic positions are also available in several regions of the United States.

Starting salaries range from \$25,000 to \$65,000. Compensation is based on experience and/or level of education. Benefits include:

- Health/Life/Dental Insurance
- Profit Sharing
- Company vehicle for construction/irrigation superintendent position
- 401K
- Housing Allowance

Landscapes Unlimited is proud to be the premier golf course contractor in the United States today. Golf Course News poll voted LUI "Golf Course Builder of the Year" in 1992, 1993, 1995 and 1997. Please visit our LUI home page at: www.landscapesunlimited.com

We invite you to contact Landscapes Unlimited to schedule a time to interview with us while you're in Orlando. Please contact Melissa Giesler at LUI at **888-650-3722** or **402-423-6653** to schedule your interview. Melissa can also be reached via email: MelissaG@LandscapesUnlimited.com

February

5-7 — 16th Annual Chicago Golf Show.
Contact Ricky Iovino at 800-781-6083.

8 — GCSAA seminar on Focus on the Military in Orlando, Fla. *

8-14 — GCSAA International Conference and Show in Orlando, Fla. *

10 — GCSAA seminar on Managing Golf Course Trees in Orlando, Fla. *

10 — GCSAA Turfgrass Field Seminar in Orlando, Fla. *

15-19 — Virginia Tech Turfgrass Ecology and Management Short Course in Blacksburg, Va. Contact Dave Chalmers at 540-231-5797.

15-28 — Long Island (N.Y.) Turfgrass Management Short Course. Contact 607-255-1792.

22 — NYSTA Southeast Regional Conference in Suffern, N.Y. Contact NYSTA at 800-873-8873.

22-26 — Indiana-Illinois Turfgrass Short Course in Willowbrook, Ill. Contact Bev Bratton at 765-494-8039.

23 — GCSAA seminar on Maximizing Turfgrass Disease Control in Albany, N.Y. *

23-25 — Western Pennsylvania Turf Conference & Trade Show in Monroeville. Contact 814-863-3475.

24 — GCSAA seminar on Environmental Considerations in Golf Course Management in Bloomington, Ill. *

26 — GCSAA seminar on Budgeting and Forecasting in St. Louis. *

28-March 4 — Club Managers Association of America 72nd World Conference on Club Management and 22nd Annual Exposition in San Francisco. Contact Bridget Gorman at 703-739-9500.

March

1 — GCSAA seminar on Wildlife Management and Habitat Conservation in Sioux Falls, S. D. *

2 — GCSAA seminar on Protecting Natural Resources on the Golf Course in Gaylord, Mich. *

2-4 — New England Regional Turfgrass Conference and Show in Providence, R.I. Contact 401-848-0004.

3 — GCSAA seminar on Problems and Solutions: Using Annuals and Perennials in the Golfscape in Gaylord, Mich. *

3 — GCSAA seminar on Turfgrass Stress Management in Indianapolis. *

4-7 — Canadian GCSA International Turfgrass Conference and Trade Show in Toronto. Contact 800-387-1056, ext. 500.

8 — GCSAA seminar on Causes, Detection and Management of Localized Dry Spots in Birmingham, Ala. *

8 — GCSAA seminar on Managing Turfgrass Root Systems in Birmingham, Ala. *

8-9 — USGA/Georgia GCSA Spring Meeting in Duluth.

9 — GCSAA seminar on Strategies for Managing the Turfgrass System in Valley Forge, Pa. *

9 — GCSAA seminar on Turfgrass Ecology in St. Louis Park, Minn. *

10 — GCSAA seminar on Financial Management in St. Louis Park, Minn. *

16 — GCSAA seminar on Turfgrass Ecology in Cincinnati. *

17 — GCSAA seminar on Maximizing Teamwork in Manchester Center, Vt. *

18 — GCSAA seminar on Protecting Natural Resources on the Golf Course in Palm Desert, Calif. *

* For more information contact the GCSAA Education Office at 800-472-7878.

NATIONWIDE-IRRIGATION CONTROLLER REPAIR

- Lightning and water damage specialists.
- One Price - normal reconditioning services.
- Fast turnaround, emergency or exchange services.
- Service contracts including the central computer.
- Repairing previously "totaled" equipment.
- Servicing:
Toro- NW8000, LTC, OSMAC, VT3, VT4, VTII;
and Rain Bird- MSC, PAR, ISC, SBM.
- Contractor and distributor inquiries welcome.



BoardTronics, Inc.

(formerly ICS)

P.O. Box 6084 Auburn, CA 95604

Telephone - 800-782-9938

CIRCLE #179

SuperParts™

Replacement Controller Parts

- Replacement triac and relay output boards.
- Direct replacement warranty service.
- The highest quality parts available.
- Exclusive ServiceSockets™ for in-field servicing.
- Featuring epoxy sealed and oil lubricate switches.
- Upgraded non-OEM replacement parts for:
Toro- NW8000, LTC, LTC Plus, OSMAC,
and Rain Bird- MSC+, PAR+.
- Contractor and distributor inquiries welcome.
- Don't repair - trade-in your damaged OEM boards.

Irrigation Aftermarket Parts Corp.

P.O. Box 5515 Auburn, CA 95604 Call: 800-294-1846

CIRCLE #186

EXCEL BRIDGE MANUFACTURING CO.

Specializing in golf course/ park/ bike trail bridges and using a variety of materials to suit your particular landscape needs, we fabricate easy-to-install, pre-engineered spans and deliver them anywhere in North America.



The Macho Combo: Combines the beauty of wood and the strength of maintenance free self-weathering steel. Bridge designed by Golf Dimensions.

800-548-0054
(outside California)

12001 Shoemaker Avenue, Santa Fe Springs, CA 90670
Tel: 562-944-0701 Fax: 562-944-4025
www.excelbridge.com

CIRCLE #183/GCSAA BOOTH #4283

Keep That Edge



Contact Your Local Distributor or Call Us
Toll Free 1 (800) 422-4748

CIRCLE #187/GCSAA BOOTH #150

LIST RENTAL

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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

Call for details...

207-846-0600

LAMINATED WOOD BRIDGES



PEDESTRIAN & VEHICULAR

Order Direct From The Leading Manufacturer in U.S.
• Complete Prefabricated Packages • Ready for Fast Erection
• Direct Distribution Throughout the U.S. • Custom Design & Engineering



CALL 800-777-8648

P.O. Box A • Morrisville, NC 27560
Tel. 919/467-6155 • FAX 919/469-2536

CIRCLE #182/GCSAA BOOTH #4660

You'll want to play barefoot on our certified grasses.

Featuring

- Tifton 419
- Midlawn
- El Toro Zoysia
- Meyer Z-52 Zoysia

- Sprig Planting Service
- Laying Machinery Rentals
- Row Planting Service

- Lay and Play Fairway Cuts (warm season)
- Pads
- Big Rolls

P.O. BOX 58440 • LITTLE ROCK, AR 72215

1-800-666-0007 501-280-0763 www.quailvalley.com



Quail Valley GRASSES

SPORTS • GOLF • COMMERCIAL • RESIDENTIAL • SOG PRODUCERS

barefoot walkin' thick

CIRCLE #192/GCSAA BOOTH #5345

Flymo

Easy to use
Lightweight
Adjustable
Powerful
Fast

The Original
Hovering Trimmer



4 Models
GCT12
GCT15
GCT20
GCT21

STARTING AT
\$299.95

PRECISION
YOUR GOLF COURSE SUPERMARKET

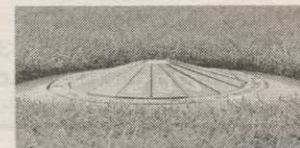
1-800-345-1960

ORDER ONLINE WWW.PRECISIONUSA.COM

CIRCLE #191/GCSAA BOOTH #277

A Visible Marking System You Can Mow Right Over

- ♦ Speeds up play - Reduces playing time up to 30 minutes per round
- ♦ Cost effective - Pays for itself in months - Lasts for years
- ♦ More enjoyment - No pacing and hunting for sprinkler heads
- ♦ Available in all colors
- ♦ Proven at thousands of courses around the world



The Kirby Marker System

760-931-2624 • 800-925-4729 • Fax 760-931-1753

CIRCLE #189/GCSAA BOOTH #4167



1-800-328-2047

CONTINENTAL
BRIDGE

Where Leadership is Expected

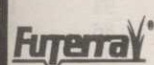
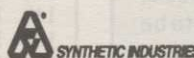
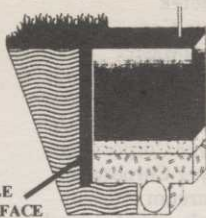
8301 State Highway 29 N, Alexandria, MN 56308 USA • Phone: 320-852-7500 Fax: 320-852-7067
E-Mail: conbridge@continentalbridge.com Website: www.continentalbridge.com

CIRCLE #180/GCSAA BOOTH #2361

GOLF COURSE NEWS

EAGLE GOLF & LANDSCAPE PRODUCTS

EAGLE INTERFACE FOR GREEN CONSTRUCTION



VISIT US AT THE G.C.S.A.A. SHOW
FEB 12-14, 1999 BOOTH #5103

TREVIRA®

1-800-21-EAGLE

WWW.EAGLEGOLFANDLANDSCAPE.COM

CIRCLE #181/GCSAA BOOTH #5103

MAXON SP100

4 CHANNELS, PL, SCAN

\$199⁷⁵ VHF
UHF \$209⁷⁵

Call Nationwide Toll-Free
1-800-527-1670

BEARCOM

11545 Pagemill Rd. Dallas, TX 75243 • 214-340-8876 Fax: 214-349-8950

CIRCLE #178/GCSAA BOOTH #4261

Tel: 256-845-0154

Fax: 256-845-9750



"DELIVERED ACROSS AMERICA"

PEDESTRIAN AND SINGLE LANE
VEHICULAR BRIDGES
ENGINEERED AND FABRICATED
TO YOUR SPECIFIC
REQUIREMENTS. CLEAR SPANS
TO 250 FEET AVAILABLE IN MOST
OF OUR STYLES. FACTORY
DIRECT.



1-800-749-7515
www.steadfastbridge.com

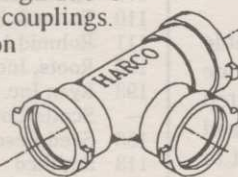
10' 6" X 250' CONNECTOR SERIES
ADMIRALS COVE • JUPITER, FL

CIRCLE #194/GCSAA BOOTH #4386

HARCO DUCTILE IRON FITTINGS FOR GOLF COURSE IRRIGATION SYSTEMS

Sizes 2" through 12", all configurations
including "knock-on" repair couplings.
High Strength, high corrosion
resistance.

The Harrington Corporation
P.O. Box 10335
Lynchburg, Va 24506
804-845-7094 Fax 845-8562



CIRCLE #185/GCSAA BOOTH #3667

**DURABILITY
RELIABILITY
FLEXIBILITY**

Pond and Lake Liners

Great Lakes Containment, Inc.

(616) 258-8800 / (800) 455-7800

FAX (616) 258-5496

731 South Cedar Street, P.O. Box 51, Kalkaska, MI 49646

www.glcpcv.com

brian@gtii.com

SPECIALIZING IN PVC LINERS

CIRCLE #184/GCSAA BOOTH #5431

Golf Course Bridges

Bridges

Call Today For
**FAST, FREE
Estimates!**

Ask About Our
**FAST
Delivery!**

Pedestrian and Light Vehicle Bridges
Custom Designed, Engineered, Built To Suit

For FREE Brochure Call 1-800-822-4535

or visit www.marineworks.com/bridges.html



Marine Bridge & Iron

CIRCLE #190

You Don't Know

ZIP

The New Choice for Premium Reel Sharpening Compound
A better job in half the time—Nothing works like **ZIP**

Zip Abrasive Company

1192 East 40th Street; Cleveland, Ohio 44114

Phone/Fax: (216) 426-0707 (800) 315-0919

America's original patented water-based lapping compound

CIRCLE #195

GET RID OF THOSE #% BIRDS TODAY!

Manage tough wildlife problems
easily by disrupting eating,
nesting and mating patterns.



Invade their territory with a noisemaker that can be
heard and **SEEN** coming. • Research proves propane
cannons, ultrasonics, etc. fail because they offer **NO** irregular
movement and intimidating noise that **YOU** apply when and
where needed. • An everyday sound that does **NOT** disturb
neighbors, but easily frightens **AWAY** dirty birds and animals!

JPF Distributors 800-582-8843

CIRCLE #188



Ryan Incorporated Central

COMPLETE GOLF COURSE CONSTRUCTION

*We have the supervision, experienced personnel,
and equipment to meet the tightest schedule
while producing the highest quality work.*

Janesville, Wisconsin

Washington, DC

Patrick Ryan, 608-754-2291

David Ryan, 301-874-5119

Certified Charter Member of Golf Course Builders Association of America

CIRCLE #193

STAY ON COURSE...

WITH

**GOLF COURSE
NEWS**

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

ONLINE

www.golfcoursenews.com

Golf Course Classifieds

SERVICES

BIRD AND BAT HOUSES



- Wildlife Feeders
- Over 70 Items
- Free Catalog
- 1-800-326-2807

Coveside Conservation Products

GRUND GUIDE

SINCE 1987

Complete Marker Systems

- Sprinkler Yardage • Practice Range
- Cart Path • Fairway & Tee Plaque
- NEW • Sprinkler ID (zone, control box, recycled water)

Laser Measurement Services

- We Measure • Laser Rental

Golf Print Services



"The Yardage Detectives"

(800) 971-7233 FAX (626) 969-3724

Booth #4282 at the GCSAA Show

SOLID BRONZE SIGNAGE

- Yardage Markers
- Tee Signs
- 100, 150, 200
- Commemorative
- Laser Measuring
- Sprinkler Tagging



(800) 932-5223

Fax: (219) 637-6874

Booth #5149 at the GCSAA show

MARK ELIOT DESIGN LANDSCAPE & GOLF COURSE DESIGN

CLUB LANDSCAPING

*Design
New Construction
Renovation*

&

GOLF COURSE DESIGN

*Master Planning
Renovation
Construction Management*

MARK E. SOSNOWITZ, ASLA

MARK ELIOT DESIGN

PO BOX 11188

GREENWICH, CT 06831

203-972-9131 Fax: 203-972-9132

Mimosa Leisure Estate

Continued from page 73

rights to Mimosa's outstanding rent—not to their assets. MLRC reiterated that they have no intention of abandoning a project in which they have invested over 5 billion pesos (\$128 million).

At press time, the CDC had offered to compromise with MLRC, on the condition that they raise an additional 2 billion pesos (\$51 million) to ensure that they can finance further development of the estate. The compromise was offered by the CDC after they rejected MLRC's counter offer to pay back 275 million pesos (\$7 million) in back rent.

MLRC joins the ranks of other Asian companies that have run into financial trouble after investing heavily into real estate and then getting burned by the regional financial crisis that has caused recession and increased borrowing costs. MLRC's operating cash flow is only 51 million pesos (\$1.3 million) while their outstanding debt is 5.2 billion pesos (\$133 million). Mimosa has been fighting the economic decline for the past year, watching the share value of memberships plunge from 1.2 million pesos (\$31,000) to less than 750,000 pesos (\$19,000). As perhaps a last gasp to raise money, Tiger Woods came to Mimosa last January to play in a promotional tournament with Filipino professional golfers.

Their dispute with the CDC, however, has been long standing. Last year CDC officials blocked the completion of the final 9 holes of golf at Mimosa by refusing to sign off on an Environmental Compliance Certificate. Another point of contention arose when the CDC tried to charge MLRC for water that was drawn from wells that MLRC built and operated.

CDC is a government agency responsible for the development of the former US Airbase at Clark Field that was given back to the Philippine government in 1991. MLRC was the former distributor of Nike footwear and Shiseido cosmetics and was attempting to turn a portion of Clark Field into the "Las Vegas of Asia."

SNC to raise golf's image

Continued from page 75

The reasoning behind this apparent stagnation is multifaceted, as Mark Adam is well aware: "People involved in the golf course industry in France have to be discreet. Golf is considered, both politically and fiscally, a bad business to be in. There is a definite stigma attached to the sport."

An indicator of the economic status of French golf is to be found in the lack of golf club management company activity there. Tom Henner of Clubcorp International said that the company's current interest in France is through an affiliate arrangement at Chateau de Vizier in the South of France.

"We are more comfortable in Germany and England than in France," said Henner. "We understand these markets better. But, France could well be the next emerging golf market—if the facilities available provide for the development and teaching of golf then that market will grow quicker."

Clubhaus is similarly cautious, according to Jonathan Talbot-Weiss. "France is not a priority for us at this point in time," he said.

"Historically golf is seen as being very elite," continued Adams. "When the boom happened [in the early '90s] advertisers used golf as a symbol of luxury and elitism; for example, advertisements for luxury cars used the golf course as a backdrop."

The golf courses themselves do little to dispel this image, said Adam. "Overall the quality of golf courses in France is extremely high. Yet most of these courses are operating at only 30 percent of their potential. The current players are happy to keep it this way and nobody is encouraging tourists at all despite the comparative cheapness of playing. The average price for a round of golf on a week day is around £15."

The lack of an effective marketing strategy from either the Government or the Tourist office is puzzling considering the potential. Despite the poor public image of the game in France, there are more native golfers than there are to be found in Spain or Portugal—two countries that are renowned for golf tourism.

• ASIAN UPDATE •

Asian projects roll into 1999

Continued from page 74

new layout, which replaces the existing nine hole course built by the British Army in the early 1960's, is being constructed by Heritage Golf and is due to be completed by the end of 1999.

VIETNAM

• PHAN THIET, Phan Thiet Golf Club — The messy commercial dispute between Thai golf builder, Bangplee, and Phan Thiet Golf, owned by US-based Danao Holdings, may be resolved soon.

Bangplee Golf Course Construction has been fighting for compensation in the amount of \$1.05 million ever since Danao fired them from the Phan Thiet job in 1994.

Since then, the battle between Phan Thiet and Bangplee has visited and revisited the local courts as well as the court of appeals in Ho Chi Minh City and the supreme court in Hanoi without resolution.

The local and appeal courts have awarded Bangplee damages, but Phan Thiet has refused to honor the decision claiming that since Bangplee doesn't have a construction license in Vietnam, the deal is void. So far, the higher courts in Hanoi have agreed with them helping to stave off the seizure of Phan Thiet's assets.

To Phan Thiet's relief, President Tan Duc Luong has since ordered that the matter be immediately resolved.

• SAIGON — The Saigon South development zone close to downtown Saigon netted over \$23 million in total foreign direct investments and VND 27 billion (approximately \$2 million) in domestic investment in 1998 including a licensed golf course project to be developed by Phu My Hung Corp.

Wright in the Garden

Continued from page 75

found the Garden of Eden. They were apparently awestruck by the native palm tree, the "Coco de Mer," which bears a football-sized fruit that is strikingly similar to a woman's lower torso.

But that hasn't distracted Wright from the task at hand—his work on the first international-standard golf course in the Seychelles.

The layout of Wright's 18-hole design at the five-star Lémuria Resort is tentatively rated par-71 and will truly be a work in progress. "We will let the site dictate the final par rating. Because of the ocean front location and the fragile nature of the coastal environment, great care will be taken not to force more golf onto the site than it can comfortably support," said Wright.

Wright has teamed up with consulting French golf professional, Marc Ferry, to finalize the design.

The Lémuria course will feature some unforgettable holes. The 459-yard, par four, eighth is destined to become the "postcard" hole according to Wright. "The elevated tees will be scattered among huge, naturally occurring red granite boulders looking over a tidal mangrove forest to the fairway which will stretch out along the Grande Anse Kerlan beach."

Construction of the first nine holes is scheduled to be completed in November 1999.

Periodicals postage paid at Yarmouth, Maine, and additional mailing office. Golf Course News (ISSN 1054-0644) is published monthly by United Publications, Inc., 106 Lafayette St., P.O. Box 997, Yarmouth, ME 04096. Phone number is 207-846-0600.

The publisher assumes no responsibility for unsolicited material or prices quoted in the newspaper. Contributors are responsible for proper release of proprietary classified information. Copyright 1999 by United Publications Inc. All rights reserved. Reproduction, in whole and in part, without the written permission from the publisher is expressly prohibited.

Reprints and permission to reprint may be obtained from Managing Editor of Golf Course News. Back issues, when available, cost \$6 each within the past 12 months, \$12 each prior to the past 12 months. Back issue orders must be paid in advance either by check or charged to American Express, Visa or MasterCard.

Golf Course News is distributed in the U.S. and Canada without charge to qualified personnel of golf course facilities and to golf course builders, developers and architects. Non-qualified paid subscriptions to the U.S. and Canada cost \$55. All foreign subscriptions cost \$125 annually to cover air delivery. All payments must be made in U.S. funds drawn on a U.S. bank. For subscriber services, please call 215-788-7112. Send address changes to Golf Course News, P.O. Box 3047, Langhorne, Pa. 19047-3047.

Circle#	Company	Page	GCSAA Booth
138	American Cyanamid*	10	1883
139	American Cyanamid	82	1883
140	Ametek	65	3852
174	Aqua Gen	89	5141
129	AquaMaster	3	225
141	Aquatrols	50	2075
142	Aquatrols	74	2075
106	BASF	22-23	2868
143	Bayer Corporation	78	561
104	Bayer Corporation	42-43	561
178	Bearcom	93	4261
164	Becker Underwood	86	3161
179	BoardTronics	92	—
115	Club Car	37	2751
180	Continental Bridge	92	2361
175	E.P. Aeration	90	—
144	E-Z-GO	68	1243
181	Eagle Golf & Landscape Prod.	93	5103
134	EarthWorks	28	3787
182	Enwood Structures	92	4660
183	Excel Bridge Mfg.	92	4283
116	First National of America	95	—
172	First Products	87	3748
126	Flowtronex PSI	19	849
127	Fore Par	36	1972
170	Formost Construction Co.	89	—
117	GolfSolutions.com LLC	20	4555
184	Great Lakes Containment	93	5431
145	Griffin LLC	73	4369
185	Harrington/Harco Corporation	93	3667
146	Homestead Nitrogen Corp.	79	3749
186	Irrigation Aftermarket Parts	92	—
147	Jacklin Seed Co.	52	653&753
148	Jacklin Seed Co.	75	653&753
187	Jesco Products/Pinhigh	92	150
107	John Deere	14-15	2461
188	JPF Distributors	93	—
189	Kirby Markers	92	4167
149	Kubota	4	3042
131	Lebanon Turf Products	46	2872
132	Lebanon Turf Products	47	2872
196	Lebanon Turf Products	88	2872
105	Lesco	60-61	643
150	Lesco	80	643
—	Lofts, Inc.	29	3361
190	Marine Bridge and Iron	93	—
166	Markers, Inc.	72	4053
176	Master of the Links	90	5063
112	Milorganite	24	2383
167	National Mower	53	661
151	New England Turf Conference	84	—
—	NOVARTIS	5	1043
—	NOVARTIS	6-7	1043
—	NOVARTIS	30-31	1043
152	Nutramax	85	593
119	Otterbine/Barebo	41	1068
128	Palmer Course Design	39	—
153	PBI/Gordon Corporation	76	1273
135	Pennington Seed	48	5033
154	Precision Labs	81	3483
191	Precision Small Engine	92	277
108	Pursell Industries	54-55	1161&1272
192	Quail Valley Farms	92	5345
155	Rain Bird	62	2161
156	Rain Bird	67	2161
157	Regal Chemical	56	1672
109	Rhone-Poulenc*	44-45	2860
177	RJ Advantage	90	4452
110	Rohm & Haas	26-27	2883
111	Rohmid LLC	34-35	—
136	Roots, Inc.	40	3170
193	Ryan Inc. Central	93	—
—	Scotts Company, The	49	2449
158	Seed Research of Oregon	66	3243
113	Smithco	32-33	1561
—	Standard Golf	21	1360
194	Steadfast Bridge Co.	93	4386
165	Steiner Turf Equipment	86	1251
120	Tee-2-Green	2	5001
168	Tempest Controls	63	418
114	Terra Industries	58-59	325
121	Textron TCASP	96	1543
159	Textron TCASP	64	1543
137	TifEagle	38	4472
122	Toro Comm'l. Prod. Div.	9	232
123	Toro Comm'l. Prod. Div.	11	232
160	Toro-Irrigation Div.	13	232
171	TRUE-SURFACE®	29	118
169	Turco, Inc.	63	661
161	United Horticultural Supply	8	2973
130	Watertronics	57	3343
124	Yamaha	12	361
173	York Bridge Concepts	87	3753
162	Zajac Performance Seeds	25	3451
103	Zeneca Professional Prod.	51	2060
125	Zeneca Professional Prod.	51	2060
195	Zip Abrasive Company	93	—

*Appears in regional editions.

To Some Lenders This Is A Very Risky Situation.

MANY LENDING INSTITUTIONS CAN'T afford to dedicate the necessary resources to fully understand golf course financing.

First National is one of the largest lenders to golf courses, with substantial experience lending domestically and internationally. No one understands this specialized asset class better than we do.

As a principal lender—not a division or subsidiary—we make our own decisions, we make our own loans and we can usually provide higher valuations and higher loan limits to golf facilities. And we continue to service our loans so our borrowers always deal with the principal lender.

See why your first choice should be First National, for acquisitions, construction, renovation or refinancing loans.

THE FIRST CHOICE

First National
of America, Inc.

1982 WASHINGTON VALLEY ROAD, MARTINSVILLE, NJ 08836

TEL. 908-604-4700 • FAX. 908-604-6699

CIRCLE #116



Ever notice how more fans always follow **One** foursome?

Some pairings just naturally draw more attention than others. Maybe that's why the buzz around the world is about the new Textron Turf Care And Specialty Products team. Cushman, Jacobsen, Ransomes and Ryan—four great names, each built upon legendary performance, together as one foursome. The unbeatable team.

Easy to do business with. First in innovation. Dependable quality. And, the experience and know-how to get the job done. It's good for the industry. It's good for the game. It's even better for you.

To make the most of your turf maintenance investment, follow the leader. Call 1-888-922-TURF. It's where the action is.



TEXTRON
TURF CARE AND SPECIALTY PRODUCTS

CUSHMAN JACOBSEN RANSOMES RYAN